

First Annual Report

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**The European
Observatory
for SMEs**



European Network for SME Research

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THE EUROPEAN OBSERVATORY FOR SMEs

First Annual Report

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FOREWORD

By Raniero Vanni d'Archirafi

Member of the Commission of the European Communities responsible for Enterprise Policy, Distributive Trades, Tourism and Cooperatives

I very much welcome this first, wide-ranging report considering the state of small and medium-sized enterprises in the Community as a whole. This report comes at a particularly opportune moment as businesses, particularly small and medium-sized enterprises, attempt to take advantage of the opportunities, and grapple with the problems, presented by the Internal Market which is now very much a reality.

Produced by an independent European network of Research Institutes within the framework of the 'European Observatory for SMEs', the report aims at providing a comprehensive analysis of SMEs within the European economy. Bearing in mind that SMEs, by most people's definition, represent well over 90% of all enterprises within the Community they account for a considerable portion of the economy activity, as well as providing for 50% of all jobs. It is important therefore that we know as much as possible about SMEs in the Community. How and why they operate; the problems they face in trying to grow and develop their activities. All the issues that go into running a business. This report attempts to shed some light on these issues and reviews major trends affecting small and medium-sized enterprises and includes information on such areas as entrepreneurship and business dynamics, markets and sales, employment and productivity, and capital and finance.

The Declaration on Promoting Economic Recovery in Europe made by the Council at the Edinburgh European Council on 11 and 12 December 1992 recognised the importance of SMEs for creating employment and stimulating growth. The creation and development of SMEs in all Member States is essential if the European economy is going to fight its way out of recession. There is a need for Community-wide programmes in order to assist SMEs and to accelerate their ability to adapt to the structural changes necessary as a result of the Internal Market.

The Commission's programmes of assistance for SMEs need to be complementary to those which are provided at the Member States level. We in the Commission need to work together in co-operation with Member States and the business community in order to ensure that the programmes we offer are flexible enough and meet the needs of business and the entrepreneur. The facts and information contained in this report, and in subsequent reports, should

provide the basis for a wide-ranging discussion at a regional and Community level by those responsible for enterprise policy and small business development. It is for this reason that I commend this report to you as the basis for our forthcoming policy debates.

SUMMARY AND RECOMMENDATIONS

Almost all (99.9%) of the 15.7 million businesses in the private non-primary sector of the European Community are small and medium-sized enterprises (SMEs). These enterprises provide 70% of the jobs and make a significant contribution to the prosperity of the Community. Throughout Europe, the SME sector experienced a revival of dynamics and new entrepreneurship.

The completion of the internal market will in time considerably change the environment for SMEs. In the short run European entrepreneurs in SMEs are faced with concentration processes, the adjustment to new EC legislation and with information gaps in a widening internal market, but they must also cope with recessionary tendencies in their markets. However, in the long run the expected acceleration of economic growth as a result of European integration and the ongoing internationalization of SMEs will present many opportunities for those entrepreneurs seeking to launch new products and enter new markets. Moreover new possibilities for SME growth will be offered by the demographic developments and rapid technological change. However, SMEs will have to make specific efforts to realize their potential within the increasingly more competitive climate of the internal market.

1. SMEs IN THE EUROPEAN ECONOMY

Enterprises

The typical EC business is a micro enterprise (0-9 employees) of which there are more than 14.5 million. The EC also has about 1 million small (10-99 employees) and about 70,000 medium-sized (100-499 employees) enterprises. Thus the vast majority of enterprises (99.9%) in the European economy are SMEs. It is estimated that in 1992 there were 15.7 million SMEs in the private non-primary sector of the Community, exclusive of former Eastern Germany. There were only about 12,000 large enterprises with more than 500 employees.

For the year 1988 more detailed figures of the European enterprises sector are available. A summary of the key indicators is presented in Table 1.

On average there were about 45 enterprises per 1,000 people in the EC. However, this ratio differs greatly between countries and ranges from about 30 in the Netherlands, Germany and Denmark to more than 60 in Portugal and Greece.

Table 1 Key Indicators at the Community level

	SMEs (0-499)	micro firms (0-9)
<i>Structure (1988)</i>		
number of enterprises (x mln)	14.6	13.6
number of enterprises per 1,000 inhabitants	45	42
number of persons employed (x mln)	62.4	26.2
employment share in private, non-primary sector (%)	70	30
employment per enterprise	4.3	1.9
turnover per enterprise (x 1,000 ECU)	413	125
turnover per employee (x 1,000 ECU)	97	69
share of extraction ^a in employment (%)	3	1
share of manufacturing in employment (%)	27	14
share of construction in employment (%)	12	13
share of trade in employment (%)	24	30
share of other services in employment (%)	35	42
share of exports in turnover (%)	10	5
share of consumption goods in turnover (%)	36	38
share of investment goods in turnover (%)	9	8
share of intermediate goods in turnover (%)	45	49
<i>Performance^b 1989 -1992 (average annual growth)</i>		
turnover of consumption goods (%)	1.7	2.0
turnover of investment goods (%)	2.0	1.8
turnover of intermediate goods (%)	2.2	2.2
exports (%)	4.7	5.0
total turnover (%)	2.3	2.3
employment (%)	0.7	0.9
the number of enterprises (%)	1.9	1.9
<i>General indicators</i>		
venture capital as percentage of GDP 1989 (%)		0.8
annual real growth private consumption 1989 -1992 (%)		2.4
annual real growth GDP 1989 -1992 (%)		2.2
annual growth real labour costs per employee 1989 -1992 (%)		1.7
average birth rate of new enterprises, 1989 (%)		10
share of 15 -24 in population, 1990 (%)		15
share of 25 -64 in population, 1990 (%)		52
share of self-employed in total employment, 1990 (%)		13
share of craft-industry in non-primary employment, 1988 (%)		12-25 ^c

a. Including energy and metal processing.

b. Preliminary estimate with SME Accounting Scheme; growth of turnover is measured at constant prices.

c. Lower and upper approximation.

This ratio may be viewed as an index of entrepreneurship, but it also reflects differences in average firm size as measured by the number of persons employed per enterprise.

Including large firms, the average enterprise in the European economy has just over 6 persons employed, while the average SME employs almost 4.5 persons. Average firm size however differs greatly between the Member States. Furthermore, although average firm size in extraction and manufacturing is much higher than in construction, trade and other services, the differences in average firm size between countries have little to do with the sectoral composition of the national economies.

By and large it turns out that the more prosperous the country in terms of per capita GDP, the greater average size of SMEs in most sectors will be. This is probably due to scale economies in more advanced markets and to concentration processes related to higher labour costs in these countries. Furthermore, large countries having a large domestic market, seem able to exploit economies of scale more fully. Densely populated countries have a greater number of customers within the local market of enterprises, implying these enterprises can be larger.

In the period 1988-1992 the number of enterprises in the European Community has increased substantially. Empirical evidence suggests that this increase was especially marked in 1989, but has slowed since. The increase is fully due to the strong growth of small and micro enterprises. The number of medium-sized enterprises has been rather stable over the past four years, whereas the number of large enterprises is now somewhat smaller than it was in 1988.

Employment

Total employment in SMEs in 1988 was 62 million, some 70% of employment in the non-primary market sectors of the European Community. Large firms provide about 26 million jobs. Within the SME sector there are about 16 million self-employed and 46 million employees.

More than 90% of the self-employed belong to the micro enterprises (0-9 employees), and total employment in these smallest firms was 26 million in 1988. Most jobs in the micro firms are in the personal services, retailing and wholesaling. The share of construction is small in an absolute sense, but is larger than in any other size class. Over the past four years micro firms have witnessed the largest employment growth and are now estimated to be providing about 27 million jobs.

Small firms (10-99 employees) account for 25% of non-primary employment and provide about 22 million jobs. The employment in these firms is spread

more evenly over the major sectors of the economy than in micro enterprises. In fact manufacturing has a substantial share at about 30%. Small firms have shown remarkable job growth in 1989 and 1990, but more recently seem to have only been able to sustain employment.

Medium sized firms (100-499 employees) provide about 14 million jobs, 40% of which are in manufacturing. After strong job generation in the late 1980s, it is estimated that these firms are now losing jobs. The same can be said for the large firms sector, in which manufacturing, transport and business services are relatively dominant.

Craft industries

In this report a first assessment is presented of the size and structure of the crafts sector in the EC. The term craft trades is legally defined in Belgium, Germany, Luxembourg, France and Italy, and an official non-legal definition is used in Greece, Ireland and the Netherlands.

In countries where the term craft trades is legally defined, the definition is applied in various ways. For instance, Luxembourg and Germany classify 151 and 127 professions respectively as being craft trades. The remaining countries define the sectors comprising crafts and sometimes stipulate the maximum number of employees in craft firms. In Ireland and Greece the craft trades are closely connected with 'arts and crafts'.

Craft enterprises are primarily to be found in manufacturing industry, building and installation, repair and personal services. In retail trade only a small proportion of the enterprises can be considered as craft firms.

Upper and lower 'approximations' of the number of jobs in the craft sector indicate that between 12% and 25% of all jobs in the non-primary sector are provided by craft enterprises.

2. THE IMPACT OF THE INTERNAL MARKET

At the end of last year more than 90% of all proposals contributing to the completion of the internal market had been approved. In its consequences, however, the completion of the single market is a far more gradual process. Already in the late 1980s a great many firms, especially medium-sized and larger ones, were positioning themselves in anticipation of the new conditions.

Furthermore it will take many years after 1993 for the first and second order effects on both the supply and the demand side to run their full course.

Meanwhile, after a period of strong economic activity and of 'Euro-optimism', now economic slow down, increasing 'Euro-scepticism' and debate about subsidiarity and sovereignty dominate the scene. In itself, this fits within the longer term integration process of alternating periods of progress and set-backs from 1957 onward, but the immediate effect will be a delay in the full interplay of the consequences of the internal market.

In the short term the major impact of the internal market for SMEs is on their costs, which will decrease due to the reduction in delay and 'red tape' when exporting goods and services and due to the harmonization of technical standards. On the other hand some formalities have merely shifted from customs offices into the firms themselves, and sometimes new formalities arise. Although these may well be adjustment effects, there is a strong risk implied that potential cost decreases for SMEs will not be fully reaped in practice. At the same time it is not clear what effect the opening up of public procurement will have on SMEs.

In the medium term the major issues are larger markets, more competition, more trade between Member States and a fuller exploitation of economies of scale. Foremost this means SMEs in many sectors will have to face up to increasing competition from new entrants, often larger firms, on their traditional markets. Especially in those manufacturing sectors where economies of scale have not yet been fully exploited, SMEs may have to suffer losses in market share.

Also new challenges for SMEs will be created by strategic decisions of large firms regarding their location and make-or-buy choices. Sometimes these will offer new opportunities to subcontracting SMEs, but the internal market will also imply higher demands on these firms.

Within this setting SMEs have to take their own strategic decisions on how to counter competition, how to grasp new market opportunities and whether to venture (international) cooperation.

In the medium term the completion of the internal market will probably have a negative impact on the number of small and medium-sized firms in many industries, such as in manufacturing and the distributive trades. In so far as the European integration will result in a convergence of labour costs, this negative effect on the number of SMEs will be most notable in the lower income countries such as Greece, Portugal, Spain and Ireland.

But it is only in the longer run that the full consequences of the completion of the internal market will manifest themselves. On that time scale a restructuring of complete industries on the basis of comparative advantages within the internal market can take place. Labour intensive manufacturing industries in the lower income Member States will either face increasing competition from developing countries or other non-EC countries or will have to converge their industrial production structure towards that found in the more developed countries of the Community. In transport and in the wholesale and retail trades restructuring may imply a rise of large scale distribution networks.

Also a further division of labour will be stimulated by the large European market. This will create opportunities for further specialization. Restructuring and specialization alike will create a business climate conducive to new initiatives. An increasing share of goods and services will be in the early stages of the product life cycle. Business dynamics will then be boosted, showing both higher natality and mortality of new enterprises.

In macro-economic terms increasing competition, a fuller exploitation of economies of scale, a further division of labour and an increase in business dynamics all hold a promise of higher prosperity. This in itself will enhance domestic demand within the Community which will especially stimulate the sales of the small and medium-sized enterprises.

Of course other influences also shape events. First there are the possible wider aspects of further integration such as the Monetary Union, the decline of sovereignty of the Member States and the extension of the Community with new members. Secondly there are the external developments in the macro-economic environment and in the fields of demographics and technology which may in many ways interplay with the effects of integration.

3. OTHER TRENDS AFFECTING SMEs

The macro-economic environment

The evolution of the SME sector is closely linked with macro-economic developments. Changes in private consumption and in labour costs are very important issues for SMEs due to their strong dependence on consumer sales and their relatively labour intensive production methods. The growth of the economic activity in the whole EC has faced a slow down since 1990. From a 3.3% annual growth in 1986-1989, GDP growth decreased sharply to 2.8% in 1990, 1.4% in 1991 and 1.1% in 1992. Further deceleration is expected this year.

Looking at two major markets on which SMEs operate, i.e. private consumption and investment in construction, the general outlook is not encouraging. Both have been suffering persistent slowdown and their recovery is expected to be

only moderate in the immediate future. In 1992, for instance, the growth of consumption fell to 1.3% and for 1993 this figure is projected to be only 0.7%.

Demographic developments

The size, composition and growth of the European population are important factors for SMEs. They affect directly and indirectly the demand and the supply side of SME-activity. On the demand side demographics affect the market in retailing, personal services, residential construction, consumer goods; while on the supply side they clearly influence the labour force available for SMEs.

In the coming decade the population of the EC will grow at an annual rate of 0.2%, against 0.3% in 1980-1990, and the population will be ageing. The population aged 15 to 24 years will decrease by three percentage points sharply reducing the supply of young labour. This will have a greater impact on SMEs, the staff of which has been always relatively young compared with larger firms.

Within the population aged 25-64 years the middle age groups (30-55 years) will increase their share. The rise of these relatively well-educated and affluent groups will boost demand for differentiated consumer goods and services. This presents opportunities for SMEs to generate new goods and services for new and growing niche markets.

Technology

Technology is the most important engine for expanding economic potential and for that reason all countries are, more or less, engaged in a technological race. The most important trends in technology are the emergence of pervasive technologies, the acceleration of technological progress, the shortening of product life cycles and the growing importance of cooperation in research and development. New opportunities and threats arise for SMEs. SMEs with an active approach towards technology, highly efficient in R&D and at the forefront of new developments, will continue to play an important role in innovation. For these firms flexible production, decentralized management practices and the differentiation of former mass markets provide new opportunities.

However, a large part of SMEs, mostly operating in mature sectors, will continue to lag behind. They can easily be locked out from new markets and new technologies because of the increasing sophistication and complexity of products and processes, and the increase of R&D costs.

Such less active SMEs only play the role of users of innovations already developed by others, and they will need to give more attention to developments in technology in order to survive in the inevitable increase of competition in the market.

Internationalization

Internationalization is a continuous process happening all over the world. At the European level this is intensified by the creation of the single European market. Increasing international trade is the most important element of internationalization, but foreign direct investment (FDI), international co-operation between firms and international licensing are clear elements in the internationalization process. Even firms operating only in domestic markets, are affected by the 'globalization' process through the appearance of international players in their input and output markets.

Besides, a lot of SMEs are suppliers to large firms especially in manufacturing and they supply parts for final products to be marketed abroad. This implies that SMEs will increasingly have to meet European standards.

The participation of SMEs in the internationalization process is increasing. European integration means a rise of SME-exports, as they benefit from the removal of several bottlenecks. Intra-EC trade in six small scale sections studied in detail in this report is growing faster than exports to countries outside the EC. This means that for SMEs internationalization means primarily 'Europeanization'.

For most SMEs the first step in internationalization is exporting, but many of them are also active in FDI. International co-operation is also increasing more and more in various fields i.e. research, joint-buying, production, marketing, and this is a clear trend which has grown significantly during the 1980s.

4. ENTREPRENEURSHIP AND BUSINESS DYNAMICS

SMEs account for 99.9% of the enterprises in the EC, and micro firms (< 10 employees) for about 93%. With almost 22% of the total stock of enterprises Italy has the highest number of firms, followed by the UK (18%). In relative terms micro firms are strongly represented in e.g. Greece, Portugal and Italy. These firms are relatively scarce in Germany, which has the highest share of small, medium and large firms (about 25%). These enterprises are also well represented in Denmark, The Netherlands, France and the UK.

The average annual growth rate of the stock of enterprises during the years 1988-1992 is estimated at 1.9%, which means an average growth of almost 300.000 enterprises per annum. The growth rate however shows a downward trend during this period.

The evolution of the stock of enterprises is to a large extent the result of the birth of new enterprises and the death of existing ones. The gross natality rate

of new firms in the EC is estimated at about 10% in 1989, which means a total number of more than 1.4 million start ups.

Comparing natality and mortality rates shows that in general the natality rates are higher than the mortality rates. Only in the UK and Ireland the mortality rates are about equal to natality rates.

In the first two or three years of a new enterprise the probability of death is highest, some 10% per year. As major causes of start-up failures are mentioned lack of managerial competence, lack of training and technical competence, lack of marketing knowledge and financial problems.

The major reasons for starting an enterprise are self-realization, the presence of a business opportunity and the difference between current wage and expected income. The vast majority of entrepreneurs are males. However, the number of female entrepreneurs is increasing, especially in the trade and services sector. The average entrepreneur is 35-36 years old and between 60 and 80% of the entrepreneurs are between 19 and 39.

Education of entrepreneurs is relatively high and the percentage of entrepreneurs with no degree or only a primary degree is rapidly decreasing. Especially specialized workers, technical people and sometimes managers more frequently move into entrepreneurship. Ethnic minorities appear to have a relatively high rate of entrepreneurship and new firm start-ups.

5. MARKETS AND SALES

SMEs account for two third of the sales of the non-primary sectors. In most small countries the share of SMEs is about 80%, although in the large countries, except Italy, sales are more highly concentrated in large enterprises.

In manufacturing SMEs have about 50% of total sales, in the other services 67% and in construction and the trade sectors SMEs have almost 90% of the market. SMEs depend on their domestic markets more than large firms, which are more involved in exporting. Sales of consumption goods and services are an important market for SMEs, and particularly for micro firms. The most important market for small and medium-sized firms are the sales of intermediate goods and services.

For the countries for which evidence is available, it appears that customers of very small firms are more frequently final consumers. It also appears that micro and small firms tend to be operating in segmented product markets to a greater extent than larger firms. Also the degree of competition faced by smaller firms seems generally less than encountered by larger enterprises.

Subcontracting relationships are particularly relevant for SMEs in manufacturing and building. SMEs can take advantage of subcontracting by acquiring access to the technological and commercial know-how of large firms. However, the development of subcontracting opportunities does not necessarily guarantee that SMEs in a particular country will benefit, because main contractors are increasingly footloose and also have the option of sourcing subcontracted supplies from other countries.

Many SMEs are involved in some form of business relationship or cooperation with other companies, and in general such relationships are found to be beneficial for their competitiveness. These relationships generally do not place much restriction on the autonomy of the companies in decision-making.

6. INTERNATIONALIZATION OF SMEs

International trade has grown faster than the production of the EC, but other aspects of internationalization such as direct foreign investments, cooperation and international licensing also show rapid increases. The participation of SMEs in these processes is increasing. It appears that SMEs are catching up with large-scale enterprises in most fields, although there are still significant backlogs.

Six stages of the process of Europeanization of SMEs can be distinguished:

1. indirect international influences (e.g. subcontracting to exporter)
2. indirect export involvement (wholesale, export trading companies)
3. direct export involvement (including agents, distributors, sales subsidiaries)
4. co-operation with foreign firms (R&D, marketing, etc.)
5. international licensing
6. direct foreign investment (joint ventures, mergers, acquisitions)

Although some evidence is reported that firms may - benefitting from the collective learning curve - 'jump stages', generally speaking exports are the start of the internationalization process. Often these are preceded by international competition on domestic markets. Given internationalization 'in stages', one can look upon exports as an indicator for future internationalization in a broader sense. An increase of SME export activity now is most likely followed by increasing SME participation in Direct Foreign Investments (DFI), co-operation agreements etc.

So far as export bottlenecks are concerned, small firms face relatively more internal barriers (lack of knowledge, absence of an export manager etc.) while large firms face more distribution problems. In that respect large firms are more

likely to benefit immediately from the internal market. SMEs first have to overcome their internal barriers. However, the measures taken to increase harmonisation of markets will directly reduce the information gap of small firms. These bottlenecks are good starting points for export support policies. Because the export bottlenecks of small entrepreneurs do not vary much between member states, a general approach at the Community level seems feasible.

7. EMPLOYMENT

As stated in section 1 total employment in SMEs in 1988 was 62 million jobs, and has grown further in the late eighties. This means that SMEs now provide more than 70% of employment in non-primary enterprises. SMEs are dominant in distribution, construction, most service sectors and in a number of manufacturing industries. Taken together SMEs are dominant in sectors which jointly provide almost 80% of non-primary employment.

Micro firms account for 30% of EC employment in the private, non-primary economy. They are most important in terms of job provision in Greece (almost 60%) and Italy (almost 50%). Elsewhere their importance is more limited, and at the other extreme such enterprises account for less than 17% of German employment.

Throughout the EC employment growth in the 1988-1992 period was to a large extent a result of job growth in the micro and small firms sector. Furthermore job generation studies show impressive growth rates of job creation by newly established businesses.

Micro enterprises are more likely to employ female and part-time staff than large firms, and rely more on young workers. Average earnings are substantially lower than in large firms, but is not known to what extent lower earnings are due to differences in industry, occupation and qualifications.

Regarding the manufacturing sector, average labour costs per employee in large enterprises are between 30% and 50% higher than in small firms. However, there are no implications for lower unit labour costs in small firms because low costs per employee are offset by labour productivity (as measured by value added) being at least proportionally lower; in the industrial sector labour productivity in large firms is up to two thirds higher than in small enterprises. Furthermore, such productivity differences may have been widening in the latter half of the 1980s.

On the other hand, there are indications that in distributive trade and in several service sectors 'apparent' labour productivity (as measured by turnover per employee) is highest in medium-sized firms. However, also on this measure, the lowest level of productivity is most often found in micro enterprises.

8. CAPITAL AND FINANCE

SMEs and craft enterprises tend to use a higher proportion of short-term finance. SMEs seem to have inadequate access to lower-cost, long-term lending due to lack of collateral. Besides, SMEs are disadvantaged relative to large firms by higher interest rates, particularly on small short-term bank loans. The evidence indicates that small firms premiums on bank finance in many countries are about 1 to 2 percentage points over the rates that large firms are paying on short term finance.

Besides this restricted ability to raise bank finance at economic rates of interest, there is also evidence of equity gaps for SMEs in the majority of Member States. There are significant difficulties in obtaining venture capital at the lower end of the scale (seed-corn, start-ups).

In aggregate, Venture Capital (VC) funds in the EC have increased by some 140% between 1987 and 1991. Expressing venture capital as a proportion of GDP, the UK (2.25%), Ireland (1%) and The Netherlands are the leading countries. The countries for which VC is least important are, in rising order, Greece Italy, Denmark and Germany (between almost nil and 0.25% of GDP). It is important to note that VC investment is concentrated in medium sized firms rather than small enterprises.

Secondary stock markets appear relevant for only the very largest of SMEs, and furthermore there is a decline of those markets since 1987. Informal venture-capital networks are, by comparison with the USA, relatively underdeveloped in the EC countries.

Trade credit represents a significant proportion of outstanding commercial debt in the majority of EC countries. There is evidence that small firms extend more trade credit than their larger counterparts. Furthermore, SMEs would appear to receive less credit from their suppliers than they extend to their customers. In terms of volume trade credit has also expanded throughout the 1980s. Particularly in periods of recession, late payments on trade credit may be detrimental to performance and survival prospects of SMEs.

9. REGIONAL ASPECTS

Out of a total of about 345 million inhabitants in the European Community, roughly 10% live in intra-EC border regions, covering 15% of the Community surface.

The border has in some regions created the 'border effect': underdeveloped basins at both sides of the border. Bordering regions with similar patterns of development, however, appear to be rather unusual.

Businesses like transportation, custom agents and retail trading were flourishing at crossing points of the border. SMEs and craft enterprises are overrepresented in these business activities. The Single Market however leads to job losses in the custom agents business and after tax harmonization certain cross-shopping will be less attractive.

For some activities the border acted as protection, like house building, civil construction, artisans and services. Elimination of border barriers will release this protection and will affect those small scale sectors. Firms that operate on the thus enlarged markets will not only gain more opportunities, but they will meet more competitors on the newly enlarged markets and on their traditional markets as well.

Commuting will occur also in the near future, as long as differences in wages, social security and skill exist. In the long run these flows might however slowly decrease.

The concept of the single market promotes internationalization. Some forms of inter-SME cooperation are particularly suited for neighbouring regions, eg. subcontracting.

In the Community the so-called Objective 1 regions are distinguished. They are defined as less developed regions where gross domestic product per capita is 25% below EC's average. This definition includes three countries completely (Greece, Ireland and Portugal), a substantial part of Spain and Italy and some other regions. Characteristics of Objective 1 regions are: less populated than the rest, the level of industrialization is 6% points below EC's average and the unemployment rate is 7% points higher. The gap (in GDP per capita) between Objective 1 regions as a whole and EC average has grown in the period 1983-1990. The average firm size in Objective 1 regions is considerably lower than in the remaining EC regions. The employment share of SMEs in Objective 1 regions is considerably higher than in the remaining areas.

The Community supports Objective 1 regions with communication infrastructure, development of energy and water supply, vocational training and other services to SMEs and research and development.

The absorption of Community Structural Funds by SMEs is rather poor, due to internal factors related to SMEs and to organizational bottlenecks in the public administrations.

10. STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS

On the European level the major findings as presented before, can be approached from the angle of strong and weak aspects of the SME sector including crafts in Europe.

Some noteworthy strong points are:

1. greater business dynamics obvious from the high natality rate and the increase of the educational level of entrepreneurs;
2. the increasing participation of SMEs in international trade, direct foreign investment, and
3. the promising job creating potential, induced by new firms created, market opportunities but also by the low labour productivity growth in the SME sector.

Important weak points that can be registered are:

1. the high mortality rate; linked to the high natality rate leading to a high volatility of business in the EC;
2. weak market orientation due to lack of strategical marketing approaches and operating on small segmented markets;
3. low productivity of labour leading to high unit wage costs in spite of the relatively low wage costs per employee;
4. the financial situation of SMEs remain a weak point due to a low equity/debt ratio and difficult and costly access to financial markets.

These weak points give rise to a relatively difficult starting position for SMEs in the new European Community.

The analysis of the different trends in the macro economic environment, demographics, technology, internationalization and the completion of the internal market shows that there are some important opportunities for SMEs in the near future as well as the medium-term. But threats have to be faced as well; especially in the short run the recessionary period will definitely be affecting

all business life and not in the least that of smaller enterprises. A summary of opportunities and threats for SMEs is presented in Table 2.

Table 2 Opportunities and threats for European SMEs, by field

	Opportunities	Threats
<i>Entrepreneurship and business dynamics</i>		
- rise of middle age potential entrepreneurs	+	
- high unemployment stimulates start-ups	+	
- increase of failure rates in recession		-
- new business opportunities in internal market	++	
- more competition from abroad		--
- free movement of persons (entrepreneurs)	+	
- economies of scale		-
- specialization trend	+	
<i>Markets and Sales</i>		
- slow growth domestic market		--
- long run growth of services	++	
- rise of middle age consumers	++	
- decrease young consumers		-
- increase of subcontracting	++	
- higher (technological) standards in subcontracting		--
- flexibilisation production systems	+++	
- export as a first step to Europeanization	+	
- outsourcing foot loose large firms		--
- abolishment physical barriers	+	
- abolishment technical barriers	++	
- higher import penetration		--
- concentration in large internal market		----
- opening-up public procurement	+	
- higher prosperity (internal market)	+	
<i>Employment</i>		
- rising labour costs		--
- labour saving technology		--
- increase migrant workers	+	
- dejuvenization labour supply		-
- rising female labour participation	+	
- managerial diseconomies to scale	++	
- competition with high productivity large firms		----
- free movement of persons	+	
- harmonisation social policy	+	
<i>Capital and finance</i>		
- weakening secondary stock markets		--
- increase of late payments		--
- falling interest rates	+	
- financing acceleration innovation		-
- internationalization capital markets	+	
- supply of venture capital	+	
- competition lending market	+	

Some striking opportunities that can be mentioned are:

1. New entrepreneurship springing from the increasing number of unemployed in the short run and the demographic developments as well as the internal market in the medium term.
2. The growth of the small-sized service sector, due to increasing prosperity and the subcontracting of services.
3. Small enterprises meeting new challenges due to the smaller scale application of new production processes and the managerial diseconomies to scale (back to the core) and the decrease of the minimum efficient scale of production.
4. Export opportunities are positively influenced by the reduction of non-tariff barriers in the EC. Increased specialization due to the internal market will also create opportunities for SMEs.

Contrary to this positive perspective, some major threats for SMEs can be categorized as follows:

1. Especially in the short run the market growth, both domestically and globally, will be limited.
2. A strong exposure to international competition from larger and small foreign enterprises, leading to risks of higher import penetration. The internal market will in some sectors result in concentration of production in larger firms, particularly in the least developed member states.
3. Footloose large firms will impose stronger criteria on smaller supplying firms concerning standards, quality, etc. Consequently the subcontracting market will become more international as well more competitive.
4. Job creating potential may be eroded due to labour saving technologies and higher labour costs in small enterprises.
5. Although the capital market liberalization offers advantages for SMEs, negative aspects could be the weakening of the secondary stock market, which is of special importance for the medium-sized firms. Furthermore, late payments may lead to liquidity problems and consequently to higher capital costs.

Opportunities and threats are to be faced by the SME sector and consequently by the policy makers. Taking into consideration the weak points of SMEs and the short run threats, it can be expected that the job creation potentials of SMEs will be difficult to exploit in the coming years. The SMEs will be inclined to sustain employment instead of creating it. However, in the longer run when the recessionary influences have been overcome, excellent prospects for economic growth and employment creation can be expected in the SME sector. The opportunities created by the completion of the internal market, an increase

in prosperity as well as the adoption of 'SME-made' technology will influence the development of entrepreneurship and small and medium-sized enterprises beneficially.

11. RECOMMENDATIONS

Entrepreneurship and business dynamics

Apart from stimulating and promoting new entrepreneurship the survival of existing firms needs special attention. Experience shows that there is a wide difference in survival rates of start ups. More attention should be paid to developing instruments to lift the barriers and bottlenecks faced by new start ups in their first years of existence.

This can be done by improving managerial attitudes and skills and providing wide-ranging information. Specific attention should go to credit availability and financing facilities during the first years of life. Moreover, the market mechanism should be supported through the constitution of public services in providing information on legal, technologies, credit, production, competition and other affairs.

The present unemployment situation not only requires an offensive approach to create favourable conditions for new start ups but also offers opportunities to stimulate new entrepreneurship by offering the unemployed new perspectives on becoming entrepreneurs.

Creating a favourable climate for new start ups and for minimizing failure rates is in general not only related to positive economic and juridical conditions, like expansive markets, low entry barriers, ample and adequate capital markets, an accessible system of business advisory services and a juridical and regulatory framework that is transparent and not too complex.

More socio-psychological conditions should be taken into consideration in promoting entrepreneurship, like increasing the credibility of entrepreneurship in society and offering people possible choices in their professional careers. In this respect the EC should stimulate the individual member countries in exchanging experience in creating favourable economic and socio-psychological conditions for new entrepreneurs. Giving attention to entrepreneurship and stimulating awareness can be promoted by mass campaigning, providing proper information to pupils and students, as well as creating entrepreneurship training schools at secondary and higher levels.

A European Entrepreneurship Promotion Programme should be started at a European level which can be linked to existing national programmes and can strengthen these programmes.

In these promotional activities special attention should be paid to population categories that are highly responsive to new entrepreneurship. In this respect not only the unemployed should be mentioned, but also the ethnic minorities which seem to be rather under-represented in entrepreneurship. In some countries experiences have shown that the willingness of ethnic groups to start their own business is rather high.

Under-representation among female entrepreneurs is also found in most of the EC-countries, which demands special and 'tailor made' attention in promotional activities.

The aging population also requires special attention that policy makers give to the so-called 'superceders' - entrepreneurs that are in the second half of their career - and 'reverters' - people in the phase of late and post career - who may also choose to take the entrepreneurial path.

To stimulate more innovative entrepreneurship in order to keep abreast of new technological developments, special attention should be concentrated on students in higher education and research workers in universities. The awareness for entrepreneurial opportunities there seems to be rather low and training programmes at this level are rather limited in many European countries.

Channelling into and recruiting for entrepreneurship can be realised by special programmes. The EC can fulfil the role of exchanging information on experiences in this respect and of initiating cooperation between universities and polytechnical schools in setting up small business management programmes and eventually in strengthening the exchange of 'potential entrepreneur' students between countries.

Another opportunity for stimulating highly qualified and new entrepreneurs is to stimulate action by multinational firms to develop career planning for highly qualified (research) staff for whom the entrepreneurship track ('spin-off') is under consideration. Due to the recession this is currently of particular importance as many large firms have to dismiss large numbers of employees. Stimulating new entrepreneurship within this group should be more easily done by employers, employees and their organizations as well as by policy makers. Supporting instruments by the EC should be developed.

Further integration of the European economy demands and also brings to the fore the need for greater mobility of entrepreneurs.

Existing barriers in business licensing and regulations, should be lifted, particularly in border regions where differences are most marked. Stimulation of European trade associations to develop quality standards for their national associations should also be considered. This would be aimed at achieving a more transparent European-wide quality concept for entrepreneurs or small businesses.

The actions undertaken by the EC to arrive at new juridical forms for businesses (such as the European Economic Interest Grouping, the European Association, the European Cooperative Society and the European Mutual Society) should be supported in order to augment international business cooperation and to lift the existing barriers. Monitoring and evaluating these new European businesses should be carried out in order to adjust such worthwhile initiatives to the new business conditions in Europe.

In selecting instruments to stimulate new entrepreneurs attention should be paid to crowding-out effects. From a macro-viewpoint these are not always harmful. However on micro level the policy may engender social problems with financial and budgetary consequences.

Most of these initiatives could be undertaken at national or even at local or regional level, while on the European scale the exchange of information on different experiences in promotion and stimulation of new start ups as well as in minimizing failure rates is in order. Supporting national initiatives and broadening them to other countries should be considered as well. Moreover Community policy should be aiming at general regulatory problems and the communities institutional framework in which national schemes are envisaged to operate.

Markets and sales

Bearing in mind the recessionary state of the European economy, a careful expansionist policy might be advocated to exploit the employment creating potentials of the SME sector. Such a policy should also, however, be focused on restricting labour costs and on a sound pricing policy to strengthen the competitive position of the business sector - including SMEs - in the global markets.

Structural and business cycle policy should foster small businesses in order to maintain competitiveness and the smooth functioning of markets for final goods and services. In the present recessionary period, and with particular emphasis in several Member States, there is a tendency for small business to

be pushed aside by larger enterprises. This will endanger competition in the long run.

Certain demographic developments will lead to a greater segmentation of consumer markets, in particular of markets for consumer goods and services. Fewer young and more middle-aged and elderly consumers implies changes in the structure of market demand. There is a need for small businesses to be well informed in this area. Although on the national level specific tasks can be identified, the EC should also attempt to enhance information flow on market developments for SMEs paying particular regard to their increasing international dimension. This can be achieved by stimulating trade associations or branch organizations to cooperate more effectively on a European scale. This in turn will establish a sound financial basis for information access and adequate branch information.

Special attention must be devoted to the subcontracting market both on the national and the international level, as markets become increasingly international.

At present a few countries run subcontracting programmes as part of industrial policy. These programmes mainly consist of information and counselling activities. EC policy in the field of subcontracting is centred on two themes. The first is the creation of a favourable legal climate and the second the improvement of communication between contractors and subcontractors.

On a European level strengthening of the subcontracting relations between large and small firms will be necessary when technology-intensive products are under consideration. Business services could also be better integrated into subcontracting or cooperative networks.

Certification of SMEs should be promoted to strengthen their market position internally and externally. The basic principle for the EC in this respect should be to make the subcontracting markets more transparent and to stimulate horizontal and vertical partnerships. Instruments to accomplish this could be the assembly of data banks and/or catalogues, the organising of trade fairs etc. A better regulation of SME participation in EC-technology programmes could be very helpful in inter-relating new high-level networks in advanced technology sectors.

The reduction of non-tariff barriers in the EC evokes stronger competition. SMEs have to face more and stronger competition on their home markets as well as having to compete more effectively on foreign markets. In this large and more competitive European market economies of scale and scope can be

better utilized. Small enterprises should be enabled to remain competitive and to grow to exploit economies of scale by adopting a policy based on an adequate information system and helping to strengthen cooperation between firms.

Important in this respect is the strengthening and upgrading of the existing information and cooperation instruments such as EIC, BCNet, Europartenariat. Non-manufacturing firms need to have more explicit recognition in forming EC-policy in this respect.

Exporting and internationalization

European integration and harmonization of non-tariff barriers in the EC seems to have had a substantial positive impact on the larger exporters than on the smaller ones. For smaller firms face, in addition to the same external bottlenecks as large enterprises, many internal bottlenecks.

Full attention both from national and supranational authorities should in this respect focus on compensating small firms for their internal problems limiting both their external trade and their other international activities to other EC-countries and to third countries.

These internal problems are mainly related to steps to be taken before the act of exporting. The main bottlenecks for SMEs here are: lack of information on market opportunities and distribution channels, the identification of agents or distributors and lack of financial means to enter new markets. Other problems are connected with trade barriers like custom control procedures, insurance, currencies and quality requirements.

The EC should use the EIC to inform the smaller entrepreneur better on market opportunities and developments, but also on current national regulations and conditions.

This information could be made available more systematically as a result of analyzing market developments. Regular surveys in this area should be stimulated.

An EC-wide information system on qualified importers, exporters and wholesalers should be reconsidered to assist SMEs in finding the appropriate distribution channels to foreign countries, especially within the EC. Exports to third countries can be supported by providing selective information on relevant adjacent regions like the EFTA, Maghreb and Middle and Eastern European markets.

It ought to be emphasized that cooperation between SMEs in exporting activities should be strengthened by providing appropriate information on relevant 'candidate export partners'.

As export financing remains a major problem for SMEs it is not clear to which extent export credit guarantee schemes are existing and distorting exportation between SMEs in the Member States. More insight may be needed to find out ways and means to eliminate these distortions.

There is some evidence that in recessionary periods SMEs tend to improve their export performance, the stimulus being insufficient demand on local or domestic markets. The recessive periods can be considered as learning periods for SMEs on how to export. Especially in this period good information is to be provided to SMEs to go abroad. But for the future it is also of great importance to sustain and to improve the export competence acquired in this period. This requires special programmes, training and information focusing on these exporters. Special attention can be devoted to networking and/or cooperation for exporting SMEs.

To counteract the strong import penetration of the EC from outside, a strong emphasis should be put on improving the quality and technological performance of the SME sector, as has been advocated before.

Moreover, on a national level specific attention should be paid to the development of wages and social insurance costs in the labour-intensive SME sector, to enable it to remain competitive on external or global markets.

The SME sector should be seen as part of the European production chain, with firms delivering components, spare parts and services to each other and to large enterprises. Reinforcement of the total production chain is needed to guarantee the position of the European industry in the global markets.

To stimulate the technological renewal of the SME products and processes, SME should be encouraged to take part in licensing agreements with larger high technology companies. Special attention can be channelled by the EC through the different information or cooperation programmes of the EC in this field, like EIC, Europartenariat etc.

Employment and human resources

The high and rising unemployment rate together with the existence of hidden unemployment in the EC demand a much stronger concerted action by the EC. Strengthening and integration of policy instruments and programmes originating in the different Directorates General should be major policy strategies in the coming years. A realistic strategy should be developed in close cooperation with the social partners at the European level.

The small business and craft sector, which hosts about half of the total labour force, needs special attention in such a policy. The more so because the

potential for job generation by SMEs is significant. SMEs offer ample opportunities for particular groups on the labour market, like young workers, women, part-time labour, older employees and self-employed. Policies should be orientated to increase the demand for employees by developing and stimulating the labour-intensive SME sector in general as well as by improving job-matching on the labour market.

Stimulation of the SME sector should be based on viable economic reasoning and recognising the fact that SMEs are not the only subject of a social policy to diminish unemployment. Both large and small enterprises should be targeted for schemes to diminish unemployment.

On the supply side of the labour market policies should be geared towards upgrading and training personnel conform the demands requested by SMEs. This usually implies in particular vocational training for the potential labour force, but also the emphasizing of permanent training for multi-skilled staff. This will keep the labour force more abreast of new technological developments and make it more responsive to change both internal and external to the firm.

The demographic, technological and internationalization developments will demand more and more supplementary training and retraining programmes for keeping the older members of the labour force particularly up to date in their profession or adaptable to new demands in the production process.

Small firms lack facilities to implement this internally. The setting up of 'external' systems in cooperation between enterprises and governments should be pushed for. This will increase the quality of the labour force in the SME sector. In this respect the EC can play a role by stimulating international exchange of information, ideas and schemes. Due to the expected increase in international mobility (in particular in border regions of the EC) the EC can play a more active role in stimulating exchange of information on the qualities of the different professions by e.g. harmonizing certificates, or by providing information on the quality of the different national certificates.

Although most of the labour market problems should be tackled on a national or even a regional scale, the European Commission should, apart from the aforementioned actions, emphasize training, in particular taking into consideration the changes in the internal labour relations resulting from changes in the structure of the labour force, technological developments and the phenomenon of internationalization.

Entrepreneurs should be adequately informed or trained in management principles to adapt their organization to these processes. In this respect the programmes of CEDEFOP are relevant.

Exchange of experiences in effective unemployment and training programmes in the member states could stimulate the application of the best instruments to solve the unemployment.

Policy interventions need to reflect the lower productivity achieved in the small and micro firms in comparison to middle sized and larger firms. Measures designed either on the national or at the supranational level to raise the 'social wage' may have a disproportionate effect on the SME sector and particularly on employment in that sector, unless steps are taken to raise labour productivity levels.

Financing of SMEs

Investments by SMEs should be stimulated to contribute to the growth process and job creation in the European Community. However, the financing of investments by SMEs and start ups is hampered by the limited equity capital of the small firms, the limited access to capital markets and in particular access to long term funds and venture capital. This arises from liquidity problems due to late payments which hit SMEs harder than larger enterprises.

The fact that SMEs have more reliance on short term funds is consistent with a lack of demand for longer term funds but also with a lack of collateral to provide for long-term loans. Loan Guarantee Schemes and Mutual Guarantee Systems have been introduced in a number of EC-countries to cope with the latter. This policy might be extended to other member states. The EC should also strengthen its policy to establish these guarantee schemes. Guarantee schemes are in particular of importance for start ups having limited access to venture capital funds.

The establishment and promotion of risk capital funds should be strengthened by the EC, especially in view of the skewed availability of these funds in the different member states.

There are significant difficulties for the smallest firms raising venture capital. As the micro or small firms will have less access to the more formal funds, the EC should investigate ways to mobilize informal risk capital.

Tax incentives to informal venture capitalists appear to have a beneficial effect on investment levels.

Policy intervention should also be geared to increase the self financing by SMEs, which can be stimulated by tax facilities. In this respect the different legal forms of enterprises, especially occurring in the SME sector, should be taken into consideration. The EC can take the lead in informing member states of the different systems applied and to stimulate the self-financing by SMEs accordingly.

SMEs extend more credit to their customers than do large firms. Measures both on a national level but also by the EC on a supranational level should be taken to ensure prompt payments of debts. The policy of the EC should be strengthened and supported in attacking late payments by both the private and (particularly) the public sector. In this respect special attention is also required to stimulate the efficiency of the banking system, reducing the transfer times of cross-border financial transactions.

As small firms are strongly rooted in their regional or local environment, investment promotion and accordingly financial incentives or means should be put available at regional or local levels. Establishment of regional venture capital funds may be a solution to the problem of local equity gaps. Strengthening of links between the widely dispersed banking systems and advisory or information centres for SMEs, including those initiated by the EC, is needed.

With regard to bank lending small firms are disadvantaged relatively to large firms by higher interest rates on short term bank loans. These loans are more important for SMEs than for large enterprises.

It should be investigated whether this phenomenon is due to a lack of collateral, other asset evaluation techniques by the banks, or to less bargaining power of SMEs.

In order to stimulate SME-investments in R&D or innovation the EC could consider linking participation of SMEs in the different technology programmes of the EC to financial schemes under development by the EC or already available in Member States.

Border regions

In the border regions quite different degrees of integration can be found, due to differences in historical background, culture, physical barriers and economic structure. Further European integration is required for a proper 'zipper-type' of integration of the adjacent regions at the border of countries. In particular further convergent development is needed in legislation that prevents markets

from being unified, e.g. social benefit and fiscal systems influencing the relative prices on input and output markets are still bottlenecks for mobility of labour, capital and goods.

Strengthen the regional policy makers in deciding on policies for specific regional conditions, to optimize the allocation of EC funds and to solve the structural differences within the border region more effectively.

Developments in the cross border regions should be monitored and assessed thoroughly in order to get better insights into the progress of integration, the effectiveness of the different activities and the real needs of business.

International cooperation requires information. There is still a shortage of mutual knowledge at the three levels of households, business activity and public administration. Therefore, information exchange in border regions, in particular of relevance for SMEs and craft enterprises, is a priority. Transnational databases and public information agencies must be supported or should be developed.

For example cross-border operations in the construction sector are usually hampered by different quality requirements, standards and norms. Better information for the SMEs and craft firms in this sector is needed to have an appropriate marketing strategy established.

Planning by municipalities and other administrative bodies must increasingly integrate cross-border aspects. Ad-hoc transnational bodies (*Eurodistricts*) should be set up and gradually receive mandatory powers. Systematic creation of transborder *Enterprise zones* could be considered to melt and integrate differences within the border regions.

Special attention should be paid to develop technological and innovation programmes in the cross-border regions; one of the weakest points at present. Strengthening the exchange of experiences in this respect between the different Euregions is desirable.

Transnational educational programmes should be further encouraged, both at the basic level (national languages and culture) and management level, preparing the professionals to work in and with firms and administrations of both sides of the border.

In the labour market area, the specialized bureaus should focus more strongly on matching demand and supply across the frontiers, taking into consideration

the different educational, vocational and professional backgrounds. Detailed information on labour qualifications in the whole region should be developed.

Objective 1 regions

For SMEs in less developed regions easier access will be provided to a broad and harmonized single market for the sale of their products and the purchase of raw materials, and, for cooperation with partners of other member states in the fields of subcontracting, technology transfer and marketing.

In order to take advantage of the opportunities, the means should be provided for these firms to increase their competitiveness, to enlarge their local field of activity, to fit in the requirements of the European customers and follow the rapid evolution of the technology.

Increasing the utilization of EC Structural Funds by SMEs is likely to be more effective if the assistance focuses, in the first instance, on intermediaries rather than directly on SMEs themselves.

Developing managerial resources of these intermediaries is a high priority in less developed regions. It is therefore necessary to help and develop business assistance services and networks to provide for consultancy and information services to SMEs. In this context special attention should be paid to the improvement of the functioning of existing intermediaries rather than creating new ones, and to the establishment of network links between them on a regional, national or Community level.

In this field Community support could be given for the exchange of experience and the diffusion of best practice on methods and mechanisms for delivering assistance as well as for the establishment of transnational networks of intermediaries. Priority should be given for this type of action.

Financial bottlenecks also limit SMEs capability for innovative action. Many SMEs find Community support of no avail when their financial structure is too weak to afford additional funds and the local financial institutions are too risk-averse to provide for cheap financing. Thus Community programmes should also shift their emphasis to alleviating financial burdens or to helping develop financial institutions geared to the needs of SMEs (like Mutual Guarantee Systems) in these regions in particular.

The problems and needs of SMEs would be better understood and catered for if on the regional scale the SME and craft organizations would be stronger and

better integrated in the decision making process, in the implementation of the Operational Programmes and in their monitoring.

In general a uniform approach to Objective 1 regions should be avoided. Community assistance should be more 'tailor-made' to the specific needs and weaknesses of the regions.

PREFACE

The Directorate-General XXIII (Enterprise policy, Distributive Trades, Tourism and Cooperatives) of the Commission of the European Communities has decided to set up a European Observatory for SMEs. A major objective of the Observatory is to provide the Commission with structured information to inform its policy-making activity in relation to the SMEs including the craft sector. Besides, the information will be of importance for the national governments as well as for intermediary organizations in the business sector.

The aim of the project is to prepare an *independent annual report*, which gives a structured overview of European SMEs and the craft trades in both quantitative and qualitative terms. This is the First Annual Report and subsequent reports will be submitted in 1994 and 1995.

Key points of each annual report will be that

- it should provide an overall, structured view of the SME sector in the Community and the Member States;
- it should include an analysis of regional aspects;
- it should offer a periodic survey of existing policies to assist SMEs in the Member States, and at Community level;
- it should include selective theme studies focusing on specific sectors and related aspects of SME activity;
- it should monitor the position of SMEs with respect to the completion of the internal market;
- it should be relevant for policy-makers at the Community level and in the Member States, and for intermediary organizations;
- it should have a catalytic effect on the collection of SME data and research.

Organisation

The report has been prepared by the twelve partners of the European Network for SME Research (ENSR), coordinated by the EIM. The ENSR is a network of leading organisations which specialize in SME research and cover all Member States. Partners in the European Network for SME Research are:

Belgium	Small Business Research Institute (KMO-Studiecentrum), Katholieke Universiteit Brussel, Brussels
Denmark	Danish Technological Institute (DTI), Copenhagen
France	L'Association pour la Promotion et le Développement Industriel (APRODI), Paris
Germany	Institut für Mittelstandsforschung (IFM), Bonn

Greece	Hellenic Organization of Small and Medium-sized Industries & Handicrafts (EOMMEX), Athens. Subcontractor: Centre of Planning and Economic Research (KEPE), Athens
Ireland	The Economic and Social Research Institute (ESRI), Dublin
Italy	Bocconi University, Centro Studi sull'Imprenditorialita 'Furio Cicogna', Milan
Luxembourg	Centre de Promotion et de Recherche de la Chambre des Métiers du Grand-Duché de Luxembourg, Luxembourg
The Netherlands	EIM - Small Business Research and Consultancy (Economisch Instituut voor het Midden- en Kleinbedrijf), Zoetermeer
Portugal	Instituto de Apoio às Pequenas e Médias Empresas e ao Investimento (IAPMEI), Lisbon. Sub-contractor: Universidade Nova de Lisboa (Instituto Superior de Estatística e Gestão de Informação - ISEGI), Lisbon
Spain	Instituto Vasco de Estudios e Investigacioni (IKEI), San Sebastian
United Kingdom	Centre for Small and Medium Sized Enterprises, University of Warwick, Coventry, England

In Annex III further details about the partners in the ENSR are presented.

The project is coordinated by Rob van der Horst and Sander Wennekers (both EIM). Prof. Vianen, director of the EIM, has the scientific supervision of the project.

Furthermore the EIM has appointed the following chapter-coordinators, responsible for the coordination and elaboration of those chapters of the Annual Report directly based on information from the twelve partners in the Network:

Chapter 5	Entrepreneurship and business dynamics: Prof. Giuliano Muscati (Bocconi, Italy)
Chapter 6	Markets and sales: Eoin O'Malley (ESRI, Ireland)
Chapter 7	Employment: Prof. David Storey, Nick Clay and Stephen Creigh-Tyte (Warwick, UK)
Chapter 8	Capital and financing: Robert Cressy and Marc Cowling (Warwick, UK)
Chapter 9	Regional aspects: Juan Luis Llorens-Urrutia (IKEI, Spain)

Chapter 10	Internationalization of SMEs: Koos van Elk (EIM, The Netherlands); for Chapter 10 An Bord Tráchtála/Irish Trade Board acted as subcontractor
Annex II	SME policy in countries of the EC: Aad de Koning (EIM, The Netherlands)

The following chapters were prepared by the EIM as main contractor:

Chapter 1	Introduction
Chapter 2	SMEs in the European Community
Chapter 3	The impact of the internal market
Chapter 4	Trends
Chapter 11	Synthesis
Chapter 12	Policy recommendations

A Reference Group has been established to reflect on the research findings and to advise EIM/ENSR. The Reference Group is mainly composed of representatives of European organisations which are generally active in the field of SME or the business sector in general. The European Commission (Directorate-General XXIII) attends the meetings of the Reference Group as an observer.

Participating organisations in the Reference Group are:

- CCACC (Comité de Coordination des Associations de Coopératives)
- CEDI (Confédération Européenne des Indépendants)
- CECOP (Comité Européen des Coopératives de Production et de Travail Associé)
- EMSU (Union Européenne des Classes Moyennes)
- EUROCHAMBRES (Union Européenne des Chambres de Commerce);
observer
- EUROCOMMERCE
- EUROGROUP
- EUROPMI (Comité Européen de la Petite et Moyenne Entreprise
Indépendante)
- FABRIMETAL
- OECD (Organisation for Economic Co-operation and Development)
- SME-Intergroup of the European Parliament
- Confédération Européenne des Syndicats/ETUC
- UEAPME (Union Européenne de l'Artisanat et des PME)
- UNICE (Union des Confédérations de l'Industrie et des Employeurs
d'Europe)
- UN/ECE (Economic Commission for Europe, United Nations)

Acting as the main contractor, the EIM bears full responsibility for the content of the report, including policy recommendations.

In the course of the project the project coordinators very frequently had discussions with DG XXIII, especially with Mr. C. Tenreiro. He has been very helpful and constructive at all stages of the project.

The recent Eurostat publication 'Enterprises in Europe' has been a cornerstone of the project. The Eurostat initiative to collect, analyze and publish comparable data by size class and country was extremely useful to the project. At several stages of the project the co-operation provided by Eurostat was of great help.

The institute ANCE (Agence Nationale pour la Création et le Développement des Nouvelles Entreprises) in Paris was very helpful in providing data on birth and death rates of enterprises in several countries.

Mr. Stephen Creigh-Tyte and his colleagues at the SME Centre of Warwick University have made an important contribution to the final editing of the report.

One of the objectives of the Observatory-project is 'networking'. Of course the European Network for SME Research (ENSR) is the main network used within the framework of the project. The competence of this network is in the quality and experience of its partners, in the large number of specialized SME researchers and in the geographical balance. Nevertheless, on specific issues cooperation with other institutions can be fruitful and could improve the quality of the reports. Therefore prior to the start of the project the ENSR established cooperative links with specialized organizations. Apart from the organizations represented in the Reference Group and others already mentioned (Eurostat, ANCE and the Irish Trade Board/An Bord Tráchtála) professional craft organizations, craft research organizations and chambers of commerce in several Member States have contributed to the implementation of the Observatory-project. Although these organizations cannot be considered as responsible for the content of this report, their assistance has been highly appreciated.

Due to the publicity about the Observatory-project a large number of other organizations in the Member States have expressed their interest in cooperating in the project. ENSR has informed them all about the objectives and the framework of the project and will investigate how these organisations can play a role in the second and subsequent reports.

1 INTRODUCTION

1.1 BACKGROUND

Community policy to stimulate the business environment and promote small and medium-sized enterprises (SMEs) in the non-primary sector has increased the demand for structured and detailed information and for research about this sector within Europe. Comparative analysis across all member states is a prerequisite for detailed analysis. At present, however, research into SMEs including the craft trades is conducted in the Member States in an unstructured way by research institutes, trade organizations, universities etc. Moreover, the scope and extent of SME research differs between Member States. Consequently, a structured overview of the European SME sector in both quantitative and qualitative terms is not available.

The singular importance attached to SMEs and the craft trades by the Community is based on sound economic and social reasoning. SMEs and craft enterprises are generally an important provider of new jobs not only in the growing service sectors but also in the traditionally larger-scale manufacturing industries which have recently been subject to major structural changes.

SMEs also seem to be more responsive to market needs, more adaptable to change and more innovative in their ability to meet customer demands. The role played by SMEs and craft firms in providing indigenous sub-contracting facilities to larger high-technology firms competing in world markets is particularly significant. As such, SMEs and the craft trades play a critical role in the competitive base of the Community relative to the other major trading areas in the industrialised world.

For these reasons the Directorate-General XXIII (Enterprise Policy, Distributive Trades, Tourism and Cooperatives) of the Commission of the European Communities has decided to set up a European Observatory for SMEs. In the frame of the European Observatory for SMEs an independent report is to be prepared each year.

1.2 METHODOLOGY

Each annual report on the European SMEs will provide an up-to-date overview of the situation of and prospects for the small and medium-sized enterprises within the European economy. Furthermore, each report will contain one or

more detailed thematic studies of special topics and sectors. Finally each annual report will provide an indication about the impact of the internal market on SMEs.

An explicit conceptual framework underlying each report will ensure the information provided is structured and comprehensive, and will guide the development of the report in subsequent years.

The conceptual framework of the European Observatory for SMEs is presented in Figure 1.1. In this the so-called SME-fields have a central position. These fields represent the main dimensions of the SME-sector, including the craft trades. For each heading a structured set of coherent information will be provided.

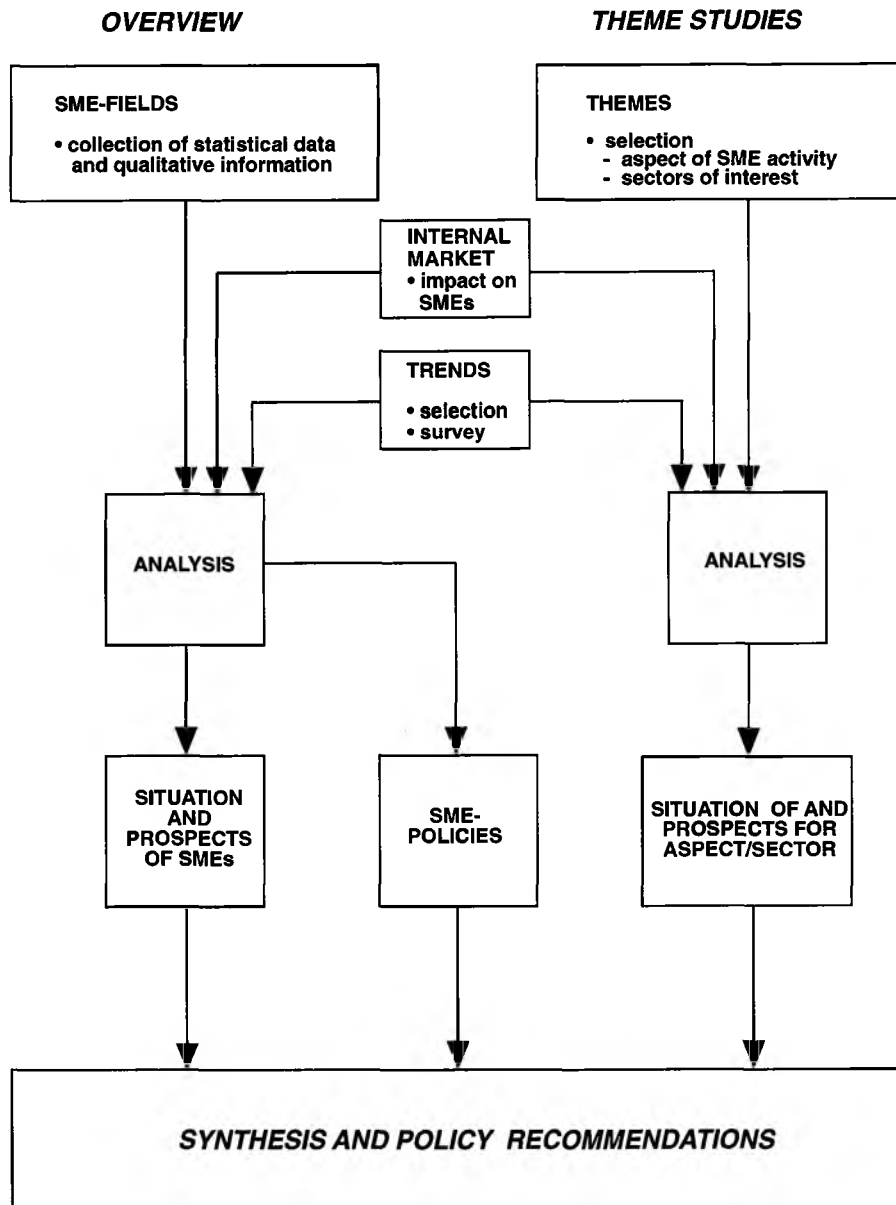
Major SME-developments are linked to causal factors within the fields, and to socio-economic and other issues affecting SMEs. In each report a separate overview of these developments will be presented. In Figure 1.1 these are indicated as 'Trends'. The list of trends to be analyzed in a specific year is not intended to be comprehensive and is likely to vary from year to year.

The analysis produces an *Overview* of the state of affairs and perspectives on each SME-field, as well as in the sector in general. This overview contains both quantitative and qualitative information on SMEs and the craft trades. Emphasis will be placed on the identification of bottlenecks and opportunities, in order to provide relevant issues for policy makers.

Nevertheless, there are other important topics which deserve more attention than can be given within the overview framework. With this in mind every year at least one 'in-depth study' will be provided on a subject of particular relevance to SMEs, either on a particular sector or a specific aspect of SME activity: the *Theme Study*.

Finally each report will contain a section presenting a synthesis of the findings and discussing policy issues emerging from the analyses: *Synthesis and Policy Recommendations*.

Figure 1.1 Conceptual Framework of the European Observatory for SMEs



1.3 CONTENT OF THE REPORT

The design of the First Annual Report is based upon the conceptual framework as set out in Figure 1.1. The impact of the internal market is discussed in Chapter 3.

The trends selected for this report and discussed in Chapter 4 are set out below.

Table 1.1 Some Major Trends affecting SMEs

*	Macro-economic developments
*	Technological change
*	Demographic developments
*	Internationalization

The major SME-fields selected for the First Annual Report are listed in Table 1.2. In subsequent reports the selected fields may change.

Table 1.2 Major SME-fields in the First Annual Report

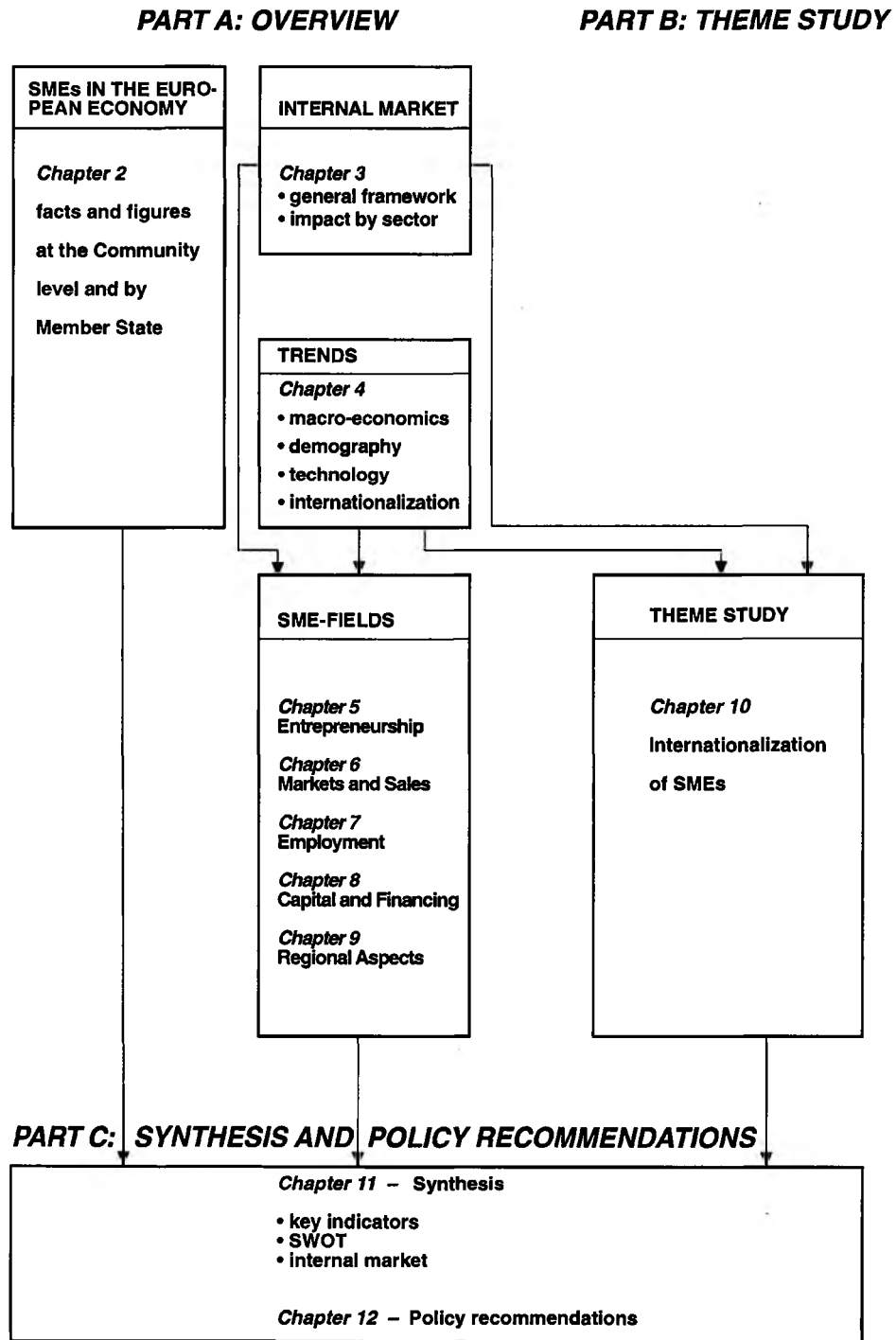
*	Entrepreneurship and business dynamics
*	Markets and sales
*	Employment
*	Capital and financing
*	Regional aspects

These fields are elaborated in the Chapters 5, 6, 7, 8 and 9 respectively.

SME policies have a special character. In this report the focus has been on national policies related to the selected SME-fields mentioned in Table 1.2. A description of relevant existing SME-policies is included in Annex II.

An overview of the framework of the First Annual Report is presented in Figure 1.2. The report has three parts:

Figure 1.2 Framework of the First Annual Report



Part A: OVERVIEW

This consists of eight chapters: first Chapter 2 provides a quantitative overview of the SME sector in the European economy, then Chapter 3 deals with the impact of the internal market. In Chapter 4 the 'Trends' are presented, followed by five chapters on the selected 'fields' (Chapters 5 through 9).

Part B: THEME STUDY

For the First Annual Report the Theme Study deals with 'Internationalization of SMEs'. (For the Second Annual Report the Theme Study will probably be focused on the craft sector.) This Theme Study forms Chapter 10.

Part C: SYNTHESIS AND POLICY RECOMMENDATIONS

Chapter 11 provides a synthesis of the findings. A set of key indicators is presented at Community level as well as by country. The completion of the internal market is monitored in a separate section. Additionally a description of strengths and weaknesses as well as an assessment of threats to and opportunities for SMEs are presented. Chapter 12 summarises policy recommendations.

The First Annual Report concentrates on a *general* overview of the structure of SMEs in the European Community and the Member States, together with a first focus on some major SME-fields and one in-depth study. Subsequent reports will draw upon the experience gained in this First Annual Report. In subsequent reports there will be an opportunity:

- to study these fields in more detail;
- to study additional fields;
- to pay more attention to *micro*-processes at the level of the individual firm, thus providing more insight into the real life of the small entrepreneur.

PART A - OVERVIEW

2 SMEs IN THE EUROPEAN COMMUNITY

2.1 INTRODUCTION

In this study the European SME-sector¹ is taken to comprise enterprises - except agriculture, hunting, forestry and fishing - employing less than 500 employees. Within the SME sector the following broad size classes are distinguished:

- micro enterprises : 0 - 9 employees;
- small enterprises : 10 - 99 employees;
- medium enterprises: 100 - 499 employees.

Non-primary enterprises employing 500 and more employees are regarded as large sized enterprises (LSEs). Within the SME-sector a substantial number of enterprises belong to the craft trades. The position of the SMEs and craft within the European economy is broadly outlined in Figure 2.1.

Throughout most of this report, the following industrial classification of private non-primary enterprise has been employed:

- industry (NACE 1-4);
- construction (NACE 5);
- distributive trade (NACE-classes 61-65);
- other services (NACE 66, 67, 7, 8, 9).

Usually industry has been subdivided into:

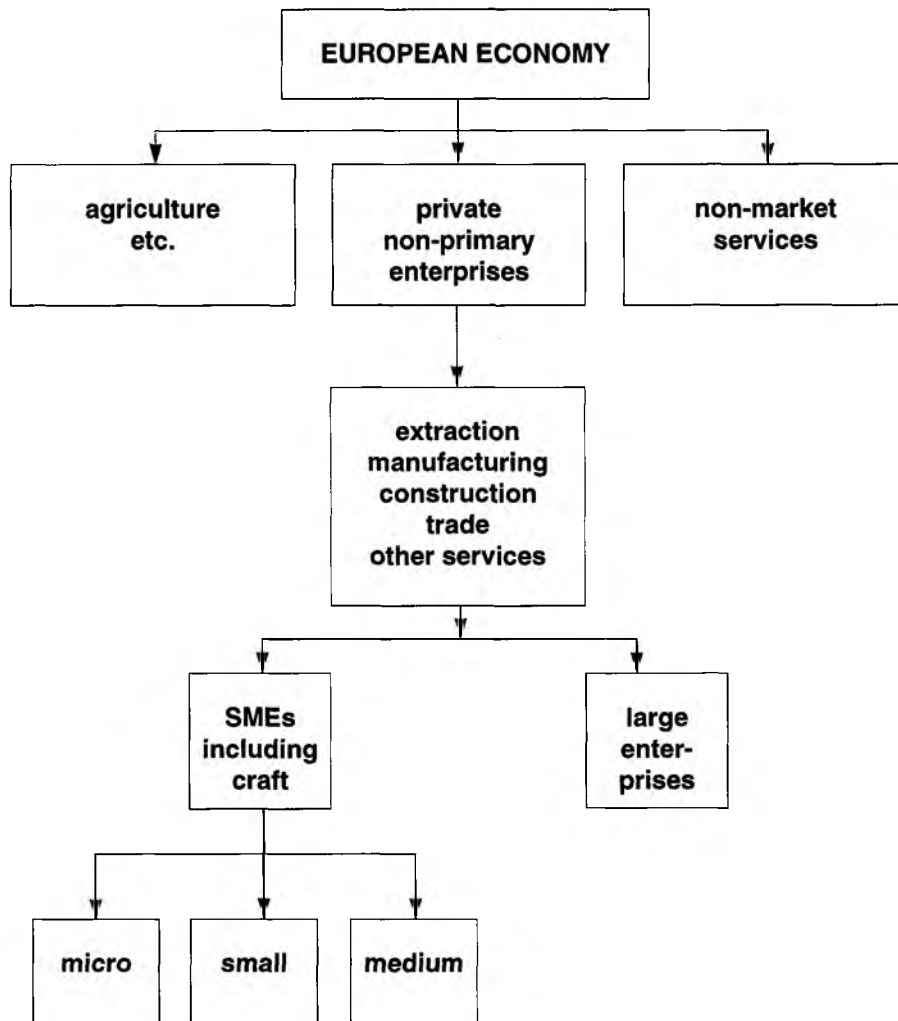
- extraction (including energy and metal processing; NACE 1, 21-24);
- manufacturing (NACE 25, 26, 3, 4).

The statistical basis of this chapter is the SME-database developed by Eurostat². Within the framework of the Observatory project some additional estimates have been made at EIM, relating to missing data on the number of firms, employment and turnover. For these estimates extensive use was made of other statistical sources from Eurostat, such as National Accounts and the Labour Force Survey, as well as publications of the various national statistical offices.

¹ In fact there is not a formal, unique definition of an SME. This publication follows the framework as set out in *Enterprises in Europe - Second Report*. Published by EUROSTAT and the EC Directorate General XXIII (1992). A fuller description of definitions is given in the Annex on Methodology.

² See 'Enterprises in Europe', *op. cit.*

Figure 2.1 Position of the SME and Craft Sector in the European Economy



The database 'Enterprises in Europe' provides mainly data for the year 1988 with some data related to 1989. The Observatory project also sets out to present a preliminary estimate of the current size of the SME-sector. In order to provide such estimates up to 1992, an SME Accounting Scheme has been developed, linking macro-economic developments to developments by sector and size-class¹.

¹ More information on supplementary estimates and the SME Accounting Scheme can be found in the Annex on Methodology (Annex I).

This Chapter summarizes the available statistical information on the SME-sector in the Community and presents an initial analysis. In the final section an initial assessment of size and structure of the crafts sector is also presented.

2.2 THE SME SECTOR AT THE COMMUNITY LEVEL

The great majority of enterprises in the European economy are SMEs. It is estimated that in 1988 the non-primary, private sector of the Community included about 14.6 million small and medium-sized enterprises in the broad sense, i.e. including micro firms¹.

In contrast, there are only about 13,000 large enterprises with more than 500 employees. This represents less than 0.1 per cent of the total stock of enterprises.

The SME sector also accounts for a dominant share of the employment in the non-primary sector. In 1988 more than 62 million jobs were provided by SMEs, representing 71 per cent of the relevant total. The main indicators are presented in Table 2.1.

Total estimated turnover of SMEs in 1988 amounted to the staggering figure of 6 trillion ECU, whereas for large enterprises the estimated total turnover was 2.9 trillion ECU. Average turnover per employee² in the SME sector was almost 100,000 ECU, about 13 per cent lower than in the large firm sector.

The average SME in the private, non-primary economy employed about 4.5 persons when the self-employed are included, and in 1988 turned over 413,000 ECU in 1988. Here, the differences in scale with large firms stand out most sharply: the average large enterprise in 1988 counted over 2,000 employees and turned over 230 million ECU per enterprise.

¹ The figure of 14.6 million enterprises includes the personal services and other non-market services in NACE 9 (about 2.3 mln enterprises). This is the major explanation for the difference with the number of 11.6 mln enterprises (excl. NACE 9) presented in the Eurostat publication 'Enterprises in Europe'. Besides a somewhat higher number of micro firms was estimated in several industries. In both publications the numbers do not include the former GDR.

² Because turnover includes the costs of raw materials and the purchase value of merchandise, turnover per employee needs to be interpreted carefully. As an indicator for apparent labour productivity by size class it is preferably used for comparisons within industries, and not on an aggregate level.

Table 2.1 Main Indicators of SMEs and Large Enterprises, 1988

Description	0-499	500+	Total
Number of Enterprises (x 1,000)	14590	13	14600
Employment (x mln)	62.4	26.1	88.5
Employment per Enterprise	4.3	2072	6.1
Turnover per Employee (x 1,000 ECU)	97	111	101

Source: Eurostat; EIM.

While contrasting sharply with the large enterprises, these overall averages for the SME sector conceal a great deal of heterogeneity as illustrated in Table 2.2. In terms of sheer numbers, the typical firm is a micro enterprise. On average, this firm provides employment for two persons, including the self-employed. Turnover per employee is relatively low in these firms. It is estimated that there are about 13.5 million micro firms, although there is a considerable margin of uncertainty surrounding this number.

By contrast, small firms (10-99 persons employed) provide on average 24 jobs and turn over almost 2.5 million ECU per enterprise. Medium-sized enterprises (100-499), of which there are some 70,000, have an average firm size of 210 persons who turn over around 30 million ECU per firm.

Table 2.2 Main Indicators of Micro, Small and Medium-sized Enterprises, 1988

Description	0-9	10-99	100-499
Number of Enterprises (x 1,000)	13600	920	70
Employment (x mln)	26.2	22.2	14.0
Employment per Enterprise	1.9	24.1	210
Turnover per Employee (x 1,000 ECU)	69	101	140

Source: Eurostat; EIM.

Among the ubiquitous micro-firms it is estimated that more than 6 million enterprises (almost 50 per cent) have no salaried employees. These estimates are of a preliminary nature, and there is a great need for further statistical investigation into the number of such firms in the Community. However, these preliminary estimates serve the purpose of clearly demonstrating the quantitative importance of this group within the European economy.

The unmistakable dominance of SMEs from a macro-economic point of view, as presented in Figure 2.2, does not illustrate the differences which exist between the major sectors of the economy and between the Member States.

A more detailed picture of the SME sector is presented below, in sections 2.3 and 2.4.

Figure 2.2 Size Distribution of Enterprises, Employment and Turnover, 1988



2.3 SMEs BY SECTORS OF INDUSTRY

2.3.1 SMEs in the main industries

Five main sectors, defined in section 2.1, make up the private, non-primary economy. In Table 2.3 some key indicators for each of these sectors are presented. Three features stand out.

First, the extraction/energy sector has by far the largest average firm size. At the same time, it is the only major sector where SMEs account for less than 50 per cent of employment.

Second, manufacturing is also characterized by a large average firm size. Nonetheless SMEs, and especially the firms between 10 and 499 employees, have a strong position in manufacturing with almost half of all jobs.

Finally, construction, trade and (other) services show a remarkably similar average firm size of between 4 and 5 persons employed. Concurrently, these sectors show a strong presence of both micro firms and small and medium-sized enterprises.

By all criteria, the trade and construction sectors are the realm of SMEs. The employment share of these firms is about 90 per cent. The other services are in fact quite heterogeneous. Personal services strongly resemble trade and construction and have an SME-employment share of almost 80 per cent. On the other hand, transport and communication are dominated by larger enterprises. Business services lie between these sectors.

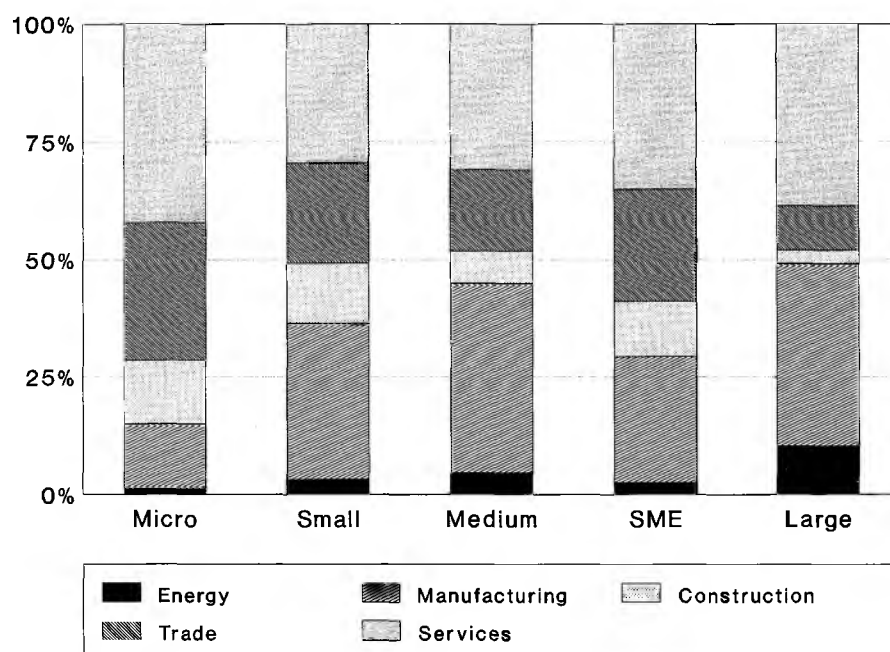
Table 2.3 Some Indicators by Sector, 1988

Description	Number of Enterprises (x 1000)	Employment per Enterprise	Employment Share 0-9 (%)	Employment Share 10-499 (%)
Extraction	150	29.4	7	31
Manufacturing	1710	15.7	14	49
Construction	1920	4.2	44	47
Trade	3830	4.5	45	41
Services	6990	4.6	35	34
Total	14600	6.1	30	41

Sectoral breakdown by size class

Figure 2.3 gives the sectoral breakdown by size class in terms of employment shares.

Figure 2.3 Sectoral Breakdown of Employment by Size Class, 1988



The micro firm sector is dominated by the personal services, but retailing and wholesaling also have a large share. The share of construction among micro firms is small, but it is larger than in any other size class.

Small and medium firms are spread over the sectors in a similar way and have a remarkable share of manufacturing employment. However, the share of construction is relatively low in the medium-sized enterprises.

Large enterprises are the only segment in which extraction and energy have a sizeable employment share. Manufacturing, transport and business services are relatively dominant. Construction and trade account for a low share of employment in large firms.

2.3.2 SME predominance at the 2-digit level

A more precise picture can be drawn at a lower level of aggregation. Table 2.4 presents a regrouping of sectors at the NACE-2 level into three groups:

- micro dominant sectors where micro firms have the largest employment share
- SME dominant sectors where small and medium-sized firms (10-499 employees) have the largest employment share
- large-firm dominant sectors where large enterprises have the largest employment share

Only 10 out of 56 industries distinguished are *micro-dominant*. All but 2 belong to other services, the other two belong to trade. The average firm size in micro-dominant sectors varies between 1.0 and 4.0 employees. The share of micro-firms in total employment of these industries varies between 40% and 90%, the share of small and medium-sized firms between 10% and 40%. The share of large firms in total employment is usually very small in these industries (at most 20%).

Some 23 industries can be said to be *SME-dominant*. Of these:

- 11 belong to manufacturing
- 7 belong to (other) services
- 2 belong to trade
- 2 belong to extraction

Also the construction industry is SME-dominant.

Average firm size in SME-dominant industries lies between 2.5 and 26 employees. Manufacturing industries are found at the high end of this scale, as are extraction industries. Construction and services industries are found at the lower end of this spectrum; and with one exception, average firm size of these industries is less than 12. The share of micro firms in total employment of SME-dominated industries varies between 8.0% and 45%. The share of small and medium-sized firms varies much less, and lies between 44% and 64%. Even though these sectors are SME-dominant, large firms sometimes constitute a large fraction of total employment as well.

There are 23 *large firm dominant industries*. This group of industries is also rather heterogenous:

- 9 belong to extraction
- 8 belong to services
- 6 belong to manufacturing.

In large firm dominated industries, average firm size varies greatly, from less than 10 employees to about 650 employees. Industries with a relatively small average firm size, like supporting services to transport, are characterized by a large number of small firms together with a large share of employment in large firms.

From Table 2.4, it can be seen that most industries in extraction are large firm dominant. About two thirds of manufacturing industries are SME-dominant, the others are large-firm dominant. Trade industries are either micro-dominant or SME-dominant. The services industries are evenly spread over micro-dominant, SME-dominant and large firm dominant segments.

Table 2.4 Number of NACE-2 Industries by size-class dominance, 1988

	Micro-dominant	SME-dominant	Large firm dominant	Total
Extraction	-	2	9	11
Manufacturing	-	11	6	17
Construction	-	1	-	1
Trade	2	2	-	4
Services	8	7	8	23
Total	10	23	23	56

Source: Eurostat; EIM.

2.3.3 Apparent labour productivity by sector

Table 2.5 provides information on turnover per employee (apparent labour productivity) by sector and size class.¹

Table 2.5 Index of Turnover per Employee by sector and size class, 1988 (Total of Sector is 100)

	micro	small	medium	large	total
Extraction	50	57	101	117	100
Manufacturing	58	82	108	124	100
Construction	73	107	147	142	100
Trade	67	116	177	94	100
other Services	72	107	153	103	100

Micro firms have smallest apparent labour productivity in all sectors distinguished. In extraction and manufacturing, a positive correlation between apparent labour productivity and firm size appears.

In construction, apparent labour productivity does not differ much between medium-sized and large firms. In trade and other services, by far the highest apparent labour productivity is found in medium-sized firms. In trade, apparent labour productivity in small firms is somewhat above average, and in large firms, it is a little below average. In other services, apparent labour productivity in small as well as large firms is somewhat above average.

2.4 SMEs BY MEMBER STATE

2.4.1 Enterprises

The number of enterprises² in the Member States ranges from about 16,000 in Luxembourg to about 3 million in Italy. A quick glance at Table 2.6 suggests that there is a strong correlation with population size. However, this correlation is far from being perfect. In fact, the number of enterprises per 1,000 inhabitants differs greatly between the various countries. The highest ratios, over 60

¹ Turnover per employee is a very approximate measure of labour productivity, and may be subject to product-market power distortions.

² All figures concern 1988, and in the case of Germany relate to the former FRG only.

enterprises per 1,000 inhabitants, are found in Greece and Portugal. The lowest ratios, between 28 and 35 firms per 1,000 inhabitants, are found in The Netherlands, Denmark and Germany. In itself a high ratio indicates a high index of entrepreneurship. But differences in definition and measurement preclude hard and fast conclusions on this matter.

These ratios are inversely reflected in the average firm size, as measured by the number of persons employed per firm, which is also demonstrated by a correlation analysis¹. So the other side of the coin is that countries with a high level of entrepreneurship often seem to exploit economies of scale to a lesser extent.

Table 2.6 Enterprises by Member State, 1988

Country	Number of Enterprises (x 1,000)	Number of Enterprises Per 1,000 Inhabitants	Average Firm Size	Employment Share 0-9 (%)	Employment Share 0-499 (%)
Belgium	530	53	5	28	69
Denmark	180	35	9	22	76
France	2040	36	7	28	67
Germany*	2160	35	9	17	62
Greece	670	67	3	59	91
Ireland	130	36	6	34	83
Italy	3170	55	4	48	81
Luxembourg	20	43	9	23	74
Netherlands	420	28	10	28	72
Portugal	640	62	4	36	80
Spain	2020	52	4	36	83
United Kingdom	2630	46	8	26	65
Total EC	14600	45	6	30	70

* Former FRG only.
Source: Eurostat; EIM.

Firm sizes range from an average of 3-4 employed persons in Greece, Italy, Portugal and Spain, up to 9-10 persons employed in Luxembourg, Germany, Denmark and The Netherlands. One possible explanation might be that to a large extent these differences have to do with differences in the sectoral breakdown of the economy. This is for instance suggested by the fact that the employment share of extraction and manufacturing in Germany is about 45 per cent, whereas in Greece it is only 35 per cent.

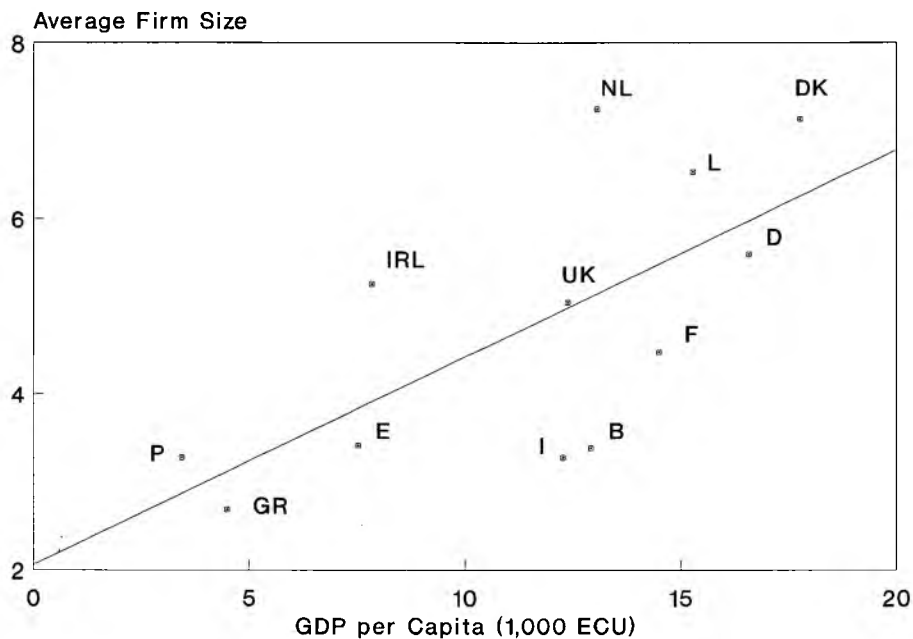
¹ A perfect negative correlation follows automatically when all countries have the same employment share in the population.

However, a full analysis of this matter shows differences in sectoral breakdown carry only very little weight in the explanation. Within each sector, the differences in firm size between countries remain striking.

From a further analysis it turns out that per capita GDP is an important explanatory variable.

So, on average, the more prosperous the country, the greater average firm size in most sectors will be¹. This holds irrespective of other causal factors such as country size or population density. The analysis also holds for the average size of an SME, as can be seen from Figure 2.4.

Figure 2.4 Average Firm Size of SMEs, and GDP per capita, by country, 1988



However, there seems to be a difference in emphasis as regards the average firm size of large companies. Here, the major explanation is to be found in the size of the country as measured by its GDP. This is demonstrated in Figure 2.5.

¹ A possible explanation might be that a higher average wage level per employee, which correlates with rising prosperity, can be a driving force of concentration processes. Apparently this process is overriding the countervailing influence of a rising share of the services sector, which has a lower average firm size than manufacturing.

Figure 2.5 Average Firm Size of large Enterprises, and total GDP, by country, 1988

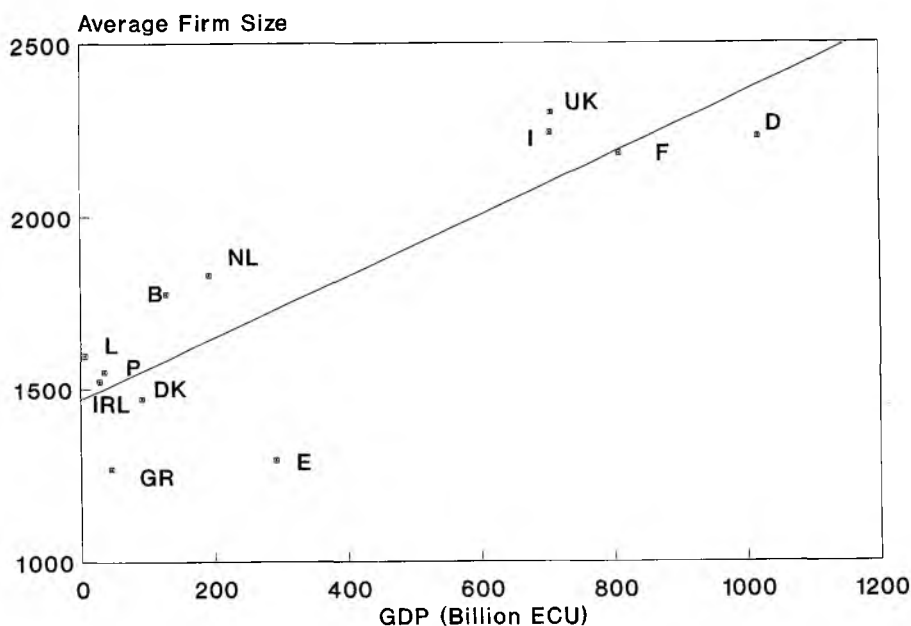


Figure 2.5 shows that, on average, for larger countries - measured by GDP - average firm size of *large firms* is greater than for smaller countries. This suggests that large firms in large countries¹, having a larger domestic market, are able to further exploit economies of scale, which leads to a further increase in the size of large firms.

Analysis by group of countries

To provide some insight into regional patterns of SME, countries are first combined into two groups, *i.e.* large countries (France, Germany, Italy and the United Kingdom) and small and medium-sized countries. The latter group can be further subdivided into central small countries (Belgium, Denmark, Luxembourg and The Netherlands) and the group of peripheral countries, consisting of Greece, Ireland, Portugal and Spain; measured by per capita GDP, the latter countries also are the least prosperous.

Table 2.7 provides some information about average firm size by size class for these groups of countries. Average firm size appears to be greater in large countries than in smaller countries. Within the group of small countries, it is smallest in peripheral countries, and largest in central small countries.

¹ In this chapter a country is called large, when it is large in economic terms as measured by its GDP. So Spain, which obviously is large in terms of area and population, in 1988 still belonged to the group of medium-sized countries.

In fact, average firm size in central small countries is larger than in large countries. This regional pattern is the same for SME; for large firms, average firm size is greatest in large countries, and smallest in peripheral small countries, with central small countries in between. Within SME, this pattern can only be found for micro firms. So, for large firms as well as for micro firms, a clear cut regional pattern of firm size exists; for small and medium-sized firms, such patterns do not exist, and the regions distinguished do not in fact differ much with respect to firm size.

Table 2.7 Average Firm Size by group of countries and size class, 1988

	SME	LSE	total
large Countries*	4.5	2243	6.6
small/medium Countries	3.8	1528	4.8
of which			
- central/rich**	5.4	1736	7.5
- peripheral/poor***	3.3	1355	3.9

* France, Germany, Italy, United Kingdom.

** Belgium, Denmark, Luxembourg, The Netherlands.

*** Greece, Ireland, Portugal, Spain.

2.4.2 SME presence

Table 2.7 also presents the employment shares of micro enterprises and the total SME sector.

Micro firms are clearly dominant in Greece and Italy, and are least important in Luxembourg and Germany.

The employment share of the total SME sector ranges from just over 60 per cent in Germany to 90 per cent in Greece. From a regression analysis these differences appear to be negatively correlated with both GDP and GDP per capita. So, generally speaking, the larger a country (in terms of GDP), the smaller the share of SME in total employment will be. This is consistent with results in Chapter 6 on the relation between GDP and the share of SME in turnover. The negative correlation with per capita GDP might well correspond to the relatively high wage level in countries with a high per capita GDP. Furthermore, there seems to be an influence of population density on the share of SME in employment. This result needs further investigation.

Analysis by group of countries

Table 2.8 presents the size-class distribution of employment. The share of large firms in employment is largest in large countries, and smallest in small peripheral countries. Conversely, the share of SMEs is smallest in large countries.

For small and medium-sized firms, the difference between the groups of countries are relatively small. So far as micro firms are concerned, large countries¹ and central small countries do not differ much, but the employment share of micro firms is higher in peripheral small countries.

Table 2.8 Employment Shares by group of countries and size class, 1988

	SME	LSE	total
	in %		
large Countries*	68	32	100
small/medium Countries of which	79	21	100
- central/rich**	72	28	100
- peripheral/poor***	84	16	100

* France, Germany, Italy, United Kingdom.

** Belgium, Denmark, Luxembourg, The Netherlands.

*** Greece, Ireland, Portugal, Spain.

As Table 2.9 shows the regional pattern of total SME shares is accurately reflected in extraction and manufacturing. For the construction sector the, SME share in employment in large countries is indeed below that in small countries, but within small countries, there is no difference between central and peripheral groups. In trade and other services there is no significant difference between large countries and the central small countries, although again the share of SMEs is highest in peripheral small countries.

Table 2.9 Share of SME in Total Employment by group of countries and sector, 1988

	Extraction	Manufacturing	Construction	Trade	Services	total
	in %					
large Countries*	33	58	89	84	67	68
small/medium Countries of which	54	78	94	91	73	79
- central/rich**	38	66	94	85	68	72
- peripheral/poor***	61	84	94	96	78	84

* France, Germany, Italy, United Kingdom.

** Belgium, Denmark, Luxembourg, The Netherlands.

*** Greece, Ireland, Portugal, Spain.

¹ Excluding Italy which has a higher share of micro firms.

2.5 DEVELOPMENTS 1988-1992¹

2.5.1 Growth in stock of enterprises

As will be explained in chapter 4 it is difficult to find a close relationship between the growth in the number of enterprises and economic variables. Social and psychological aspects seem to be more important, but there is hardly any data concerning the latter.

Nevertheless some estimations have been made using economic and demographic factors. Because of the limited availability of time series a proxy was used in the case of micro and small enterprises: instead of the growth in the number of these enterprises, the growth of the self-employed has been used. Regarding this proxy, there seems to be some relationship between the growth in the number of enterprises and growth in real GDP or sales (+), the growth in the density of population (-) and unemployment (+). In some countries there also seems to be some relation to real compensation of employees per head (-). The number of medium sized and large enterprises is related to sales (+) but there is a negative time trend.

During the last years 1986-1990 there has been a considerable growth in the number of the self-employed. Self-employed are defined to include managers of enterprises who are also owners of these firms. Generally speaking they own and manage micro and small businesses. As most of these enterprises are managed by only one self-employed person there is a close connection of the number of self-employed with the number of enterprises. Table 2.10 shows the growth of the number of self-employed in 1986-1990.

Since in 1989 and 1990 the number of self-employed grew by 3.5 and 1.9% respectively, it is likely that the number micro and small firms increased at a similar rate. Using the relationship with economic and demographic variables we estimate that the number of these enterprises increased by about 1% in 1991 as well as in 1992. So the growth slowed down.

The strongest growth in 1991 through 1992 was projected for Spain, Portugal and Ireland.

The number of medium-sized enterprises and large enterprises is estimated to have fallen. Growth of about 3.5% was achieved in the medium-sized class in

¹ Preliminary analysis.

1989, but it was followed by a decline in subsequent years. Only Ireland and The Netherlands show an increase in all years investigated. A similar pattern was found for large enterprises. An increase by about 2.5% in 1989 and a considerable decrease in 1990, 1991 and 1992. In Germany there was an increase up to 1992 and in The Netherlands there was an increase except for 1990.

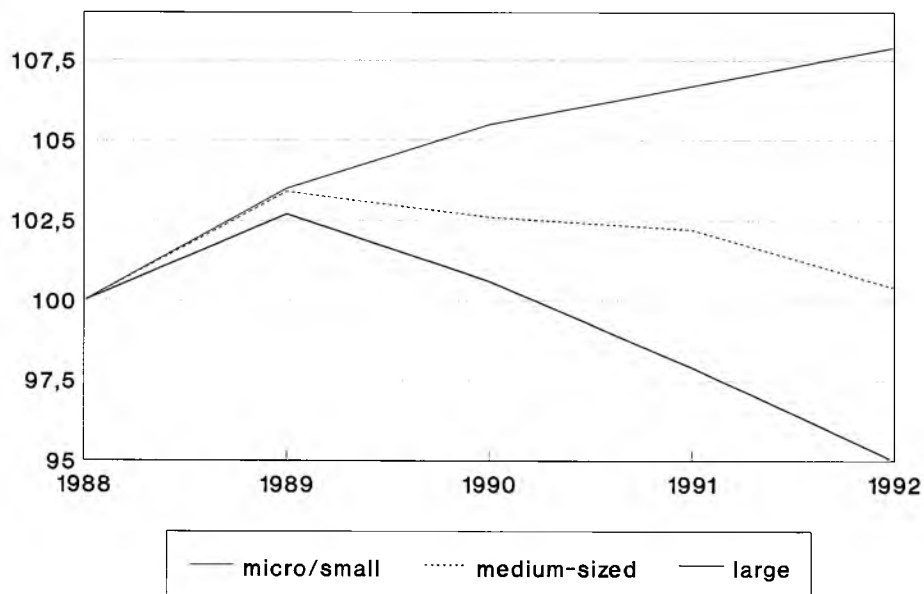
Table 2.10 Growth of the Number of Self-Employed in 1986-1990

	1986	1987	1988	1989	1990
Belgium	1.4	1.8	2.0	2.2	2.0
Denmark	2.4	-1.7	-7.1	7.6	5.3
France	0.7	1.3	1.2	0.4	0.1
Germany	1.9	0.9	1.8	2.4	2.2
Greece	2.2	2.8	1.2	1.1	0.7
Ireland	-3.8	8.8	7.2	0.0	5.9
Italy	2.3	0.7	2.6	2.9	1.6
Luxemburg	-0.8	0.0	0.8	0.0	0.0
The Netherlands	-0.5	8.0	1.2	2.1	4.7
Portugal	4.7	4.7	4.8	3.6	11.7
Spain	3.6	10.9	1.2	2.4	1.4
United Kingdom	0.7	10.1	5.4	9.4	1.4
EC-12	1.8	4.0	2.5	3.5	1.9

Source: OECD, Eurostat.

Figure 2.6 shows the estimates of the number of enterprises by size class.

Figure 2.6 Estimated Stock of Enterprises in the EC, 1988-1992 (index 1988 = 100)



In 1988 the stock of enterprises in the EC was estimated at 14.6 million, of which 14.5 million were micro or small. About 67.000 enterprises were medium-sized and almost 13.000 were large. In 1992 the total stock had increased to about 15.7 million enterprises. The number of micro and small enterprises increased by an estimated 1.1 million, the number of medium-sized enterprises remained unchanged, while the number of large enterprises is estimated to have decreased by about 500.

2.5.2 Growth of turnover

In this section, first the general pattern of turnover by sector for the years 1989-1992 will be discussed. Thereafter, more detailed patterns will be discussed in terms of :

- growth by sales category and size class
- growth by size-class and by country
- macro-economic determinants of the size-class patterns of growth

All estimates are based on an SME Accounting Scheme designed to link growth rates by size class to macro-economic developments. Initially, the model calculates sectoral patterns of growth. Subsequently size class patterns of growth are estimated, although during the estimation process calculations are updated by direct statistical observations whenever available.

Growth of turnover by sector and sales category

Estimates of turnover at constant prices by sector and sales category during 1989 -1992 are summarized in Table 2.11.

Table 2.11 Development of Turnover EC-12, 1989 -1992*, at constant prices

	domestic Sales	Exports	total Sales
annual Growth Rates in %			
Extraction	2.0	5.5	2.6
Manufacturing	1.8	4.4	2.6
Construction	1.7	3.9	1.7
Trade	2.0	4.5	2.2
other Services	1.9	4.2	2.1
total	1.9	4.5	2.3

* Preliminary Estimates with SME Accounting Scheme (NACE 1-8).

Domestic sales have grown at a rate of almost 2% a year. Differences between sectors regarding turnover growth on domestic markets are rather small when averaged over four years.

In all sectors, the growth rate of exports has been well above the growth rate of turnover on domestic markets. This is a result of increasing interdependence of national economies, which is partly due to market forces supported by economic policies. The sectors rank the same regarding growth of exports and domestic sales. On average, turnover has increased by 2.2% annually, with construction industry lagging behind somewhat at 1.7%, and the highest growth rate occurring in extraction industry (2.5%). The total growth performance of manufacturing ranks second, even though it ranks rather weak on domestic sales and exports separately. This is because of the high share of exports in total turnover of manufacturing, and the fact that exports have increased much more than domestic sales. Conversely, trade and other services rank lower on total turnover growth than on domestic sales and exports separately because of the small share of exports in total turnover.

Turnover by type of goods and services

Turnover can also be analysed by the sales category. Four types of goods and services can be distinguished: consumption goods and services, investment goods, intermediate goods and services, and exports. Table 2.12 presents the average growth of turnover of these categories for the community as a whole, for the years 1989-1992.

Table 2.12 Average annual Growth of Turnover, by type of good and size class, EC-12, 1989-1992*, at constant Prices

	SME					
	micro	small	medium	total	large	total
	annual Growth Rates in %					
consumption Goods	2.0	1.8	1.1	1.7	1.4	1.6
investment Goods	1.8	2.1	2.1	2.0	1.3	1.8
intermediate Goods	2.2	2.3	2.2	2.2	2.0	2.2
total domestic Sales	2.1	2.1	1.7	2.0	1.7	1.9
Exports	5.0	4.9	4.4	4.7	4.3	4.5
total Sales	2.3	2.4	2.1	2.3	2.3	2.3

* Preliminary Estimates using the SME Accounting Scheme (NACE 1-8).

For all types of goods the estimated growth rates of SMEs were above those for large firms. In the export sector the difference in growth rates amounted to almost 0.5 percentage-point. This is because SMEs are strongly oriented towards wholesale trade and other services which have enjoyed relatively high export growth rates.

For total domestic sales, the difference was 0.3 percentage-point. The growth rate of sales of consumption goods and services by micro firms was relatively high, because of the orientation of SMEs towards trade and other services.

In spite of these differentials between SMEs and large firms for each sales category there is hardly any difference regarding total sales growth. This is because of the positive correlation between firm size and the share of exports in sales¹. Exports make up a relatively large share of turnover of large firms, while SMEs turnover is for the larger part sold in domestic market. With increasing international specialization exports grow faster than domestic sales.

Size-class patterns by Member State

Table 2.13 shows the average annual growth of turnover by country and size-class during the years 1989-1992. While for the Community as a whole SMEs and large firms show approximately the same growth rate, at the country level some remarkable differences between SMEs and large firms occur.

Table 2.13 Average annual Turnover Growth by country and size class, 1989 -1992*, at constant prices

	SME	large	total
annual Growth Rates in %			
Belgium	2.5	3.2	2.7
Denmark	1.2	2.9	1.6
France	2.5	3.0	2.6
Germany	3.8	3.6	3.7
Greece	1.9	1.8	1.9
Ireland	5.7	5.5	5.6
Italy	2.0	2.1	2.0
Luxembourg	3.1	3.9	3.2
The Netherlands	3.2	3.0	3.2
Portugal	3.5	3.4	3.5
Spain	2.9	3.2	3.0
United Kingdom	-0.1	0.4	0.1
EC-12	2.3	2.3	2.3

* Preliminary Estimates with SME Accounting Scheme (NACE 1-8).

¹ Of course, this is partly a result of difference in sectoral structure, but also within sectors, the share of exports in SME's sales is small relative to large firms.

In Belgium, Denmark, Luxembourg, Spain and the United Kingdom, turnover growth of SMEs has been well below average. In Germany and Greece, the opposite occurred, while in France, Ireland, Italy, The Netherlands and Portugal the difference between SMEs and large firms was negligible.

Impact of macro-economic development

Using the Accounting Scheme, it is possible to investigate how macro-economic developments may have influenced the pattern of turnover by size class. Thus it can be investigated to which extent:

- private consumption demand,
- investment demand,
- government consumption,
- export markets, and
- other factors

have influenced turnover growth of micro, small, medium-sized and large firms. The exercise focuses on total turnover. Private consumption growth has a direct effect on sales of consumption goods, but it also affects sales of intermediate goods and services, and these effects have been allowed for in the calculations. Table 2.14 provides the main results.

Table 2.14 Factors underlying cumulative EC-12 Turnover Growth 1989-1992*, at constant prices

	SME					
	micro	small	medium	total	large	total
compound Growth Rates in %						
total Growth	9.4	9.8	8.6	9.3	9.6	9.4
of which due to:						
- domestic Demand:						
· Consumption	6.5	4.9	4.2	5.4	3.3	4.8
· Investment	1.1	1.9	1.5	1.4	1.2	1.4
· Government	0.2	0.1	0.1	0.2	0.2	0.2
· total	8.0	7.1	6.0	7.2	4.7	6.5
- Export Markets	3.5	5.2	5.4	4.5	8.5	5.6
- other Factors**	-2.5	-2.9	-3.0	-2.7	-3.8	-3.1

* Preliminary estimate with SME Accounting Scheme (NACE 1-8).

** Calculated as a residual.

The largest part of SMEs turnover growth comes from domestic demand, and in the SME sector, this effect is strongest in micro firms. Within domestic demand, consumption demand is by far the most important factor determining SMEs sales. Investment demand and government expenditure contribute to a limited extent to SMEs and LSE's turnover growth.

External demand - *i.e.* the development of export markets - has been less important for SMEs than domestic demand.

However, the contributions of macro-economic demand categories do not coincide with the share of particular categories of goods in turnover. For example, the share of exports in SMEs turnover is approximately 10%, while external demand contributes to almost half of total turnover growth of SME. This is because SMEs can benefit from LSEs exports by way of intermediate deliveries. So although export growth has only a limited direct effect on SME growth, but there is a considerable indirect effect. Conversely, even though consumption goods make up only a rather limited share of large firms' output, large firms experience positive impulses by supplying products sold by SMEs in the retail trade.

Turnover growth has been constrained by various factors. One is the increasing openness of national economies. This implies an increasing share of foreign suppliers (from EC- or third countries) on national markets (import penetration). This is the counterpart of external demand and it negatively influences turnover. The greatest effect is on the LSEs, since most of the sector exposed to foreign competition belongs to LSEs.

2.5.3 Employment growth

The SME Accounting Scheme has also been used to calculate preliminary estimates¹ of employment growth by size class for the period 1989-1992. The main results are presented in Table 2.15.

Table 2.15 Average Growth of Employment by size class, EC-12, 1989-1992*

	SME				
	micro	small	medium	total	large
	annual growth Rates in %				
Turnover, at constant Prices	2.3	2.4	2.1	2.3	2.3
Apparent Labour Productivity	1.4	1.7	1.7	1.6	1.8
Employment	0.9	0.7	0.4	0.7	0.5

* Preliminary Estimate with SME Accounting Scheme (NACE 1-8).

¹ Growth rates for total employment and manufacturing employment as published in European Economy, Supplement A, Jan/Febr 1993, were used as a benchmark.

It was estimated that employment growth has been highest for the micro firms. One reason is that micro firms have a small share of manufacturing, which is the only major sector witnessing an absolute decrease of employment over 1989-1992. But besides this micro firms have probably achieved relatively high job growth within construction, trade and other services. This has to do with a relatively low growth of apparent labour productivity in the downturn of the business cycle (1991 and 1992). Because of the existence of threshold labour¹, indivisibility of tasks, psychological constraints and lack of information micro firms can only gradually adjust their workforce to slower production growth. A further indication of relatively strong job growth in micro firms is the expansion of the number of the micro firms in 1989-1992, as was discussed in section 2.5.1. To a lesser extent labour hoarding in the downturn can also be expected for small firms.

This means that, after a period of strong job growth these firms have been able at least to sustain their employment levels through 1991-1992.

The job creation in the medium sized and large firms sector has been disadvantaged by their relatively large share of manufacturing industries. Besides they achieved a relatively high rate of productivity growth, especially in 1991 and 1992.

Table 2.16 presents the estimated job growth by size class in absolute numbers. Over the period 1989-1992 the SME sector has achieved net employment creation of about 1.6 million jobs. This is slightly more than 75% of total job generation in the non-primary economy. Micro firms have created 800.000 jobs. This is 38% of all job creation, which compares very favourable with the 30% share of micro firms in the total stock of jobs. Job creation in small firms was slightly more than proportionate to their share, whereas medium sized and large firms have suffered a decrease of their share in total employment. Thus the 13.000 large enterprises in the EC which accounted for almost 30% of total employment in 1988 were responsible for creating only 23% of all new jobs generated between 1988 and 1992.

¹ So, for instance, the average micro firm employing 2 persons cannot cut employment proportionately to match a small fall in sales.

Table 2.16 Job Creation by size class, EC-12, 1989-1990 and 1991-1992*

	micro	small	medium	large	total
	(x 1000)				
1989-1990	620	615	400	800	2435
1991-1992	190	-10	-180	-300	-300
1989-1992	810	605	220	500	2135

* Preliminary Estimate with SME Accounting Scheme (NACE 1-8).

2.6 THE CRAFT TRADES

2.6.1 Introduction

In this section a first assessment of the size and structure of the crafts sector in the EC will be presented, together with a brief analysis of major bottlenecks. The term 'crafts/craft trades' varies substantially between countries.

Despite this diversity, two salient facts emerge in most countries when defining crafts, i.e. their small-scale nature and their dependence on a handicraft base. The craft trades are thus manifestly more than simply small businesses. The definitions used in various EC Member States are summarized in Table 2.17. While they are not comprehensive, they do provide some insight into these findings.

Table 2.17 Definition of the Craft Trades in EC Member States

Country	Definition	Aspects	Size
Belgium	L	NT	
Denmark	NL		< 50
France	L	NT	< 10
Germany	L	P	
Greece	NL	H, A	
Ireland	NL	H, A	
Italy	L	NT	< 9 - <32
Luxembourg	L	P	<500
Netherlands	NL		< 10
Portugal	N	H, T, A	< 10
Spain	N		
United Kingdom	N		

L	legal	P	profession
NL	non-legal	H	handicraft
N	none	T	tradition
		A	artistic
		NT	no trade

The term craft trades is legally defined in Belgium, Germany, Luxembourg, France and Italy. The Netherlands, Ireland and Greece maintain an official, non-legal definition.

In countries where the term craft trades are legally defined the definition is applied in various ways. Luxembourg and Germany for instance classify 151 and 127 professions respectively as being craft trades.

The remaining countries define the *sectors* comprising crafts, with sometimes stipulating the maximum number of employees in firms. In Ireland and Greece the craft trades are closely connected with 'arts and crafts'.

2.6.2 Position of the craft trades

In the Second Annual Report of the European Observatory for the SMEs, a more detailed analysis of the craft sector will be presented. However, a first attempt to describe the sector is presented in this First Report, as a basis for the Second Report.

Wherever statistics on the number of firms and persons employed in the craft trades are available, the significance of the craft trades within the entire private enterprise system may be assessed (see Table 2.18¹). However, these figures cannot be compared, across countries, since in some countries membership of professions is taken as a criterion, while in other countries the type of enterprise is taken as a criterion (with limits ranging from 10 to 500 employees).

In countries maintaining a legal definition of the craft trades, one quarter or more of the firms belong to this sector. Furthermore, in The Netherlands and Denmark, which do not have a legal definition of the craft trades, one quarter of the firms belong to the craft trades.

As might be expected, the share of craft trades in employment is lower than their share in the number of enterprises, but it is not insubstantial. In most countries the craft trades account for 10 to 25 per cent of employment.

¹ The information presented in this table has been collected by the partners in the ENSR. In some cases, differences exist between this information and Appendix 4 to the Advice of Mr. Schleyer on 'SME and the Craft Trades', approved on 22 October 1992 by the Economic and Social Committee (document CES 529/92 fin D/MN/AB/SG/ef/lc/cb). For Germany for instance, Appendix 4 concerns establishments rather than enterprises, and the figures include also craft-related establishments in the new 'Bundesländer', whereas Table 2.18 includes the old 'Länder' only.

Table 2.18 The Size of the Craft Sector according to official national definitions

Country	Percent Firms	Percent Persons Employed
Belgium	*	*
Denmark	27	27
France	42	17
Germany	25	19
Greece	15	25**
Ireland	0	1
Italy	44	38
Luxembourg	24	25
Netherlands	26	11
Portugal	?	?
Spain	?	?
United Kingdom	?	?

* No statistics available.

** One would expect a lower percentage of persons employed than of firms, but in Greece a very large number of establishments are engaged in artistic production at home. They produce on a limited scale, and usually work on an order basis. The activities mainly comprise in-home handicraft as well as home production activities undertaken on a subcontracting basis.

Source: Partners ENSR.

Although it seems to be rather risky to present a European definition of the craft trades and hardly any country would be in favour of this, it might serve as a starting point for discussions of the character of the 'European craft trades'. We prefer the term 'approximation' rather than 'definition', in order to express the temporary and preliminary character. We have made a lower and an upper approximation to the craft sector's magnitude, based upon the data derived from Eurostat's 'Enterprises in Europe'. This allows for a (provisional) comparison between member states. Craft enterprises are to be found in the following NACE-sectors:

- NACE 2 Manufacturing Industry
- NACE 3 Manufacturing Industry
- NACE 4 Manufacturing Industry
- NACE 5 Building and Installation
- NACE 64/65 Retail Distribution
- NACE 67 Repair
- NACE 98 Personal Services

In the retail trade, however, only a very small proportion of the enterprises (and thus of employment) can be considered as crafts: bakers, butchers and some other branches. Because the Eurostat-database does not provide data at the necessary 3-digit level, the retail sector must be left out in the approximation. On the other hand, clearly not all enterprises in manufacturing industry can be considered as craft enterprises, as this would lead to overestimation.

Our 'approximations' are based upon the assumption that all enterprises within the following sectors and size classes are to be considered as craft enterprises:

	Number of Persons employed	
	lower Approximation	upper Approximation
NACE 2	0-10	0-100
NACE 3	0-10	0-100
NACE 4	0-10	0-100
NACE 5	0-20	0-200
NACE 67	0-20	0-200
NACE 98	0-10	all

Table 2.19 shows that in Europe about 30% of all firms belong to the craft trades, regardless the application of the lower or the upper approximation. Figures for individual countries on the lower estimate vary between 14% for Luxembourg to 39% for Spain. As may be expected, these figures for individual countries do not correspond with the official definition. Across the EC as a whole, the number of persons employed in the craft sector varies considerably with the approximation applied ranging from 12% to 25%. Between countries the differences are even greater (6% for Luxembourg at the lower end against 38% for Greece at the upper end). The in-depth study of the craft sector (planned for the Second Annual Report) will need to provide more insight into these differences.

Table 2.19 Lower and upper Approximation of the Size of the Craft Sector

Country	lower Approximation		upper Approximation	
	Percent Firms	Percent Persons employed	Percent Firms	Percent Persons employed
Belgium	27	10	29	27
Denmark	22	8	27	23
France	27	11	30	23
Germany	24	8	29	21
Greece	34	27	35	38
Ireland	26	13	29	26
Italy	21	17	24	33
Luxembourg	14	6	17	18
Netherlands	24	9	27	20
Portugal	32	14	35	31
Spain	39	17	42	33
United Kingdom	38	10	40	19
Total European Community	29	12	32	25

Source: Enterprises in Europe 1988; EIM.

2.6.3 Bottlenecks

The identification¹ of the three most important bottlenecks reveals that the main obstacles are finance-related. The problems faced in qualifying for loans are quoted most frequently. Next, difficulties in terms of management, business-licensing and staffing are quoted. While issues concerning business-licensing in Belgium and Italy are related to the lack of business sites, there are problems related to the business-licensing act in The Netherlands.

Staff shortages, particularly those concerning professional-staff recruitment, may affect labour costs.

Some countries mention bottlenecks in the output market, i.e. foreign competition, too little domestic demand and the difficulty of penetrating new markets. The abolition of EC-frontiers demands adaptability of the craft trades: a market without frontiers represents tough competition both in existing markets and in the attempt at penetration of new markets.

An entrepreneur in the craft trades will thus have to reinforce his position in the domestic/local market through explicit product differentiation from standard products, or by expanding his activities to the European market.

The above bottlenecks clearly illustrate that while not all problems are specifically related to the craft trades, they often prevail in small firms. It was however also illustrated that there are problems which are specifically crafts-related.

Although it was occasionally revealed that governments make too little effort to support the craft trades, almost all countries maintain an institution promoting crafts.

¹ This was based upon a survey among the members of the ENSR.

3 THE IMPACT OF THE INTERNAL MARKET

3.1 GENERAL EFFECTS

3.1.1 The completion of the internal market

In 1985, the European Commission issued a White Paper laying down about 300 proposals for EC-directives. Implementation is through the national legislation of Member States. The aim of the directives is to abolish existing physical, technical and fiscal barriers.

The Single Act, drawn up in 1986 and ratified in 1987 represents the force pushing Europe toward completion of the internal market. It confirms the White Paper proposals, and adds a coherent policy framework by stressing coordination in a number of policy areas¹.

The 1987 agreement of the EC member states constituted a decision to complete the internal market on the first of January, 1993. Though this date has passed without all the proposals taking effect, the speed of implementing the plans increased considerably in 1992. At the end of this year 282 proposals or directives were approved by the Council. This is more than 90% of all proposals.

¹ These areas are the Monetary Union, social standards, regional development, science and technology, and the environment.

The Monetary Union implies a fixed rate of exchange and complete convertibility of European currencies. Necessary conditions with respect to budget deficits, balance of payments, and price stability were laid down in the 1991 Maastricht Treaty.

Social standards a.o. refer to employee health and safety conditions, and to vocational and professional education including equivalence and mutual recognition of qualifications.

Regional development policy aims at balanced social and economic development by stimulating the less developed regions of the Community to rise their standards.

Strengthening the scientific and technological basis of European industry, thus improving its competitive position relative regard to third countries like the USA and Japan, is the objective of European research and technological development policy, particularly by stimulating national and international cooperation between firms, research institutions and universities.

Environmental protection and preservation, and efficient use of energy and raw materials are the issues of environmental policy.

In addition, barriers and restraints to free competition like cartels will be tackled and uniform product liability legislation put into effect.

Approval does not imply the completion of the internal market, however: the directives have to be implemented in national legislation, which may take quite some time. This applies even more to the policy coordination stipulated by the Single Act. The present Chapter focusses on the consequences of the internal market, as initiated by the White Paper (abolishing non-tariff barriers), and on the short and medium term effects upon SMEs. Of course what actually happens to European SMEs depends on a number of other influences as well as internal and external to the Community. In this Chapter influences other than those coming from the completion of the internal market are not considered in any detail, although attention is given to them in the section on 'Other trends and influences'.

The completion of the internal market will have a variety of effects on SMEs and on business in general. Figure 3.1 gives a brief overview of the impulses and effects that will be discussed in this paragraph. The measures aimed at removal of non-tariff barriers to free intra-EC flows of goods and services, capital and persons, can be described as the impulse. The barriers concerned take various forms:

- physical barriers, in particular customs control;
- technical barriers, caused by different national standards and prescriptions. Removing these barriers must include harmonization of patent and trademark legislation, accessibility of the public procurement market to firms from all member states, and creating optimal conditions for intra-EC inter-firm cooperation;
- tax barriers, caused by national differences in taxation and excise-duties.

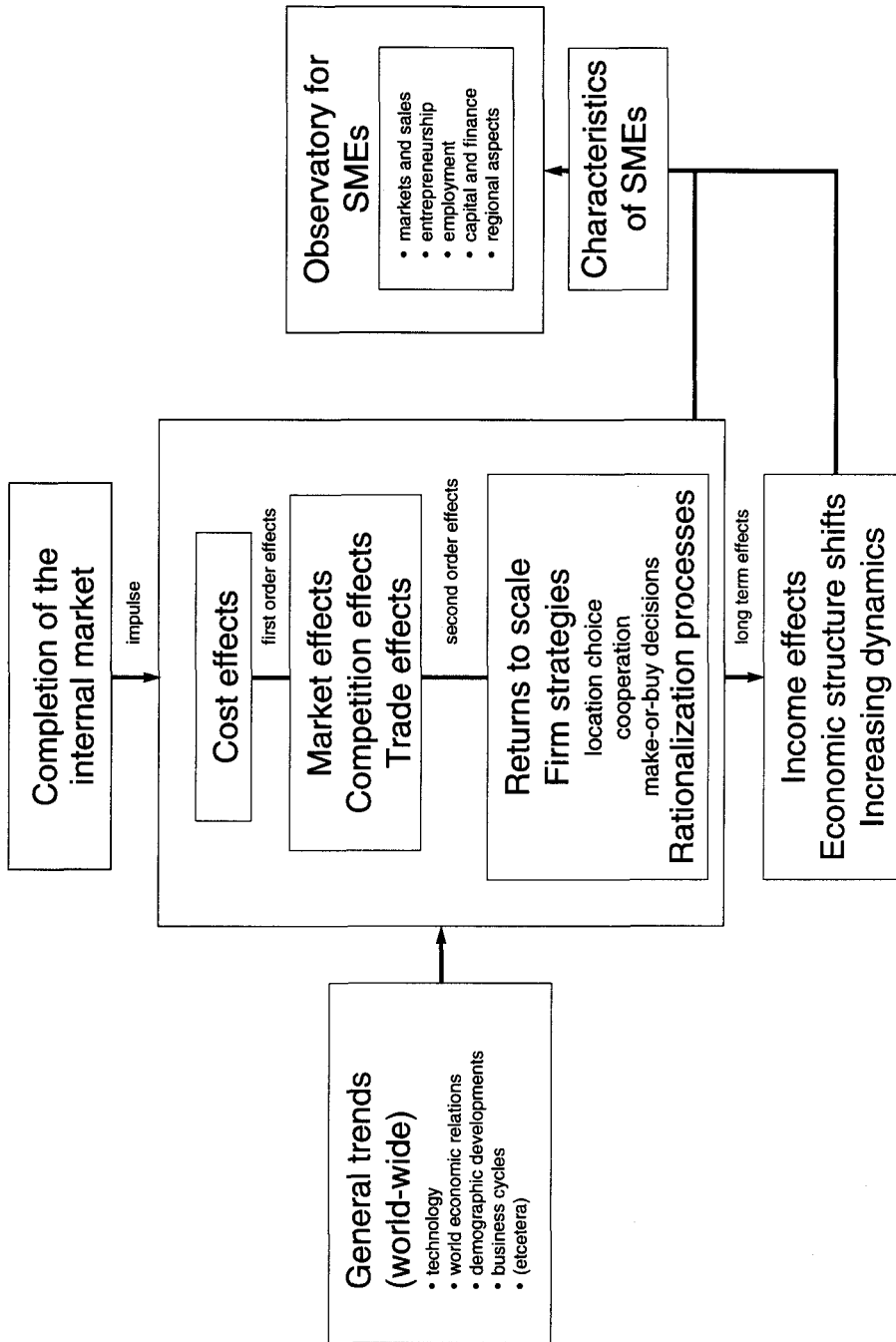
In discussing the impact of removing these barriers it is possible to distinguish first order, second order and long term effects. First order effects result directly from EC-legislation becoming effective. These are direct effects such as cross-frontier markets becoming easily accessible or 'difference-bound' economic activities becoming obsolete, and the indirect effects of changes in the costs of imported and exported goods and services, capital, etc.

Second order effects relate to changes of market size, intra-EC trade and competitive conditions, affecting economies of scale, bringing about rationalization processes and leading to adaptative firm strategies.

In the long term changes in economic structure and the income effects of the completion of the internal market are generating dynamics of their own. These different effects are discussed below in more detail.

Figure 3.1

One market effects on SMEs



3.1.2 First order effects

The net effect of the integration impulse is expected to result in a decrease of firms' costs. Labour costs will decrease due to the reductions in delays when passing frontiers and of 'red tape' when exporting goods. Harmonization of technical standards is expected to bring about lower inspection and packaging costs per unit, and so will the opening up of the public procurement market for interested parties from other member states.

On the other hand the formalities used until now will be replaced by new national or Community procedures, and will partly be moved from the customs into other offices. New EC-formalities may in some cases be compromises between different countries, raising the administrative burden rather than decreasing it in some cases.

Besides, necessary adjustment to changed procedures raises short term administrative burdens anyway, with negative implications to SMEs in particular. Red tape is more of a barrier to smaller companies, because fulfilling administrative requirements is a well-known weak point of SMEs. The adjustment effect is temporary, however.

The combination of more accessible and 'standard' markets should produce cost reductions through increased returns to scale. This does not imply increased average firm sizes as well, however. The long term trend toward specialization is leading to smaller firm size. In addition, available evidence suggests that market size relates negatively to economies of scope in manufacturing industry, and that the effect of extending market size may be a break of multi-product firms into single high-volume companies with improved economies of scale¹.

Moreover, the cost of collecting Euro-information will be raised for SMEs, due to their (potentially) larger operational area: the entire European Community. Moreover, more information is required to supply this widened market and cope with new EC-procedures and legislation. Scaling-up among both public and private suppliers of information may reduce their accessibility to SMEs. Competition among suppliers of information is increasing as well, however. Private services firms will anticipate the information demand from increasing numbers of (other) SMEs seeking business opportunities elsewhere in the EC. Public services to local or national SMEs will undoubtedly fill the information gaps left eventually, particularly if these are caused by EC-regulation being substituted for national procedures and legislation.

¹ Scherer, F.M. and David Ross: 'Industrial market structure and economic performance' (3d ed.), Boston 1990. See page 102, referring to evidence.... 'that the typical Canadian plant tends to produce a wider assortment of products than its counterpart in the much larger US market, where it is easier to fill a plant with one or a few high-volume products'.

The total net effect is nevertheless expected to be positive for SMEs, but less so than the prospects held out in previous, more optimistic, estimates.

The effects may not be felt equally over countries and regions within the European Community, however: it is possible that the completion of the internal market may bring about increasing administrative burdens in some cases.

The impulse of shifts in costs following the removal of barriers between member states works on markets, competition and intra-EC trade in the first place. The effect of enforcing free accessibility of all national markets is creating larger markets, more competition and increased intra-EC trade, on balance. SMEs are affected both directly and indirectly.

The direct effects are the impact on activities related to customs as well as differences in taxes and excise-duties on the one hand, and business opportunities in a potentially larger market on the other.

The indirect effects are changed market conditions as a result of direct responses by and even anticipating strategies of large size enterprises (LSEs). SMEs are facing new conditions in their markets, set by large competitors, suppliers or buyers, applying to both EC and non-EC large companies.

In the short term these indirect effects prevail, because most SMEs wait until the effects are manifest: they cannot afford large investments, and do not have a long term strategy. SMEs' reactions to actual and short term business opportunities tend to be fast, however. There is evidence from some countries, for example, that a substantial proportion of the increasing intra-Community share of total exports is caused by the growth of SME exports to other member states.

3.1.3 Second order effects

The market, competition and trade effects discussed in the previous section are the impulse for the second order effects. They give use to new standards for minimum efficient scales of production and to new firm strategies coping with these through mergers, take-overs, international cooperation or other means. In particular multinational LSEs anticipate the new conditions, and this includes third party reactions like US and Japanese firms setting up subsidiaries to supply the integrated European market¹.

¹ Shortly after the EC-governments' sanctioning of the Single Act in 1987 large firms inside and outside Europe developed strategies to cope with the post 1992 situation. See '*Der Europäische Binnenmarkt*' (O. Mayer, H. Scharrer and H. Schmahl, 1989) as an example of concrete concentration measures by EC firms, and of 'insider policies' by Japanese and other non-EC firms.

Direction and nature of the second order effects on SMEs are the combined result of the first order impulse (cost reductions and new business opportunities), SME strengths and weaknesses like the ones discussed in Chapter 11 of this report, and general trends like new technologies, international business cycles and economic relations (GATT, EC/US/Japan, Central and Eastern Europe, new applicants for EC-membership).

The most important second order effect is an increase of intra-Community competition. Competition within the European Community will increase on balance, as a result of removing intra-Community barriers to a free flow of goods and capital. The flow of mergers and take-overs, starting at the end of the 1980's and still going on now, is not expected to lead to the creation of EC-wide oligopolistic markets as they exist now on a national level, because of remaining market diversity and nationalist sentiments opposing such supply power on the one hand, and because of the sheer size of the common market on the other. There will no doubt be EC-wide oligopolistic markets or cartels, but they will probably be less important than they are now on a national level.

The internal markets effects must be discussed in general terms. As mentioned before, the detailed impact of cost reductions and new business opportunities cannot be isolated easily. Strengths and weaknesses of SMEs (see Chapter 11) differ by country and by sector, and will determine the internal markets effects as well. So do other important trends, discussed in Chapter 4, notably: macro-economic development (in particular the present downturn in the business cycle in most member states), major technological and demographical trends, and the ongoing internationalization process of firms, including the smaller ones.

3.1.4 Long term effects

Although the medium term effects on SMEs of completing the internal market are the focus of this Chapter some discussion of the long term effects is inevitable. These long term effects are extra economic growth, economic structure shifts, and increasing economic dynamics.

The income effects of the internal market, are particularly important to SMEs, as smaller enterprises are more directly dependent on the level of consumer purchasing power. Economic structure will reflect an EC-wide reshuffling of economic activities along the lines of comparative advantage, the consequences for SMEs ranging across regions.

As for dynamic effects, new growth theories emphasize that policies removing trade barriers and other disincentives not only cause one-off effects in the short term, but also produce a 'compound interest' in the medium and long term, by creating aggregate increasing returns to scale. According to some economic

analysts the benefits of completion of the internal market might substantially exceed expectations like the estimates of the Cecchini report, in the longer run¹.

In addition, the importance that the common agreement on the policy of subsidiarity will have for reaping the full benefits of the one market should be emphasized: the balance of national and supra-national authority can not always be based on 'economic rationality'. Suboptimal allocation of resources and of Euro-market functioning may result from this.

3.1.5 Other trends and influences

Effects of the completion of the internal market to SMEs can not be isolated from other trends and influences, both in the EC and on the global playing field. Several important trends in the macro-economic development and the demography of the member states, and in technology and internationalization in general are discussed in the next Chapter. Trends in world economy that should be mentioned here are the shifts in international labour division and the emerging NICs, the reaction of other global players leading to economic integration elsewhere (example: see North American Free Trade Association NAFTA), the development of world trade relations (example: GATT-agreements), etc.

Some possible scenarios for world economic development are elaborated in a recent study: the global gravity centre shifting to Asia, European Renaissance as a result of policy-led integration, combined with inclusion of EFTA and Eastern European countries, or global crisis, with antagonistic and protectionist blocks dominating the global field².

Predicting what will happen in the medium term as a *result of* the completion of the internal market is subject to the condition 'all other things being equal'. But of course they are not. What really happens is subject to a number of other influences, internal and external to the European Community.

In some cases it is hard to find indications or arguments as to nature and direction of these influences. However, some important recent developments with an obvious impact on the integration process over the medium term are briefly discussed below.

¹ Technology and the Economy, OECD, Paris 1992). See pages 172-174, in particular the reference to R. Baldwin on page 173.

² 'Scanning the future. A long-term scenario study of the world economy 1990-2015'. Central Planning Bureau CPB, The Hague 1992.

- Delay of EC-directives taking effect: some of them will be put (fully) into operation only in the medium term. This applies for example to the energy and telecommunication market, and to the Monetary Union. In these cases, integration effects other than anticipating new market conditions will only become clear in the medium and the long term (i.e. after the year 2000)
- The lack of monetary integration became clear in monetary imbalances like the devaluation of some member states' currencies. Furthermore, the fact that only a few countries meet the Maastricht Treaty's requirements for entering the Monetary Union, and especially that there is by no means a clear trend toward an increasing number of applicants for such a union. This will exert influence on the monetary stability within the European Community in the near future
- Increasing 'Euro-scepticism' with governments and constituents in a number of member states, that may lead to delays in implementing the Maastricht Treaty. The result of the Danish and French referendums, and the special conditions stipulated by and granted to the UK in the same Treaty are indications of this scepticism. Sharp discussions have also focused on 'subsidiarity', the competency of European versus national authority, as well as criticism of the EC's democratic quality and (alleged lack of attention to) social policy. A more optimistic view with respect to this scepticism is the observation that alternating periods of progress and set-backs are characteristic for this extremely complex integration process, which began in 1957. The historical evidence, however, suggests a net positive effect with successively higher levels of integration after each set-back¹.
- Existing non-tariff barriers to free intra-EC trade may be replaced with new ones, for example as a result of different national environmental policies. Delegation of national authority to regional and local levels may raise new non-tariff barriers as well.
- The EC will be extended to include EFTA-members like Sweden and Austria. This implies adding to a situation that is already complex.
- Trade relations with Eastern Europe and possible labour migration from these countries on the one hand, and economic relations with the USA/NAFTA and Japan on the other are subject to rapid changes as well. As for Eastern Europe, a two-sided development is emerging: some countries developing fast toward a market-economy, others more or less stagnating. The former will induce increasing competition, and accelerate a restructuring of economic activities in the European Community, particularly affecting bulk and relatively low value added products like steel, textiles and clothing, agricultural products

¹ Mr. Willy de Clercq, former Belgian Secretary of State and member of the European Commission in a speech on December 18, 1992.

and the like. This could seriously affect certain regions within the European Community, particularly in the Southern member states. Continued stagnation of the Eastern part of Europe, however, may cause substantial migration into the Community.

- Solving national economic problems is likely to have a higher priority during less favourable economic conditions. This applies to the present declining stage of the business cycle in most member states¹, and to the unanticipated costs of integrating the former DDR into Germany.
- Last, but not least, the completion of the internal market is a major influence on the world economic system, provoking reactions from other economic blocks. These reactions range from strategic investments in order to obtain bridge-heads within the European Community to creating countervailing powers like NAFTA.

3.1.6 Conclusion

Summarizing the general integration effects previously mentioned, the removal of constraints and the emergence of new competitive incentives will affect the business sector in five main ways:

1. A potential net reduction in costs due to a reduction of administrative procedures for international trade, and due to a better exploitation of several kinds of economies of scale.
2. Improved efficiency in enterprises resulting from innovations, induced by more competitive markets.
3. Adjustments between industries on the basis of a fuller play of comparative advantages in an integrated market.
4. More dynamism and an improved flow of innovations, new processes and new products.
5. More economic growth in the long run, leading to new market opportunities.

3.2 EFFECTS BY SECTOR

The next sections of this Chapter focus on the impact of the internal market by sector and its relevance to SMEs. The important issues in this context are competitiveness on a national and an international level, and expected develop-

¹ With the exception of the UK, which is showing some signs of recovery following its early entry into the recession.

ments in terms of market share and position in the market of SMEs as contractors or subcontractors.

3.2.1 Manufacturing

Certain European Community policies (technical harmonization, competition and external trade policies) have an impact on the structural adjustment process in two distinctive groups of Member States¹ and their implications for their SMEs must now be addressed.

Adjustments in the most industrialized Member States

For these countries, economic integration is already well advanced and production methods are similar. The same type of goods but of different brands or qualities are traded between them (intra-industry trade dominates). The nature and quality of infrastructures, training levels and access to funding are relatively comparable. Even in weak sectors there are dynamic firms which can export successfully.

Smaller firms seem to specialize in production and act as sub-contractors. These activities require less human capital, but not necessarily less physical capital. A considerable number of large firms in an industry seems necessary for a strong economic performance during increasing European economic integration². However, the actual state of affairs in SMEs in these countries is not unfavourable. Many SMEs are already involved in exporting and compete on foreign markets³. Easier access to foreign markets may have a positive impact for these SMEs. However, in those manufacturing sectors where major economies of scale are within reach but not fully exploited yet, SMEs will face

¹ The analysis is mainly based on: P. Buigues, F. Ilzkovitz and J-F. Lebrun, The impact of the internal market by industrial sector: the challenge for the Member States, in European Economy: Social Europe, special edition 1990.

² Bert Minne, Economies of scale within the EC, Central Planning Bureau, Research Memoranda no. 67, Den Haag, The Netherlands.

³ See for example: Peter Hübner, Mittelstand an der Schwelle zum EG-Binnenmarkt '92, Bundesministerium für Wirtschaft, Ergebnisse einer Fachkonferenz des Bundesministerium für Wirtschaft durchgeführt vom Institut für Mittelstandsforschung Bonn, Bundesministerium für Wirtschaft, Bonn.

increasing competition from large firms and a loss of market share can be expected¹.

In other manufacturing sectors where hardly any further economies of scale can be gained (e.g. food industry, textile and clothing industry, furniture industry) the additional economic growth prompted by the European integration will be a positive influence for SMEs and their market share can probably be maintained.

Adjustment paths for the least developed Member States

Two adjustment alternatives can be foreseen for the least developed countries of the European Community. The first is an increase in their specialization in those sectors where they currently enjoy comparative advantage, i.e. labour-intensive sectors such as clothing and footwear. Under this alternative the countries become further specialized in industries with low demand growth potential facing increasing competition from developing countries and other non-EC economies. Under the second scenario the structure of industrial production converges towards that found in the more developed countries of the European Community². Of course, combinations of these two scenarios can be foreseen. In Greece, Spain and Portugal micro enterprises (0 - 9 employees) dominate the manufacturing sector in a stronger way than in the most industrialized Member States.

Where returns to scale can be obtained, SMEs are in an even more difficult position compared to SMEs in the most industrialized Member States. The adjustment process will mean reorganization and restructuring. Exploiting economies of scale and the pressures on marginal SMEs will result in a loss of market share for SMEs as a whole. Quality upgrading to European standards will be necessary and SMEs will face more problems in meeting improved quality standards than SMEs in the most industrialized Member States, which are already much more used to producing to European standards.

¹ A.C.P. de Koning, *Kleine bedrijven op een grote Europese markt*, EIM, 1989, Zoetermeer, The Netherlands.

² P. Buigues, F. Ilzkovitz and J.-F. Lebrun, *The impact of the internal market by industrial sector: the challenge for the Member States*, European Economy: Social Europe, special edition 1990.

3.2.2 Construction

A major factor in the European integration process for the construction sector will be the opening up of public procurement. Consequences for the construction sector will be better opportunities to acquire projects abroad, but the reverse will mean increased competition on home markets caused by foreign competitors trying to acquire projects.

Nevertheless, circumstances will exist even after the opening up of public procurement which form barriers to carrying out projects abroad eg., additional costs such as higher transport and accommodation charges are incurred when working abroad. Personal relations, cultural, traditional and climatic factors affect the way construction works are conceived and built. Building methods can vary not only across countries, but also at a regional level. These differences are by far the most important difficulties met by European construction enterprises working in other geographical regions.

The impact of the opening up of public procurement on enterprises in the construction sector may take the form of acquisition by, or mergers with, foreign enterprises, the establishment of affiliates abroad, 'cooperating' with foreign enterprises in turn key projects and penetrating foreign markets on their own. An important feature of the construction sector is cooperation involving many subcontractors when working on projects. Although the European integration is expected to lead to increases in enterprises contracting projects in other Member States, the above circumstances will affect how these projects are actually carried out. In many cases a foreign main contractor will use local subcontractors instead of carrying out the project by himself or using subcontractors from his home country.

In general large enterprises are the main contractors, certainly in relatively large projects carried out abroad. SMEs in the construction sector are involved as subcontractors in these projects but the direct impact of the European integration will be upon the large enterprises. However, SME subcontractors will be affected indirectly and may need to cooperate increasingly with foreign main contractor enterprises which are undertaking construction projects in the home country of the SME.

In border regions SMEs have better opportunities to directly undertake projects across the border, although similar opportunities occur for both SMEs and larger enterprises on the other side of the border. So, in border regions compe-

tition will increase at both the main contractor and subcontractor levels, whereas in other regions competition will mostly increase at the main contractor level.

3.2.3 Trade sector

Within the trade sector traditionally the retailer was distinguished from the wholesale sector simply by selling to final consumers. However, this distinction is becoming increasingly blurred. In addition, in many cases today, the function of the trade sector itself may be partially or fully undertaken by the manufacturer¹. The retail chains increasingly buy their products directly from the manufacturers, which threatens the position of the wholesale sector. While the trade sector is dominated by small and medium-sized enterprises, a number of chains have emerged with a considerable market share.

The wholesale sector has already undergone major rationalisation over the last twenty years. As noted above, the growth in importance of multiples in the grocery trade, that deal directly with manufacturers is one factor in this process. The new business environment - caused by the European integration - will add to the pressures. The single market may lead to a new distribution strategy from manufacturers. It will be easier to deliver directly to retailers or to distribute to a group of countries through a single agent. Especially in the smaller Member States, SMEs engaged in the import and distribution of goods from abroad are more vulnerable than similar SMEs in the larger Member States. Better opportunities for retailers to deal directly with wholesalers or agents in another country will put pressure on the margins of wholesalers. In turn the wholesale sector will probably react by developing cross-border activities such as setting up buying groups.

Over many years major rationalisations have led to increased concentration of retailing in most Member States. Only the Mediterranean Member States have lagged behind in this trend and still exhibit a rather fragmented retail structure. Therefore it is these countries which will be most affected by European integration. After '1992' retail chains can now source their goods in the country where they are cheapest and supply all their stores from that one source. This could significantly increase their market strength in dealing with producers generally, and with multinationals in particular.

¹ See J.D. Fitzgerald, *The impact of 1992 on the Distribution Sector*, ESRI, 1991, Ireland.

This strengthened competitive position of the retail chains will clearly have a negative impact on the market position of the smaller retailers.

The small retailers in the Mediterranean Member States will be especially affected by these concentration processes. The pattern is already apparent: retail chains from other Member States penetrate - through acquisitions or setting up establishments on their own - into the Mediterranean Member States. Retailing of food is the first sector to be affected. However, other sectors, such as furniture, do-it-yourself goods and white goods will also be affected.

3.2.4 Services

The services sector comprises:

- transport
- telecommunication services
- financial services
- business services
- personal services.

The air transport and telecommunications services sector is dominated by a few very large enterprises with SMEs playing hardly any role. Therefore, these sectors are discussed very briefly here, although a strong impact is expected from the European integration. The opening up of the air transport and telecommunications markets will cause more competition, and additional opportunities for SMEs: it will raise business opportunities for SME niche-players. Nevertheless, economies of scale in these sectors will continue to play an important role and will in a natural way (i.e. even without artificial restrictions) prevent a substantial market share for SMEs. Nevertheless, SMEs are indirectly involved in these developments, because a large number of SMEs supply all kinds of services to these sectors (catering, cargo services, etc).

In road transport the movement and operation of vehicles throughout the European Community is partly restricted, and competition is considerably distorted by different national regulations on capacity and access to the road haulage industry and tariff control. A system of licences requires hauliers to apply for a limited number of permits in order to move goods between given Member States. In addition there is a general prohibition of 'cabotage', that is the possibility for non-resident hauliers to collect and deliver loads within boundaries of another Member State. A liberalized regime for international road haulage in the European Community, including permission for 'cabotage', will imply more competition at both international and national levels.

More efficient use of the actual capacity will reveal some overcapacity in the road haulage, which will in turn require enterprises to adapt to the expected requirements of the new business environment. Enterprises incapable of adapting will be forced out of the market. However, the increasing flow of goods in the EC caused by the Single Market will increase the market as a whole. Enterprises with large international networks - working through 'hubs and spokes' systems - can be expected. Through a network of 'hubs' such large enterprises are able to provide transport services throughout (a major part of) the European Community. The 'spokes' connect the 'hubs' to smaller stop-overs or the final destination and large enterprises will also play a major role here. So, large enterprises will dominate the regular flow of goods through 'hubs and spokes' systems and SMEs will mainly have to depend on transport services which do not fit in this system or those transport services which are contracted out by the large enterprises in the 'hubs and spokes'. Thus the environment for SMEs in road haulage will shift from mainly independent operations to acting as subcontractors and the market share of SMEs is expected to diminish.

The financial services sector includes banking, securities markets and insurance. Freedom of establishment for foreign banks and insurance companies already exists in many Member States, although national regulations cause problems in conducting effective and efficient operations abroad.

Access to foreign markets in the European Community will be easier for enterprises in the financial service sector. Competition will be stronger especially in Member States where national regulations have previously prevented competition with foreign enterprises. Nevertheless, foreign enterprises face great difficulties in acquiring a considerable market share on their own, because of the high initial costs involved. Mergers and acquisitions seem to be a more appropriate method of entry to a foreign market or alternatively enterprises may decide to concentrate on market niches. These strategies are mainly viable for large enterprises with sufficient financial resources.

The distribution channel of financial services is often through a large number of agents. These agents provide services at the local level, because of the importance of face-to-face contacts with customers. SMEs in this line of business are mainly (in)dependent agents offering a large variety of financial services for a number of larger enterprises. Such distribution channels in the financial services sector will not change substantially, because face-to-face contacts with customers remain important. Nevertheless, the *Allfinanz*' concept (i.e. the provision of banking and insurance services altogether) may lead to

the provision of simple insurance products (i.e. those products about which not much information is needed by the customer) through banking outlets. This may threaten the market position of the agents in providing these simpler insurance products. Yet, the increasing variety of financial products will affect the search processes carried out by customers and lead to a growth in demand of customers for detailed information. Good opportunities arise for agents to meet the need for these more sophisticated and diverse products.

Important activities in the business services sector are: engineering and related services, management consultancy, commercial communications (including advertising), computing services, accountancy, audit services, legal services and research and development. In general the supply of most business services is not limited by barriers to cross-border trade. However, in engineering and related services and commercial communications trade barriers are of importance. Government procurement can affect computing services and research and development, but it is considered to have only a moderate impact on trade. For certain business activities, including accounting and management consultancy, trade is conducted to a high degree through international networks or partnerships, and here trade barriers are considered to be of virtually no importance¹. Overall the impact of the internal market on SMEs in the business services sector seems to be limited, because of the existing internationalization of the business services sector and the limited importance of trade barriers in the past.

Personal services comprise: hotels and restaurants; maintenance and repair; recreation and amusement; hairdressing and beauty services and several other services. In many European countries an acceleration in the growth of the personal services was observed in the 1980s². A major cause of this revival are the evolving lifestyles connected with growing female labour force participation, individualization, increasing leisure and the ageing of the population. This is highly relevant for the SME sector, because many of these services are embedded in the local economy and offer excellent opportunities for tailor-made provision by small firms. A factor hampering personal services growth is the rising cost of these labour intensive activities. In some segments, e.g. fast food restaurants, new possibilities of increasing labour productivity have been developed through standardization and the use of part-time labour. It is

¹ Directorate-General for Economic and Financial Affairs, *The economics of 1992*, European Economy, no. 35, 1988.

² Economic Commission for Europe, *Personal and Collective Services: an international perspective*, Discussion paper, vol. 2, no. 1, 1992.

to be expected that the Internal Market will strengthen this trend and this will create opportunities for chains and increase competition between large and small firms.

3.2.5 The craft sector

The hallmark of the craft sector is the provision of individual services to private consumers, and to trade, industry and the public sector. Other important characteristics of the craft sector are the predominance of customized production/working to order and labour-intensive production (although many firms in the craft trades also use advanced technology).

Craft firms are active in various branches in the economy (e.g. manufacturing, construction and personal services). As such, the consequences of the internal market on the craft sector is a mixture of the consequences for SMEs in the various sectors described earlier in this Chapter. Nevertheless, the particular characteristics of the craft industries also lead to specific consequences flowing from the internal market.

Craft enterprises in manufacturing are usually less internationally oriented than SMEs in general. The type of products and the type of customers lead to a much more domestic-market-based approach. The internal market certainly improves the opportunities for the craft enterprises to sell a larger share of their products abroad. On the other hand, industries in other countries have the same opportunities to enter the domestic markets of craft enterprises, and competition will certainly increase. However, the typical predominance of customized production to order means that the likely consequences of the internal market in terms of market share are less relevant to craft industries. The type of production of craft industries is less based on large quantities, and economies of scale are less apparent. Therefore craft enterprises will be less severely affected by the internal market than many other parts of manufacturing although in specific branches and/or countries craft enterprises in manufacturing may have to face severe competition on the completion of the internal market.

Increased competition might for instance occur in border regions where differences exist between countries with respect to:

- labour costs
- market regulation
- standards and norms
- indirect taxes

- price/quality levels
- vocational training systems and certificates.

Clearly, the bigger those differences are, the more likely it is that a contractor will look for better or cheaper subcontractors abroad.

In the long run scale advantages may be gained due to the harmonization of standards and norms, opening up markets for public procurement and the abolition of market regulations. As a consequence the better practice segments of the industrial craft sector will grow and become more internationally orientated while other parts of the craft sector may decline.

The consequences of the internal market for craft enterprises in construction are similar to the consequences for SMEs in construction. Thus, craft enterprises will be affected by the opening-up of public procurement. The main results are:

1. the opportunity to work more often as a subcontractor for major foreign enterprises in large construction projects in the domestic market. However, many large foreign companies have a network of regular subcontractors (in construction, installation, repair, etc.) who frequently work for them and in some cases they will seek to retain these sub-contractors on foreign projects which could mean a loss of sales for domestic craft firms;
2. there will be more opportunities in the border regions for craft enterprises to undertake projects across the border at a limited distance from their home base, but the reverse is also true: more competition in the home (border) regions. If firms succeed in setting up forms of cooperation (for instance between firms offering complementary products and services) they might be successful in offering a package of products and services to large contractors abroad.

Already in some countries larger firms such as installers or painters, hire cheap labour from other EC-countries to do the job. Particularly for work of moderate or low quality this is a real threat to craft firms in construction and construction-related sectors.

Craft enterprises in the service sector are concentrated in personal services with a high labour-intensity. The internal market improves opportunities for internationally tradeable services and cooperation in combination with possibilities for increased labour productivity. This creates increased opportunities for more large-scale operations in the personal-services sector and can lead to more

competition between large enterprises and craft enterprises, and to a threat to the market share of craft enterprises in services.

If vocational training systems and certificates become more compatible between countries and are mutually recognized, the possibilities of attracting skilled labour from abroad will grow, especially in border regions. The same applies to the harmonization or recognition of business licensing and this will open-up possibilities for operating or even establishing subsidiaries abroad.

4 TRENDS

4.1 INTRODUCTION

This chapter reviews some major trends affecting European SMEs at present and in future years and presents a broad assessment of the possible impact of these trends on SMEs. Subsequent chapters elaborate on the effects of these developments in specific SME-fields.

Below the following major trends are discussed:

- macro-economic developments;
- demographic developments;
- technology;
- internationalization.

4.2 MACRO-ECONOMIC ENVIRONMENT¹

The small and medium-sized enterprises make up a major segment of the European economy. As such they are closely linked to macro-economic developments in the Member States. The growth of private consumption is a key indicator of market perspectives for SMEs, in particular micro firms. More generally, economic activity in the Community is an indicator of possibilities for sales of intermediate goods. Also changes in labour costs are highly relevant for the performance and the jobgeneration of the labour intensive SME sector. Finally SMEs are directly and indirectly linked to the world economy.

4.2.1 The international perspective

Economic activity in the European economy has slowed down since 1990. At first economic experts predicted a short period of slow growth, but at the start of 1993 clear signs for a cyclical up turn have still not appeared. In fact the economic outlook for the Community has significantly deteriorated over recent months. At this moment EC-countries face an uncertain period, caused by the turmoil on European foreign exchange markets which occurred towards the end of 1992. As a result a growth recovery is not expected to materialise this year.

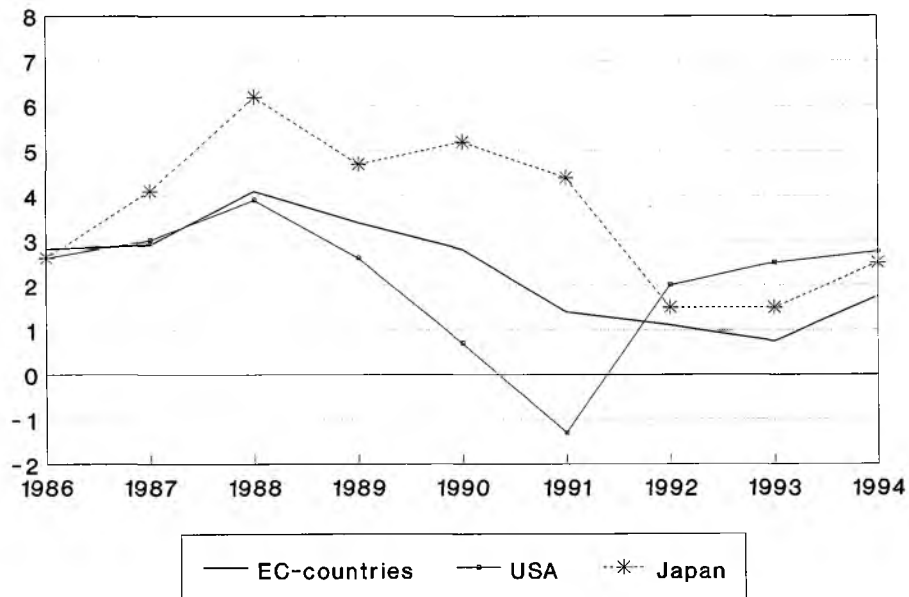
¹ This section is based upon: Commission of the European Communities, Annual Economic Report for 1993, and European Economy, Supplement A, Jan/Feb 1993.

Although great caution is required in analyzing data and trends, a modest pick-up of growth is now expected for 1994.

The period 1986 - 1989 witnessed sharp economic growth in the European Community, the USA and Japan (see Figure 4.1). The average annual growth varied from 3.3% in the EC to 4.4% in Japan. Buoyant investment growth (especially in equipment) was a major driving force behind the development in Japan and the European Community.

In 1990 the first signs of a slow down in economic growth became apparent in both the USA and the United Kingdom with growth less than one percent in both economies. On the other side a one-off boost in economic activity occurred in Germany, caused by the unification process. In 1991 most other countries in the OECD-area were confronted with a decrease in economic growth and the USA and the United Kingdom were in fact hit by a recession.

Figure 4.1 Growth of Gross Domestic Product at constant prices in the EC, USA and Japan, 1986 - 1993



Source: European Commission.

Economic activity remained weak in the *OECD-area* in 1992 with strong decreases in economic growth in both Japan and Germany. Moreover, most other OECD-countries experienced a further slowdown in growth and the UK-economy experienced a third year of falling output.

In the *United States* economic growth recovered modestly in 1992 with GDP-growth of 2%. Forecasts for the US economy project a somewhat hesitant recovery with growth rates of 2.4 and 2.8% in 1993 and 1994 respectively. The most important factors preventing higher growth rates are the weak financial position of households, preventing a strong pick-up of private consumption, persistently high interest rates and weakening export markets in Europe and Japan. On the other hand, some factors facilitating growth are also clearly evident: an accommodating monetary policy, mildly stimulating fiscal impulses and a boost in construction activities due to the damage caused by Hurricane Andrew.

The sharp slowdown of the *Japanese economy* - from 4.4% in 1991 to an expected 1.5% in 1992 and 1993 - has its roots in the exceptional growth rates of the late 1980s, which led to an asset-price boom and inflationary pressures. In the final half of 1992 the economic situation deteriorated sharply: declining industrial production and investment, falling consumption, weakening of business and consumer confidence and worsening labour market conditions. Many Japanese firms are taking a very cautious position on new capital investment. Moreover the export performance is rather disappointing, especially due to the appreciation of the yen and sluggish growth on export markets. A gradual recovery is expected for next year (GDP-growth of 2.4%).

The favourable economic growth in the *EC-countries* in the second half of the 1980s led to an average annual increase of employment of 1.2% in the period 1986 - 1989 (see Table 4.1). This led to a sharp fall in the EC unemployment rate, i.e. from 10.7% in 1986 to 8.3% in 1990. Nevertheless, unemployment in the EC was still high relative to the USA and especially Japan. The slowdown of economic growth in recent years had also weakened employment growth. In 1991 the growth-figure was just 0.1%, with a decline of employment in the manufacturing industries of 1.6%. Preliminary figures for 1992 show an actual fall in employment (-0.5%) within the EC-countries for the first time since the early 1980s. The dim prospects for employment growth stem from slow production growth and the adaptation process in enterprises aimed at increasing their competitiveness, a process which still is not finished. Cost cutting adjustments lead to a decline of 2.4% in manufacturing employment whilst labour productivity rose. In 1993 and 1994 it is expected that the employment growth in the EC countries will remain negative (-0.8 and -0.1% respectively).

Given civilian labour force growth of 0.3%, the EC unemployment rate is expected to rise from 8.3% in 1990 to 10.6% this year and 11% in 1994. This expected unemployment rate exceeds the previous cyclical peak of 10.5% recorded in 1985.

Table 4.1 Situation on the Labour Market

	86-89	1990	1991	1992	1993	1994
Percentage Change						
Growth of Employment						
EC*	1.3	1.6	0.1	-0.5	-0.8	-0.1
USA	2.6	1.2	-1.6	0.7	1.0	1.2
Japan	1.4	2.1	1.9	0.5	0.2	0.7
*						
Percentage of civilian Labour Force						
Unemployment rate						
EC*	9.9	8.3	8.8	9.5	10.6	11.0
USA**	6.0	5.5	6.7	7.3	7.2	7.0
Japan**	2.6	2.1	2.1	2.1	2.2	2.3

* Excluding former Eastern Germany.

** Percentage of total labour force.

Source: European Commission.

4.2.2 Economic growth in the Member States

In 1991 the UK faced a recession and other countries were confronted with deflationary factors. This was mainly due to lack of confidence among both consumers and investors, which had worsened at the beginning of the year due to the uncertainties surrounding the Gulf War. However, the end of the Gulf War did not lead to the expected pick-up of economic activity. Consumers and investors in the Member States gave priority to reducing their debts and increasing savings, instead of resuming their expenses and investment pattern as before. In Germany however economic growth remained strong because of the German Unification process, which gave rise to a boost in both consumption and investment.

Despite the strong impulses of the newly unified German economy, economic growth in most other EC-countries deteriorated. GDP growth in the Community as a whole decreased sharply from 2.8% in 1990 to 1.4% in 1991.

In 1992 GDP growth in the EC fell further to 1.1%, with further convergence between the Member States. The predicted pick-up in growth did not materialise. Hopes for a domestic demand driven recovery were unfulfilled due to macro economic imbalances within the EC countries and the weaker external environment. Despite continued growth of world trade Community Members faced problems in their export markets, mainly due to the sharp depreciation of the US dollar. As a consequence export growth in the EC turned out to be weaker than expected. In most Member States GDP growth had to be scaled down and the recession in the UK continued. In Ireland and Luxembourg growth exceeded 2%, but all other EC countries faced more disappointing growth figures. The actual and projected growth performance of individual countries is summarised in Table 4.2.

For 1993 a persistent deceleration of real GDP growth is expected with heightened recessionary risks. GDP growth in the Community this year is expected to fall back to 0.7%. This continued sluggishness is essentially predicated upon the following factors: low business and consumer confidence, tight monetary policies, weak budgetary positions and the moderate growth of the world economy. Domestic demand is expected to grow very slowly. The German economy faces a recession this year and surrounding countries will suffer the consequences.

For 1994 a modest growth recovery will probably take place within the Community. Stimulated by the growth of exports and investments GDP is expected to increase by 1.7%. This signals a phase of weak growth which will continue for some time before a further pick-up in growth can be expected. Differences in growth rates between Member States are likely to remain small.

Table 4.2 Actual and Projected Real GDP Growth in EC Countries

	86-89	1990	1991	1992	1993	1994
Percentage Change						
Belgium	3.1	3.4	1.9	1.0	0.5	1.7
Denmark	1.5	1.7	1.2	1.0	1.8	2.2
Germany	2.7	5.1	3.7	1.5	-0.5	1.0
Germany +	-	-	-	1.7	0	1.5
Greece	2.1	-0.2	1.8	1.5	1.6	2.0
Spain	4.7	3.6	2.4	1.2	1.0	1.8
France	3.0	2.2	1.1	1.9	1.0	1.9
Ireland	3.7	8.3	2.5	2.9	2.1	2.5
Italy	3.3	2.2	1.4	1.1	0.8	1.4
Luxembourg	4.9	3.2	3.1	2.2	2.0	2.6
Netherlands	2.4	3.9	2.2	1.3	0.6	1.3
Portugal	4.6	4.4	1.9	1.7	1.3	2.5
UK	3.8	0.5	-2.2	-0.9	1.4	2.6
EC	3.3	2.8	1.4	1.1	0.7	1.7
EC +	-	-	-	1.1	0.7	1.7

Note: Germany + = Germany including former Eastern Germany.

EC + = EC including former Eastern Germany.

Source: European Commission.

4.2.3 Trends relevant to the European SMEs

A detailed study of the development of different output categories gives insight into factors relevant to European SMEs. The output structure of SMEs and large enterprises differ considerably. In general, output of SMEs is relatively more dependent on developments in domestic demand, i.e. private consumption of goods and services, investment and intermediary deliveries. The output of large enterprises on the other hand is more strongly influenced by the development of exports.

The growth of *private consumption* - an important output category for SMEs - has been slowing markedly in recent years. In 1992 the growth of consumption fell to 1.3% and for this year a further decrease is expected to 0.7%. The main cause is the sharp decline in real disposable income, due to high inflation, stagnant employment growth, falling working hours and tax increases in several Member States. A recovery of private consumption is hampered by fears arising from increasing unemployment and further falls in consumer confidence and growth of only 1.2% is projected for 1994.

Table 4.3 Growth of Consumption in the EC (excl. former Eastern Germany)

	86-89	1990	1991	1992	1993	1994
Percentage Change						
Private Consumption, Volume	3.8	3.2	1.9	1.3	0.7	1.2

Source: European Commission.

Investment by enterprises consists of four items: investment in equipment, investment in residential and non-residential construction and investment in stocks. SMEs are - in comparison with large enterprises - more dependent on investments in construction and less dependent on investment in equipment. Both investment categories have been almost equally affected by the economic decline, with the latter proving to be slightly more resilient to the downturn. Investment in the Community stagnated in both 1991 and 1992. This stagnation was caused by the fall-off in demand, high interest rates and the lack of business confidence. Prospects for a recovery in 1993 are not hopeful. Given the expectation of continued weak demand, a decline in investment of half a percentage is expected this year. For 1994 a gentle recovery in investment is predicted.

Table 4.4 Growth of gross fixed Capital Formation in the EC (excl. former Eastern Germany)

	86-89	1990	1991	1992	1993	1994
Percentage Change						
Gross fixed Capital Formation	6.4	3.9	0	-0.3	-1.0	2.1
Investment in Equipment	8.0	4.8	-0.2	-1.5	-1.5	2.2
Investment in Construction	5.0	3.8	0.5	1.0	-0.6	2.0
Stock Building	0.1	-0.3	-0.2	0.1	0	0.1

Source: European Commission.

World trade has proved to be quite resilient to weak economic activity in the world economy. World trade (excluding the EC) is estimated to have grown by more than 5% in 1992, an upward revision being almost entirely due to surprisingly strong import growth in the US. Forecasts are for a further acceleration in world trade to 5.7 and 6.5% in 1993 and 1994 respectively.

Due to the strong appreciation of EC-currencies in 1992 export growth to non-EC economies was dampened (2.9%). However, the export performance of the

EC is expected to recover significantly in 1993, and forecasts point to a growth of EC exports to the rest of the world of more than 5%.

The on going economic downturn and the continued tight monetary policy stance have contributed to an easing in *inflationary pressures* in 1992. However, owing partly to the inflationary impact of recent currency devaluations in several EC countries, the Community rate of inflation is expected to remain almost unchanged in 1993 (4.2%). Whilst the depreciation of several EC currencies will lead to a stronger rise in import prices in 1993 this rise will be offset by the slower increase in unit labour costs, which are forecast to rise by just 2.9% this year. For 1994 a further modest decline of inflation to 3.5% is expected.

The *labour cost* development is an important issue for SMEs, because of their relatively high labour intensity compared to large enterprises. After several years of strong increases in labour costs, the increase in compensation per employee declined somewhat to 5.8% in 1992. A further moderation is expected for 1993 and 1994, with compensation per employee growing by 4.4% per annum in the Community.

Table 4.5 Main economic Indicators of the EC, 1986-1993 (excl. former Eastern Germany)

	86-89	1990	1991	1992	1993	1994
	Percentage Change					
Gross Domestic Product Volume	3.3	2.8	1.4	1.1	0.7	1.7
Private Consumption Volume	3.8	3.2	1.9	1.3	0.7	1.2
Public Consumption Volume	2.0	2.1	2.0	1.5	0.8	1.1
Gross fixed Capital Formation Volume	6.4	3.9	0	-0.3	-1.0	2.1
Export Goods/Services Volume	4.9	6.9	5.2	3.8	3.6	4.2
Imports Goods/Services Volume	7.8	6.7	4.5	3.7	2.5	3.6
Inflation	4.0	4.5	5.3	4.5	4.2	3.5
Compensation per Employee	6.0	7.5	7.2	5.8	4.3	4.4
Short-term Interest Rate*	9.4	11.9	11.0	11.3	10.7	.
Long-term Interest Rate*	9.5	11.1	10.4	11.2	10.8	.

* Levels.

Source: European Commission.

4.3 DEMOGRAPHIC DEVELOPMENTS

The size, composition and growth of the European population is important for SMEs. Even the density of population can be important. On the demand side population acts - directly or indirectly - on the market faced by SMEs in retail, personal services, residential construction and the consumer goods producing industries. On the supply side it affects the labour force. SMEs have good reasons for paying careful attention to population change. In terms of the labour force SMEs may for instance rely on young - and relatively cheap - workers. But the well documented ageing phenomenon means this source of labour will diminish over time.

4.3.1 Population growth and density

The population of the European Community (exclusive of Eastern Germany) grew between 1980 and 1990 by about 10 million persons, i.e. by an annual growth rate of 0.3%, to reach 327 million in 1990. Including Eastern Germany the Community population was 343 million persons. This means that about 6% of the world population was living in the European Community. Of the 12 EC-member countries Germany has the largest number of inhabitants, followed by Italy, United Kingdom and France. These latter three countries have a population of almost equal size, as Table 4.6 shows.

According to the population projection of Eurostat¹ the population of the Community will increase to 349 million persons by 2000 when the EC's share in world population will have decreased to about 5%. Between 1990 and 2000 the population will grow with an annual average of 0.2%. In the coming decade The Netherlands will show the biggest population growth of the member states. In Belgium and Ireland the population is expected to fall.

Population density, i.e. the average number of inhabitants per square kilometre of land area, varies between 51 (Ireland) and 439 (The Netherlands). In certain sectors of economic activity such as retailing, services and craft industries there may be a connection between the population density and the relative number of SMEs.

¹ Eurostat, Demographic Statistics 1992, Luxembourg, March 1992, 168.

Table 4.6 Population by Member States on 1 January, 1980, 1990 and projections for 2000

	1980	1990	2000	Average annual growth		Density
	x 1000			1980-1990	1990-2000	1990*
				in %		
Belgium	9840	9950	9890	0.11	-0.06	326
Denmark	5120	5140	5230	0.02	0.19	121
France	53730	56580	57880	0.47	0.23	103
Germany	78180	79110	79690	0.12	0.07	222
East-	16740	16430	15390	-0.18	-0.66	.
West-	61440	62680	64300	0.20	0.26	.
Greece	9590	10060	10120	0.47	0.06	76
Ireland	3390	3510	3490**	0.33	-0.05	51
Italy	56390	57580	57610	0.22	0.01	191
Luxembourg	364	379	394	0.40	0.39	146
Netherlands	14090	14890	16020	0.56	0.73	439
Portugal	9710	9880	10580	0.17	0.69	107
Spain	37240	38920	39380	0.44	0.12	77
United Kingdom	56290	57320	59040	0.18	0.30	235
EC-12 ex***	317200	326880		0.31		
EC-12****		343310	349320	0.28	0.17	146

* Population on 1 January 1990 per sq.km of land area.

** 2001.

*** EC-12 excluding Eastern Germany.

**** EC-12 as constituted from 3 October 1990.

Sources: National statistical publications, United Nations, Eurostat.

Decomposition of population growth

In 1990 the number of life births in the European Community was about 4 million or 12 per 1000 of the population. Ireland still has the highest birth rate (15 per 1000).

The total period fertility rate on EC level declined from 1.9 in 1980 to about 1.6 in 1990.

Countries with the lowest fertility rate in 1990 were Italy, Spain, Portugal, Greece and Germany. About ten years ago Spain, Portugal and Greece belonged to the countries with the highest fertility rate. Between 1990 and 2000 the fertility rate will increase in some countries like Denmark, Portugal and The Netherlands, but in all member countries fertility rates will be below the replacement level.

In all EC member countries life expectancy is increasing, and differences in life expectancy between men and women are slowly decreasing. The mortality rate in the EC member states lies between 7.5 and 9.5 per 1000 of the population.

Natural growth is determined by the number of birth and deaths and varies from country to country. Due to the ageing phenomenon and the low fertility rate Germany has a natural growth that is slightly negative. On the other hand Ireland has the biggest natural growth of the European Community, although it is also declining.

Table 4.7 Population Changes in 1990

	Live Births	Deaths	Natural Growth	Net migration (000s)	Total population growth
	x 1000				
Belgium	124	105	19	20	39
Denmark	63	61	3	8	11
France	762	526	236	80	316
Germany	905	921	-16	646	630
East-	178	208	-30	-395	-425
West-	727	713	14	1041	1055
Greece	102	94	8	146	154
Ireland	53	32	21	-8	13
Italy	581	544	36	133	170
Luxembourg	5	4	1	4	5
Netherlands	198	129	69	60	129*
Portugal	116	103	13	-33	-20
Spain	399	335	65	-8	57
United Kingdom	799	642	157	6	162
EC-12	4108	3496	612	1054	1666

* Excludes administrative revisions (-11).

Sources: Periodicals of national statistical offices, Eurostat, United Nations.

The net migration rate is highest in Luxembourg and Germany. Only Ireland, Portugal and Spain had negative net migration. Net migration in Germany has strongly increased. The population growth in Germany is now totally determined by immigration. In comparison with other member states of the EC Germany and France have the largest numbers of foreign residents.

As to the future, growing political instability and unemployment in Central Europe and the Balkans make the high scenario of the Eurostat net migration projection more likely.

4.3.2 Population by age groups

The population of the European Community is getting older. On the one hand

there is the dejuvenization phenomenon, i.e. a decreasing share of young people in the total population. On the other hand there is the ageing phenomenon, i.e. an relatively increasing number of elderly people. In 1990 18.3% of the EC population was younger than 15 years of age (1980: 21.9%) and 14.4% of the population was 65 years of age or over (1980: 13.8%).

In comparison to 1980 the potential labour force (in this case that part of the population that is aged between 15 and 64 years) has increased. At the EC level from 64.3% in 1980 to 67.3% in 1990. This increase in the potential labour force happened in all member countries of the EC.

The dejuvenization and ageing phenomena will also occur in the period 1990 - 2000. In 8 of the 12 member countries the share of young people (0 - 14 years of age) in the total population will decrease. When looking at the potential labour force a striking point is the decreasing share of the population of 15 - 24 years of age. For the EC as a whole this share will decrease by 3 percentage points, i.e. about 10 million young potential workers. This will mean a substantial loss for the labour market because the participation rate of this age group is 49% for unmarried people and 68% for married people. The dejuvenization phenomenon is an important issue especially for the SMEs because of the relatively high percentage of young workers they employ. This means SMEs may have to face changing the age structure of their staff.

On the other hand the population of 25 - 64 years of age will increase. Also the numbers economically active in older age groups and married women's participation will probably rise, thus the total labour force will continue to grow.

In view of high and rising unemployment rates, this implies an urgent need for resumed job creation within the European Community. Undoubtedly SMEs can continue to play a vital role in employment growth. This will be elaborated in Chapter 7.

In terms of the total population, those between 25 and 64 years of age will increase their share, particularly those aged 30-55. The rise of these relatively well educated and affluent groups will boost demand for differentiated consumer goods and personal services. This will provide an opportunity for SMEs to generate new tailor-made products for niche markets.

At the same time, because the average age of new entrepreneurs is about 36 years, the rise of the middle age groups will also be a stimulus for new entrepreneurship. This may compensate for a negative demographic influence on start ups below the age of 30 years.

Table 4.8 Age Structure of Population by Member State on 1 January 1990 and 2000

	0-14		15-24		25-64		65 and over	
	1990	2000	1990	2000	1990	2000	1990	2000
% of total Population								
Belgium	18.1	17.9	14.2	11.9	52.9	53.6	14.8	16.6
Denmark	17.1	18.2	15.0	11.6	52.3	55.0	15.6	15.2
France	20.1	19.8	15.1	12.9	50.8	51.7	14.0	15.6
Germany	16.0	16.8	14.1		55.0		14.9	15.9
East-	19.5		13.5		53.8		13.3	
West-	15.1	16.1	14.3	10.2	55.3	56.6	15.3	17.1
Greece	19.6	16.1					13.7	17.3
Ireland	27.5	21.8	17.1	16.2	44.1	50.5	11.3	11.5
Italy	16.7	15.8	16.0	11.6	52.7	55.3	14.5	17.3
Luxembourg	17.3	16.6	13.3	11.6	55.9	56.8	13.5	15.0
Netherlands	18.2	18.8	15.9	11.8	53.1	55.9	12.8	13.5
Portugal	20.9	17.0	16.7	14.0	49.3	53.6	13.1	15.4
Spain	20.0	16.1	16.8	14.3	49.9	53.7	13.3	15.9
United Kingdom	18.9	20.0	15.0	12.1	50.5	52.3	15.6	15.6
EC-12	18.3	18.1	15.3	12.3	52.0	54.6	14.4	15.0

Sources: National statistical publications, United Nations, Eurostat.

4.4 TECHNOLOGY

4.4.1 Introduction

Technology is the most important engine of economic growth in modern industrialised societies. Technology led improvements count for as much as half of the annual growth of production and have a positive influence on income growth, employment, international competitiveness and price reductions¹. Because of this role of technology and its positive welfare effects, all countries can be said to be engaged in a technological race, with all governments stimulating the same key technologies. Policy measures vary from country to country and can have an influence on the competitive position and internationalisation strategies of firms.

¹ OECD, 'Technology and the economy', Paris, 1992, 168; N. van Hulst, 'Technologie als motor van economische groei' (Technology as an engine of economic growth), in: Economisch Statistische Berichten, vol. 77, nr. 3885, 11 November 1992, 1088-1092; Giovanni Dosi, Keith Pavitt & Luc Soete, 'The Economics of Technical Change and International Trade', New York, 1990.

In new growth theories technology is seen in a broad sense because the determinants of economic growth are capital investments, human capital and learning processes, R&D and innovation, management and organization, the physical and social infrastructure and an unhindered allocation of resources from one sectors to another¹. Therefore 'knowledge' in all its aspects, is the most important determinant of economic growth.

Firms play a dominant role in realizing this technological development. To realize growth, continuity and profitability the 'generation of technology' and the continuous 'diffusion and application of new technologies' are the keys for individual firms. For most firms these two concepts of technological change are complementary and in practice not substitutes. This 'knowledge' is incorporated in investment goods and capital, in education, in training, in a well-educated workforce, in R&D, in new ideas, and also in managerial and organizational skills. This permanent upgrading and the increase in the stock of knowledge includes not only the generation and application of technology but also the improved use of human capital, integrated quality control, logistic performances and internal environmental protection systems. A spirit of enterprise and commercial aptitude are other vital features in this process of permanent upgrading. International comparative research has revealed the importance of the continuous upgrading.

Best practice firms bring more new products and production processes onto the market, incorporate more technologies in their products, introduce products more quickly on the market and do so in more geographical markets².

This permanent upgrading and the generation and application of 'knowledge' takes place in firms of all sizes, and each firm plays its own complementary role vis-à-vis other firms.

The next three sections discuss the general trends in technological developments (section 4.4.2.), the threats for SMEs (section 4.4.3.) and the opportunities for SMEs.(section 4.4.4.).

¹ Nicholas Stern, 'The determinants of growth', in: *The Economic Journal*, vol. 101, January 1991, 128; *The Economist*, Economic Growth; explaining the mystery, January 4th, 1992, 17-20.

² T. Michael Nevens, Gregory L. Summe and Bro Uttal, 'Hoe de beste ondernemingen technologie commercialiseren' (How the best firms commercialize technology), in: *Harvard Holland Review*, no. 25, Winter 1990, 7.

4.4.2 General technological trends

Emerging pervasive new technologies

An important trend in technological developments is the emergence of pervasive generic technologies or new technology systems that have such wide ranging applications that they may affect the conditions of production and distribution in all or almost all sectors of the economy.

Steam-power for example was a pervasive technology in the past, since it made possible the mechanisation of most manufacturing processes and, through its application in railway systems and ships, radically changed distribution systems, transport costs and economies of scale for many services as well as for manufacturing. Electric power is another example. Today's most pervasive technology is information technology, defined as a combination of radical innovations based primarily on computers, micro-electronics and telecommunications. Some economist have used the expression 'techno-economic paradigm' to describe those technologies that are so pervasive that they affect the entire economic system.

The importance of the emergence of pervasive information technology is that it requires a redesign and reconfiguration of capital stock, a new skill profile in the labour force, new management structures and work organisation, a new pattern of industrial relations and a new pattern of industrial regulation at national and international level. Information technology is so pervasive and has so many new features that it is the latest 'hurricane' in Schumpeter's successive 'creative gales of destruction'.

In particular SMEs play an important role in this 'gale of destruction' because it will be they who will discover an unlimited number of as yet unknown new applications.

Other important new technologies, although not as yet pervasive as information technology are biotechnology, materials technology, space technology, nuclear technology and environmental protection¹.

The acceleration of technological progress

'Time to market' had become a crucial variable in the strategy of firms because of the general availability of basic technologies, the shortening of product life cycles, dynamic technological developments and the erratic developments in

¹ OECD, *New Technologies in the 1990s; a Socio-economic Strategy*, Paris, 1988, 35, 36. OECD, *Technology in a Changing World, The Technology/Economy Programme*, Paris, 1991, 94.

market demands. Decrease in product life cycles can be illustrated by several examples: thirty years ago a firm in electromechanical engineering could take a headstart with a new product of 4 to 5 years, while today in consumer electronics a product life cycle of six months is usual; the first modern typewriters were mechanical and dominated the market 25 years, while the following generations had a life cycle of 15 (electromechanical), 7 (electrical) and 5 years (first generation wordprocessors)¹.

At the beginning of the life cycle, the new technologies are not yet standardized, brand loyalty is weak, further improvements and new applications are explored, close producer-user relations are necessary, price is not the most important competitive factor, uncertainties and scepticism are the dominant feelings, a lot of experimentation takes place, scale economies are unimportant and market shares are volatile. Because of these characteristics small firms play a dominant role at the start of the life product cycle.

However, when demand is expanding and the product becomes more mature large firms may become important and overshadow small firms. In the mature phase of the product life cycle price competition becomes more important. Lowering costs of production is achieved by concentration, by process rationalization and by achieving economies of scale.

Thus in these final phases of the product life cycle large firms and plants play a more dominant role than SMEs².

Because nowadays markets appear and disappear quickly, they are highly fragmented and volatile. More and more products do not enter the final phases of their life cycles or do so very shortly. This acceleration of technological progress and shortening of life cycles is strengthening the role of SMEs as a group. The volatility within innovative SMEs as a group (failures and new entrants) makes that the SME sector could benefit from this trend. Nevertheless, it will be evident that the large group of marginal, traditional, individual firms, particularly if they are not continuously improving their products, production processes and organisation, will have extreme difficulty to survive in this new turbulent environment.

More cooperation among firms

A general tendency in technological developments is that different technologies are more and more linked with each other. Examples are the combination of

¹ C. Stevens, 'Adjustment issues in the electronics industry', in : STI Review, OECD, 1989, no. 5; T. Michael Nevens, Gregory L. Summe and Bro Uttal, op. cit., 8.

² Paul Stoneman, The economic analysis of technological change, Oxford, 1983, 241, 242.

mechanical engineering and electronics (mechatronics) and the combination of telecommunication and informatics (telematics).

It is expected that the most important technological breakthroughs will take place at these crossroads of different fields of technology.

Because of these linkages, the increasing R&D expenditures and the tendency for each individual firm to concentrate on its core competences, cooperation becomes increasingly important. Although one often assumes that large firms cooperate more than small firms in their R&D efforts and in developing new products, a closer look does not reveal systematic differences among firms by size class. In different countries and regions of Europe, as well as in Japan, many SMEs are engaged in technological cooperation with large firms or with other small firms. Firms with different competences and specialities are working closely together and are forming strong networks and clusters of economic activities.

Different national and international technology programs and local public institutions are fostering cooperation among firms¹. The cooperative networks that grew and prospered in mid and northern Italy in the 1970s and early 1980s seemed, however, to be undergoing some reversal in the late 1980s².

4.4.3 Technology as a threat for SMEs

Technology as a barrier to entry

Technological change can represent an entry barrier for SMEs. Entry barriers arise from high capital costs, high R&D investment, patenting, costs of scanning technology, licensing agreements, firm-specific learning processes (learning-by-

¹ A.H. Kleinknecht, J.O.N. Reijnen, W. Smits, 'Innovatie-indicatoren: vernieuwing in het Nederlandse bedrijfsleven' (Innovation indicators in Dutch industry), in: J.W.A. van Dijk, *Technologie met open grenzen*, Alphen aan den Rijn, 1992, 103, 104; Robert Howard, 'Can Small Business Help Countries Compete?', in: Harvard Business Review Paperback, Boston, s.a., 55, 56; Eric H. van Kooij, *Technology transfer in the Japanese electronics industry; analysis of interorganizational networks supporting small and medium-sized enterprises*, EIM, Zoetermeer, 1990, 33-47. See for conclusions that mainly large firms do cooperate e.g. Jos Hagedoorn and Jos Schakenraad, *Alliances and partnerships in Biotechnology and Information Technologies*, Beleidsstudie Technologie Economie nr. 10, Den Haag, 1991. Luc Soete, 'National Support Policies for Strategic Industries: The International Implications', in: OECD, *Strategic Industries in a Global Economy; policy issues for the 1990s*, Paris, 1991, 59, 67-75.

² Andrea Fumagalli, *The Evolution of Flexible Specialization System: some Italian Experiences*, Paper for the International Conference 'Autonomy and Independent Work', Nijmegen, The Netherlands, November 30 and December 1, 1992, mimeo. See also: U.S. Congress, Office of Technology Assessment, *Making Things Better; Competing in Manufacturing*, OTA-ITE-443, Washington DC, 1990, 61, 168.

doing, learning-by-using, learning-by-interacting), protective R&D and excess capacity used when a firm's position is challenged, marketing power, reputation, brand loyalty and access to sales channels¹. In some fields of technology and in some sectors economies of scale in production are an extra barrier to entry. This is the case of the pharmaceutical sectors, bio-technology and the production of memory chips.

In other words, when the type of technology is very capital intensive and R&D-expenditures are large there is little room for small firms. Also in other markets and technology fields SMEs may be locked out from new technologies. As technology increases the sophistication of products and processes, so the scientific, technological and industrial resources and skills for development and production become more costly and complex.

Small innovating firms may be excluded by rising R&D thresholds and have difficulty in obtaining licenses from larger firms. In industrial sectors like pharmaceuticals where small enterprises were able in the past to play a significant role, they are increasingly squeezed out by rising R&D thresholds and technological complexity. A similar trend is underway in the machine-tool sector, while in telecommunications equipment some larger firms are also beginning to face the problems caused by rapid technological change and escalating R&D and investment costs. Small firms also face a disadvantage in the relation to the suppliers of high-technology components (e.g. semi-conductors). The evidence is that large suppliers give priority to larger firms and are not interested to supply SMEs which may purchase volumes of only 10,000 pieces annually².

The answer to overcoming these entry barriers is for SMEs to join forces with large firms or with other small firms. The creativity, flexibility and innovativeness of small firms may make a happy marriage with the economies of scale and scope (in R&D and in marketing) and with the strategic global planning of large firms.

R&D-expenditures are increasing for all firms

In certain sectors and fields of technology SMEs are playing a minor role because of increasing R&D-expenditures and increasing investment requirements in production equipment.

¹ Paul Stoneman, *op. cit.*, 240-242.

² Vivien Walsh, 'Technology and the Competitiveness of Small Countries: Review', in: Christopher Freeman and Bengt-Ake Lundvall, *Small Countries Facing the Technological Revolution*, London, 1988, 50, 51.

A clear example can be found in the R&D-expenditures needed to develop each new generation of memory chips¹. Moreover, there are several other sectors and fields of technology where for each new generation of products the R&D-expenditure is increasing considerably, e.g. chemicals, pharmaceutical products, aeroplanes, telecommunication equipment and defence material.

There is also a tendency for complexity to increase within the medium and low-technology industries, often the domain of SMEs. The technology of today's car production is approaching the complex characteristics of yesterday's aircraft industry. The low technology, low complexity area of food-processing is likely to become more complex and more science-based as a result of the impact of biotechnology. One aspect of this development is that for the effective exploitation of these technologies in industry a much broader spectrum of R&D capability is required, even in medium-technology sectors, and consequently a much greater expenditure of human and financial resources².

SMEs lagging behind in R&D-efforts

The generation of technology and the diffusion and application of new technologies are highly interlinked. To adequately scan, evaluate and adopt new technologies it is important that firms perform R&D on their own³. Most of SMEs are either unaware of the importance of R&D or are not able to carry out R&D.

The innovativeness of SMEs is not well represented by R&D activities alone and is better measured by innovative output. Several studies⁴ indicate that a large number of SMEs are engaged in traditional activities rather than in activities at the forefront of technological development. In most SMEs strategic management practices are absent and they devote insufficient attention to the necessity of permanent upgrading. Because of general technological trends these SMEs will not survive in an increasingly competitive market place and they will be

¹ Business Week, 'Talk about your dream team; Can IBM, Siemens, and Toshiba design the next big chip? Maybe', July 27, 1992, 33.

² Vivien Walsh, *op. cit.*, 50.

³ See Wesley M. Cohen and Daniel A. Leventhal, 'Innovation and Learning; the two faces of R&D', in: *The Economic Journal*, vol. 99, September 1989, 569-596.

⁴ A.H. Kleinknecht, J.O.N. Reijnen, J.J. Verweij, *Innovatie in de Nederlandse industrie en Dienstverlening; een enquête-onderzoek* (Innovation in Dutch manufacturing and services; a survey), *Beleidsstudies Technologie Economie*, no. 6, The Hague, 1990, 17; E. Santarelli and A. Sterlacchini, 'Innovation, Formal vs. Informal R&D, and Firm Size: Some Evidence from Italian Manufacturing Firms', in: *Small Business Economics*, 1990, no. 2, 223-228.

replaced by new entrepreneurs more aware of the necessity for permanent upgrading.

In certain regions and countries of Europe this 'gale of destruction' of SMEs will be more dominant than in other regions and countries. In the least developed regions and countries a dynamic entrepreneurial spirit with an open mind for the opportunities of new technologies is as yet not well developed and strong interfirm linkages within which knowledge is exchanged are missing. If national R&D statistics are used as a proxy for the innovative behaviour of SMEs in different countries in Europe, large differences between countries are apparent (see Table 4.9).

Table 4.9 Gross Domestic Expenditure on R&D as a percentage of GDP, 1989 (index total EC=100)

	in % of EC average
Belgium	85
Denmark	77
France	118
Germany	145
Greece	24
Ireland	43
Italy	62
Luxembourg	n.a.
Netherlands	109
Portugal	25*
Spain	38
United Kingdom	113
Total EC	100

* 1988.

Source: OECD, Main Science and Technology Indicators 1992, Paris, 1992/2, p. 18.

4.4.4 Technology as an opportunity for SMEs

Technological developments in production equipment favour SMEs

Many authors agree that technological developments in production equipment (CNC, FPA, CAD, CIM) are decreasing the traditional scale disadvantages of SMEs. With these modern types of production equipment small series can be produced as cost effectively as in traditional mass production systems. Manufacturing technology has been revolutionized by both the cost reduction of small-scale production relative to large-scale and the degree of flexibility offered by the technology. Piore and Sabel suggest that the emergence of this new flexible technology represents, in fact, an 'industrial divide' in which firms and society are confronted with a choice of technological modes. In referring to the

Italian example, where an increased reliance on small-scale production has resulted from underlying technological and institutional changes, Piore and Sabel argue that flexible production will tend to promote the relative viability of small firms.¹ However, there are other indications that no final conclusions can be reached at this moment.²

Management practices and industrial organisation in favour of SMEs

The full exploitation of new technologies implies a shift from the 'Tayloristic' model of production organisation to a much more decentralised organisational structure which emphasizes a two-way flow of information within the firm and between suppliers, customers, technological institutes, universities and public authorities outside the firm. Efficiency and control are no longer the main objectives of management, but important new objectives are the best qualitative use of the expensive production equipment and increased responsiveness to emerging markets.

Considerable advantages can be gained here through greater worker participation. New technologies require the decentralisation and integration of management, production, inventory control, marketing and design process. Greater functional integration and fewer layers of hierarchy guarantee greater speed in product development and greater responsiveness to changing markets.

The requirements of changes in management thinking has important implications for organisational and skill structures. There is a move towards a substantial upgrading and broadening of skills. Narrowly defined job categories have to be replaced by broader job classifications. A key element in the greater flexibility of firms and on the capability to produce innovative new products is a work-force which can not only adapt more readily to requirements for produc-

¹ Zoltan J. Acs and David B. Audretsch, *Small firms and technology*, *Beleidsstudies Technologie-Economie* no. 2, Ministerie van Economische Zaken, Den Haag, 1989, 11-15; Graham Vickery, 'Advanced Manufacturing Technology and the Organisation of Work', in: *STI Review OECD*, no. 6, December 1989, 111.

² Based on large survey among firms in the Italian metalworking industry, Cainarca et al., for instance, concluded that in large plants, in particular if they are part of large industrial groups, FPA and other forms of advanced production automation are far more diffused than in small firms. Because of important barriers of adoption of FPA in SMEs the contribution of these technological developments in production equipment to the flexible definition of success of small firms appears rather limited. Gian Carlo Cainarca, Massimo G. Colombo and Sergio Mariotti, 'Firm Size and the Adoption of Flexible Automation', in: *Small Business Economics*, vol. 2, 1990, 129-140.

ing new products and services but can also actively assist in the innovation process. It becomes evident that the quality, commitment and creative potential of all workers is an essential component of the competitive edge of the firm, sector or nation.

Another implication of the new technologies will be that new work schedules will correspond to the aspirations of the labour force (e.g. part-time work or longer working hours and more days free a week), will make intensive use of expensive capital equipment, and will make just-in-time logistic performances more feasible (e.g. use of shifts).

Decentralisation and greater participation should not only take place within firms but also with suppliers and customers. With suppliers new forms of cooperation and networking are needed because this is crucial in cutting inventories, in speeding up the flow of products, and in reducing defects. With customers new relations are needed because close and continuous contact with customers allows products to be improved, new product applications to be identified and firms can redeploy their productive resources in time to new uses.

Such integration and networking in turn demand new skills involving an ability to communicate across functions¹.

SMEs are highly efficient in R&D

A lot of recent studies have pointed out that size is not positively related to the innovative output of R&D, and it seems that the Schumpeterian hypothesis about the economies of scale in R&D may no longer be valid.

Research has shown that small firms engaged in R&D, experience higher productivity in the R&D investment than large firms. American comparisons of relative efficiency of innovative SMEs and large firms in R&D reveal that SMEs realize two times more innovations than large firms by employee, produce 3.5 times more new products out of an R&D-dollar than large firms, innovate 2.4 times more than large firms and that the number of innovations per 1 million employees is 322 in SMEs and 225 in large firms². In Europe there

¹ OECD, *New Technologies in the 1990s; A Socio-economic Strategy*, Paris, 1988, 14, 15, 87, 89; OECD, *Technology in a Changing World, The Technology/Economy Programme*, Paris, 1991, 98-102; Michael L. Dertouzos, Richard K. Lester, Robert M. Solow, *Made in America; Regaining the Productive Edge*, New York, 1989, 117-128.

² Ministry of Economic Affairs, *Technieus Washington, Small Business Innovation Research (SBIR)*, vol. 29, no. 5, W. 91-05 August 1991, 3; Zoltan J. Acs and David B. Audretsch, 'Small firms in the 1990s', in: Zoltan J. Acs and David B. Audretsch, *The Economics of Small Firms; A European Challenge*, Dordrecht, 1990, 6.; P.A. Geroski, 'Competition and Innovation', in: CEC, *Research on the 'Cost of Non-Europe', Basic Findings*, vol. 2, Brussels-Luxembourg, 1988, 359. See also W.L. Baldwin and J.T. Scott, *Market structure and technological change*, London, 1987, 77.

are also indications that SMEs are more productive in their R&D than large firms. Moreover, this efficiency difference among large firms and SMEs is not due to the fact that large firms generate radical innovations and small firms only minor innovations and new product applications. On the contrary, several authors state that there is no relation between the quality of an innovation and the size of the innovating firm or even that the large firms are producing the minor innovations and obtaining the ideas for new applications from small firms¹.

Radical innovations and technological breakthroughs are coming from SMEs

SMEs innovativeness cannot fully be measured by SMEs formal R&D efforts and SMEs relative efficiency in R&D. Firstly, most of the innovative efforts are not measured by formal R&D-statistics. SME innovations may not be coming from formal R&D departments but are taking place in design departments, in product engineering, in drawing offices, on the shop floor and 'free time' of entrepreneurs; such efforts are not measured in formal R&D statistics.

Secondly, 'research' is not more than 20% of the costs of innovation in manufacturing industry, while 60-80% of the costs of innovation consist of development and adaptation of production processes. SMEs are very competitive in these development and adaptation activities².

To grasp the role SMEs play in innovation one has to look at new products, new production processes, new product applications and market innovations or the so-called output of innovative activities. The share of firms employing less than 1000 employees in the 4,378 important innovations introduced in the United Kingdom increased from 37% in the period 1945 to 1949 to 60% in the period 1980 to 1983. While the share of firms with less than 200 employees increased from 30% to 43% over the same period. Small firms are responsible for a large share of total innovations and this share is increasing. This role of

¹ P. A. Geroski, op. cit., 358; Zoltan J. Acs and David B. Audretsch, Small firms and technology, Beleidsstudies Technologie-Economie no. 2, Ministerie van Economische Zaken, Den Haag, 1989, 17; Alfred H. Kleinknecht, Jeroen O.N. Reijnen, Wendy Smits, Een innovatie-output meting voor Nederland; de methode en eerste resultaten (An innovation output measurement for the Netherlands, method and first results), Beleidsstudies Technologie Economie nr. 21, Den Haag, 1992, 3.

² Jacques Mairesse and Mohammed Sassenou, 'R&D and productivity: A Survey of Econometric Studies at the Firm Level', in: STI Review OECD, no. 8, April 1991, 10.

small firms in innovativeness outweighs the share of small firms in terms of production, value added or employment¹.

In the history of technological developments there are numerous examples where new entrants and outsiders have been responsible for a substantial share of the revolutionary new industrial products and processes. In several of these cases, well-established firms flatly rejected invitations to collaborate with the inventor of a concept that later revolutionized their industry. Many other cases can be found in which the threat of entry from an innovative newcomer stimulated existing members to pursue well-known technical possibilities more aggressively².

In the techno-economic paradigm shift taking place today the opportunities for SMEs are numerous. Large firms face enormous problems in halting their investments in old technologies and to accept that they should change to new technologies. Because of the internal resistance to change in corporate culture large firms may take 10 years or more to adjust³. Small firms and new entrants to a market do not have these problems. There is no need to defend old products and there is no stimulus to maintain old plants and capital investments simply because there is little to defend or maintain. Small firms and new entrants have nothing to lose and everything to gain.

Moreover, innovations and technological breakthroughs are often combinations of insights that exist already. In 'seeing' these new combinations luck and hazard often plays an important role. The lack of tradition is an important stimulus for small new firms. For these reasons individual inventors, outsiders and small (new) firms are often the origin of radical innovations and technological breakthroughs.

Market innovations

The role of SMEs in innovations should not only be judged by their capability to generate new products and new production processes but also by their role in market innovations. Because of the advent of demand proliferation markets are becoming more and more differentiated and segmented. Mass markets are breaking up. Consumers are increasingly put off by the idea of buying the same

¹ P.A. Geroski, 'Competition and Innovation', in: CEC, Research on the 'Cost of Non-Europe', Basic Findings, vol. 2, Brussels-Luxembourg, 1988, 359.

² F.M. Scherer and David Ross, Industrial Market Structure and Economic Performance, Boston, 1990, 653, 654.

³ Keith H. Hammonds, 'Why are big companies so tough to change', in: Business Week, June 17, 1991, 30, 31.

dishwasher, frozen pizza or stereo as their neighbours. The result is a flood of small companies in niche markets for everything from ice-cream to fancy kitchens¹. The increased market segmentation is due to the high level of welfare in the modern industrialized countries, the increased level of education, modern means of communication and the increased competition among suppliers that forces them to differentiate their products and services vis-à-vis competitors.

Because of the increased diversification of consumer preferences and the increased demand of 'tailor-made' products and services, personalized products and individualized products that are more closely linked to the consumers' life styles, an infinite number of niche markets exist.

SMEs are better equipped to serve these niche markets than large scale producers and technological developments are helping them to do so. Internationalisation trends enable small firms to supply these international niche markets. A tendency is also evident for large firms to behave like small firms and act locally within the highly fragmented markets found nowadays. Only those large firms which are able to succeed in the balancing act of thinking 'globally' while acting 'locally' and 'small' will prosper.

4.5 INTERNATIONALIZATION

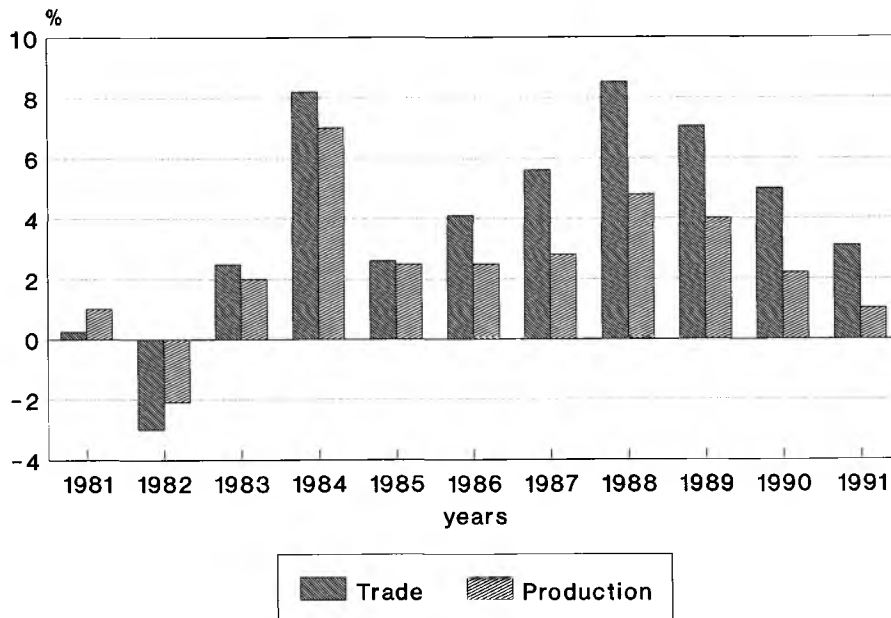
4.5.1 Introduction

The process of internationalization, or globalization, which is manifest in Europe as well as in other parts of the world economy is much discussed. It refers to the increase of international economic links and international activities at the level of the firm. The fact that the annual growth rate of international trade is consistently higher than growth of world production since 1983 can be considered as a first proxy for such internationalisation (see Figure 4.2).

Although international trade is an important element and exports may be important for growing SMEs, various broader elements within the concept of internationalization have to be considered. These include: foreign direct investments (FDI); international co-operation between firms and international licensing.

¹ The Economist, Management Brief: Munchkin management, October 14, 1989, 91, 92.

Figure 4.2 Growth of World Trade and Production, Annual Growth Rate (%), 1981-1991



Source: GATT as quoted in NRC, 4 November 1992.

However, statements about internationalization are often poorly documented, and stories about large firms, the so called 'global-players' dominate. Very little is said about the consequences for SMEs, which are also actively involved and affected by these processes. Within the Community the process of internationalization is being intensified by the creation of the Single European Market (see Chapter 3).

4.5.2 Internationalization and domestic markets

Even firms operating solely on domestic markets are affected by 'globalization' processes. These firms have to deal with internationally active firms on input as well as output markets. Generally speaking the increased competition on input markets brought about by new entrants from abroad is beneficial to SME (lower prices, higher quality). Furthermore, new inputs (financial, insurance and information services, labour, material inputs etc.) become available.

The situation on output markets is more diverse and complex and is discussed in some detail below.

Competitive imports

Studies analyzing the share of imports in total domestic supply have generally shown that domestic market shares are decreasing¹. This process will be furthered by the Single European Market². In 1986 there was already an import penetration ratio of 35% for Community industry (EUR-9), of which 21% is from intra-EC imports and 14% from extra-EC imports.

The import penetration ranges from around 70% for mining and office equipment to 17% for construction materials and food & drinks³.

Subcontracting standards and Foot loose manufacturing units

SME subcontractors are supplying parts for final-products to be marketed abroad by the main contractor and this implies that these SMEs will increasingly have to meet European standards.

Two developments taking place simultaneously and reinforcing each other, will make manufacturing units in the Community relatively footloose⁴. Firstly, transportation and communication costs decreased sharply during the last decades because of technical developments. Shipping costs of cargo and air transport rates have decreased e.g, 50%, and 80% respectively in the period 1930-90, and charges for transatlantic telephone calls are now only 2% of those in 1930⁵.

Secondly, transportation, adaption and transaction costs are decreasing due to market integration, as 'borders' are diminishing and standards harmonizing.

¹ European Economy, No.39, March 1989, provide data for EUR, US and Japan. From 1973 to 1985 the Community's dependence on non-EC imports increased from 8.7 to 13.1%.

² An illustration: recently a EC-wide market study on products for domestic heating systems was implemented by a consortium of European research organisations. The idea was to give European manufacturers insight in the market prospects in other EC markets. However, among the first clients of this study were manufacturers from outside the EC. This indicates that the single market is also a target for suppliers from outside the EC (The European Building Services Study, 77 volumes, Düsseldorf/London, 1990-1992).

³ European Economy, No. 40, May 1989.

⁴ European Economy, number 42, November 1989, p. 190.

⁵ The Economist, economic and financial indicators, July, 20, 1991, p. 115.

Large, international firms are put in a position to rationalise their production by increasing the scale of manufacturing units, i.e. reducing the number of sites¹. This development which is likely to accelerate in the nineties, will affect subcontracting SMEs in various ways. For firms supplying to units being closed down, the negative effects are very evident. SMEs subcontracting to surviving manufacturing units should be aware of likely side-effects.

The restructuring and rationalisation processes and the scale-increases will make strong demands on the subcontracting parties. These include: quality insurance (zero-defects);, logistics aspects (delivery time and just-in-time); electronic data interchange (EDI);, etc. Furthermore and most importantly, outsourcing firms are purposely limiting the number of sub-contractors to improve administration of the process (single sourcing, supply pyramid with first-tier suppliers at the top). Consequently, SMEs previously selling directly to outsourcing firms may be forced to make a strategic choice: either concentrate on a number of relatively simple operations to obtain efficiency gains, i.e. become a second-tier (or even lower) 'jobber' or develop into a high qualified first-tier co-producer. These developments will have a strong impact on SMEs as sub-contracting² is important to SMEs and the reduction in the number of first-tier sub-contractors utilised by a single large firm will affect large numbers of SME subcontractors³.

4.5.3 Exports

From 1970 onwards total exports of the EC increased four times, leading to an increase of the share of exports (goods and services) in GDP from 22% in 1970 to 29% in 1992⁴. In the early seventies the shares of intra-EC and extra-EC exports within total exports were about equal.

¹ Examples are given in the report 'Facing the challenge of the early 1990's', adopted by the Commission 18 October 1989.

² Indicated by the larger share of intermediary supplies in total output of SMEs compared to large scale firms.

³ In: EIM, The Economic Importance of Subcontracting in the Netherlands, prepared for the European Commission, DG XXIII, (not published), some examples are given:

- Rank Xerox, copiers, in 1984 5000 subcontractors, near future 300.
- Saab-Scania, trucks, 1986 500 subcontractors, 1991 200.
- Ford, cars, from 3200 subcontractors to 2000.
- DAF, trucks, in 1983 1200 subcontractors, in 1987 950.
- Philips, electronics, effort to reduce number with 20 to 25% annually.

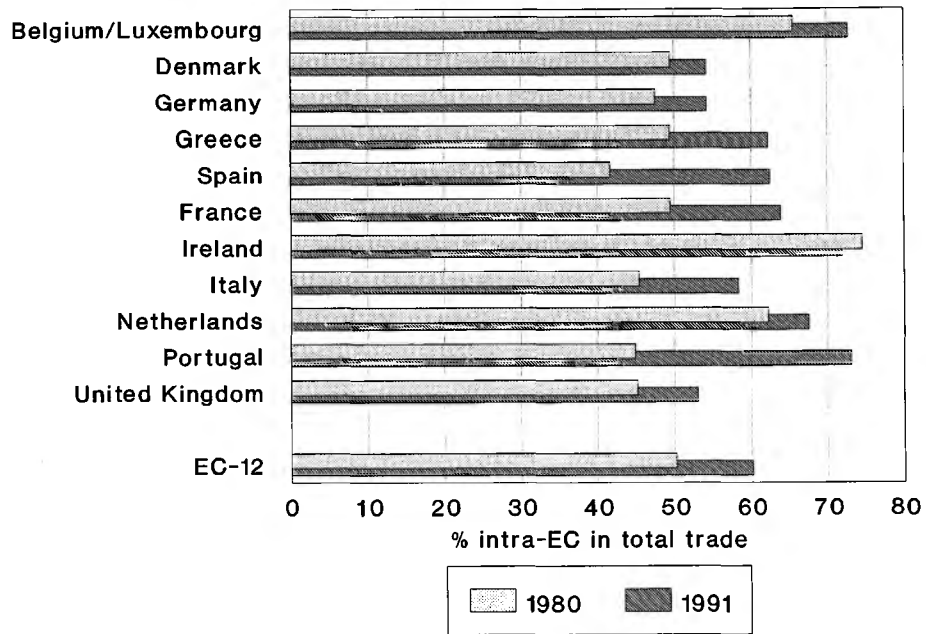
⁴ European Economy, No.51, May 92, Statistical Annex, table 35 (1992 data are forecasts).

During the early eighties the growth of exports was interrupted. After growth resumed around 1983/84, the share of intra-EC trade (imports and exports between member states) increased considerably¹: from 50% in 1980 to 60% in 1991². In Figure 4.3 this information is provided for individual Member States. The share of intra EC trade is increasing especially rapidly in Portugal (growth 63%) and Spain (50%) compared to an EC average of 20%. This trend of European integration is accompanied by rising SME-exports, as SME benefit from the removal of several bottlenecks in the process of European integration which had previously been more difficult to overcome by firms lacking specialized export marketing staff and liberal financial resources. As an illustration Figure 4.4 shows this trend for SMEs in Dutch manufacturing. The export growth of SME outstrips growth of larger firms. More details by Member State are given in Chapter 10.

¹ The regionalization of trade increased in the EC as well as in North America and East Asia, but the level of regionalization is much more pronounced in the EC (Robert C. Hine, Regionalism and the Integration of the World Economy, in: *Journal of Common Market Studies*, Volume XXX, no. 2, June 1992).

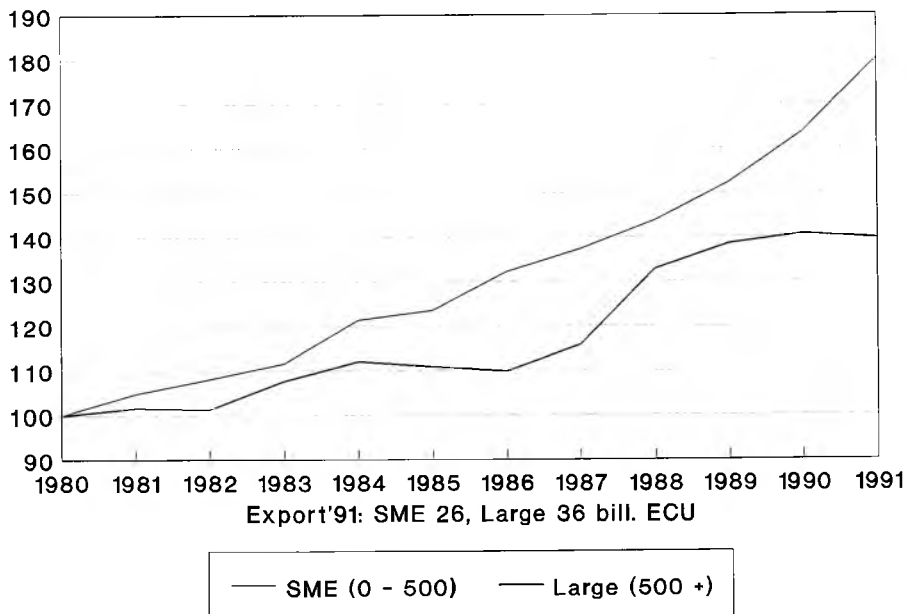
² EUROSTAT, Doelstelling 92 nr. 6 - 1992.

Figure 4.3 International trade between EC Member States as percentages of total international trade of Member States, 1980 and 1991



* Greece, Spain and Portugal 1984 and 1991.
 Source: EUROSTAT (Suppl. Doelstell. 92, 92/6)/EIM.

Figure 4.4 Export Growth 1980-1991 (constant prices) Dutch manufacturing, SME and large (index 1980 = 100)



Source: CBS/EIM.

4.5.4 International co-operation

Co-operation agreements between firms are aimed at various fields, i.e. research, joint-buying, production or marketing. From most of the available studies a fairly clear trend emerges: new strategic alliances and inter-firm agreements have grown significantly in number during the 1980's¹.

4.5.5 International licensing

The financial flows related to international licensing, taken as a percentage of GDP, have increased during the last decade. However, care is needed in analyzing the role of SMEs in this process as a major share is due to inter-

¹ Francois Chesnais, Technical Co-operation Agreements between Firms, STI Review, no. 4, December 1988, OECD.

company flows: i.e. payments of foreign subsidiaries to mother companies¹. Micro data based on survey-research generally also show increases in licensing activity².

4.5.6 Direct foreign investment

From 1984 to 1989 the worldwide flow of foreign direct investments (FDI) rose at an annual rate of 29%, i.e. three times faster than international trade. The triad, the three major global players in FDI Japan, the USA and the EC, account for 80% of the total outward stock. The three major movements are: EC to USA, USA to EC and Japan to USA³. Data from the European Commission also show major increases in the number of mergers and acquisitions with the number in 1986/87 2.6 times that in 1982/83⁴.

The economic slowdown of recent years has resulted in reductions in cross-border acquisitions, although this is probably a cyclical effect and the momentum is likely to increase again over the medium term. Of course large firms are very active in this area, but reports show that SMEs in Germany and family owned firms in Italy are actively looking for potential purchasers to safeguard their interest in the Single market. Data from the OECD confirm the trend of increasing international ownership patterns. As annual fluctuations are relatively large, an average annual growth rate has been calculated using figures on the cumulative flow of outward investment over the period 1973-80 and 1981-1989⁵. Results range from 10 to 24% for all EC member states for which data are available.

¹ In The Netherlands expenditures on international licences have increased from 0.30% to 0.55% of GDP (1982-1989). More than 80% of these expenditures are to parent companies abroad. International licences account for about 25% of all financial flows related to building up technological knowledge. The remaining 75% are done on own R&D. Also receipts have increased, from 0.17% to 0.25% of GDP. (R. Bulthuis, J.A. Veit, R.L.A. Morsink, *Internationale overdracht van technologische kennis, De positie van Nederland, Beleidsstudie technologie Economie*, Ministry of Economic affairs, The Hague, 1991).

² A 1986-survey, for example, showed 74 out of 119 firms with an increase over 1983-85. Graham Vickery, *A Survey of International Technology Licensing*, STI Review, No.4, December 1988, OECD.

³ Data from the United Nations Centre on Transnational Corporations (UNCTC), see also *The Economist*, August 24, 1991, p. 53.

⁴ Only mergers or acquisitions of majority stakes involving at least one of the 1000 largest firms in the Community are included. *European Economy*, no. 40, May 1989.

⁵ *Industrial policy in OECD countries, annual review 1991*, OECD, page 105, Paris, 1991.

Indications do exist that although the process is dominated by large firms, smaller firms are catching up¹. Recently outflows of FDI by OECD countries, in particular from the UK, have declined (1991 compared to 1990), but the same source shows that Intra-EC investments linkages continue to strengthen².

¹ The participation of Dutch SME, firms with less than 100 employees, in foreign companies doubled from 1986 to 1990. To make this possible the flow of FDI from SME more than tripled over the years, i.e. an annual average growth rate of 50%. The share of SME in FDI has increased to more than 15% during recent years. (Dr. W. F. Duisenberg, 'Het midden- en kleinbedrijf in een groot Europa' and J.M.J. Jannink, 'De internationale verplechting van het Nederlandse midden- en kleinbedrijf' in: DNB, Kwartaalbericht 1991-4 and 1992-1, Amsterdam 1991 and 1992.)

² OECD, Economic Outlook, 51, June 1992.

5 ENTREPRENEURSHIP AND BUSINESS DYNAMICS

MAIN POINTS

Enterprises

- About 99.9% of the enterprises in the EC are SMEs, of which 93% are micro enterprises (<10 employees)
- The average firm size for EC is 6 persons, but varies considerably between the Member States. The average firm size of SMEs is 4.3. Generally speaking the average firm size is positively related to GDP per capita and population density.
- Mediterranean countries have a higher share of SMEs, especially in manufacturing industries.
- The central belt of Europe is characterized by larger average firm sizes.

Business dynamics

- Gross natality rate of enterprises in the EC is about 10% (1.4 million start-ups).
- The average annual growth in the stock of enterprises during the period 1988-1992 is estimated at 1.9% (almost 300,000 enterprises per year).
- The United Kingdom has the lowest birth rate and Germany the highest.
- In the period 1986-1991 birth rates are increasing until either 1988 or 1989, with two significant exceptions: Italy which saw its birth rate decreasing during the whole period and Germany which experienced continuing growth after 1989.
- Survival rates vary widely between the Member States.
- There is a correlation between birth rates and death rates.
- The major reasons for starting are self-realization, the presence of a business opportunity and the difference between current wage and expected income.
- Major causes of start-up failures are lack of managerial competence, lack of training and technical competence, lack of marketing knowledge and financial problems.

Characteristics of new entrepreneurs

- Although the vast majority of entrepreneurs are males, the number of female entrepreneurs is increasing, especially in trade and service sector.
- New entrepreneurs tend to be rather young. The average entrepreneur is 35-36 years old.
- The percentage of entrepreneurs with no degree or only a primary degree is rapidly decreasing. Specialized workers, technical people and sometimes managers move into entrepreneurship more frequently.
- Ethnic minorities appear to have a relative high rate of entrepreneurship and new firm start-ups.

5.1 INTRODUCTION

This chapter focuses on entrepreneurship and business dynamics. After an introduction on the heterogeneity of the data in the EC Member States (5.2), the average size of a firm in the EC-12 and the stock of enterprises is discussed in 5.3.

Business dynamics for micro, small, medium and large enterprises are the subject of 5.4, followed by changes in the birth and death of enterprises as well as factors influencing new firm survival in 5.5.

In 5.6 self-employment is discussed.

In 5.7 the factors affecting the start of a new firm are discussed, especially the economic climate, motives and personal characteristics affecting entrepreneurship.

5.2 HETEROGENEITY OF DATA AND SOURCES IN EC-12

Throughout Europe, the 1980s showed a positive increase in entrepreneurial dynamics after a decade of stagnation in production.

In particular, after the second oil crisis of 1979-80 and the subsequent period of recession, the number of new firms rapidly increased in most European countries. This trend was particularly evident in the Mediterranean areas, where the industrial structure is more heavily based on low-technology products and

is characterized by smaller scale economies and by a higher proportion of small firms.

In the period of expansion 1983-89 entrepreneurial dynamism was responsible for the introduction of technological and organizational changes in traditional, labour-intensive industries.

This emphasis on the role played by entrepreneurship and the improved understanding of business dynamics whilst having a long historical tradition is a relatively recent line of empirical research. Statistical information is still incomplete, often shedding insufficient light on the phenomenon within a single country, let alone facilitating adequate international comparisons.

By analysing the country-specific situation, which differs between the 12 members of the EC, methodological problems of two kinds arise:

1. cross-country heterogeneity of data and sources;
2. variations in the choice of entrepreneurial indicators.

With respect to these points, heterogeneity may arise from the specific interest of the institution collecting data: size disaggregation, type and number of the relevant variables and sectoral coverage are defined according to the purpose of the research in a given country. Some examples are:

- the 0-employees class may be omitted in Social Security data;
- in some countries all registered enterprises are taken into account, whilst elsewhere only enterprises which carry on an economic activity are included;
- the definition of SMEs and sector classification may vary between countries, and over time;
- 'new firms' may mean different things:
 - a) new entrepreneurs who start a new activity in a new enterprise;
 - b) existing entrepreneurs who start a new activity in a new enterprise (subsidiary or new local unit);
 - c) registration of a new firm without starting any economic activity;
 - d) a new entrepreneur taking over an existing enterprise (take-over or succession).
- 'closures' may also mean different things:
 - a) ceasing of activity;
 - b) bankruptcies;
 - c) cancelling a registration of a firm, which had no economic activity;
 - d) an entrepreneur who sells his firm to a new entrepreneur (take-over).

In the analysis the following definitions have been used:

- The number of enterprises has been derived from the Eurostat publication 'Enterprises in Europe', complemented by other sources in the EC countries, collected by the members of ENSR. For a few countries estimates had to be made, especially for the service sector. The definition used is similar to

that used by Eurostat. In general an *enterprise* is the smallest legal unit or economic entity, having its own balance sheet subject to a directing authority and formed to carry out in one or more places, one or more activities for the production of goods and services¹. In this analysis 'a firm' has the same meaning as 'an enterprise'.

- As far as new firms are concerned, the broad definition of new firms will be used, i.e. the registration of a new firm, regardless of whether it starts its activity or not (point c.). Take-overs are however excluded.
- The definition of 'failure' used in the tables refers to the cancellation of local Chamber of Commerce membership, or VAT deregistrations where Chambers of Commerce data bases are not provided. Take-overs are excluded.

It must be emphasized that on the data presented in this chapter there are differences in data availability (see Table 5.1). Hence, comparative analysis using absolute values presents many difficulties. Therefore, in many tables, only rates of change and shares of the relevant variables will be provided. This minimizes the impact of data gaps across countries.

However, differing data on the total stock of enterprises and on the number of establishments influence the definition of natality and mortality rates.

Table 5.1 Availability of Data in EC Member States

	B	DK	F	D	GR	IRL	I	L	NL	P	E	UK
Enterprise	X	X	X				X	X	X	X	X	X
Establishment					X	X						
Birth	X	X	X*	X*	X	X	X	X	X	X	X	X
Death	X				X		X	X	X	X	X	X
Employer**	X	X	X	X	X	X	X	X	X	X	X	X
Employment												
by size	X	X	X	X	X	X	X	X	X	X	X	X
Individual												
entrepreneurs	X						X	X				
Nace Sectors	X	X	X	X	X	X	X	X	X	X	X	X

* No NACE disaggregation available.

** Enterprises with 0 employees.

Definitions of business dynamics vary according to the research objectives. Some researchers argue that birth (and death) rates should be measured by the ratio of the number of new firms in a given period to the total number of

¹ In Ireland and Greece the unit is not an enterprise, but an establishment, which is a local activity unit.

existing firms at the beginning of the period. Others argue that it is better to use the size of the active population (or total employment) as the denominator of the ratio, in order to avoid bias due to the low number of existing firms. Finally, it is sometimes argued that the number of small firms should be taken as the denominator because of the 'incubator' role played by small firms in sourcing entrepreneurship.

Unfortunately, not all the necessary data are available for these indicators. For this chapter, no historical series are available for the first two kinds, and for some countries birth and death rates can only be calculated for 1988.

The problem of homogeneity between Member States also affects the theoretical framework. The 12 EC Member States have different historical, social and economic backgrounds which should be taken in account when analysing entrepreneurial dynamics. Heterogeneity among countries is particularly relevant, since entrepreneurship is influenced by country-specific extra-economic variables.

It seems that an impasse is unavoidable. In principle, it would indeed be incorrect to draw definitive conclusions. However, some 'stylized facts' are apparent and allow the suggestion of some inferences; only when results differ widely between countries will data heterogeneity be highlighted. Elsewhere, cautious comparisons will be drawn.

As business dynamics are an extremely important issue in the framework of SME-policy the heterogeneity of data and - thus - the lack of comparative analyses, causes a severe deficiency in our knowledge of entrepreneurial activity in Europe.

5.3 STOCK OF ENTERPRISES AND FIRM SIZE

Entrepreneurial activity can be analysed from two complementary points of view: macroeconomic aspects on the one hand, and psychological, environmental and individual aspects on the other. The latter will be discussed in section 5.7.

A useful starting point is the stock of enterprises. Despite the data problems it is possible to present an overview of the total stock of enterprises in EC-12 and the share per country (Table 5.2).

Table 5.2 The Stock of Enterprises in EC-12 and Distribution over Member States by size class (1988)

	total	0-9	10-99	100-499	500+
	14,600	13,600	920	67	13
EC-12 stock (x 1000)	share (%)	%	%	%	%
Belgium	3.6	3.7	2.6	3.1	3.5
Denmark	1.2	1.1	2.9	2.2	2.2
France	14	14	13.6	14.4	16.1
Germany	14.8	13.9	27	25.4	26.8
Greece	4.6	4.8	2	1.6	1.1
Ireland	0.9	0.9	1.1	1	0.7
Italy	21.7	22.2	14.8	10.1	8.3
Luxembourg	0.1	0.1	0.2	0.2	0.2
The Netherlands	2.9	2.8	3.9	5.3	5
Portugal	4.4	4.5	3.2	3.3	2.6
Spain	13.8	14	11.4	10.6	8.5
United Kingdom	18	18	17.4	22.6	24.8
EC-12 (%)	100	100	100	100	100

Source: Eurostat, ENSR.

To interpret these figures and to compare the twelve Member States, the stock of enterprises may be related to some other variables. There is a close relationship of firm stock to the number of inhabitants (+), the firm size (-) and the density of the population (-).

In the EC-12 there is about 1 enterprise per 22 inhabitants. Greece has the highest density of enterprises per inhabitant: 1 enterprise per 15 inhabitants; The Netherlands have the lowest density: 1 per 36 inhabitants.

The average size of an enterprise varies considerably between the countries. In the EC-12 on average 6 persons are employed per enterprise. Average firm size is definitely larger in Germany, The Netherlands, Denmark, Luxembourg, France and the United Kingdom, while it is definitely smaller in Greece, Belgium, Spain, Italy and Portugal. Generally speaking, the average firm size is positively related to GDP per capita and density of population. Of course the share of SME and the industrial structure also have an influence on the average size of a firm.

As can be derived from Table 5.2 99.9% of the enterprises in the EC are SMEs, of which 93% are micro enterprises (<10 employees), and only 0.1% (or 13,000 enterprises) have more than 500 employees.

The older industrialized countries like Germany, France and the United Kingdom have a higher concentration in manufacturing as a result of the longer industrialization period and greater economies of scale. Portugal seems to be in the same category. However, this is the result of the former political situation with large-scale state-owned industries. The older industrialized countries also have a relatively high concentration of commercial services among the large firms, as a result of the longer period of service sector growth.

The small and medium-sized enterprises consist mainly of trade firms and personal services firms. In the more recently industrialized (Mediterranean) countries, however, small-scale industries are relatively well represented among SMEs.

So far as the importance of small firms is concerned it can be noted that:

1. Mediterranean countries (Portugal, Spain, Italy and Greece) have a higher share of SMEs, especially in manufacturing industries (NACE 2-4). In these countries, industrial structure is characterized by the presence of relatively low-tech, 'supply-dominated' production (according to the well-known Pavitt's taxonomy on innovativeness¹), such as NACE 4 (e.g. textile, leather, clothing industries), in which marginal SMEs play a relevant role in output and employment growth.
In Italy small firms are heavily concentrated in mechanical engineering (NACE 3). In Greece² and Portugal and most areas of Spain, organizational structures referred to as 'industrial district-areas' or 'system-areas' are found.
2. Some regions with an older industrial tradition also have a high share of small firms. Here, SMEs are active in promoting technological and structural change. Such regions are situated in the centre of Europe, in Bavaria and Baden-Württemberg (Germany), Lombardia and Emilia

¹ Pavitt's taxonomy is an attempt to single out industrial sectors according to innovation flows; in this view 4 main classes can be defined:

1. Science-based firms, with strong linkages with the scientific sources of innovation;
2. Scale-intensive firms, when scale economies are of paramount importance and innovation is embodied in new processes;
3. Supplier-dominated firms, which, in traditional sectors, buy innovative capital from class 1 or 2;
4. Specialized suppliers firms, which are innovative with regard to intermediate goods (machinery), that they sell to class 2 and 3.

² Greece is characterized by a large share of SMEs, in particular a large share of firms with no employees (the highest in the Community), and also a large proportion of unpaid family employees. There are a number of (socio-economic) reasons which account for this situation, that is: the strong element of 'individuality' in business and family-like business development; the origin of the majority of new entrepreneurs as craftsmen or merchants; the country's geographical characteristics favouring the development of small businesses with their advantage of supplying local markets.

Romagna (Italy), in Lyon (France) and in Catalonia (Spain). These areas can be considered a sort of 'trait d'union' between the Mediterranean regions and the highly industrialized areas of North-Central Europe.

3. Finally, the central belt of Europe between the Atlantic Ocean and the Oder border (North-France and South-East England, Belgium, The Netherlands, Luxembourg and Central North Germany) is characterized by a higher share of large firms. In manufacturing industries more than 40% of employees work in firms with more than 500 workers (more detailed information is to be found in Chapter 7).

5.4 BUSINESS DYNAMICS

An indicator of business dynamics can be obtained by comparing the natality and mortality rates, i.e. the role played by birth and death rates in determining changes in the number of enterprises. These indicators will be discussed in this section.

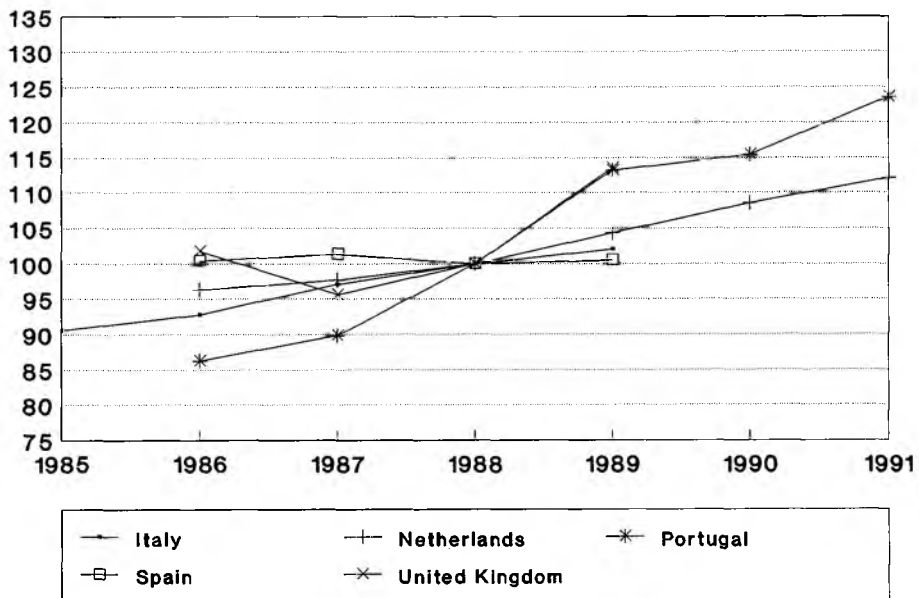
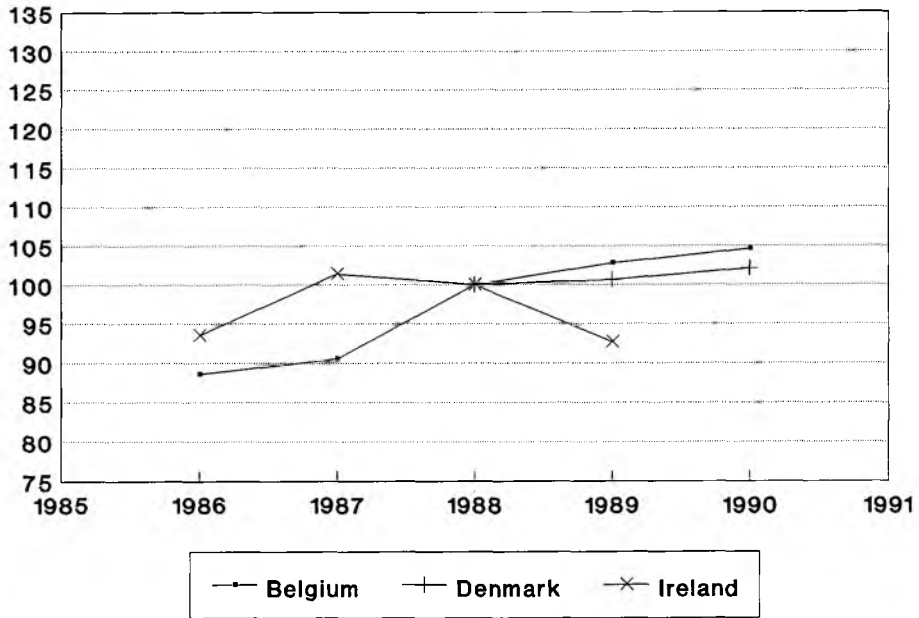
One indicator of business dynamics is simply the change in the number of the firms itself, without looking at its two components. At the EC-level the average annual growth in the stock of enterprises during the period 1988-1992 is estimated at 1.9%. This is an average net annual growth of almost 300.000 enterprises, although the growth rate within that period was declining. Information on changes in the number of firms by country is provided in Figures 5.1a, 5.1b, 5.1c, 5.1d for most EC Member States (Germany and Luxembourg are excluded because of lack of data).

In most Member States micro and small-sized enterprises have increased more or less for the entire 1988-1991 period. On the other hand, there was a declining in medium- and large-sized enterprises.

At the national aggregate level, Portugal shows the highest increase in the number of enterprises (+6.8%) over 1986-91, whilst the other countries (except Greece) show positive but lower growth.

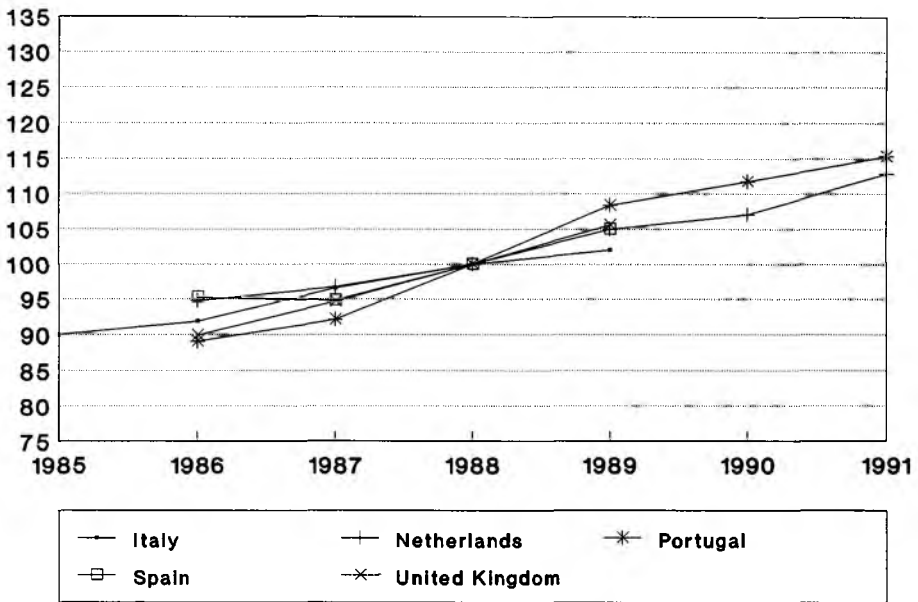
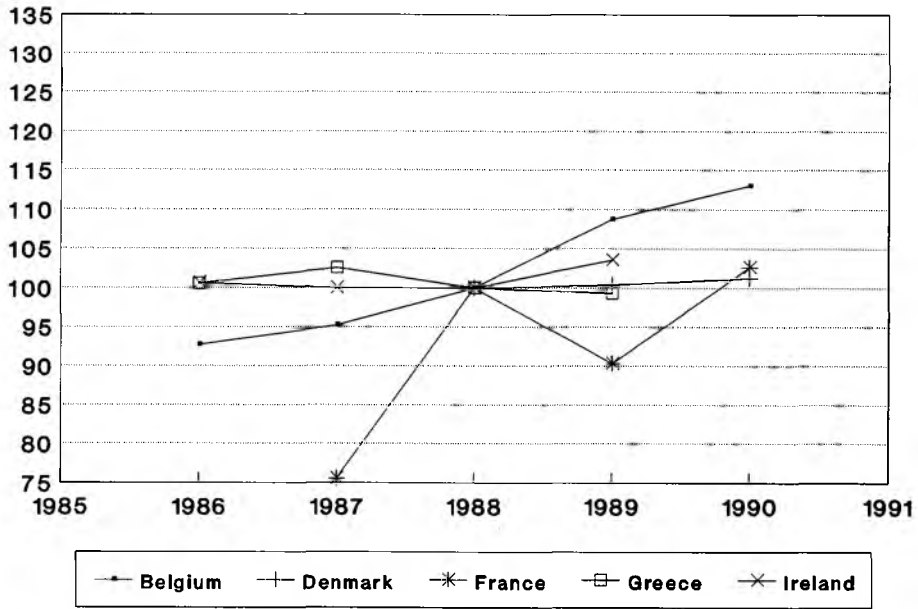
If size disaggregation is considered, more qualitative information can be drawn. Micro-firms' (1-9 employees) rate of growth is high in Portugal (+7.4% yearly average in 1986-91) and lower but still positive in all other countries except Ireland (see Figure 5.1a). Spain and Denmark exhibit falls in manufacturing, especially in 1988 and 1989. The trend is particularly negative for Irish manufacturing micro firms (-1.4% and -7.3% in 1988 and 1989). No data on French and Greek micro firms are available.

Figure 5.1a Development of Micro-sized Enterprises in the EC Member States



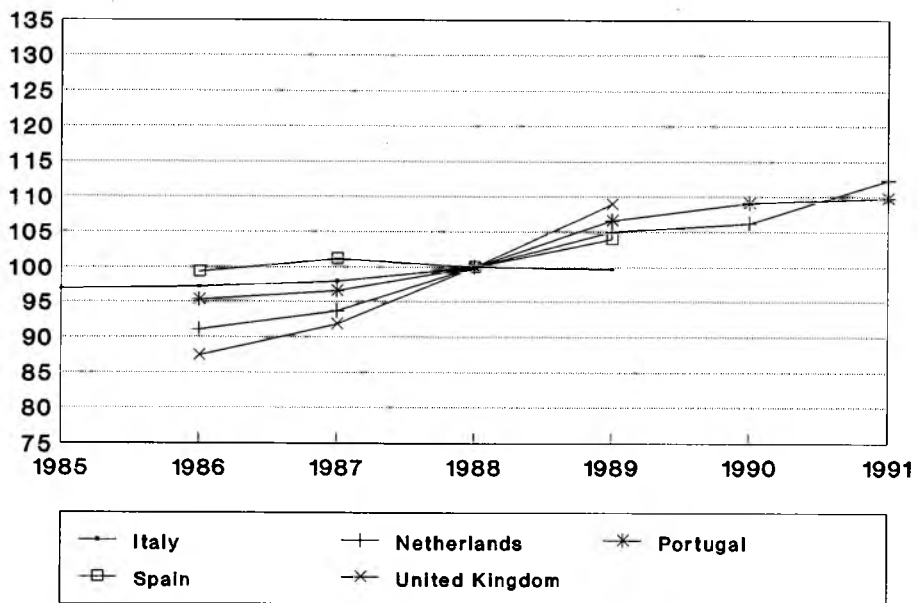
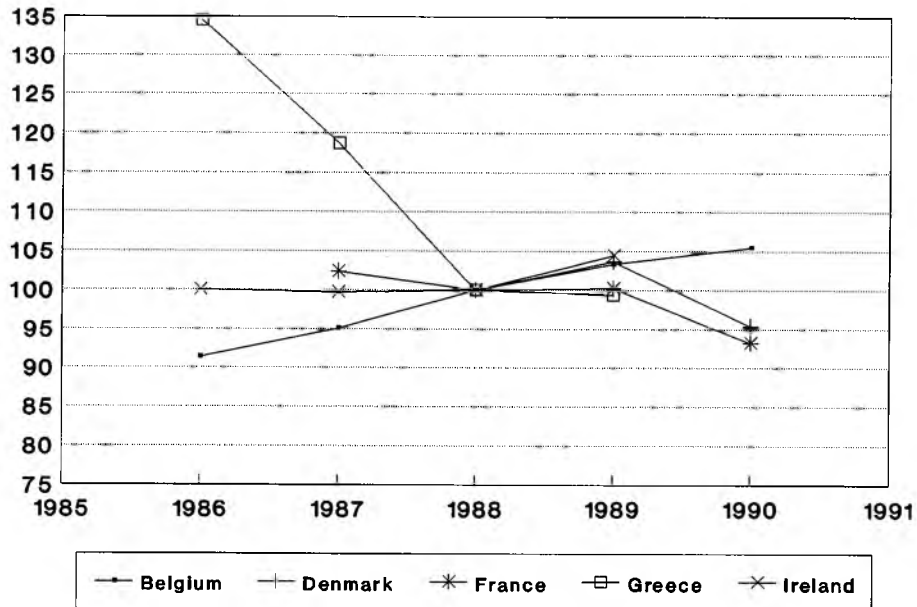
Source: ENSR.

Figure 5.1b Development of Small-sized Enterprises in the EC Member States



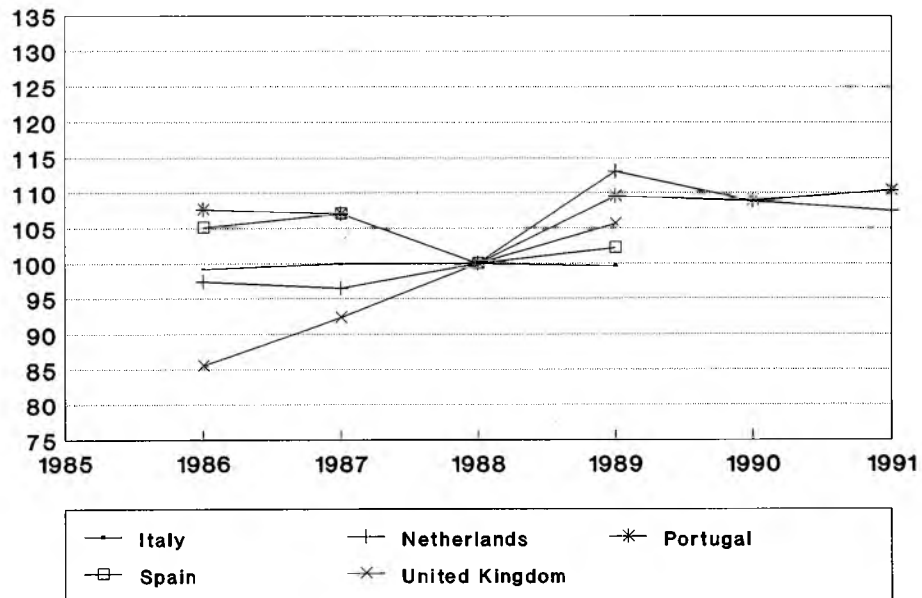
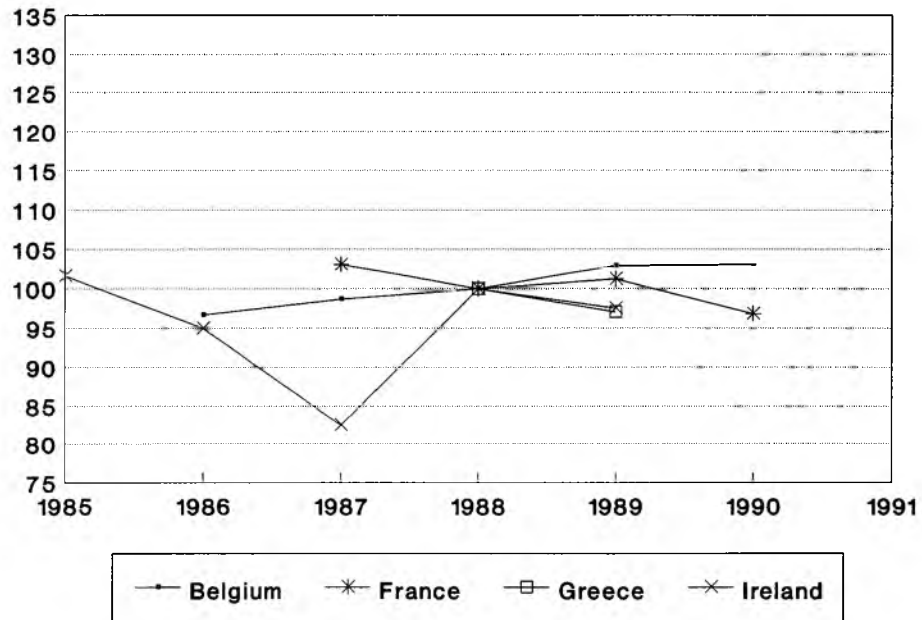
Source: ENSR.

Figure 5.1c Development of Medium-sized Enterprises in the EC Member States



Source: ENSR.

Figure 5.1d Development of Large-sized Enterprises in the EC Member States



Source: ENSR.

Small firms (10-99 employees) dynamics show increases in almost all countries. The only exceptions are Spain (-0.4% in 1987), Greece (-0.7% in 1989), France (-9.7% in 1989) and Ireland (-0.2% in 1988). Over the whole period 1986-91 all countries (except Greece) have seen an increase of the number of small firms (see Figure 5.1b).

As far as medium-sized firms are concerned the growth over the total period is positive for all countries except Denmark (including large firms), France and Greece. The Netherlands, Portugal and Belgium experienced only growth whereas Denmark, Ireland and Italy have experienced declines in 1990, 1988 and 1989 respectively (See Figure 5.1c).

Over the whole period, Belgium, The Netherlands, Portugal and the UK have seen an increase of the number of large firms. Only Belgium and the UK have experienced continued growth, whereas the trend is negative for The Netherlands after 1989 and in Portugal (as well as Spain) it increased after this year (See Figure 5.1d). No specific data on large firms are available for Denmark.

5.5 NATALITY AND MORTALITY OF FIRMS

5.5.1 Introduction

The evolution of the stock of enterprises (business dynamics) is the result of the births of new enterprises and the deaths of others. As shown in Table 5.1, European data are heterogeneous, because of different ways in which each country defines a new firm. On account of this heterogeneity¹ of the data

¹ The data are received from different sources and are collected by the members of ENSR. Sometimes the data only include a part of the economy, so it is impossible to present a fully homogeneous picture. The most important sources and definitions used to receive information related to births and deaths of firms are:

Belgium:	Central Trade Register
Denmark:	The Danish Statistical Bureau
Germany:	Register of Commerce only for Craft Sector
France:	Centre de Formalités des Entreprises
Greece:	Number of establishments data refer only to manufacturing sector
Ireland:	Census of Industrial Production (establishments). It is not compulsory to register with the Chamber of Commerce (only Limited Company and Un-limited Companies).
Italy:	Commercial register (Central Trade Register)
Luxembourg:	Commercial register (mainly SA and SARL); whole economy; VAT register for NACE disaggregation
the Netherlands:	New administrated firms, new operative firms, new subsidiaries
Portugal:	Register of Enterprises
Spain:	Industrial register, Industrial Record office (data from a sample)
United Kingdom:	VAT register

absolute numbers will not be presented in this chapter but only the natality and mortality rates.

The *natality rate* can be defined as the ratio of the number of new enterprises to the existing stock of enterprises; the mortality rate is defined as the ratio of closures to the existing stock.

5.5.2 Natality of firms

Gross natality rate of firms in the EC was 10.1% in 1989, which means more than 1.4 million start-ups. Natality rates show big differences between countries (see Table 5.3), partly due to differences in definition.

Table 5.3 Natality Rate of Firms, related to Stock in EC Member States, 1986-1991

Year/ NACE	B	DK	F	D	GR	IRL	I	L	NL	P	E	UK
<i>1986</i>												
2-4	4.8	12.9			2.8		9.1			8.8	5.8	5.2
Total	7.0	15.8		16.4			8.7	14.4	11.7	9.5		6.2
<i>1987</i>												
2-4	6.0	11.5			2.5	12.1	7.6			10.8	7.4	5.9
Total	9.3	13.8		16.7			8.1	13.3	12.7	11.0		6.7
<i>1988</i>												
2-4	7.6	11.9			2.4	9.9	6.9			12.0	6.7	5.2
Total	12.3	14.3		17.7			7.2	13.3	13.5	12.3		6.6
<i>1989</i>												
2-4	8.8	12.5			2.0	6.9	6.4			9.9	7.2	5.0
Total	12.3	14.4	13.3	18.3			6.6	14.4	14.4	10.7		5.9
<i>1990</i>												
2-4	7.1	11.7			1.7		6.0		9.1			
Total	10.9	14.3		20.1			6.5		14.5			
<i>1991</i>												
2-4					1.5				9.4			
Total				21.2					14.0			

It should be noted that:

- due to remaining differences in definitions data *between* countries are not always fully comparable;
- for France only data for 1989 are available;
- for Ireland, Greece and Spain the data are restricted to manufacturing only;
- data of Greece are by no means comparable with other countries.

Source: ENSR.

Despite the data problems still some conclusions can be drawn. Germany, Denmark, Luxembourg and The Netherlands show overall natality rates greater than 10% in 1986 (see Table 5.3). Italy and Portugal show a lower level, in each case over 8%, whilst the United Kingdom has the lowest natality rate.

In a dynamic perspective, overall birth rates are increasing until 1988 or 1989, with two significant exceptions: Italy, which sees its natality rate decreasing during the whole period, and Germany's continuing growth after 1989 as well. As far as manufacturing industries are concerned, the general trend remains the same - there was an increase from 1986 to 1989, followed by a decline -, but the range of the countries is modified. Natality rates for Greece are decreasing during the whole period.

Using more disaggregated data, especially as far as manufacturing sectors are considered, it is interesting to point out that the national specific industrial structure is relevant in explaining the different patterns of growth of entrepreneurial trends.

However, if one defines the natality rate as the ratio of new firms to the number of persons employed in 1988 a more appropriate analysis of the phenomenon with further disaggregation is possible; for this includes the distribution of employment among the different sectors. From this point of view, it is interesting to note that:

1. Natality rates in manufacturing industries (NACE 2-4) are very high in Italy (11.7 new firms per 1,000 employees), and in Denmark (8.4). Among the remaining countries (apart from Germany and France, for which numerical information is missing), the best 'performance' is that of Greece, Spain and Portugal (4.9, 3.9 and 3.3, respectively). With the exception of Denmark, the distribution of new firms in manufacturing industries is more concentrated in the Mediterranean countries than in North-Central Europe. The same result is confirmed by analysing the number of new firms in NACE 1 (energy and extractive industry) in which Portugal and Spain show the highest birth rate. Focusing on new industrial firms seems to give quite different results compared to results for the whole economy.
2. Italy and the United Kingdom have the highest number of new firms in construction (NACE 5). This is no surprise, since in these countries the average size of enterprises in this sector is very small.

Although the conclusion cannot be strictly inferred it seems reasonable to speculate that a great number of new firms may constitute a proxy tertiarization process. Entrepreneurial dynamics seem to affect non-industrial sectors more than industrial ones. Because in the old-industrialized countries (eg. United

Kingdom, France, Benelux) the weight of industrial sectors in the whole economy is lower than in the more recently industrialized countries, the number of new industrial firms will be lower in the old industrialized countries.

The hypothesis developed in section 5.2 about a positive correlation between birth rates of new firms and a high share of small firms is confirmed in any case for the manufacturing and construction sector.

In general, it seems that the boom in new firm creation ended at the beginning of the 1990s. In Italy, where the role played by small and medium-sized firms is noticeably greater, the decline in new firm formation occurs two or three years earlier than in other European countries.

Entrepreneurial activity is a good indicator of the qualitative changes in industrial structure. At the beginning of the Eighties, most European countries (especially Germany, France, Benelux, Denmark, the United Kingdom, but to a lesser extent in Ireland and the Mediterranean countries) faced a deep restructuring process in production organization, because of the new challenges offered by technological progress, which freed new entrepreneurial energies. Now it seems that this phase is definitively over and the dynamics of the new firms creation process is more related to specific country characteristics and, in any case, linked to the economic performance of small and medium-sized firms (see chapter 2).

5.5.3 Mortality of firms

At an aggregate level death rate data in 1988 are strongly correlated with birth rates. Table 5.4 provides information on mortality rates in 1988 and on the dynamics in 1986-1991.

Comparing mortality rates with natality rates gives some remarkable results:

1. Given its birth rates the United Kingdom has higher than expected death rates.
2. Belgium, Luxembourg and Italy show the highest difference between natality and mortality rates.
3. Denmark and Portugal show high mortality rates as well as natality rates.
4. In manufacturing industries the Mediterranean countries and Belgium show a positive increase in business stock, while this is negative for Ireland and almost zero for United Kingdom.

Table 5.4 Mortality Rate of Firms, related to Stock in EC Member States, 1986-1991

Year/ NACE	B	DK	F	D	GR	IRL	I	L	NL	P	E	UK
<i>1986</i>												
2-4	0.8	10.2			0.2		4.3	2.4		9.2	3.9	5.1
Total	2.2	10.6					4		5.7	9.6		4.9
<i>1987</i>												
2-4	0.6	7.9			0.2	10	3.4	2.3		8.8	2.7	5.9
Total	2.0	8.6					3.2		5.8	10		6.6
<i>1988</i>												
2-4	0.5	13.8			0.2	10.1	3.1	2.4	6.3	7.9	3.8	5.1
Total	1.9	14.8					3			8.6		6.5
<i>1989</i>												
2-4		11.8			0.2	7.6	3.3	2	5.6	9	2.6	4.9
Total		13.2					3.2		6.1	9.8		5.9
<i>1990</i>												
2-4		11.4			0.2		2.9		5.2			
Total		13.2					3		6.3			
<i>1991</i>												
2-4					0.2		8.1		5.8			
Total							8.1		6.6			

It should be noted that:

- due to remaining differences in definitions data *between* countries are not always fully comparable;
- for France and Germany no data are available;
- for Ireland, Greece, Luxembourg and Spain the data are restricted to manufacturing only;
- data of Greece are by no means comparable to other countries, as they concern only bankruptcies, which form a minor part of the mortality of enterprises;
- data of Belgium are also not comparable to other countries as no sanction is imposed on firms that do not cancel the registration when closing.

Source: ENSR.

It follows that the number of firms increased throughout Europe except for the UK and Ireland. In the UK the transformation of industrial structure which occurred in the Eighties led to the disappearance of some complete sectors and large companies, resulting in strong negative effects on inter-firm relations (disappearance of possibilities for subcontracting and contracting-out).

5.5.4 New firm survival

Start-ups depend on environmental and structural factors, based on the entrepreneur's will and may be stimulated by their perception of economic, technological, structural and organizational opportunities. Only once the new firm is created is it possible to analyse if the initial business idea was able to grasp the opportunity.

Depending on the quality of the business idea and the entrepreneurs ability in adapting it to market and prevailing technological conditions, the new firm can survive and then, eventually, grow. This 'incubation period' may last two or three years (see Table 5.5), in which the probability of death is highest, at some 10% per year. Of course, the exact period and percentage vary according to the structural and economic characteristics of the country. Only when the 'incubation' has been overcome, one can speak of the effective birth of a new firm.

The differences among European countries in business dynamics are significant when comparing survival rates.

Table 5.5 Survival and Death Rates on new Firms born in 1985 in EC Member States

Year	B*	DK	F	D	GR	IRL	I**	L***	NL	P	E	UK
1985	0.1		17.0	14.0	-	10.1	5.5	6.3		-	-	12.0
1986	0.1		12.0	10.0	-	9.7	7.4		16.0	-	-	14.0
1987	0.2		10.0	6.0	-	10.2	5.6	13.5		-	-	10.0
1988	0.6	31.0	7.0	4.0	-	7.2			16.0	-	-	9.0
1989	1.2	11.0	6.0	3.0	-	4.9	10.0	5.2	4.0	-	-	6.0
alive	97.8	58.0	48.0	63.0	-	57.9	71.5	75.0	64.0	-	-	49.0

* Individual firms with no employees are excluded.

** Milan's Province.

*** Craft sector only.

Source: ENSR.

Table 5.5 provides some information on survival rates of new firms established in 1985. It is easy to see that Belgium has an extremely high survival rate, whilst the survival rates for French and UK firms established in 1985 were only 48% and 49% respectively. However institutional factors may blur the picture: for instance, this data only refers to firms that *started* with employees. In Belgium no sanction is given to firms that do not cancel the registration when closing. Hence the number of surviving firms is certainly overestimated.

It seems reasonable to hypothesize a negative correlation between the degree of turbulence in entrepreneurial activity and survival. This seems to be the case for Italy, France and Germany.

In general the factors hampering the smooth operation of young firms, thereby decreasing the probability of survival, are similar in all countries. Generally speaking, they are financial, organizational, technical and even bureaucratic and personal problems.

Table 5.6 sums up the major findings of various studies. Obviously such a table can only provide a generic proxy for the real problems; furthermore, such studies usually report the answers of failing entrepreneurs, who are naturally likely to place greater emphasis on 'external' causes.

Among the leading influences 'managerial and organizational problems' are not well specified. Indeed when they are, it is usually noted that people start their business with no clear understanding and perception of the market situation. Sometimes even a well rooted business idea is lacking. This often reflect on the initial motivation for starting a business. For instance it is found that closures are more likely to occur among entrepreneurs who were previously unemployed, even when specific policy schemes exist. This rises the need for training for such individuals.

'Technical problems' mainly concern:

- lack of specific competence on the part of technical people, i.e scientists and engineers. Such problems are more significant for high-technology firms;
- product inadequacy, that is the inability to meet market requirements. This is included within 'technical problems', but it may also reflect the lack of managerial capability, since firms' success is ultimately related to the strength of the user-producer relationship.

Overall, the most cited problem is, almost inevitably, that of finance. Failed entrepreneurs are less likely to refer to the cost of borrowing (i.e. too high interest rates), but more likely to mention the limits imposed on credit availability. This is true in almost every country, though to different degrees.

Table 5.6 Major Causes of Start-up Failures

Factors/Country	B	DK	F	D	GR	IRL	I	L	NL	P	E	UK
<i>managerial and organizational problems</i>		X	XX	X	X	XXX						
lack of managerial competence					X		X				XXX	X
strategy problems			X		X							X
<i>technical problems</i>										X	XX	
lack of training and technical competence		X	X						X	XX		
product inadequacy		X	X				X					
<i>financial problems</i>	X	XX	XXX		X	XX			XX	XXX	X	X
credit rationing	X			X	X	X	XX			X		X
cost of credit										X		X
<i>fiscal pressure</i>	XX											
<i>bureaucracy</i>										X		
<i>market problems</i>		X	X	X								
strong competition	XXX			X	X		XXX		XXX			X
insufficient demand		XXX	X	X	XXX			XX	XXX			X
late payment					X	X				X		X
<i>social costs</i>	X											
<i>locational problems</i>						X					X	
<i>personal problems</i>				X	XX			XX				

XXX The more crosses, the more important.

Source: Information drawn from answers given by partners ENSR to a questionnaire, based on main studies in their own countries.

The last issue examined is that of 'market problems'; harsh competition in the home market appears as one of the most important problems. This seems unavoidable, for SMEs are often 'marginal' in the economic structure. Insufficient demand may reflect different elements ranging from lack of aggregate demand (low level of economic activity) to lack of individual demand. The latter might also be included within managerial troubles, inasmuch as the

start-up decision is taken with the wrong marketing perception. Again, any specific situation must be analysed in itself, in order to make the right policy conclusion.

5.6 SELF-EMPLOYMENT¹

Until now we have analysed changes in the number of enterprises. Of course enterprises are directed by entrepreneurs. In SMEs the entrepreneur is in most cases the manager as well as the owner of the firm. They are often specified as self-employed, provided they do not exclusively draw a salary as an employed director of an incorporated enterprise. The main sources of statistics on the number of self-employed are Labour Force Surveys. These Labour Force Surveys largely use self-categorization to determine whether someone is self-employed. However, this may be inaccurate². Other sources of data on the self-employed are income-tax and social security records. According to OECD definitions, two types of self-employed can be distinguished:

1. Persons who are leading a business which is not legally incorporated. They gain no salary, but the enterprise's profits form their income. They personally have full liability for the conduct of business.
2. Owner-managers who gain profits as well as a salary as a managing director of an incorporated business. This type of entrepreneur only runs a risk equal to his share of the paid-up capital of the business.

People in the first category are clearly self-employed. In the second however there is some discussion, because the individuals not only gain profits but are also remunerated by a salary. In some cases only the first group is taken to be self-employed (France, The Netherlands and the UK). In other countries like Belgium, Denmark, Germany, Ireland, Italy, Luxembourg, Portugal and Spain the owner-managers of incorporated businesses are included. In Greece the legal position is not clear, but unpaid family workers are excluded.

When comparing the data the first group of countries will clearly tend to understate the level of self-employment relative to the latter one.

¹ This paragraph is based on OECD, *Employment Outlook*, July 1992.

² Casey, B. and S. Creigh; *Self-employment in Great-Britain. Its Definition in the Labour Force Survey*, in *Tax and Social Security Law and in Labour Law*.

5.6.1 Number and characteristics of self-employment

Despite the alternative definitions one can gain an overall picture of the self-employment. In EC-12 there are at the moment 16.1 million self-employed, that is about 13% of total employment (see Table 5.7). By using the broad definition for all countries there are circa 17 million self-employed, about 15% of total employment.

The bulk of the self-employed do not have employees. So they can be found in the '0'-class of enterprises¹. Only 28% have employees. In Italy and Belgium the proportion of self-employed without employees is over 90%. The clearest exceptions are Denmark and Germany where over 50% do have employees. The proportion of self-employed without employees has tended to rise.

Table 5.7 Self-employment in 1990, Share in Employment and annual Growth (Agriculture excluded)

	number of self-employed in 1990 (x 1000)	share in total employment (%)	average growth rate 1986-1990 (%)
EC-12	16,091	13.0	3.0
B	469	12.9	2.0
DK	179	7.4	0.9
F	2,109	10.3	0.7
D	2,076	7.7	1.8
GR	745*	27.2	1.3
IR	126	13.3	5.4
I	4,296	22.3	2.0
L	13	7.1	0.2
NL	469	7.8	3.9
P	680	18.5	6.1
E	1,901	17.1	3.9
UK	3,028	11.6	6.5

Source: OECD, Eurostat.

In all EC-countries the number of the self-employed increased in the period 1986-1990, by an average of 3% yearly; the highest growth rates could be observed in Ireland, Portugal and the UK (>6%), the lowest in France and Denmark (<1%).

¹ Since '0'-class enterprises have not been included in the stock of enterprises in EC-12 as presented in Table 5.2, the number of self-employed is higher than the number of enterprises.

Most of the self-employed can be found in the trade sector (NACE 6) and in personal services (NACE 98). In some countries the share of self-employment is also high in finance, insurance, real estate and in business services (NACE 8). This is especially true in Greece, Belgium and Germany.

About 75% of the self-employed are male. The differences between the countries are limited. In The Netherlands and Portugal the share of men is slightly lower and in France, Greece and Ireland slightly higher.

Most self-employed persons tend to be older than employees. More than 45% are older than 44 years. Furthermore, the self-employed with employees are older than those without employees.

Although evidence on the working conditions and rewards of the self-employed is not as clear as for employees, generally speaking the self-employed work more hours per week than employees, whilst their reward is less certain. In EC-12 the self-employed have an average working week of 45 hours (1989). In four countries, Denmark, France, Luxembourg and Belgium, the average weekly hours of work are over 50 and only in The Netherlands the average working week is less than 40 hours. An important proportion of the self-employed work no more than 30 hours per week: in the UK and The Netherlands their share is high (24% and 35% respectively). Looking at self-employed women it becomes as high as 55% and 71%. This is the fastest growing type of self-employment. In most countries the median earnings of the self-employed seems to be lower than for employees. But hard conclusions cannot be drawn, because the true income of the self-employed can be understated because of tax evasion.

5.6.2 Dynamics of self-employment

The dynamics of self-employment are highly correlated with births and deaths of enterprises.

As Table 5.8 shows former employees are the main source of inflows into self-employment. A large part of the remainder comes from outside the labour force. However, the unemployed are also substantial, especially in Ireland, Italy, France and the UK. The influence of unemployment is nevertheless uncertain, because there seems to be no simple relation between the change in self-employment and the change in unemployment. Nevertheless, the results suggest that longer duration of unemployment does provide some incentive to switch into self-employment.

The main outflows from self-employment are to wage-employment and out of the labour force, with both groups roughly equal. There is also a flow into unemployment, especially in the UK, The Netherlands and Ireland.

Lately there has been some research which has shed light on the attitudes of the newly self-employed, especially in the United Kingdom¹. Most people gave positive reasons for becoming self-employed. Negative reasons included the desire to escape from large and bureaucratic company or the desire to do the job better than in their previous company. Less than one third of respondents could be characterized as involuntary or reluctant entrants to self-employment. Most were making a positive choice in favour of an alternative to traditional wage-earning. The involuntary self-employed were far less ambitious generally seeking only to provide a job for themselves.

Table 5.8 Composition of Flows into and out of Self-employment

	Inflow %			Outflow %			Share %		
	unpaid family workers	wage-earners	unemployed	not in labour force	unpaid family workers	wage-earners	not in labour force	self-empl'd last year	
B	1.5	47.8	19.6	31.1	11.9	32.8	10.5	44.9	95.1
DK	-	81.7	8.3	10.0	-	37.2	26.9	35.9	92.9
F	9.2	52.2	19.1	19.4	6.0	29.4	12.7	51.9	87.9
D	3.7	78.6	5.7	12	3.4	63.0	5.9	27.7	88.9
GR	7.1	43.3	11.5	38.1	4.2	31.3	9.5	55.0	95.3
IRL	0.6	40.5	28.7	30.3	1.2	34.0	28.1	36.8	93.6
I	4.7	35.7	19.8	39.7	8.1	52.5	6.2	33.2	94.2
L	-	65.8	2.2	31.9	6.6	32.5	8.2	52.6	93.2
NL	0.3	47.5	20.1	32.0	-	37.4	22.6	40	92.8
P	2.9	74.3	10.3	12.6	2.2	30.5	7.3	60	91.0
E	4.8	38.9	30.0	26.3	18.0	30.2	14.5	37.3	91.0
UK	-	59.0	18.2	22.8	-	52.6	20.8	26.6	83.4

Source: OECD, Eurostat.

¹ Hakim, C., Self-employment in Britain; recent trends and current issues, *Work, Employment and Society*, Vol. 2, no. 4 (1988)
 Bevan, J., G. Clark, N. Banerji and C. Hakim, Barriers to business Start-up, research paper no. 71, United Kingdom Department of Employment (1988).

5.7 BACKGROUNDS OF THE START OF A NEW FIRM

5.7.1 Economic climate factors affecting entrepreneurship

In principle, a healthy business climate may either lead potential entrepreneurs to establish their own business or close the business by raising the opportunity cost of becoming an entrepreneur - for wages are higher when the economy is in good health. New possibilities occur for instance when the demand for a (new) product is rising. When new enterprises enter into the market, production rises and profitability declines after a while. So it will then be less profitable for a new entrepreneur to penetrate that market, whilst existing entrepreneurs will change markets or close.

Another theory deals with the situation of unemployment, the so-called 'self-employment hypothesis' which states that the higher the unemployment rate, the higher is the number of start-ups. This could be the case for older people and less well educated people.

Partners of the ENSR were asked to comment upon the relationship by referring to the empirical evidence available and the studies carried out in their country. It is worth recalling that the studies considered do usually not embrace the whole population of new firms but rather concentrate on samples of different size and source.

Generally speaking, there is no clear-cut relationship between the level of current macroeconomic performance (say GDP, or rate of change of unemployment) and the rate of new firm formation.

In some countries, such as The Netherlands and Italy, there seems to be some positive correlation between variations in the GDP level and the formation of new firms. In other countries (Belgium, Ireland), the opposite appears to be the case.

In two major European countries, Italy and the UK, the so-called 'self-employment hypothesis' has been proposed and tested. It appeared that actual and even potential unemployment explains a considerable part of the new start-ups, up to a third in the UK. This is summarized in Table 5.9, where unemployment is marked 2 (fairly important) as determining factor to start one's own new business. Although unemployment is a not very significant factor for Belgium as a whole, the importance is increasing significantly in the Eighties for the trade sector. For other countries however, this is not the case: either unemployment is negligible (e.g. Luxembourg), or unemployment benefits are so high as to provide little incentive in the short and medium run to undertake a risky activity (Denmark, Luxembourg, The Netherlands). The importance of

the unemployment factor in Denmark is lower in manufacturing relative to other sectors. On the other hand, opportunities are more important for manufacturing in Denmark.

Hence there is no straightforward relationship between the number of new enterprises and the business cycle.

Even so it might be that the increasing number of start-ups (as has been indicated in part 5.4) is linked with the general economic process in a more mediated way. For instance, one suggestion is to take into account the back-to-basics tendency of many large firms which followed the recession of the Seventies and accompanied the process of restructuring in the Eighties. Due to this process many opportunities for sub-contracting and supply of commercial services have developed.

Although more detailed investigation is needed, this seems to be a suitable interpretation of the events in the last decade: certainly this process has been quite relevant, in the service sector, but anecdotal evidence is plentiful even for manufacturing.

Table 5.9 Degree of Importance of Motivating Factors to Start-up Decisions

Motivation	B	DK	F	D	GR	IRL	I	L	NL	P	E	UK
Unemployment	3	2	2/3	4	2	3	2	4	3	3	3	2
Self-realization	1	1	1/2	1/2	1	1	1	n.a.	1	1	1/2	1
Business					n.a.							
Opportunities	n.a.	2	2	n.a.	*	1	1/2	n.a.	n.a.	2	1	2
Expected												
Income	3	3	n.a.	1	1	2	2	n.a.	1	3	2	1

Legend: 1 = most important; 2 = fairly important; 3 = not very significant; 4 = negligible.

* Presumably low, given the small rate of survival.

n.a. Not asked.

Source: Information drawn from answers given by partners ENSR to a questionnaire, based on main studies in their own countries.

5.7.2 Motives and personal characteristics affecting entrepreneurship

In this section the entrepreneur's characteristics in terms of age, gender, ethnic origin etc. will be discussed as well as factors inducing her/him to set up a new firm. The latter will be discussed first.

In the previous section how the economic process may affect the formation of new firms was considered. Unemployment did not prove to be a key factor in explaining entry by new small firms, except perhaps in the Italian and British

cases. As shown in Table 5.9, positive motivating factors may be important as well. These positive motives are much more important since only a minority of the entrepreneurs could be characterized as involuntary or reluctant entrants to entrepreneurship.

Self-realization

Self-realization is the overwhelming factor explaining the decision to start a new business. By self-realization is meant a number of (basically psychological) aspects such as a wish for independence, job satisfaction, social status and the like. This is sometimes caused by the desire to escape from large and bureaucratic companies.

Business opportunities

The presence of a (perceived) business opportunity is another relevant motivating factor, but one must be careful in interpreting this 'finding'. First of all, since the major source of this kind of information is interviews with entrepreneurs, it would be surprising if they started a new project with no chance of being a success; so answers are obviously biased.

Second, it must be noted that 'business opportunity' is not identical to perception of a technological opportunity and innovative behaviour. It simply means that would-be entrepreneurs single out a niche for their product, and try to become an entrepreneur. Often the product relates to what they previously did when they were employed. When this is the case new entrepreneurs are 'incremental innovators'; and this needs to be borne in mind in the discussion of policy issues.

The difference between current wage and expected income from entrepreneurial activity is a further inducing factor to start one's own business. Clearly, this variable is correlated with unemployment, for the latter reduces wage earnings. Such correlation is apparent in the similar emphasis given to the two variables. However it is common to distinguish between the two, since large differences between expected entrepreneurial income and wage income may be a strong motivating factor even when unemployment is low.

There may well exist other conditions which enable, or ease, the decision to establish a new firm: the most typical are reported in Table 5.10. Again problems of availability of data arose during the collection phase.

Table 5.10 Degree of Importance of Motivating Factors to Start-up Decisions

Factors	B	DK	F	D	GR	IRL	I	L	NL	P	E	UK
Family Links	1	2	n.a.	2	2	1	4	n.a.	1	2	2/4*	n.a.
Age	2	2/3	2	3	3	2	3	2	2	2	3	2
Gender	n.a.	3	n.a.	3/4	3/4	1	n.a.	2	2	1	n.a.	2/3**
Education	1	2/3	3	2	1	2	2	1	2	1	1/2	2
Previous Professional Status	1	n.a.	n.a.	2	1	1	1	1	n.a.	2	1	2
Ethnic origin	n.a.	n.a.	n.a.	2	n.a.	n.a.	n.a.	n.a.	2		n.a.	2

Legend: 1= most important; 2= fairly important; 3= not very significant; 4= negligible.

* According to two different surveys.

** Converging participation rates (still much lower for females).

Source: Adaptation of answers given by partners ENSR to a questionnaire, based on main studies in their own countries.

Family links

The influence of family history plays a significant role in some countries (Belgium, Denmark, The Netherlands, Portugal), while it seems to be rather unimportant in Italy and perhaps Spain (where evidence is not clear-cut). It is possible that this simply reflects the family culture. Either way, it is not clear whether the 'family link' has different weight in manufacturing as opposed to the service sector.

Gender

As far as gender is concerned, the interpretation is straightforward: the vast majority of entrepreneurs are males, although women are increasingly taking up the opportunity to start a new firm, especially in the trade and service sector. However, the differences between male and female take-up rates are enormous, though less striking in the northern countries of Europe.

Age

Age is also significant, in the sense that new entrepreneurs tend to be rather young; in all countries but Italy, the average businessman is 35-36 old, and the age class 19-39 accounts for 60% to 80% of total numbers. Italian entrepreneurs are older, on average, the mode being the 40-49 years class. The explanation for the Italian case could be the relative importance of unemployment in explaining start-up figures: it is evident that a forty-year-old specialized worker can do little else than employ himself by starting a business on his own.

Education

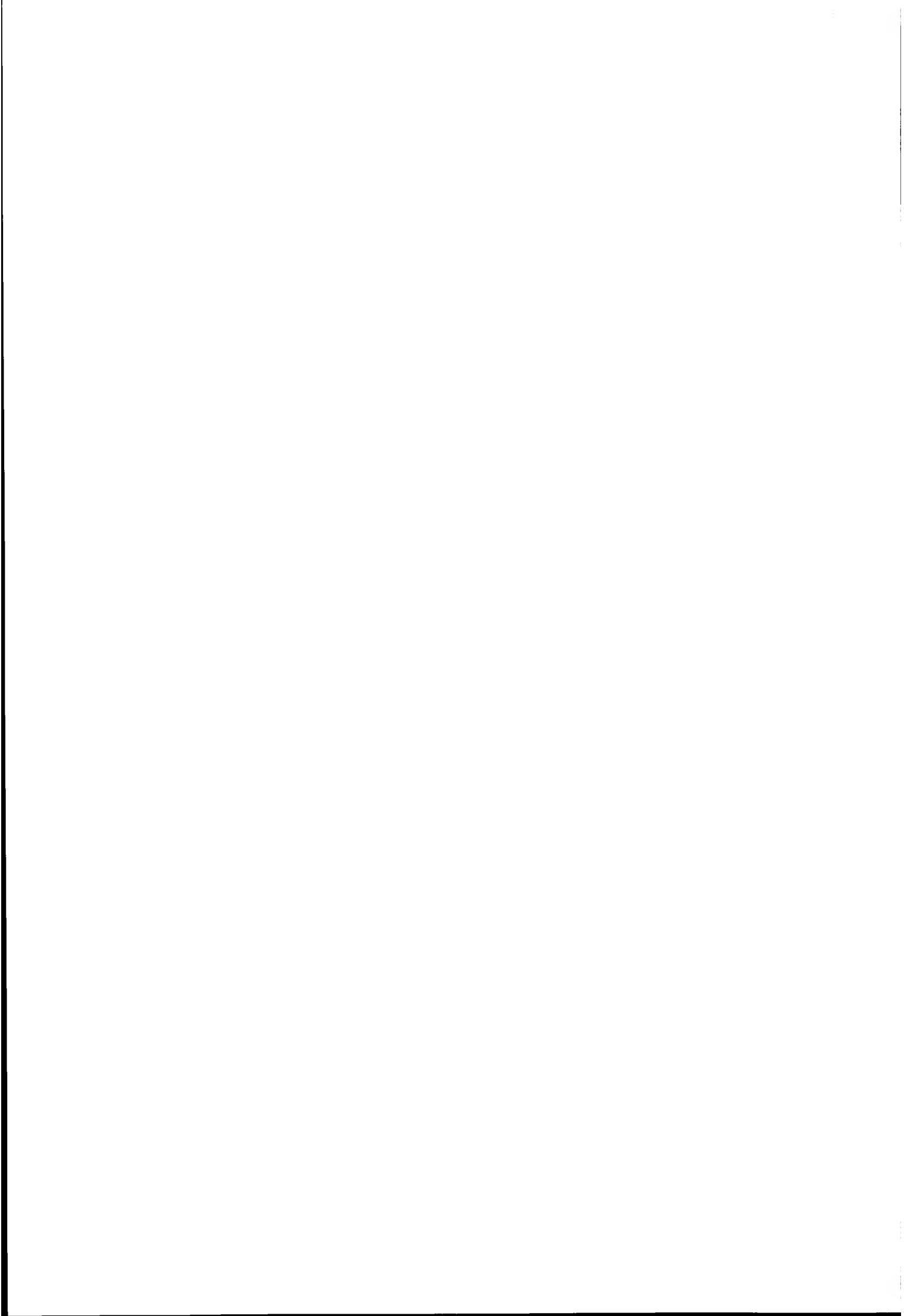
Age is inevitably linked to the level of education. Education of the new entrepreneur is high, and became higher in the Eighties. The entrepreneur has typically got at least a technical education, but often entrepreneurs have a higher diploma and in some cases they are even graduates. Relative figures differ among countries, but not significantly. In any case, the percentage of entrepreneurs with no degree or only a primary degree is rapidly decreasing.

Previous professional status

The former status of the new businessman is a particularly strong factor: As indicated above, specialized workers, technical people and sometimes managers more frequently move into entrepreneurship. This again is a common picture throughout the EC. In some countries there also is evidence of a close link between new products and the entrepreneurs' former activity. Such evidence may suggest that the opening of opportunities, and/or the general process of restructuring are very strong motivating factors.

Ethnic origin

Ethnic origin also plays a role, especially in those countries where the presence of minorities is rooted in the past, for instance in the UK and The Netherlands. Ethnic minorities appear to have higher rates of entrepreneurship and new firm start-ups in these countries, though it is not clear if they are more active in certain specific sectors or not. In The Netherlands most new ethnic entrepreneurs start a business in the retail trade, the hotel and catering sector and in clothing industries (in general easy access sectors with high competition). It is unclear whether the same pattern will be repeated in countries, mainly in the Mediterranean belt, with more recent flows of immigration.



6 MARKETS AND SALES

MAIN POINTS

Sales by size class:

- SMEs account for two third of the sales of the non-primary sectors. In the small countries this share is almost 80%;
- Large firms account for a greater than average share of sales in the four largest economies (except Italy). This holds in all sectors;
- Sales of the construction and trade sectors are the most highly concentrated in micro and small firms or in SMEs in the broad sense;
- In the other services sector two third of the sales come from SMEs;
- Sales of the manufacturing and energy/extraction industries come mainly from large firms.

Sales by sectors:

- Trade and other services combined usually account for the majority of sales;
- Manufacturing and energy/extraction are relatively important in large economies while trade and other services are relatively more important in the small countries.

Sales by geographic markets:

- SMEs depend on their domestic markets more than large firms do. The penetration of SMEs is particularly strong in the consumer market;
- In larger countries exports account for a smaller share of sales than in the smaller countries;
- SMEs in smaller countries are more highly export-oriented than SMEs in larger countries.

Customer characteristics:

- Customers of very small firms are generally final consumers;
- Smaller firms mainly sell directly to other businesses;
- SMEs are more likely to operate in segmented markets and to depend on fewer customers.

continued

continued

Subcontracting:

- Subcontracting sales tend to be more important for smaller size classes of firms than for larger firms;
- Subcontracting is important in sectors like textiles, construction, electronics, transport equipment and motor vehicles;
- SMEs can take advantage from subcontracting by acquiring access to the technological and commercial know-how of large firms;
- Subcontracting programmes are part of industrial policy in only a few countries;
- As many SME-subcontractors supply goods to be marketed abroad by the main contractor, they are forced to meet European standards.

Other business relationships:

- Many SMEs are involved in some form of business relationship or co-operation with other companies;
- In general, such relationships are found to be beneficial for competitiveness;
- These relationships generally do not place much restriction on the autonomy of the companies in decision-making;
- Franchising is one form of relationship which has been growing relatively quickly in recent years, particularly in the retail sector.

6.1 INTRODUCTION

This chapter focuses on markets and sales of SMEs. The objectives are to compare and contrast patterns between SMEs and large enterprises, and also to compare and contrast patterns between different Member States.

The pattern of sales by enterprise size provides the focus for section 6.2. The distribution of sales by sector, the importance of export versus domestic markets, and customer are then discussed in sections 6.3, 6.4 and 6.5 respectively. The trend towards greater interdependence among enterprises is reviewed in the final sections of this chapter. Subcontracting is discussed in section 6.6 while section 6.7 focuses on other business relationships such as franchising and licensing.

6.2 DISTRIBUTION OF SALES BY SIZE CLASS

The chapter covers the non-primary economy, i.e. energy, manufacturing, construction, trade and other services. The NACE industrial classification is used throughout employing the following size classes; micro 0-9 employees, small 10-99, medium 100-499, SME in the broad sense 0-499 and large 500 or more employees. Eurostat statistical data on turnover¹ by size class, by sector and by Member State are the basic starting point. These data, supplemented where necessary by some estimates by EIM, are used to compare and analyze the position of SMEs in the national sales of the Member States, and to compare the sectoral composition of sales in each Member State.

For the whole non-primary sector, the percentage distribution of sales by size class is compared between Member States for 1988 in Table 6.1 below.

Taking the analysis further, Table 6.2 provides data at an aggregate level (i.e. total EC-12) on the percentage distribution of sales by size class for five broad sectors (energy/extraction, manufacturing, construction, trade and other services) for 1988.

From Table 6.1 it emerges that, in the EC as a whole, SMEs account for two-thirds of the sales of the non-primary sectors. The four largest economies, as a group, have a greater than average share of sales coming from large firms while in the other countries, as a group, SMEs - and especially micro and small firms - account for a greater than average share of sales. Among the four large economies, however, Italy is exceptional in having a relatively low proportion of sales coming from large enterprises, while micro enterprises account for a particularly high share of its sales. But among the smaller countries, the share of sales accounted for by large enterprises is below the EC average in every case. It is noticeable that the United Kingdom has the greatest concentration of sales in both the large and medium-size classes, as well as the smallest percentage of sales in both the micro and small size classes. Sales in general reflect the under representation of micro enterprises. The UK, being one of EC's larger countries, tends to have larger firm sizes due to its greater domestic markets and scale economies. Thus at one extreme, 60 per cent of sales of UK enterprises come from SMEs, while at the other extremes about 80 per cent of sales come from SMEs (Italy, The Netherlands, the smaller countries).

¹ In this chapter the terms 'sales' and 'turnover' will be used as substitutes.

Table 6.1 Percentage Distribution of Sales of all Non-Primary Sectors by size class for each country, 1988

Size Class/Country	0-9	10-99	100-499	500+	Total
Belgium	29	28	18	26	100
France	19	27	17	37	100
Germany	12	24	25	38	100
Italy	40	26	13	22	100
Luxembourg	22	37	21	20	100
The Netherlands	24	32	23	22	100
Portugal	25	29	18	28	100
United Kingdom	11	20	30	40	100
Large Countries (a)	19	24	22	35	100
Small Countries (b)	26	31	20	22	100
Total EC-12	20	25	22	32	100

Source: Eurostat (1992), supplemented by some estimates by EIM. While these data for Denmark, Greece, Ireland and Spain are not available or only partially complete, estimates for those countries are included in the totals for EC-12 and the smaller countries. Note: (a): France, Germany, Italy, United Kingdom; (b): Remaining countries.

Regarding the percentage distribution of sales of sectors by size class, it emerges from Table 6.2 that on an EC-12 level the sales of the construction and the trade sectors are the most highly concentrated in micro and small firms, and in SMEs in the broad sense. Two-thirds of the sales of the other services sector also came from SMEs, whereas sales of manufacturing and especially energy/extraction came from large firms to a much greater extent. Compared with the other sectors, only a very small percentage of the sales of manufacturing and energy/extraction comes from micro enterprises, while large firms are dominant in these sectors.

Table 6.2 EC-12 - Percentage Distribution of Sales by size class for five broad sectors (Energy/Extraction, Manufacturing, Construction, Trade and Other Services), 1988

Size Class/ Sector	0-9	10-99	100-499	500+	Total
Energy/Extraction, EC-12	4	9	15	72	100
Manufacturing Total EC-12	8	23	23	47	100
Construction Total EC-12	32	38	18	13	100
Trade Total EC-12	30	32	25	13	100
Other Services Total EC-12	25	22	21	33	100

Source: Eurostat (1992), supplemented by some estimates by EIM.

Note: Energy/extraction: NACE 1 and 21-24. Manufacturing: NACE 25, 26, 3 and 4. Construction: NACE 5. Trade: NACE 61-65. Other Services: NACE 66, 67, 7, 8 and 9 (excluding 91 and non-market services).

Rather similar patterns are also found in the two groups of large and small economies. Thus in each of the two groups, sales of the construction and trade sectors are much more highly concentrated in SMEs than in other sectors; in both groups, sales of other services are the next most highly concentrated in SMEs; and in both groups large firms are more important in manufacturing and still more important in energy/extraction. In the case of each of these five broad sectors, however, a greater percentage of sales comes from large enterprises in the four largest economies, as a group, than in the smaller economies, as a group.

6.2.1 Market size, income levels and enterprise size structure

The twelve EC member countries vary considerably in size of population and levels of income, and hence the size of their domestic markets varies considerably too. It is of interest to consider whether these factors may be related to the differences between countries in their enterprise size structures. For example, it was noted above that the four largest economies, as a group, tended to have a greater than average share of production concentrated in large enterprises. One might ask is there a causal link here; has the growth of a relatively high proportion of large enterprises in these countries been facilitated by the opportunity to reap scale economies in a large domestic market? Or might the enterprise size structure be related more to a country's level of economic development as indicated, say, by GDP per capita? Or do both hypotheses hold?

To examine these questions, Table 6.3 provides data relating to Gross Domestic Product (GDP) and GDP per head of population for all EC countries, as well as the share of SMEs in total sales of all non-primary sectors in each of these countries in 1988.

Based upon these data, a statistically significant inverse relationship between SME-share and GDP can be established. This is shown in Figure 6.1.

However, there are also some exceptions to this pattern, such as Italy, where SMEs are relatively important although this country has a large GDP, or Portugal which is one of the smallest economies but has a lower share of sales coming from SMEs than in some substantially larger economies.

Table 6.3 Shares of SMEs in Sales and Indicators of Market Size and Incomes, eight countries* 1988

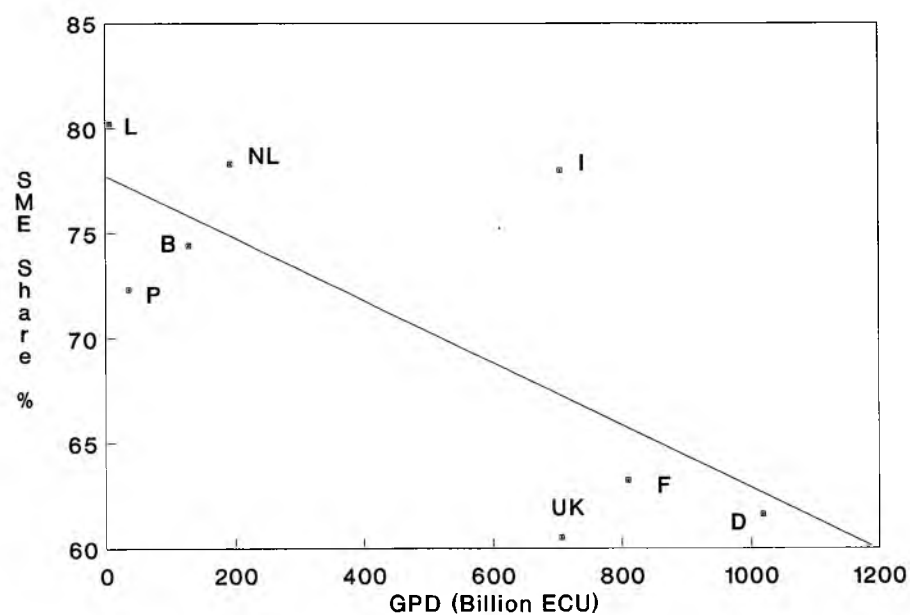
Countries	SME-Share** (%)	GDP (bn. ECU)	Population (mln)	Area (1000 km ²)	GDP Per Capita (1000 ECU)	Population Density (1/km ²)
Belgium	74	127.8	9.9	30.5	12.9	324.6
France	63	809.0	55.9	549.1	14.5	101.8
Germany	62	1017.5	61.4	248.7	16.6	247.1
Italy	78	704.4	57.5	301.3	12.3	190.7
Luxembourg	80	5.7	0.4	2.6	15.3	143.6
The Netherlands	78	192.5	14.8	41.8	13.0	353.2
Portugal	72	35.3	10.3	92.3	3.6	111.4
United Kingdom	60	705.5	57.1	244.1	12.4	233.8

* Available data or estimates at individual country level are less reliable for Denmark, Greece, Ireland and Spain. Accordingly these countries have been excluded from Table 6.3.

** Eurostat, including some supplementary estimates by EIM.

Source: Eurostat.

Figure 6.1 SME-share in sales and GDP, 1988



6.3 DISTRIBUTION OF SALES BY SECTOR

This section examines the sectoral composition of total sales in each Member State in 1988. For the EC as a whole, it also looks at the sectoral composition

of the sales of each size class of enterprises. Table 6.4 below shows the different patterns in each country of the composition of sales.

It can be seen in Table 6.4 that, in the EC as a whole and in most Member States, the trade sector accounts for the largest share of sales, and trade and other services combined usually account for a majority of sales. Regarding sales of the trade sector it is appropriate to once more emphasize that turnover in retailing and wholesale includes the purchase value of merchandise. Manufacturing generally accounts for a substantially larger share than either energy/extraction or construction, which usually account for a relatively small proportion of sales.

Table 6.4 also shows that the four largest economies, as a group, have a somewhat greater percentage of their sales than the other countries arising in manufacturing. Conversely, the smaller economies, as a group, have a greater percentage of their sales from trade and other services, while both groups of countries have the same share of sales coming from construction. It was noted above in section 6.2 of this chapter that manufacturing and energy/extraction tend to be more characterised by large-scale enterprises than is the case in the trade or other services sectors, and this is true of both the group of larger and smaller Member States as well as the EC as a whole. Thus the somewhat different patterns of sectoral composition between the groups of larger and smaller economies, with manufacturing and energy/extraction being relatively more important in the larger countries, would in itself *partly* explain why large firms are relatively more important overall in the group of larger countries while SMEs are relatively more important in the group of smaller economies, as seen in section 6.2.

Differences in sectoral composition, however, only partially explain the differential in the overall importance of SMEs in the two groups of countries. For it is also the case that *within* each of the five broad sectors, the group of larger countries has a greater share of sales coming from large firms while the group of smaller economies has a greater percentage of sales arising from SMEs, as was also mentioned in section 6.2.

Table 6.4 Percentage Distribution of Sales by sector, all size classes, 1988

Sector/ Country	Energy/ Extraction	Manufac- turing	Construc- tion	Trade	Other Services	Total Non- Primary
Belgium	11	28	5	42	15	100%
France	7	31	6	34	23	100%
Germany	11	34	5	33	16	100%
Italy	8	30	5	39	17	100%
Luxembourg	14	14	5	36	31	100%
The Nether- lands	7	25	7	40	22	100%
Portugal	7	30	4	37	22	100%
United Kingdom	9	21	7	32	31	100%
Large Countries*	9	29	6	34	22	100%
Small Countries**	8	25	6	35	26	100%
Total EC-12	9	28	6	34	23	100%

* France, Germany, Italy, United Kingdom.

** Remaining countries.

Source: Eurostat, supplemented by some estimates by EIM. While data are not available for Denmark, Greece, Ireland and Spain, estimates for those countries are included in the totals for EC-12 and the smaller countries. Sectors are defined by NACE Code as in Table 6.2.

Among the four large economies, France and Germany have a percentage of sales arising in manufacturing which is greater than the EC average, and these countries were also shown to have a greater than average share of sales arising from large firms. Italy also has a greater than average share of its sales coming from manufacturing, but this does not result in a higher than average share of its sales coming from large enterprises. And the United Kingdom, where large firms are relatively most important, does not in fact have a relatively large manufacturing sector.

To take this analysis a step further, Table 6.5 provides data relating to the percentage distribution of sales by sector for each size class of enterprises in the EC as a whole.

It can be seen in Table 6.5 that the trade sector contributes the highest proportion of sales in the micro, small and medium size classes of firms; the share of that sector is at its highest level in the micro size class and it diminishes in importance among the larger size classes until it accounts for a rather small share of sales in the class of large enterprises. Construction accounts for a rather small percentage of sales in each of the size classes but, like trade, it is at its most important in the smallest size bands.

Other services account for a rather similar proportion of sales in each of the size classes. Manufacturing, in contrast, accounts for only a small percentage

of sales of the micro size class (11%), rising to about one-quarter in the small and medium size bands, and further to 41% of sales of the largest size class. Among large firms, manufacturing sales account for a greater share of sales than any other sector. Similarly, energy/extraction accounts for a very small share of sales of the smaller size classes and a greater share of the sales of large enterprises.

Table 6.5 EC-12 - Percentage Distribution of Sales of each size class by sector (1988)

Sector/Size Class	0-9	10-99	100-499	500+
Energy/Extraction	2	3	6	20
Manufacturing	11	25	29	41
Construction	9	9	5	2
Trade	50	43	39	14
Other Services	28	20	21	23
Total	100	100	100	100

Source: Eurostat, supplemented by some estimates by EIM. Sectors are defined by NACE code as in Table 6.2.

When one looks at comparable data for the group of four large Member States and the group of smaller economies, the patterns are similar in each group to those of the EC as a whole in the micro and small size classes. In the medium size class, however, the group of smaller countries has a greater share of sales coming from manufacturing (38%) than the total EC figure of 29%, while they have a smaller share of sales coming from trade (30%) than the total EC figure of 39%, see Table 6.5. Conversely, in the large size class, the group of smaller countries has a smaller share of sales coming from manufacturing than the total EC figure of 41%, while they have a larger share of sales coming from trade and energy/extraction than the total EC figures. This basically reflects the fact that sales of the manufacturing sector of the group of smaller countries are more highly concentrated in the medium size class than is the case for the EC as a whole, and a good deal less highly concentrated in the large size class than is the case for the whole Community.

At the level of individual Member States, there are some very noticeable differences (of the order of 10% or more) from the total EC patterns seen in Table 6.5. For example, in the micro size class, the United Kingdom has 20% of sales coming from construction compared with the EC figure of 9%. And in the large size class, Germany has a much greater share of sales coming from manufacturing (56%) than the Community average (41%), with a much lower than average share arising in services. Ireland and Luxembourg, in contrast, have a much lower than average percentage of sales of large enterprises

coming from manufacturing. Thus generalisations from the type of total EC data presented in Table 6.5 may not necessarily hold true for each Member State.

6.4 PATTERNS OF EXPORTS AND DOMESTIC SALES

SMEs and large firms differ in the extent to which they are active in various markets, which has implications for the development of their sales. This section presents information, in an indicative manner at the EC-12 level, on the distribution of sales by macroeconomic category for 1988. A basic distinction is made between sales to export markets and to domestic markets. Exports are subdivided according to the five broad sectors already referred to, while domestic sales are divided into consumer goods, investment goods and intermediate goods. Table 6.6 below provides the relevant data, which are partly based on estimations and should not, therefore, be regarded as exact.

It can be seen in the right-hand column of Table 6.6 that about 14% of sales of all enterprises were exports in 1988, with the remaining 86% of sales going to the domestic markets of the enterprises concerned. However, the percentage of sales going to export markets varies considerably between sectors, from a low of 1% in construction to a high of 28% in manufacturing. The manufacturing sector is much the most highly export-oriented, and energy/extraction is also rather more highly export-oriented than average. Construction, trade and other services sell rather a small share of their output in export markets.

Looking at the export data by size class, there is a general tendency for the share of exports in total sales to increase with size of enterprise¹. Thus micro firms, as a group, export only 5% of their total sales, while large firms export a much more substantial 22% of their total sales. In general, SMEs depend on their own domestic markets for sales to a significantly greater extent than large enterprises. This tendency for large firms to be more engaged in exporting than smaller firms is also evident in most of the individual sectors in Table 6.6, but not in all of them. Thus larger firms do tend to export more in manufacturing, energy/extraction, construction and 'other' services, but there is no such evident tendency in the trade sector. In fact, in wholesale trade the export shares are highest for micro and small firms.

¹ Some of the underlying evidence for this tendency is reported in Chapter 9.

Table 6.6 EC-12 Preliminary Estimates of Percentage Distribution of Sales of each size class by export and domestic sales, 1988

Size Class/Macroeconomic Category	0-9 %	10-99 %	100- 499 %	500+ %	Total
Exports as % of Sales					
Energy/Extraction	14	13	14	16	16
Manufacturing	11	18	24	38	28
Construction	1	1	2	2	1
Trade	5	9	7	6	7
Other Services	3	8	12	12	9
Total Exports	5	10	13	23	14
Large Countries	4	9	11	22	13
Small Countries	9	15	19	27	17
Domestic Sales					
- Cons. Goods	38	36	35	25	33
- Investm. Goods	8	10	9	6	8
- Intermed. Goods	49	44	43	46	45
- Total	95	90	87	77	86
Total Sales	100	100	100	100	100

Source: Estimates by EIM. Sectors are defined by NACE code as in Table 6.2, except that in the above table none of NACE sector 9 is included in Other Services. Sales or turnover refers to market value of merchandise; so the export shares of sales in this table cannot directly be compared with shares of exports in GDP in Chapter 9.

It is not surprising that, for the most part, large firms are more involved in exporting than smaller enterprises. For large firms tend to develop most readily in activities in which there are significant economies of scale, and if the presence of economies of scale makes it advantageous for firms to be relatively large they would need to have a large volume of sales in order to realise that advantage. And if they need to have a large volume of sales, this tends to imply that they are more likely than small firms to need to look beyond the domestic market for sales. This is especially the case in small countries, as is confirmed by Table 6.6.

The above considerations apply particularly in manufacturing, since most manufactured products can be traded over substantial distances into export markets quite readily. In many services, or in construction, on the other hand, there is often (although of course not always) a greater need to provide the service on the spot for local customers, so that exporting to distant customers can be less feasible.

When one looks at patterns of exporting in the two groups of larger and smaller economies, it is found that exports account for a larger share of sales of the group of smaller countries (17%) than in the group of larger countries (13%).

Furthermore, the SMEs of the smaller countries are more highly export-oriented, with 14% of their sales being exported, than the SMEs of the larger countries which export 7% of sales. Similarly, the large firms in the smaller countries also export a greater share of their sales (27%) than the large enterprises of the larger countries (22%). Companies in smaller countries are more likely to be confronted by the limitations of the domestic market than those in larger countries. If they wish to expand, they are thus more likely to have to export.

It was noted in Chapter 3 of this report that exports have tended to increase considerably as a percentage of sales in the EC countries generally since the early 1970s, with a particularly marked increase in intra-EC trade. This is a trend which may be expected to continue in the context of integration of the Community's internal market. And it is likely that intra-EC exports from SMEs will benefit particularly, since some of the obstacles to international trade which will be removed by the process of European integration are more difficult to overcome for small firms which lack specialised export marketing staff and financial resources.

As regards sales to domestic markets, Table 6.6 shows that, for all size classes combined, sales of intermediate goods are the largest category followed by consumer goods, with investment goods being a rather small component of the total. When considered by size class, SMEs, as a group, and particularly micro firms have a relatively great share of their sales consisting of consumer goods and services for domestic markets. Otherwise, there is little systematic variation by size class in the pattern of sales here.

6.5 CUSTOMER CHARACTERISTICS

This section examines the characteristics of customers of SMEs. It is divided into two subsections, namely, (i) kinds of customers and main commercial distribution channels of SMEs, and (ii) customer concentration. The section concentrates on interpreting the available data and only where relevant are tables presented for illustrative purposes.

6.5.1 Kinds of customers and commercial distribution channels

The information available from the various Member States is generally not in a common and readily comparable format, it is sometimes qualitative rather than quantitative, and indeed there is not useful information available from quite

a number of countries. Hence it is necessary to consider individually the countries for which there is useful information.

However, one international study, by the STRATOS Group, provides relevant information for a group of eight countries, which include five EC Member States (Belgium, France, Germany, Netherlands and the United Kingdom), as well as Austria, Finland and Switzerland¹. The STRATOS survey covered manufacturing SMEs in the clothing/footwear, food processing and electronics sectors. As can be seen from Tables 6.7 and 6.8 below, the main customers of SMEs in the clothing/footwear and food industries are final consumers and trade. However, the customers of SMEs in the electronics industry are mainly industrial firms.

Table 6.7 Kinds of Customer of a Sample of SMEs in Clothing/Footwear, Food and Electronics in the 8 European countries (By Industry - Percentages), 1985

Main Customers	Total	Clothing	Food	Electronics
Final Consumers	20.8	22.5	28.1	8.7
Trade	42.5	54.5	44.5	24.5
Industrial Firms	21.3	10.6	9.0	51.7
Public Institutions	9.7	7.4	9.7	12.6
Private Service Firms	5.7	5.0	8.7	2.3
Total	100.0	100.0	100.0	100.0

Source: The STRATOS Group (1990), *Strategic Orientations of Small European Businesses*, Aldershot: Avebury/Gower.

Furthermore, it appears that the customers of very small firms (less than ten employees) are mainly final consumers, whereas the customers of enterprises with 100-500 employees are mainly dealers.

Table 6.8 Kinds of Customer of a Sample of SMEs in Clothing/Footwear, Food and Electronics in the 8 European countries (By Size of Business - Percentages), 1985

Main Customers	Number of Employees				
	< 10	10-19	20-49	50-99	100+
Final Consumers	32.3	21.5	16.5	14.5	8.6
Trade	30.8	37.2	46.6	50.6	58.6
Industrial Firms	19.5	23.8	24.2	20.4	19.5
Public Institutions	9.9	11.1	9.3	10.5	8.1
Service Firms	7.5	6.4	3.4	4.6	5.2
Total	100.0	100.0	100.0	100.0	100.0

Source: The STRATOS Group (1990), *Strategic Orientations of Small European Businesses*, Aldershot: Avebury/Gower.

¹ STRATOS Group (1990), *Strategic Orientations of Small European Businesses*, Aldershot: Avebury/Gower.

When it comes to market share, it appears from the sample of firms covered in the STRATOS SURVEY and reported in Table 6.7 and 6.8 that 28% of entrepreneurs in SMEs do not know how large their market share is. This can be taken as an indication that a large share of SMEs do lack market and strategic management knowledge. Increased competition and shortening of product life cycles may threaten these firms. Among SMEs that know their market share in their main market this share does not vary widely by type of industry, although the entrepreneurs in the electronics industry have a larger market share than the others. Entrepreneurs in the clothing industry particularly perceive their market share as small. It is also interesting that the perceived market share does not vary very much by size of business.

In The Netherlands, concrete data about customer characteristics is difficult to obtain. However, for domestic sales an estimation was made as to what extent size classes within sectors were selling goods and services to other sectors and to private persons. On this basis, it was concluded that micro firms were delivering more to private persons and relatively less to the government. Small firms delivered more to industrial sectors and to the wholesale sector and relatively less to the government and private persons. Medium-sized and large firms delivered more goods and services to the government and relatively less to private persons.

In the United Kingdom, SMEs operate in diverse markets but there is evidence which suggests the importance of increasingly segmented product markets. According to The State of British Enterprise many SMEs rely on a few main customers, face a limited number of competitors and stress the importance of qualitative competitive factors (such as personal attention to client needs) over cost and price factors¹. However, firms do sell their products and services in a wide range of markets. A sample of British firms shows that larger firms are more likely to sell to wholesalers and retailers (26%) and to manufacturers (33%) than SMEs. Conversely, micro and small firms are more likely to sell to other firms (small, 28%; micro, 34%) and direct to the general public. The former finding reflects the importance of subcontracting for smaller firms. Furthermore, the customer composition of stable/declining firms in the UK differs from that of fast growing firms (Table 6.9).

¹ Small Business Research Centre, University of Cambridge (1992), The State of British Enterprise, 1992, chapter 2.

Table 6.9 The Relative Importance of Customers for Representative Firms by age and growth, United Kingdom

	Stable/ Declining	Medium Growth	Fast Growth	Older	Newer
Retailers/ Wholesalers	23.2	19.4	16.7	22.4	18.3
Manufacturers	31.8	32.6	28.0	31.9	28.1
Other Firms	24.7	27.9	32.6	25.6	31.5
Local or Central Government	7.1	6.8	8.5	7.6	6.8
Direct to the Public	7.1	4.9	5.4	5.6	6.4
Other	6.1	8.3	8.7	6.8	8.8
Total Responses (No.)	504	694	396	964	916

Source: Small Business Research Centre, University of Cambridge (1992), *The State of British Enterprise*, 1992, Chapter 2.

The representative stable/declining firm is more likely to sell to retailers and wholesalers and to the general public. Fast growth firms are more orientated towards serving other (primarily service) firms and government organisations. The rapid growth of the service economy up to 1990 is probably a key explanation for the rapid expansion of these SMEs. Conversely, they may now be suffering disproportionately from the recent recession-induced drop in demand for financial and professional services.

In Spain, a sample survey of manufacturing enterprises carried out in 1990 provides information on the main commercial distribution channels for firms with up to 200 employees and for those with more than 200 employees¹. It shows that wholesale and retail distribution is less likely to be the main channel for the smaller firms (41% of them) than for the larger firms (48%). Direct distribution is the main channel for more of the smaller firms (50%) than for the larger firms (41%).

A survey carried out by DTI in Denmark in 1991 found that a very large proportion of manufacturing SMEs sell directly to customers (see Table 6.10) due to the fact that most of them are sub-suppliers or subcontractors to other SMEs or large companies. Three minor studies from the University of Aalborg showed similar results. Most companies are in close contact with their customers and the use of subsidiaries for distribution purposes is unusual among SMEs².

¹ Ministry of Industry, Commerce and Tourism (1990), *Survey of Business Strategy*, Madrid.

² Bohn, Kim Rene et al. (1989), *Virksomhedens internationalisering - En undersogelse af 20 virksomheder i Hadsund Kommune*, AUC; Bohn, Kim Rene & Sorensen, Olav Jull (1990), *Internationalisering af erhvervslivet i Pandrup Kommune*, AUC; Andersen, Poul & Dahl, Jorn (1991), *Internationalisering af erhvervslivet i Dronninglund kommune*, AUC.

Table 6.10 Distribution Channel by size class, Danish manufacturing SMEs

Size Class/ Distribution Form, % of Turnover	10-19	20-49	50-99	100-199	Over 200
Direct to Customer	50	39	46	36	34
Subsidiary	5	6	8	16	24
Agents	19	22	16	13	15
Distributor	10	21	25	30	21
Indirect Sales	16	12	5	5	6

Source: DTI, 1991.

In another Danish survey by DTI it was also shown that SMEs in most sectors of manufacturing tend to sell directly to their customers, even though some differences between the sectors exist. Few companies have established their own distribution system. They either sell directly to their customers or use agents, distributors or other forms of indirect sales. Company-owned and managed sales companies are seldom found in Danish manufacturing companies (see Table 6.11).

A 1987 Danish survey among exporting manufacturing companies in 22 municipalities in the eastern Jutland, showed a similar picture¹. Most of the SMEs in the survey had direct contact with the customer. One of the key conclusions was that the SMEs in the survey keep close contact with, and are in constant dialogue with, their customers.

Table 6.11 Distribution Form by sector, Danish manufacturing SMEs

Distribution Form by Sector/Sector	Direct	Subsidiary	Agents	Distributors	Indirect Sales
Food	51	8	13	17	11
Textile and Clothing	48	4	39	8	1
Wood and Furniture	34	2	34	13	17
Paper and Print	61	8	5	14	12
Chemical and Plastic	36	17	20	22	5
Metal	42	1	10	26	11
Electronics	31	9	19	32	9

Source: DTI, 1989.

¹ Christensen, Poul Rind (1988), *Ostjytlands eksport - En undersøgelse af service sektorens betydning for eksporterhvervene*, Institut for Udenrigshandel, Aarhus Business School.

In summary, information from various Member States shows that:

- smaller firms are generally more likely than larger firms to be selling direct to consumers;
- smaller firms are also generally less likely than larger firms to be selling through the trade or distribution sector,
- smaller firms are more likely to be selling directly to other businesses.

6.5.2 Customer concentration

The degree to which SMEs are dependent upon, and possibly dominated by, their largest customers is an important issue which may constrain their profitability and hence their growth. Therefore the question addressed in this section is to what extent SMEs are dependent on sales to a small number of customers; for example, what proportion of their sales goes to their most important single customer or to their five most important customers. Unfortunately, however, most Member States do not have suitable data on this.

Firms that operate in segmented product markets are more likely to depend on a small number of key customers than are firms operating in more open markets where products are less distinctive. From a survey of representative firms in the United Kingdom, it was found that many firms depend on relatively few customers. One in three of all firms in the sample relied on one customer for one quarter or more of its sales. Nearly three-quarters of all firms relied on their five largest customers to provide at least a quarter of their sales. The most apparent contrast, however, is by firm size. Micro and small firms are more likely to depend on fewer customers for the bulk of their business. Nearly half of all micro firms depend on one customer to provide 25% or more of their sales. Additionally four out of five micro firms depend on their top five customers to provide at least a quarter of their business¹. It appears from this that micro and small firms may tend to be operating in segmented product markets to a greater extent than larger firms, which would account for the greater dependence of smaller firms on a relatively small number of customers. This dependency is particularly dangerous if the firm has no clear competitive advantage in product or skill differentiation compared with its competitors or if market segments are characterized by short product life cycles and erratic changes in customer needs.

¹ Small Business Research Centre, University of Cambridge (1992), *The State of British Enterprise*, 1992, Chapter 2.

A different type of data on Belgian SMEs in some manufacturing sectors indicates that micro or small firms are not necessarily more dependent on a small number of customer 'groups' than are medium-size firms. Customer 'groups' here means groups of customers defined by similar characteristics such as geographical location or the type of products they buy (e.g. luxury products, cheap products). The percentage of sales going to the three largest customer groups is greater for micro and small firms than for medium size firms in electrical engineering (NACE 34), but for other sectors in manufacturing industry this conclusion does not hold. Micro firms are less dependent on the top three customer groups than are medium firms in the textile, footwear and clothing industry (NACE 43, 45) and in food, drink and tobacco industry (NACE 41, 42). And both micro and small firms are less dependent on a few customer groups than are medium-size firms in manufacture of metal articles and mechanical engineering (NACE 31, 32) and in timber and wooden furniture industry (NACE 46)¹. However, this type of data on customer 'groups' is not really comparable to the information on customer concentration from the United Kingdom discussed above and gives no information about large firms.

Other aspects of concentration

It was noted above that United Kingdom data indicate that micro and small firms are often operating in segmented and niche markets. Such markets would be expected to be characterised by a relatively small number of effective competitors. Thus it is of interest that UK survey information on companies' competitors tends to confirm that these are exactly the sort of markets into which many micro and small firms are selling. From a sample survey of firms, it was found that 43% have less than five serious competitors and 6% believe that they have no serious competitors at all². The pattern of competition is broadly similar between manufacturing and service firms although the latter are more likely to perceive no competition at all. In addition it has been shown that the lack of extensive competition is greater for smaller firms; 51% of micro firms have less than five serious competitors compared to 43% for small firms, 33% for medium-sized firms and 34% for large firms. Thus the degree of competition faced by smaller firms is generally less than that encountered by larger firms, which tells us something about the nature of the markets which many of them sell in.

¹ Donckels, Rik & Ria Aerts (1992), *Interstratos: Internationalisation of Small and Medium-Sized Industries in Manufacturing*.

² Small Business Research Centre, University of Cambridge (1992), *The State of British Enterprise*, 1992.

6.6 SUBCONTRACTING

Subcontracting is increasingly becoming a strategic choice for businesses which need to improve their competitiveness. Subcontracting is particularly important in some key sectors such as textiles, construction, electronics, transport equipment and motor manufacturing. In the past, firms tended more to be integrated operations handling all aspects of the production and marketing of their output. More recently, however, this approach has been giving way to industrial structures based on specialisation and networking - firms are seeking to create efficiencies and competitive advantage by concentrating on their particular strengths and by contracting out a growing proportion of their operations. This trend has led to a greater level of interdependence among firms and the expansion of opportunities for small and medium-sized enterprises which focus on specialised areas of supply and specialize in niche markets.

This section examines the extent to which SMEs operate as subcontractors to other companies as a means of selling their products and services, as well as the nature of such subcontracting. It draws, in part, on information from the DG XXIII study on 'The Economic Importance of Subcontracting'¹, and partly on other information from individual Member States. The next section also looks at some other types of relationships between SMEs and other companies which are relevant to the issue of how SMEs market and sell their goods and services.

6.6.1 Concept and definition of subcontracting

The definition of subcontracting adopted by the Commission is the following: '... if subcontracting can be considered as a specific type of relationship between enterprises, it may be assumed that a subcontracting relationship exists whenever a business (frequently small and referred to as 'subcontractor') acts on the account of another undertaking (frequently large and referred to as the 'main contractor') in the process of working and making a specific product to plans and technical specification supplied by the main contractor, who has final economic responsibility'. Thus, subcontracting is more restricted than supplying other businesses and selling intermediary goods (See Tables 6.6, 6.7 and 6.9).

Although the studies on the economic importance of subcontracting recently

¹ Commission of the European Communities (1992), Pan-European Forum on Subcontracting, Working Group No. 1, Economic Importance of Subcontracting in the Community: Working Document on the National Reports. Commission of the European Communities (1992), Pan-European Forum on Subcontracting, Working Group No. 1, Different country reports.

completed for DG XXIII were to be carried out using the Community definition of subcontracting, this was not always possible as the practical applications of this definition diverge broadly: the definitions used in the Spanish, Belgian and Dutch studies, for example, also covered contracted out labour services. However, as far as the main elements of the definition are concerned, some of the other consultants were able to keep more closely to the definitions provided by the Commission.

The studies concerned clearly demonstrated the difficulty of estimating the economic importance of subcontracting, as every country based its estimations on different variables. The Danish study, for example, did not cover services as it did not consider services as something which can be contracted out. This restricts the comparison of general data obtained on subcontracting in Denmark with that of the other Member States. On the other hand, the services for which estimates were produced in the Belgian, British and Irish reports include general services as well as industrial services. Such general services are not to be considered as part of subcontracting according to the definition given by the Commission. In fact, such general services play only an auxiliary role in the production process of the main contractor. In view of such differences in the definitions applied, it is difficult to make precise comparisons of the importance of subcontracting in different countries.

6.6.2 The economic importance of subcontracting in the Member States

Table 6.12 presents summary data on subcontracting from the DG XXIII study. It shows, for those Member States for which data are available, the percentage of business turnover or production volume which is generated by subcontracting.

It can be seen that the percentage of turnover which is generated by subcontracting varies considerably between countries, although to some extent this is no doubt due to differences in the definitions applied. In manufacturing, Denmark, The Netherlands and the United Kingdom have particularly high shares of business generated by subcontracting, with the figures for Greece, Italy and Portugal being markedly lower. A figure for France is not available in this format, but the percentage of manufacturing *employment* generated by subcontracting in France is much closer to Greece or Italy than to The Netherlands or the United Kingdom. In three of the four countries in Table 6.12 which have data for both manufacturing and building, subcontracting accounts for a higher share of sales in building than in manufacturing.

Table 6.12 Percentage of Business Turnover/Production Volume Generated by subcontracting

Sector	B	DK	GR	E	I	NL	P	UK
Manufacturing (NACE 2,3,4)	n.a.	55	7	n.a.	5	48	4	50
Building (NACE 5)	68	31	11	16	n.a.	77	65	n.a.

Source: Pan-European Forum on Subcontracting, Working Group No.1, Economic Importance of Subcontracting in the Community: Working Document on the National Reports. Commission of the European Communities, 1992, p. 20.

It is difficult to reach general conclusions about the relative importance of subcontracting in different sectors within manufacturing, because the data by country and by sector in the DG XXIII study have many missing observations. But it can be observed that subcontracting is generally of greater than average importance in paper & printing, in textiles, clothing & footwear and in the manufacture of transport equipment.

While there are problems in presenting comparative data on subcontracting for different countries, we outline below some information on subcontracting and SMEs in each of the Member States.

Belgium

The most important customers for subcontractors are the construction sector, metal manufacturing, the food industry and the chemical industry. The sectors in which a majority of enterprises plan to make greater use of subcontracting are clothing, transport other than motor vehicles, wood processing, electrical goods and motor vehicles. A survey of Belgian manufacturing SMEs shows that the percentage of firms operating as suppliers to other firms is higher in the small size class than in the medium size class in each sector.¹

Most subcontracting firms are not totally dependent on subcontracting for sales.²

Denmark

In 1991, subcontracting in the manufacturing sector represented about DKK 60-70 billion, generating employment for about 80,000 people. The main part of the manufacturing industry acts primarily as subcontractors to the industries in UK, Germany and Sweden. The corresponding figures in the building and construction sector are DKK 15 billion and 20,000 employees. In 1986, 42% of

¹ Donckels, Rik & Ria Aerts (1992), *Interstratos: Internationalisation of Small and Medium-Sized Industries in Manufacturing*.

² Donckels, R., Hoste, L. & H. Delleke (1990), *VZW Toelevering Limburg en Antwerpse Kempen, Brussels*.

the companies in the manufacturing sector and 30% of the companies in the building and construction sector were subcontractors. This percentage increased in the eighties. Approximately one-half of the turnover in the manufacturing sector is generated from subcontracted goods, the corresponding figure in the building and construction sector is only about one-third of turnover. Since the 1980s, the industrial political climate in Denmark has not been very beneficial for Danish subcontractors (mainly composed of small and medium-sized enterprises) and an increasing number of companies had to close down. This was particularly the case in companies in the building and construction sector.

Germany

Usually subcontractors are not only engaged in subcontracting. The degree to which subcontractors do rely on this activity differs between size classes. Companies making 90% or more of their turnover from subcontracting are mainly found in size classes with more than 100 employees. Overall, the main sectors in which subcontracting takes place in Germany are the chemical industry, mechanical engineering, electrotechnical engineering and the automobile industry.

In Germany, the only data on subcontracting on a fairly representative and regular basis concern subcontracting to industrial services and labour. The importance of contracted labour services is by far the most important in two particular sectors: in the 'manufacturing of wearing apparel, dressing and dyeing of fur' (when contracted labour services accounted for 12% of gross production value in 1989) and in the 'manufacturing of aircraft and spacecraft' (also 12% of gross production value in the same year).

Greece

A recent survey of enterprises reveals that in those sectors where subcontracting is important 31% of the companies (employing 3 persons and over) are subcontractors. However, this figure is only based on a small part (19%) of the total number of establishments. In manufacturing subcontracting accounts for a rather low share of turnover (just 8%); while in services a more substantial part of turnover is subcontracting (30%). The survey also found that subcontracting in Greece is dominated by SMEs.

The construction sector is the most important in terms of the number of companies (4,300), followed by the clothing sector i.e. wearing apparel and furs (2,900 companies). Subcontracting appears to be expanding. During the last five years, main contractors have increased the number of their subcontractors and the volume of production contracted out.

France

Industrial subcontracting was estimated at around 156,000 million francs in 1989. This represents an annual average growth rate of 8% over the period 1985-89. Subcontracting is most important in value terms in metal working (mechanical engineering and casting) where it amounts to 43,000 million FF, in electronics (23,900 million FF) and textiles (23,000 million FF). The sectors where subcontracting is most intensive are aeronautics, metals, textiles and electronics.

A survey of CEPME shows that a growing proportion of SMEs have been operating as subcontractors. The percentage of SMEs which are subcontractors has increased from 37% in 1980 to 59% in 1990. Among SMEs, the smaller firms are more likely to be subcontractors than the larger ones. The smaller firms contract out greater amounts in relation to their turnover than larger firms do.

Ireland

In Ireland also subcontracting activity is characterised by a large number of SMEs and the subcontracting market is expanding. Almost 50% of the main contractors do use subcontractors from overseas (from UK and Continental Europe) mainly because specialist skills are not available in Ireland, or certain services are subcontracted in the targeted export market. A more worrying point for Irish subcontractors is that, although main contractors state that they would prefer to source locally, they often look abroad because the same products or services are available at more competitive prices and are of superior quality.

Although substantial progress has been made in the development of subcontracting, significant opportunities are still being missed. Detailed estimates from the Irish Trade Board suggest that over IR£800 million a year in new business could be picked up by Irish suppliers.

Italy

Around 30% of all manufacturing enterprises were subcontracting enterprises in 1984; subcontracting sales represented about 18% of the total sales of subcontracting enterprises. Subcontracting is most widespread in the printing and publishing sector followed by means of transport and textiles. It is far less important in the sectors of non-electrical machinery and clothing. In the traditional sectors, subcontracting is mainly observed among enterprises employing 10 to 99 workers. In the industrial sectors, it is mainly the preserve of enterprises employing between 500 and 999 workers and, to a lesser extent, those with between 20 and 99 workers.

A noteworthy general trend has been a process of rationalisation and selection

of subcontractors by main contractors, as a result of technological innovation, organisational changes and structural adjustments. Subcontractors need to invest significantly to acquire the necessary technologies, skills and professionalism.

Luxembourg

The use of subcontracting in any economy depends on the characteristics of its production structure. Luxembourg differs from the other Member States because of its very small size. This means a less diversified production structure than other Member States and has implications for the size of firms. In the sectors dominated by firms under Luxembourg control, most suppliers are SMEs, which are predominantly family businesses. These firms, even the small ones, are all involved in international trade, at least at the level of the SAR-LOR-LUX region.

Due to their size, Luxembourgian SMEs have to use specialist subcontracting for a range of services in order to gain access to key skills, e.g. in research and development.

The Netherlands

The total value of subcontracting demand in The Netherlands was estimated at 100,000 million guilders in 1991. This demand consists of subcontracted raw, ancillary and intermediate products (34%), labour services (38%), subcontracted business services (13%) and subcontracted investment goods and equipment (15%). From 1978 to 1989, the average annual increase in subcontracting demand in constant prices is estimated to have been at least 5%.

A recent survey among the large Dutch main contractors suggests that the amount of work contracted out will stabilise in the next few years, while there will be a reduction in the number of subcontractors. The consequences for SME subcontractors are scaling-up, decreasing numbers and a lesser number of companies maintaining their direct supplier status. The latter will be relatively few highly specialised companies. SME subcontractors will increasingly become suppliers to larger main suppliers instead¹.

Portugal

Over the period 1980-1988, the demand for subcontracting, measured by the ratio subcontracting over added value, increased by over 26%. The supply, on the other hand, remained relatively stable during this period. Subcontracting is most intensive in the following sectors: textiles and garments, printing and

¹ CEC (1992), Study on the Economic Importance of Subcontracting in the Community: The Netherlands, Pan-European Forum on Subcontracting, Working Group No. 1, XXIII/725/92-EN.

publishing, machinery, transport equipment, metallic products and construction. Subcontracting is positively correlated with tendencies for growth and negatively correlated with firm size. The first relation means that the level of subcontracting tends to increase where it is already high.

In manufacturing industry, subcontracting tends to be very specialised and main contractors do not intend to increase their demand for subcontractors in the near future. In services, building and construction, subcontracting is widespread and has been increasing rapidly in recent years.

Spain

Subcontracting in the Spanish economy was worth some Ptas 4 billion in 1990, 20% of which was accounted for by the external market. Nearly all subcontractors are SMEs, and a large majority of them are micro or small firms. There is a trend in Spain away from antagonistic relationships based on a conflict of interests and towards loyal, long-term relationships based on common interests. Specialised subcontracting is being consolidated and is increasing within the Spanish economy.

The United Kingdom

According to a recent survey small firms are more likely to undertake subcontract work. Smaller firms depend upon subcontract work for a larger share of their business compared to large firms. The sample survey indicates that the representative micro firm is twice as dependent on this type of work as the representative larger firm.

Overall, there has been a general increase in the volume of subcontract work undertaken by SMEs including firms of all sizes. The net increase in subcontracting in services has risen at approximately double the rate achieved in manufacturing, reflecting the general boom in service sector of the 1980s.

6.6.3 General observations

To conclude, the type of information on subcontracting which is available from the different Member States varies a good deal and it is often questionable whether it is precisely comparable between countries. However, it is possible to make some general observations based on information from a number of countries:

1. Subcontracting sales tend to be more important for smaller size classes of firms than for larger firms. This general point is supported by different types of information from different countries. Thus, in some cases (Belgium, Spain and the United Kingdom), a greater proportion of smaller companies

than of larger companies operate as subcontractors. In other cases (Greece and Ireland), it is known that a large majority or all of subcontracting firms are SMEs. In France the percentage of the amount subcontracted by small firms in relation to their turnover is higher than the one for larger size classes.

2. Subcontracting has been growing relatively quickly in recent times. Thus, in Denmark and France the percentage of companies which operate as subcontractors has been rising, in Germany subcontracting has grown faster than total production while in Portugal demand for subcontracting has grown faster than value-added, and a number of other countries including The Netherlands, Greece and Ireland report quite strong growth in subcontracting demand or supply. Given that smaller firms tend to operate as subcontractors more than larger firms, this relatively rapid growth generates an opportunity for smaller companies.
3. Growth in demand for subcontracting in a particular national market need not necessarily mean comparable growth in the subcontract sales of local subcontractors. For example, some countries show stronger growth in demand than in supply, because the contractor firms can subcontract work abroad.
4. It seems that subcontracting, on the supply side, is less well developed in the less-developed Member States such as Portugal, Greece and Ireland than in at least some of the more advanced economies such as Denmark, The Netherlands and the United Kingdom.
5. As noted in Chapter 3 of this report many SME subcontractors are supplying parts for final products to be marketed abroad by the main contractor, it follows that these SMEs will increasingly have to meet European standards; and will be affected by international trends even though they may not be engaged directly international trade. Two developments taking place simultaneously and reinforcing each other will make manufacturing units in the Community relatively footloose.¹

- First, transportation and communication costs decreased sharply during the last decades because of technical developments.

- Second, transportation, adaptation and transaction costs are decreasing due to market integration and harmonisation of standards. Large international firms are thus put in a position to rationalise their production by increasing the scale of some manufacturing units and closing down others. These developments will affect subcontracting SMEs in various ways. For firms supplying to units being closed down the negative implications are clear. But the restructuring and rationalisation processes and

¹ European Economy, No. 42, November 1989, p. 190.

the increases in scale will also make strong demands on other subcontracting parties, like quality assurance and logistics aspects (delivery time and just-in-time). These developments will have a strong impact on SMEs as subcontracting is important to SMEs. And the expected reduction in the number of first-tier subcontractors by individual large firms will concern large numbers of SME subcontractors.

6.7 OTHER BUSINESS RELATIONSHIPS

Subcontracting is one form of relationship between companies which is of particular importance for SMEs in selling their products and services. However, there are also other forms of inter-company relationships, which can reinforce market strength and the competitive position of companies. By entering into such business relationships, some influences in the environment can be neutralised and a possible competitive advantage and better response to developments can be achieved. This section briefly examines some aspects of inter-company relationships. It is based partly on Duijnhouwer¹ and partly on other information from individual Member States.

Some Possible Advantages and Disadvantages of Business Relationships

A general problem for small firms is that some activities can be carried out cost-effectively only when a company has reached a certain minimum size. If growth of the company is not considered possible or desirable, such activities can be undertaken sooner by doing so jointly with others. By developing shared activities, an increase in scale in those activities can be realised, leading to a reduction in costs for each of the partners involved. This can be achieved, for example, by joint purchasing enabling negotiations for discounts, or by mutual specialisation in one or more activities which are particular strengths of individual partner companies. Also, by developing some joint activities, the risks for partners can be reduced.

There are also possible disadvantages for a company entering into business relationships. Disadvantages may arise, for example, from the possible abuse of new know-how, skills etc. by the partners because companies become aware of each other's activities. Such opportunistic behaviour by a partner can have a negative effect on a company's competitive position. Second, the decision-

¹ Duijnhouwer, Anton (ed.) et al. (1992), *Competitiveness, Autonomy and Business Relationships*, Research Institute for Small and Medium-Sized Business (EIM), Zoetermeer. See also: O'Doherty, Dermot (1990), 'Strategic Alliances - An SME and Small Economy Perspective', *Science and Policy*, Vol. 17, No. 5, October.

making power of companies can be limited by entering into a business relationship; a firm may be prohibited from expanding certain lines of production, or it may have to buy inputs from specified sources or to sell its products through certain distribution channels. Third, co-operation requires co-ordination, e.g. in contracting and controlling activities, which takes time and money.

Business Relationships and Competitiveness

The study of Duijnhouwer was carried out in five EC countries (Denmark, Ireland, Netherlands, Portugal and the United Kingdom), as well as in Austria, Finland and Switzerland. This study examined the effects of business relationships on autonomy and competitive strength as perceived by entrepreneurs in SMEs in the metal products and transport equipment manufacturing sectors and in the road transport sector. For the purpose of this study, the term 'business relationships' denotes all dealings a company has with other companies which constitute more than a once-only agreement.

General findings of the study are:

- That the proportion of firms currently engaged in one or more business relationships is remarkably similar in all of the countries concerned. In general, seven to eight out of every ten respondents are engaged in relationships;
- The areas where firms currently maintain relationships are mostly related to essential business functions. Thus manufacturers cited most frequently purchasing, domestic sales and manufacturing activities, while hauliers cited transport, purchasing, sales and repair/maintenance activities. However, many companies (except for Danish firms) are also engaged in relationships concerning administration/book-keeping and financing/credit facilities. A relatively high proportion of Danish SMEs are engaged in co-operation in exporting;
- About one-quarter or less of the firms in The Netherlands, Ireland, Great Britain and Portugal and about half of the firms in Denmark were unwilling to enter into business relationships in particular areas;
- However, the vast majority of respondents who were unwilling to enter a relationship in particular areas are currently involved in at least one relationship in other areas.
- For both groups of firms (manufacturing and transport), the motivation for entering business relationships differs only slightly from the factors of importance for the company's competitive position;
- The initiative to enter into the most important business relationship was taken by the entrepreneur him/herself or in a joint action by the respondent and his/her partner.

- Only a small proportion of firms would be completely unable to continue without their partner, although 40% of manufacturing firms and 50% of road haulage firms are somehow dependent on the relationship;
- In spite of this, only a very small number of respondents experienced a decline in their level of autonomy concerning decision-making in the areas affected by the relationship. And changes in autonomy caused no problems or only minor problems for the entrepreneurs.

Overall,

- three out of four respondents reported an improvement in the company's competitive position due to their most important business relationship,
- a quarter or less mentioned no improvement, and
- few respondents reported a deterioration.

Consequently, few respondents were dissatisfied and the vast majority were satisfied with their most important business relationship.

Business relationships are entered into partly as a way of responding to developments in the environment, and they can be effective in this regard. Entrepreneurs who have entered into business relationships perform better both in employment and turnover development than their colleagues who have not. However, entering into business relationships can have negative implications for entrepreneurs as well. One of the most important potentially negative consequences for SME entrepreneurs is the possibility that their autonomy in decision-making may be reduced. Therefore some entrepreneurs are reluctant to enter relationships with other firms. However, stimulating firms to enter into business relationships appears to be a strategy to improve the competitiveness of SMEs. Although firms without business relationships are aware of the possible advantages of such relationships, apparently they still have objections. However, such entrepreneurs have views concerning the impact on autonomy which are not in fact identified by firms which have entered into relationships. From the survey, it seems that these prejudices are generally unjustified. Overall autonomy is not generally restricted by co-operation, and competitiveness is improved by it.

Studies on Denmark show that Danish companies rely to a large extent upon relations - formal or informal - with other companies.¹ A study on joint activities carried out in Denmark in 1990 showed that more than 600 manufacturing companies were engaged in joint activities of some kind. The joint activities covered several areas such as marketing, selling, R & D and production. In

¹ Gelsing, Lars & Rasmussen Jorgen G. (1991), Udviklingsamarbejde i industrien, AUC.

many cases more than one of these activities were involved.¹ In recent years the Danish Ministry of Industry has introduced a so-called network programme to promote joint activities among SMEs. The results from the first of these programmes have shown that SMEs are very interested in joining co-operative projects and more than 150 networks were established among SMEs particularly in such areas as joint exporting and marketing.²

In the United Kingdom a sample of firms were asked to provide details of formal or informal collaborative or partnership agreements into which they had entered during the last three years.³ Just under a third of all firms surveyed (32%) had entered into such arrangements with other organisations. Partnership agreements, often a form of networking, were more widely used in the service sector (39%) than in manufacturing (26%). This reflects the importance of specialised expertise in the business sector and the economies of informal and formal linkages which exist between small specialised firms in carrying out client assignments. It is also of interest that faster growing firms were more likely to enter into partnership agreements, which suggests that such arrangements may improve business performance and growth.

Data are available from Greece on requests by Greek firms (participants in the Europartenariat 92) to co-operate with other European firms in seven different fields, namely: joint product distribution; technology transfer; joint research and development; patent use; licensing; trade and joint ventures. Firms' principal choices of forms of co-operation have been classified by size class. For micro firms the most preferred forms of cooperation are joint ventures, joint distribution and trade. In small firms the order is joint distribution, trade and joint ventures. Among medium-sized firms, the main choices are joint ventures, trade and joint distribution. The large firms first choose joint ventures with trade and joint distribution of second equal importance and technology transfer and research and development are ranked third. Thus in each size class, the fields of joint distribution, joint ventures and trade stand out as being the three most preferred forms of co-operation, with only changes in rank order among them between the different size classes.

¹ Gustafsson et al. (1991), Udvikling af strategiske alliancer, joint ventures og netvaerk, DIOS & AUC.

² Knopp & Gelsing (1992).

³ Small Business Research Centre, University of Cambridge (1992), The State of British Enterprise.

Franchising and Licensing

Franchising is a particular form of business relationship which is of relevance to marketing and has been growing in importance. Franchising is defined as being a form of organisation in which the parent company grants an individual the right to do business over a specified period of time in a particular location.

Table 6.13 Key Trends in Business Format Franchising

	No. of Business System Franchisors	No. of Franchised Units	Total Employees	Annual Turnover (£bn)	Average Sales per Unit (000s)
1984	170	7900	72000	0.85	107
1985	215	9000	93000	1.30	144
1986	270	11000	127000	1.90	173
1987	253	15000	170000	3.10	207
1988	244	16000	182000	3.80	237
1989	295	16600	185000	4.73	285
1990	379	18260	183600	5.24	287

Source: Country Report for Chapter 6 - UK.

The parent company is the *franchisor*, the individual the *franchisee*; the rights which the parent company grants is the '*franchise*' itself. In the United Kingdom, the numbers of both franchisors and their franchisees have increased considerably over the past ten years, and Table 6.13 indicates some of the key trends in business format franchising. The growth in the economy through the 1980s, in particular in the retail and services sectors is more than reflected in the growth of franchising, and by 1990 the UK had become Europe's second largest franchise nation, behind France. An analysis of UK franchising business by sector shows that in terms of turnover the largest franchising category is food and drink which accounts for some 36% of total franchise sales. By 1990, franchising had grown to account for 4% of total retail sales and despite signs of a slowdown, individual sectors such as convenience retailing, print and business services were still experiencing high growth rates.

For Greece information about licensing agreements is only available with regard to cooperation with foreign firms. Considering franchising its development is in its infancy but business relationship are more advanced with domestic rather than foreign 'parent' firms. It is supposed that the characteristics of these business relationships are a good indication for the franchising and licensing arrangements in the Greek economy as a whole. In Greece, the very high proportion of self-employment in the economy and the small size of the large majority of enterprises are two characteristics which should favour the development of franchising. However, the development of the system in Greece is still

at an early stage.¹ It started only in recent years, concentrating mainly in the services sector and particularly in restaurants and fast-food, clothing and the retail trade. The completion of the EC internal market is expected to create a more appropriate environment for its expansion in a number of activities.

The KEPE study also notes that, despite the apparent advantages, business start-ups via licensing or franchising agreements is still in its infancy in Greece. Technology transfer from abroad through licensing agreements is rather limited. In fact, the number of licensing agreements decreased from 326 in 1979 to 156 in 1988. Moreover, about 50% of the existing licensing agreements relate to the use of foreign 'trade marks' and the rest, 50%, to 'technology transfer' which results in improved products and methods of production. Over the period 1972-1978, 25% of the licensing agreements related to chemical products, 15% to electric machinery and apparatus and 10% to metal products etc.

In The Netherlands, franchising is mainly found in the retail trade, in which there are 230 franchise-organisations with almost 8,000 independent franchisees. Over 4,000 more establishments are directly owned by the central franchise organisation. Another 36,000 retail trade businesses are involved in other types of co-operation, such as authorised dealerships, purchasing combinations, marketing combinations and so-called 'chain stores with voluntary affiliation' (see Table 6.14 below).

Table 6.14 Retail Trade Co-operation in The Netherlands

Type of Co-operation	Systems	System Owned Stores	Affiliated Stores	Total Stores
Dealership	60	328	5,698	6,026
Franchising	230	4,292	7,961	12,253
Purchase & Marketing	147	3	13,401	13,404
Purchase Combination	70	3	8,280	8,283
Marketing Combination	44	60	6,092	6,152
Voluntary Chain Store	27	12	4,152	4,164
Total	578	4,698	45,584	50,282

Source: Jaarboek Detailhandel 1992 (Annual Report on the Retail Trade in The Netherlands 1992). Because of a (limited) number of stores in more than one type of co-operation the estimated total number of affiliated stores is approximately 44,000.

Trends in retail trade co-operation are:

- increase in the number of co-operating businesses. Between 1987 and 1991 the increase was 17%;

¹ KEPE (1992), Dynamic Promotion of Greek Exports and Possibilities for Import Substitution: Present Situation, Problems and Weaknesses, Policy Recommendations.

- increase in franchising, both by new chains and by traditional forms of cooperation adopting franchising policies;
- expansion of the services offered by the central organisation, and (legal) formalisation of the co-operation agreement;
- concentration and internationalisation: by mergers between cooperating groups and penetration of franchise-organisations into foreign markets.

As a result of the trends described, a common development pattern in most types of co-operation having a central staff and management organisation is that the latter are gaining power at the expense of the members.

In The Netherlands, licensing costs are increasing faster than GNP. Furthermore, it is clear that the vast majority of license costs met by companies in The Netherlands are from foreign subsidiaries while the share of SMEs is negligible. Over three-quarters of the costs incurred in acquiring licenses come from manufacturing industry. The top three industrial sectors are chemicals, metal and electrotechnical products and food and beverages.

MAIN POINTS

Employment in the Community

- Micro enterprises are most important in terms of job provision in Italy and Greece, whereas elsewhere their importance is limited and in Germany they account for less than 17% of employment.
- The share of employment provided by medium and large sized enterprises is highest in Germany and the United Kingdom and lowest in Greece, Italy, Ireland, Portugal and Spain.
- Across the EC as a whole self employment and micro enterprises (with under 10 employed) account for about 30% of jobs; small firms (10-99 employees) for about 25%; medium sized enterprises for 16% and large firms for 30%.
- Extraction is the smallest sector with only 5% of EC employment while manufacturing accounts for 30% and construction 9%. The largest sector is the other services with 36% of total jobs, whilst trade holds 20%.
- Micro and small enterprises account for around three quarters of total EC employment in construction and trade. The highest share of medium-sized firms (21%) is found in manufacturing. The highest share of large firms is found in extraction and manufacturing.
- SMEs with under 500 employees are the dominant enterprises in sectors which together account for almost 80% of the private non-primary economy.

Employment Changes

- In the late 1980s employment growth across the EC was largely the result of job growth in micro and small enterprises, aided by the long-term trend towards employment growth in the service sector where SMEs are dominant (from 1980 to 1987 EC service employment grew from 68 to 76 million while industrial employment fell from 47 to 41 million).
- Job Generation Studies have been carried out at both national and regional levels in several Member Countries. These show impressive rates of job creation by newly established enterprises.

continued

continued

Job Characteristics

- Micro enterprises are more likely to employ female and part-time staff and to rely more on young workers than large enterprises.
- Average (gross) earnings tend to fall with enterprise size. For the countries where data are available, earnings in medium and large-sized businesses are substantially higher than in micro and small enterprises.

Labour Costs and Productivity

- Labour costs per employee differ significantly between the EC States because of wage levels, the degree of development of national social security systems and the extent to which these are financed by levies on employment.
- Across the extraction and manufacturing sectors of the Member States average labour costs per employee are between 30% and 50% higher in large than in small firms. The Netherlands shows the smallest cost variation with enterprise size while Spain has the largest variation. However, there are no direct implications for unit labour costs due to offsetting differences in labour productivity by enterprise size.
- Labour productivity (value added per employee) also differs widely between Member States. However, across the Community labour productivity in large enterprises in the industrial sector is up to two thirds higher than in small enterprises. Furthermore, such productivity differences may have been widening in the latter half of the 1980s.
- Turnover per employee is an alternative measure of "apparent" labour productivity and in the trade and other services sectors this is higher in medium sized than in large enterprises in many Community countries. However, even on this measure, the lowest level of productivity is most often found in micro enterprises with under 10 employees.

7.1 INTRODUCTION

This chapter focuses on employment in the non-primary sector across EC members, covering both employees and the self employed. Section 7.2 examines employment at the Community and Member State levels showing the importance of enterprises of different sizes in job provision and the sectors in which firms in particular size classes are dominant in terms of employment.

Employment growth is discussed in Section 7.3, while in Section 7.4 attention is focussed on variations in job characteristics like gender, age, earnings and duration of the working week by enterprise size. In the final section (7.5) the competitiveness of SMEs is reviewed in terms of differences in labour costs and productivity by enterprise size, concentrating mainly on the industrial sector where data are more commonly available using comparable definitions.

7.2 EMPLOYMENT IN THE COMMUNITY'S SMEs

7.2.1 Employment by Member State

Size class

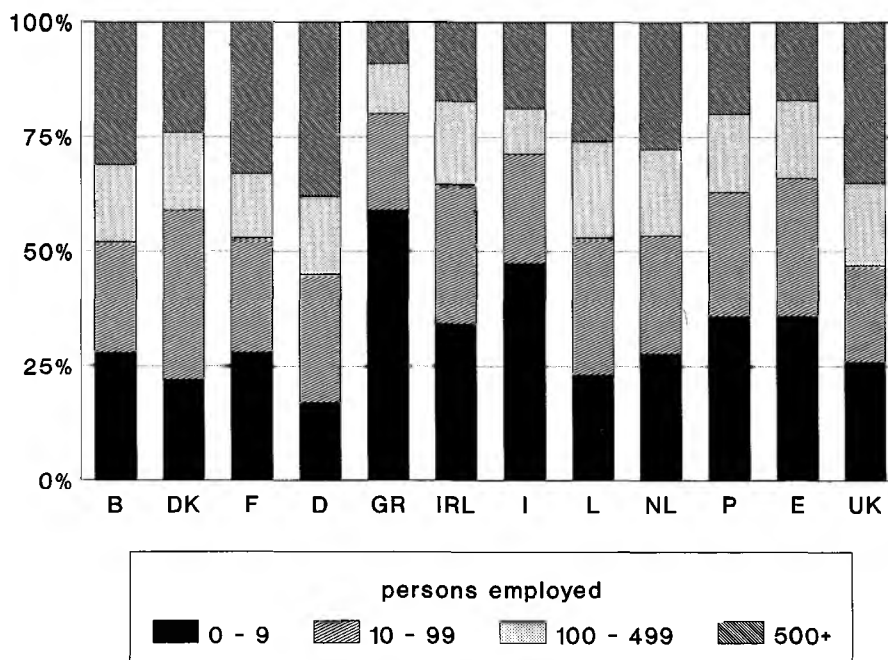
The pattern of employment by enterprise size across all EC members¹ in 1988 is summarised in Figure 7.1, which illustrates the major differences in the importance of firms within different employment size categories in job provision across member states. The absolute figures are presented in Table 7.1.

In Italy some 6 million people work in micro enterprises representing almost 50% of total national employment. Whilst in Greece, almost 60% of employment is in firms with ten workers or less. At the other extreme such micro enterprises account for less than 17% of German employment. Micro enterprises in Italy and the UK together account for over 40% of total EC employment in these smallest enterprises.

In relative terms the share of small firms (10-99 workers) is highest in Denmark, where this size group accounts for well over one third of total employment. An explanation may be that many firms are started by master artisans or well-educated skilled workers with no experience of work in, and no ambitions to run, a larger enterprise. However, in absolute terms, Germany has the largest single concentration of employment in small firms, with almost 5.5 million people employed in such enterprises, and small firms in Germany and the UK together account for about 44% of all the Community's small firm jobs.

¹ Most data in this chapter are based on Eurostat's 'Enterprises in Europe' (1988). This database, however, contains some gaps, e.g. because of confidentiality reasons and because of the fact that especially for Greece and Ireland, data are not available for some sectors. Furthermore, data on enterprises without employees are not available for some countries. In these cases, additional estimates have been made.

Figure 7.1 Percentage Distribution of Employment by size class for each country, 1988



Medium-sized and larger firms' share in employment is particularly strong in Germany and the United Kingdom (more than 50%), and lowest in Greece, Italy, Ireland, Portugal and Spain, as discussed earlier in section 2.4.2 of this report.

Table 7.1 Employment by enterprise size class: all sectors 1988

Country	0-9	10-99	100-499	>500	Total
x 1000					
Belgium	729	620	428	793	2570
Denmark	375	628	290	403	1695
France	3837	3330	1933	4435	13535
Germany	3274	5381	3380	7518	19553
Greece	1180	410	213	182	1985
Ireland	277	245	146	140	808
Italy	6045	3007	1308	2358	12717
Luxembourg	32	42	30	37	141
Netherlands	1180	1073	779	1151	4183
Portugal	951	715	437	514	2616
Spain	2967	2513	1393	1390	8263
United Kingdom	5354	4262	3620	7189	20425
EC-12	26202	22226	13956	26110	88494

Source: Eurostat (1992), EIM.

Employment by sector

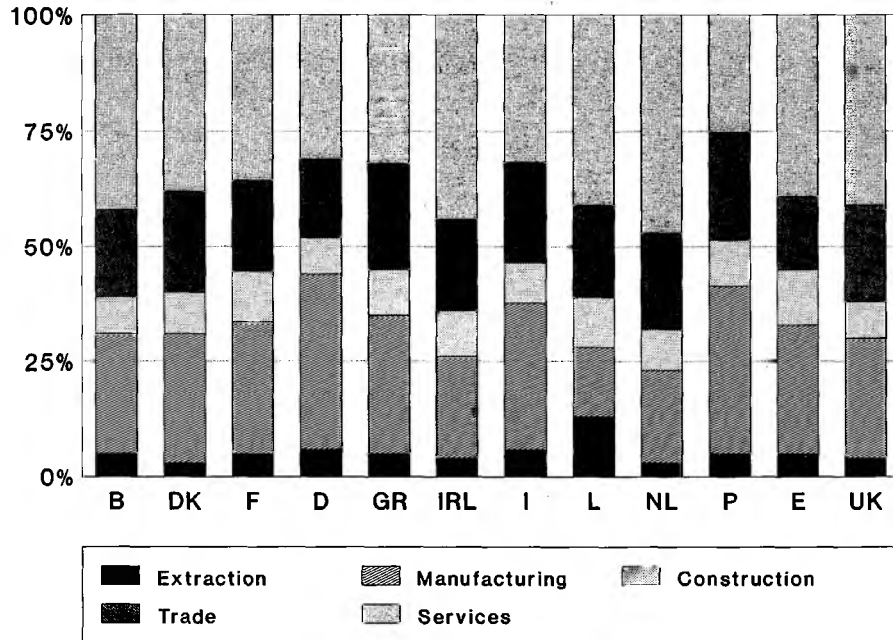
Employment by sector for Member States in 1988 is summarised in Figure 7.2. The share of the industrial sector (extraction and manufacturing together) is greatest in Germany (44% of total employment) and lowest in the Netherlands (23%). In Greece 70% of industrial employment is provided by micro and small firms (with under 100 employees). Whilst in two more 'Mediterranean' countries (Spain and Italy) over half of industrial employment is provided by small firms, and the figure for Portugal is 49%. In contrast, under one quarter of Luxembourg's industrial employment is in small enterprises and the equivalent proportions for Germany and the UK are 27% and just under 30% respectively. Ireland has by far the largest share of employment provided by medium sized enterprises found in any country, at almost twice the EC average (of just over 20%). Greece, Spain, Ireland and Portugal are the only EC members where large enterprises (with 500 or more employees) account for less than one quarter of industrial employment. In the UK and Germany their share exceeds 50% and across the EC as a whole it is just over 41%.

Construction's share in total employment ranges from more than one job in ten in France, Ireland, Luxembourg, Spain and Portugal, to less than 8% in Belgium. Although the UK has almost 1.3 million workers employed in micro and small enterprises in construction, this figure only equates to the EC average (at 79% of all construction employees in enterprises with under 100 employees). In Ireland, however, over 90% of construction employment lies in this enterprise size category. Not surprisingly, Ireland has a much smaller medium sized sector than the rest of the EC, while in Luxembourg one quarter of the 16,000 construction workers are found in firms employing between 100 and 499 workers.

The largest share in national employment from the trade sector is in Portugal (24% of total) whilst the lowest is in Spain (16%). The Netherlands is by far the most dependent on the so-called 'other' services (eg., Transport, Banking, Personal Services) for employment opportunities. Almost half (47%) of Dutch jobs lie in these areas.

Small enterprises provided at least half of all service sector jobs in each member state with their share ranging from 52% in the UK to 85% in Greece. By contrast, large enterprises with 500 or more employees accounted for just over one quarter of employment in services as a whole, and only one job in seven in the trade sector.

Figure 7.2 Percentage Distribution of Employment by sector for each country, 1988



7.2.2 Employment at the Community level

In Table 7.2 more detailed analyses have been produced at the Community level distinguishing the five main NACE sectors - extraction, manufacturing, construction, trade and services - across the four main employment size bands.

Table 7.2 Percentage distribution Employment by size class, 5 sectors, EUR-12, 1988

Sector	in %				total employment (x mln.)
	0-9	10-99	100-499	500+	
Extraction	7	16	15	62	4.3
Manufacturing	14	28	21	38	26.8
Construction	44	35	12	9	8.1
Trade	45	27	14	14	17.4
Other Services	35	20	13	32	31.9
Total EC-12	30	25	16	30	88.5

Source: Eurostat (1992); EIM.

Total employment in SMEs (0-499) in 1988 was over 62 million jobs, which is 70% of all employment in private, non-primary enterprises, and almost 50% of total employment in the Community (including agriculture, government and other non-market services). Self employed with no employees and micro enterprises with 1 to 9 employees together account for about 30% of all EC employment in the private non-primary economy.

Across the Community as a whole, small firms (10-99) account for about 25% of total employment (i.e. 22 million jobs), so that their contribution to employment provision is slightly less than that of micro enterprises with under 10 employees (at 26 million jobs). Thus taken together enterprises employing less than 100 people account for about 55% of total EC jobs.

Medium-sized firms account for 16% of total private non-primary employment (i.e. 14 million jobs). Variations between individual member countries in terms of the share of employment provided by medium-sized enterprises are much less marked than in the cases of small and micro enterprises.

Large firms account for 30% of private non-primary employment in the Community. This means large firms together provide about the same number of jobs as micro firms.

Sector and size class

Extraction and Manufacturing represented 35% of total EC employment (31 million jobs) in 1988. Micro enterprises account for about 13% of industrial employment (extraction and manufacturing) against the 41% provided by large enterprises. The contribution of small firms to industrial employment is broadly similar to medium sized firms (26 and 20% respectively).

Construction which accounts for 8.1 million EC jobs (some 9% of the total) is *the SME sector par excellence*, with under 10% of total EC employment being in large firms and over 78% in small enterprises with under 100 employees.

The *trade sector* (wholesale and retail) is only second to construction in terms of its SME-share. 86% of employment is in SMEs with 72% in small and micro firms alone. In absolute terms SMEs in trade offer twice as many jobs (15 million) as SMEs in construction.

Other services dominate the EC labour market accounting for almost 32 million jobs, some 36% of total community employment. EC-wide a clear majority of these jobs are in small firms (with under 100 employees), with micro-enterprises

alone providing 35% of the total. However, large firms are also strongly represented in this sector, especially in transport and communication, and to a lesser extent in business services. On the other hand, in personal services large firms account for a relatively low share of employment.

Employment 'Dominance'

So far as particular NACE industries are concerned, micro enterprises and SMEs are said to dominate the industry where firms with 0-9 or 10-499 employees respectively have the highest share of sectoral employment. Calculations of such 'employment dominance' have already been presented in section 2.3.2 of this report. This employment dominance analysis illustrates the importance of micro and SME enterprises in the EC's service sector. Among the 27 two digit NACE service sector categories large sized enterprises are only dominant in 8 categories (essentially in transportation, communications, banking, finance, insurance and research and development). In contrast, large sized enterprises dominate employment in 15 out of the 20 two digit industry categories in NACE groups 1 to 3 (energy and water, non-energy mineral processing and chemicals, metals and engineering). However, in the other manufacturing industries and in construction SMEs are clearly dominant and account for the largest share of employment.

These results on the importance of micro dominant and SME dominant sectors are summarised in Table 7.3. Across the EC as a whole micro dominant sectors provided 29 million jobs, some 32% of private non-primary employment. Sectors where SMEs (10-499) are dominant provided 42 million jobs, which amounts to a further 47% of relevant employment. So SMEs in the broad sense (ie., enterprises employing under 500 people) are the dominant enterprises in sectors which together provide almost 80% of the employment in the private non primary economy.

Table 7.3 Employment in micro-dominant, SME-dominant and LSE-dominant sectors, EC-12, 1988

	Employment (x million)	Employment share of		
		0-9	10-499	500+
in %				
Micro-dominant	28.6	53	33	14
SME-dominant	41.6	25	55	20
LSE-dominant	18.3	3	22	75
Total	88.5	30	41	30

Source: Eurostat (1992); EIM.

7.3 EMPLOYMENT CHANGE

7.3.1 Introduction

The relative importance of small and medium-sized firms in total employment seems to be rising. Some statistical evidence for the late 1980s will be presented in section 7.2.2. Besides this there is evidence of the job generation potential especially of new enterprises, which will be discussed in section 7.2.3.

7.3.2 Employment growth in the late 1980s

An overview of employment growth in the 1989 is provided in Table 7.3. These data are taken from the Eurostat (1992) publication 'Enterprises in Europe'. Earlier statistics for 1986 presented in 'Enterprise in the European Community' (1990) are not directly comparable and have not been included.

Table 7.4 Employment Growth in 1989, by size class, 4 countries

	0-499	500+	total
Belgium	4.3	2.3	3.6
Greece*	1.4	-4.2	0.3
Spain	9.5	3.4	8.3
United Kingdom	3.0	2.7	2.9

Source: Eurostat (1992); EIM.

* NACE 1-4 only.

When the limited number of member countries for which all NACE sector data are available in both 1988 and 1989 are reviewed, the central role of the SME sector in employment growth is highlighted.

In Belgium overall job growth was 3.6% between 1988 and 1989, but this was the result of 2.3% growth in large firms with 500 or more employees and over 4% growth in SMEs, while within small firms with 20-99 employees employment growth was 6.5%. Spain enjoyed much more rapid growth in total employment between 1988 and 1989, but the pattern of relative growth broadly mirrors that of Belgium. While employment in large Spanish enterprises grew by 3.4%, for the SME sector as a whole jobs grew by 9.5%, with SMEs accounting for 92% of total Spanish employment growth.

Overall employment grew by 2.9% in the UK between 1988 and 1989, but this was the result of 3% growth in the SME sector against some 2.7% for large firms (with 500 or more employees), and the SME sector accounted for two thirds of all UK employment growth. However, unlike Belgium and Spain, job growth did not occur in all size categories within the UK's SME sector. Employment in enterprises with 20 to 99 employees actually fell by 6.5%, while employment in micro enterprises rose by 6.6% representing over 60% of total UK employment growth.

While statistics for individual member countries illustrate the important role of certain key sectors (especially in the service sector) in which SMEs are predominant in employment growth, data are not available across the EC as a whole for recent years. However, certain long-term trends are well established. According to OECD¹ estimates, between 1980 and 1987 total employment in the service sector rose from 67.9 to 75.9 million (employees in employment, excluding groups such as the self employed and family workers, rose from 62.6 to 63.7 million between 1986 and 1987 alone). Meanwhile over the same period, industrial employment declined from 46.7 to 40.6 million.

7.3.3 Job generation studies

The increased relative importance of small firms in employment can arise in several ways, eg., more new small firms may be established, or, on the other hand, large firms may shrink and become small or cease to trade completely.

Numerous studies of employment change have been undertaken within the EC examining national, sectoral and regional patterns. However, only a small proportion of these studies are true job generation exercises focused explicitly upon the mechanisms concerned in explaining net job creation.

For such a job generation study (JGS) to be possible, employment data need to be available at two time points for a reasonably representative group of individual enterprises. Given these data net employment change represents gross new jobs minus gross jobs lost, with the gross gain figures in turn subdivided between the opening of new enterprises and expansion of existing enterprises and gross losses into contractions and outright closures. The process is illustrated in Figure 7.4.

¹ OECD 'Employment Outlook' July 1992.

Figure 7.4 Job generation

BIRTHS]								
PLUS	]	=	OPENINGS]					
MOVES	]		PLUS	]	=	GROSS NEW JOBS]		
			EXPANSIONS]]		
							MINUS	]	= NET JOB CHANGE
]	
OUT	]		CONTRACTIONS]]	
MOVES	]	=	PLUS	]	=	GROSS JOB LOSSES]		
PLUS	]		CLOSURES]					
DEATHS]								

Source: Storey (1982).¹

Major national job generation studies have been published in six Community countries, with the UK reporting most of these but Belgium and Ireland also reporting several examples. Regional JGS analyses are rather more common. Again these appear to have been carried out most often in the UK, but studies have been identified in four other EC nations. Belgium, Spain, Netherlands and Ireland as well as the UK have all undertaken both regional and national JGS studies in recent years. A brief overview of a selection of national job generation studies is presented in Table 7.5.

While JGS studies are almost equally divided between those covering all sectors and those confined to manufacturing, most studies do not specifically exclude enterprises of particular sizes or types and cover all employees.

British studies on job generation largely reflect the severe UK recession of 1980-1981 and subsequent recovery after 1983. Government policy has emphasised deregulation and creation of an 'enterprise culture'. While national analyses of employment generation by firm size category are rare, in Britain at least small firms have been creating jobs when taken as a group. However, the major UK study of all sectors of the economy by Gallagher, Daly and Thomason showed that the actual pattern was complex, with net job losses found in the 20 to 49 employees size band as well as among firms with 1000 or more employees. Thus it cannot simply be assumed that small enterprises of all sizes are creating jobs to the same extent (or even at all).

¹ Storey, D. J. 1982 'Entrepreneurship and the New Firm' London, Croom Helm, 1982.

Table 7.5 National job generation studies for selected EC countries

Study	Country	Sectoral coverage	Time period	Cut-offs	Employees covered	Base year employment (x 1000)
Doyle & Gallagher ^a	UK	All	1982-84	None specified	All	14,770
Gallagher, Daly Thomason ^b	UK	All	1985-87	None specified		16,744
Macey ^c	UK	Manufacturing	1972-75	88% of employment census	< 10 empl.	6,448
Johnson ^d	UK	Manufacturing	1975-83	Small establishments	< 10 empl.	2,160
Contini & Revelli ^e	IT	Nace 2,3+4	1984-89	Micro firms	All	4,530
		6 7 + 8	1984-89	Micro firms	All	2,363
Vanthournout ^f	BEL	All	1960-80	None specified	All	3,447
Van Humbeeck ^g	BEL	All	1963-83	None specified	Female	810
Boonen ^h	BEL	All	1973-87	None specified	All	3,999
Kennedy & Healy ⁱ	IRE	Manufacturing	1973-80	None specified	All	218
Keating & Keane ^j	IRE	Manufacturing	1979-85	< 3 employees	All	228
O'Farrell & Croughley ^k	IRE	Manufacturing	1973-81	None specified	All	136
Lafuente ^l	SP	Manufacturing	1978-92	None specified	All	Not known

- a. Doyle J. and C.C. Gallagher, 1987 'Size Distribution, Growth Potential and Job Generation Contribution of UK Firms'. *International Small Business Journal* 6(1).
- b. Gallagher C.C., M.H. Daly and J.C. Thomason 1990 'The Growth of UK Companies, 1985-1987 and their Contribution to Job Generation'. *Employment Gazette* (February).
- c. Macey, R.D., 1982 'Job Generation in British Manufacturing Industry. Employment Change by Size of Establishment and by Region', GES Working Paper 55. Department of Industry, London.
- d. Johnson P., 1989 'Employment Change in the Small Establishment Sector in UK Manufacturing' *Applied Economic* vol.21.
- e. Contini, B. and R. Revelli, 1992, 'Imprese Occupazione E Retribuzioni al Microscopio' Bologna, Il Mulino.
- f. Vanthournout, D., 1982 'De Tewerkstellingspolitiek in België (1960-1980)' (Employment Policy in Belgium), Leuven.
- g. Van Humbeeck M., 1985, 'Emancipatiebeweging en Vrouwenwerkloosheid met Een Praktijkstudie Over Vrouwen In Mannenberoepen (Emancipation Movement and Female Unemployment: A Practical Study About Women in 'Male' Jobs), Leuven.
- h. Boonen, A., 1994, 'De Invloed van de Recente Overheidsmaatregelen op de Vermindering van de Werkloosheid, (Influence of Recent Public Measures on the Decrease of Unemployment). Leuven.
- i. Kennedy, K.A. and T. Healy, 1985, 'Small Scale Manufacturing Industry in Ireland' ESRI Research Series Paper No.125.
- j. Keating, W. and T. Keane, 1989, 'Irish Industrial Structures 1979 to 1985 (A Longitudinal Analysis)' *Journal of the Statistical and Social Inquiry Society of Ireland*. Vol XXVI(1).
- k. O'Farrell, P.N. and R. Croughley, 1984, 'An Industrial and Spatial Analysis of New Firm Formation in Ireland' *Regional Studies*, vol.18, No.3, June.
- l. Lafuente A., 1986, 'Creación de Empresas y Empleo: Evidencias Empíricas en España' [Creation of New Firms and Employment: Empirical Evidence in Spain] *Economía Industrial*, Sept-Oct.

Rather more policy interest and research work has focused on the job creation effects of *new* businesses (i.e. businesses established by individuals which are not owned by an existing enterprise). Results for selected national studies are summarised in Table 7.6. The first column shows the actual employment growth in newly established businesses over the relevant study periods while the second column provides results standardised over a ten year period to allow improved comparability between studies covering different time spans. It is clear that significant job growth has been found in many of these studies. Thus, for example, the growth of 7.9 per cent in employment within new Irish firms over the eight years from 1973 reported by O'Farrell and Crouchley is equivalent to 9.4% growth over a decade. For the Netherlands a comparable study reports an actual 5.8% employment growth over the period 1985-1990, implying a standardised 11.6% over a decade.

Table 7.6 National Studies of Employment Impact of new Firm Formation for selected countries

Country	Author	Time period	Actual % Employment*	standardised % + Employment**
UK	Doyle & Gallagher ^a	1982-1984	4.6	23.3
UK	Gallagher Daly & Thomasen ^b	1985-1987	6.9	34.5
UK	Macey ^c	1972-1975	0.4	1.3
IT	Contini & Revelli ^d	1984-1989	0.35	0.7
IR	Keating & Keane ^e	1979-1985	17.1	28.5
IR	O'Farrell and Crouchley ^f	1973-1981	7.9	9.4

Source: Storey and Johnson (1990)^g, University of Warwick.

Total employment in new firms in final year

* % actual employment = $\frac{\text{Total employment in new firms in final year}}{\text{Total employment in base year}}$

** Refers to a ten year period; a simple ratio was used.

- a. Doyle J and CC Gallagher, 1987 'Size Distribution, Growth Potential and Job Generation Contribution of UK Firms'. *International Small Business Journal* 6(1).
- b. Gallagher C C , M H Daly and J C Thomason 1990 'The Growth of UK Companies, 1985-1987 and their Contribution to Job Generation'. *Employment Gazette* (February).
- c. Macey, R.D., 1982 'Job Generation in British Manufacturing Industry. Employment Change by Size of Establishment and by Region', GES Working Paper 55. Department of Industry, London.
- d. Contini, B and R Revelli, 1992, 'Imprese Occupazione E Retribuzioni al Microscopio' Bologna, Il Mulino.
- e. Keating, W and T Keane, 1989, 'Irish Industrial Structures 1979 to 1985 (A Longitudinal Analysis)' *Journal of the Statistical and Social Inquiry Society of Ireland*. Vol XXVI(1).
- f. O'Farrell, P.N. and R Crouchley, 1983, 'An Industrial and Spatial Analysis of New Firm Formation in Ireland' *Regional Studies*, vol.18, No.3, June 1984.
- g. Storey, D J and S G Johnson, 1992, 'A Review of Small Business Employment, Databases in the United Kingdom', *Small Business Economics*, vol 2 (4).

7.4 JOB CHARACTERISTICS

Employment provision cannot, of course, simply be assessed in terms of its level or change in its level, since the character and 'quality' of the jobs provided by firms may vary. Clearly the concepts of job character or quality are multidimensional ones including: demographic aspects such as the gender and age of those employed; their working hours; whether the jobs are permanent, or for a fixed period, or casual; pay levels and entitlement to health insurance and other 'fringe' benefits; the qualifications held by the workers and their occupations.

Given the differing social security systems found across the community and the absence standardised statistical classifications on occupations, qualifications, etc., reliable comparisons are difficult to make across more than a few countries for some selected aspects. In this section we shall concentrate primarily on a few selected variables where such definitional and comparability problems are relatively limited, namely, gender, age and whether employment was on a full-time or part-time basis, using data from national sources. The relationship between enterprise size and earnings will then be discussed.

Employment patterns *by gender* across all NACE categories are summarised in Table 7.7 but, of course, the well known and long established international differences in labour force participation among (married) women underlie any such comparisons, eg., Denmark's high female activity rate contrasts sharply with that found in the Netherlands.

In Denmark, the proportion of women rises steadily as enterprise size increases, with females accounting for less than 40% of employees in firms with less than 20 employees against over 51% in enterprises with 500 or more employees, but the Danish data include public sector as well as private sector activities. Elsewhere for the private sector alone the relationship is much less clearcut. However, in all three countries where data exist on micro enterprises (with under 10 employees) women's share of employment was higher than that found in any other size group.

Little information is available on the *age patterns* of those employed by firm size, with the most comprehensive national data coming from Portugal. In the case of Portuguese micro enterprises (with 1-9 employees) people at the extremes of the working age spectrum are noticeably more prominent than in larger enterprises. Almost 29 per cent of all employees in micro enterprises were aged under 25 years in 1989 against only 12 per cent in large enterprises

(500 or more employees) and 23 per cent for all enterprises. Similarly, 7.5 per cent of employees in micro enterprises were aged over 65 years against only 2.6% in large enterprises and 4.5% overall.

Table 7.7 Employment by size class by type and gender in 1989 for selected countries

	0	1-9	10-19	20-99	100-199	200-499	500+	total
Belgium								
% male	"	55.1	63.0	63.0	60.0	58.3	60.9	60.3
% female	"	44.9	37.0	37.0	40.0	41.7	39.1	39.7
Sample								
Coverage (000s)	"	423	197	526	222	326	1387	3081
Denmark* +								
% male	<.....		60.1	54.7	52.3	51.7	48.8	55.2
% female	<.....		39.9	45.3	47.7	48.3	51.2	44.8
% FT	<.....		66.0	73.3	<.....		77.0	72.0
% PT	<.....		34.0	26.7	<.....		23.0	28.0
Sample								
Coverage (000s)	<.....		1106	793	<.....		1063	2962
Netherlands								
% male	"	63.5	<.....	77.2	<.....		69.2	70.7
% female	"	36.5	<.....	22.8	<.....		30.8	29.3
% FT	"	70.1	<.....	84.6	<.....		73.1	76.1
% PT	"	22.7	<.....	11.5	<.....		15.6	15.6
Sample								
Coverage (000s)	"	1022	<.....	1012	<.....		1642	2676
Portugal								
% male	"	60.9	<.....	63.8	<.....	61.3	67.3	63.1
% female	"	39.1	<.....	36.2	<.....	38.7	32.3	36.9
% FT**	"	59.9	<.....	77.7	<.....	81.3	84.1	77.2
% PT**	"	40.1	<.....	22.3	<.....	18.7	15.9	22.8
Sample								
Coverage (000s)	"	350	<.....	735	<.....	455	525	2065

Source: National Databases.

* 1990 Data.

** 1988 Data

" Data not available.

+ Includes Public Sector workers.

The relative importance of young workers in the smaller enterprises is also apparent in the Netherlands. Some 26% of micro enterprise employees were aged under 23 years in 1989, against 14% in enterprises with 100 or more employees and 17% in all enterprises.

Recent years have seen considerable growth in *part-time work* across several Community countries paralleling to some degree the secular rise in female

employment, although in some members it remains rare, eg., only 5% of employment in Greece is part-time, although recent relevant reforms and legal arrangements concerning the social security system are expected to increase the proportion of part-time employment in the future. Unfortunately, information on job type by enterprise size is readily available for only three Community countries, see Table 7.7. In all three cases, the relative importance of part-time work (using national definitions) generally falls with enterprise size while that of full-time employment rises, although the picture is complicated somewhat by the 'flex time' category used in the Netherlands. Thus, for example, 34% of employees in Danish firms of less than 100 employees work part-time compared to only 23% in large and medium sized firms with more than 200 employees.

Data for the Netherlands in 1989 show a prominent size effect in terms of the *qualifications held* by employees. Among enterprises with 100 or more employees almost 13% of employees had reached 'higher' or 'semi-higher' education levels, whereas for enterprises with under 10 employees the proportion was around 6% (and just over 7% in enterprises with 10 to 99 employees).

Earnings are clearly a key element in job 'quality' under any definition. However, earnings are known to be related to a range of factors notably industry, occupation and qualifications, and such factors would need to be held constant in any definitive analysis of the relationship between enterprise size and hourly earnings. In fact, earnings data by enterprise size are only available for a limited number of EC members, and even then require standardising for the purpose of comparison.

In most cases strong size effects appear with earnings in large enterprises ranging from 77% to 28% above those in the 1 to 9 employee size band. The exception is France, where the highest average earnings are found in medium sized enterprises and employees in large concerns earn an average only 3% more than those in enterprises with 10 to 49 employees. These results are summarized in Table 7.8.

In the case of the Netherlands data on fringe benefits per working hour are available for 1989. When these are included with wages, total compensation rises even more sharply with enterprise size. Thus average wage and fringe benefits per hour in Dutch micro enterprises were almost one third lower than experienced in enterprises with 100 or more employees.

While more detailed studies are clearly needed, the data do lend some tentative support to the view that average earnings tend to fall with enterprise size at least before industry, occupation, etc. are taken into account.

Table 7.8 Comparison of Gross Wages, selected countries and year indexed (base 100)

	1-9	10-19	20-49	50-99	100-199	200-499	500+	To- tal
Greece								
1986		100	<.....	...141	<.....	.....	...191	161
1989		100	<.....	...136	<.....	.....	...192	157
France								
1991		<.....	...100	<.....	...99	104	103	103
Ireland								
1987			100	112	120	138	163	133
1989			100	109	118	137	154	129
IT								
1985-89	100	109	115	121	125	132	151	129
Netherlands								
1989	100	<.....	.....	...117	<.....	.....	...128	119
Portugal								
1988	100	<.....	.....	...117	<.....	...135	177	136
1991	100			121		139	173	135

Source: National Databases, University of Warwick

7.5 SME COMPETITIVENESS

7.5.1 Introduction

The relationship between labour costs of enterprises and their labour productivity (value of output per employee) is clearly a major determinant of competitiveness, although it is always important to remember that a range of other non-cost factors like product delivery time, quality and follow-up service arrangements also play important roles in many cases.

The combination of total employee compensation (including both wage and non-wage labour costs) and output per head gives labour cost per unit of output, once the figures are adjusted to allow for differences in the importance of self employment (since these people are not included in employee compensation statistics). This is a key measure of cost competitiveness, but clearly low labour costs per employee may not deliver low unit labour costs if they are only combined with low labour productivity. On the other hand, high labour costs per employee are compatible with low unit labour costs provided the high cost labour employed is sufficiently productive, and such a 'high wage and high productivity' position is often regarded as the desirable one in advanced industrial economies.

In practice, estimates of both labour costs and (especially) productivity involve complex calculations, are difficult to make, and are scarce for national industrial sectors as a whole, let alone by size of enterprise. For these reasons the analyses set out below focus primarily on manufacturing industry where data are more commonly available using broadly comparable definitions.¹

7.5.2 Labour costs

Wages (and salaries) paid to employees and the additional employment costs met by employers, together determine labour costs, with the latter comprising both employment related social security provisions imposed by national governments (typically social insurance and state pension contributions) and non-statutory costs like private pension contributions, bonuses, etc.

The relative importance of these various elements within labour costs differ significantly between EC members depending on the degree of development of national social security systems and the extent to which these are financed directly by levies on employment. Thus, in 1988 average gross hourly earnings of manual workers in manufacturing ranged from 11 ECUs in Denmark and almost 9 ECUs in Germany to around 2 ECUs in Portugal and Greece, but non-wage labour costs ranged from almost half the total cost of employing someone in France and Italy to around 30% in Ireland and the UK and only 16% in Denmark. As a result, Denmark, which enjoyed the highest level of gross manual earnings in manufacturing, ranked only fifth in terms of total labour costs per hour. Moreover, the importance of total labour costs will, of course, vary depending upon the 'labour intensity' of the industry as measured by the proportion of labour costs within overall production costs.

Data on average labour costs per employee by enterprise size for enterprises with 20 or more employees are available for industry (NACE 1 to 4) across a limited range of EC countries. The latest published information is summarised in Table 7.9. The well known differences between labour cost per employee in industry among EC members are illustrated by this table. For example, in 1987 manufacturing labour costs averaged just under 15,100 ECUs per employee in Spain against almost 28,000 ECUs in Germany in that year.

¹ Eurostat 1991, 'Structure and Activity of Industry: Data by Size of Enterprise 1986/1987/1988'

Table 7.9 Average Labour Costs in Industry (NACE 1-4) by country and size-class, 1988

	20-99	100-499	500+	total average (index)	national average (x1000 ECU)
country's total = 100					
Belgium*	73	90	n.a	100	26.3
France	83	91	112	100	26.2
Germany	78	87	110	100	28.5
Italy	82	98	116	100	24.0
The Netherlands	86	98	116	100	26.0
Spain*	79	103	119	100	15.1

* 1987

Source: Eurostat 1991.

There is also clear evidence that, within the industrial sector at least, average labour costs tend to rise with enterprise size across *all* the EC nations covered. The most marked variation occurs in Spain where (in 1987) average labour costs per employee in medium sized enterprises were more than 30% above those for small enterprises (with 20 to 99 employees), and labour costs in large enterprises were about 50% above those in small firms.

The Netherlands exhibits the smallest variation in labour costs with enterprise size, but even there average labour costs in large enterprises were over 35% higher than in small ones. The Netherlands has many collective agreements that are valid regardless of size class. Besides there is a legal minimum wage and compared to other countries earnings differentials are small.

7.5.3 Labour productivity

Labour productivity is conventionally defined as value added at factor cost per person employed. This measures wealth creation per employee by deducting from gross output (sales and work done after allowance for any change in the firm's stocks) purchase of inputs such as raw materials, bought in services.

In practice, such calculations are complex and the value added information is more readily available for the manufacturing sector. Studies have used turnover (sales) per employee as an alternative measure of 'apparent' labour productivity, largely because this is more widely available. However, this approach is less satisfactory since it makes no allowance for bought-in raw materials, intermediate (semi-finished) goods, etc., and if applied to national income accounts would result in massive 'double counting' of sales between firms rather than an accurate measure of the output of final goods and services sold to customers.

Thus, for example, in France in 1988 total turnover of enterprises in all sectors is estimated at 1,436,000 million ECUs, whereas value added was 445,000 million ECUs, some 31% of the turnover figure.

For this reason the data presented in Table 7.10 compare value added per employee between size classes in extraction and manufacturing industry.

Table 7.10 Labour Productivity (value added per employee) in Industry (NACE 1-4) by country and size-class, 1988

	20-99	100-499	500+	total average (index)	total average (x 1000 ECU)
country's total = 100					
Belgium*	75	87	n.a.	100	38.2
France	74	84	120	100	40.0
Germany	82	91	108	100	38.1
Italy	81	95	119	100	40.3
The Netherlands	78	94	129	100	42.5
Spain*	76	107	117	100	30.2

* 1987.

Source: Eurostat (1991).

Within industry significant differences in average labour productivity clearly exist between EC members. For example, across the countries covered, value added per employee ranged from just over 30,000 ECUs in Spain to about 39,000 ECUs in the Netherlands in 1987. However, a strong size effect is apparent with labour productivity rising with enterprise size in every country.

The greatest differences were found in the Netherlands where in 1988 labour productivity in large manufacturing enterprises was over 66% above that in small (20 to 99 employee) concerns, but very large productivity differentials are also apparent in France (where productivity in large enterprises was 61% above that in small enterprises) and Spain (with a 54% productivity difference in favour of large concerns).

Medium-sized enterprises (100-499 employees) typically enjoyed labour productivity levels some 10% to 20% above those found in small enterprises. Results range from just under 12% (in Germany) to just over 20% (in the Netherlands). The only exception is Spain where the productivity differential was much greater and stood at just over 40%.

Changes in growth of value added per employer between 1987 and 1988 at current prices are available for the countries covered in Table 7.10 except

Belgium. Given inflation it is hardly surprising that the *nominal* labour productivity rose over the year. However, in all the remaining five countries concerned nominal labour productivity rose faster in large enterprises with 500 or more employees than in small ones (20 to 99 employees). For example, in France average labour productivity rose almost 9% in nominal terms in large enterprises but by under 6% in small ones.

Thus, while the evidence is clearly very limited, it appears that value added differences between large and small enterprises in the industrial sector were, if anything, increasing rather than closing in the late 1980s.

Because value added productivity data are not available for the construction and service industries, which provide almost two thirds of non-primary private employment in the Community, analysts are forced to use measures of 'apparent' labour productivity - notably turnover per employee.

Such estimates of apparent labour productivity were presented in Chapter 2 (Table 2.5). For manufacturing and extraction they follow a broadly similar pattern to those based on value added, with apparent labour productivity rising with enterprise size. However, for construction and services, such a clear cut pattern does not exist. In France and Germany, for example, apparent labour productivity in construction does rise with enterprise size, but in at least six other countries this pattern does not apply. Thus looking at the twelve member states as a whole, apparent labour productivity is maximised in medium sized rather than large enterprises. Apparent labour productivity in all sectors is however lowest for micro firms. Unlike their equivalents in manufacturing and extraction, small enterprises with between 10 and 99 employees in construction experience above average levels of apparent labour productivity.

Differences are even more pronounced in the service area. In the trade sector apparent labour productivity rises with enterprise size only in Portugal. In Germany not only do large firms in the trade sector experience the lowest level of productivity of any size category, but this apparent productivity level is less than one quarter of that experienced by medium sized firms. As a whole, medium sized enterprises in the trade sector are approximately twice as productive as large ones, the trade sector being the only one in which large enterprises experience below average levels of productivity.

This trend for large enterprises to have apparent labour productivity levels below those of medium sized firms is continued in the other services sector, exception for Luxembourg and Portugal. Again it is only in Portugal that the apparent labour productivity peaks in large enterprises. However, in Belgium,

Luxembourg and The Netherlands, apparent labour productivity is at its highest in small enterprises, and, as with the trade sector, small firms operating in other services experience above average levels of turnover per person employed.

MAIN POINTS

SMEs and financial characteristics:

- SMEs tend to use a smaller proportion of long term finance than large firms. In the manufacturing sector in some countries however the situation is somewhat distorted.
- As far as pre-tax returns to net assets are concerned, it appears that there are quite large divergences across EC Member States and to a lesser degree between SMEs and large firms. About pre-tax returns to equity greater disparity have been found between countries and on intra-country level between large firms and SMEs (than what has been found using asset-based measures).
- Differences in liquidity between large and small firms appear to be very small.

SME and venture capital and equity gaps:

- EC Venture Capital funds have increased by 140% between 1987 and 1991.
- Expressing the venture capital as a proportion of GDP, UK, Ireland and The Netherlands are the leading countries. At the lowest position are found Greece, Italy, Denmark and Germany.
- Three-quarters of VC is sourced domestically. The majority of VC is for expansion/replacement capital and management buy-outs. Very little is for start-ups or seed capital.
- VC investment is concentrated in medium-sized firms rather than small.
- Six of the EC twelve experienced growth in VC investment in 1991 compared with 1990. In nearly all countries the averages size of VC investment decreased in 1991.
- SMEs in peripheral regions are likely to encounter a lack of risk capital which may constrain that development and slow-down the process of indigenously-generated economic development.
- SMEs ability to raise equity is limited by their reluctance to permit external involvement and by the existence of high fixed monitoring costs. In many cases secondary market appear relevant only for the very largest of SMEs.

continued

continued

SMEs and lending conditions:

- SME's pay higher nominal rates of interest on short-term credit than larger firms. The evidence indicates that the premium on bank finance in many countries is about 1 to 2 percentage points.
- For longer-term credit the interest rate differential between large firms and SMEs is much less.
- SMEs appear to be credit-rationed. Security (collateral) restricts SMEs access to finance.
- High-Technology SMEs appear more constrained by access to finance than other SMEs.

SMEs and trade credit:

- SMEs extend more trade credit than large firms.
- Trade credit represent a significant proportion of outstanding commercial debt in the majority of EC countries.
- SMEs would appear to receive less credit from their suppliers than they extend to their customers.
- Large firms extend much shorter credit lines than SMEs.

8.1 INTRODUCTION

Successful management of finance by SMEs is crucial to their profitability and survival in the European Community. It is therefore important to establish whether there are potential constraints on the availability and quality of such finance across Member States.

In this chapter we have attempted to quantify the parameters of finance for SMEs versus Large Firms. In section 8.2 the financial position of the SME sector is examined through the concepts of debt structure, gearing, profitability and liquidity of the firm. Section 8.3 is dedicated to venture capital, its different forms and its availability for SMEs. In section 8.4 special attention is devoted to the problem of the equity gap often faced by SMEs. The relationship between finance and innovation is the subject discussed in section 8.5. Since bank lending is the most important external source, in section 8.6 bank lending conditions are examined together with their implication for SME financial perfor-

mance. Section 8.7 is then dedicated to trade credit which presently represents a significant proportion of commercial debt in most EC members.

The data used in the study are in general for the latter half of the 1980s, and relate to incorporated firms only¹. For most countries the data used are averages of the years 1987-1989². They represent the best information available on a pan-European level at the present time.

8.2 BALANCE SHEET STRUCTURE, LIQUIDITY, GEARING AND PROFITABILITY

In this section we have used the terms 'Large' and 'Small' to define firm size categories. With respect to UK data Large refers to the top 2000 companies and Small to a random sample from the remaining population of firms. For most of these UK Small firms the number of employees is less than 10. Data for other Member States is based on comparable criteria.

The financial position and performance of the SME sector vis a vis the Large Firm (LF) sector can be summarised along a number of accounting dimensions using Balance sheet and Profit-and-loss data. These include: profitability, liquidity, gearing, debt structure and trade credit.

The data collected from Member States on these ratios is summarised below. In most cases it is taken from statistics of the National Bureau of Statistics.

8.2.1 Debt structure of firms

Debt structure is measured by taking the value of Long Term loans in the Balance sheet as a percentage of all Loans. From a theoretical standpoint we should expect that SMEs are in general less likely to use long term loans due

¹ For the UK, enterprises of self-employed persons whose sales are above the so-called VAT threshold, are included in the data. This may also be the case for some other countries. Of course this may lead to some distortion, as the wage of the entrepreneur is included in the profit estimate for the business.

² For some countries only data are available for one year.

to (a) their desire for independence and flexibility¹, and (b) their lack of collateral for loans².

The Evidence

For those countries reporting data on a *sectorally aggregated* basis there appears to be evidence supporting the theory that *large firms tend to use a higher proportion of long term finance than SMEs* (see Figure 8.1). Short-term loans for SMEs are primarily in the form of overdrafts (lines of credit). Their greater reliance on such loans arguably reflects their higher requirements for working capital but as mentioned may also reflect their greater desire for flexibility and financial autonomy.

However, if one considers only *manufacturing* companies (see Figures 8.2 and 8.3) the picture becomes somewhat distorted. For instance, in Denmark and Netherlands small firms had higher proportions of long term loans than large firms. On the other hand UK SMEs are significantly below the EC average in the proportion of long term loans to total loans, the reason being control-aversion and short termism by both banks and firms. This was also true for Portugal.

For *non-manufacturing* large firms in The Netherlands, the UK and Portugal both had a higher proportion of long-term loans than SMEs with UK large firms having around three times the SME figure and Portuguese large firms showing a dramatic six-fold difference.

Cross country comparisons show that there is significant dispersion in the debt structure of SMEs. Italian SMEs for example, only had around 16% long term loans to all loans, whereas for Dutch SMEs the figure was around 57%. The differences are quite striking and may represent a combination of differences both in clearing bank attitudes to SMEs and the characteristics of entrepreneurs across Member States. (In the UK for example, firms prefer 'arms-length' dealing with banks and have a high propensity for overdraft funding. In Germany the firm-bank relationship is much closer.)

¹ See e.g. Committee of Enquiry into Small Firms (Chairman: John Bolton), HMSO, 1971; and, the subject approached from a modern theoretical standpoint, Robert Cressy, 'Borrowing and Control: A Theory of Entrepreneurial Types', SME Centre Discussion Paper, Warwick Business School, 1993.

² See Robert Cressy, 'Loan Commitments and Business Starts: An Empirical Investigation on UK Data', SME Centre Discussion Paper, Warwick Business School, 1992; and by the same author, 'Business & Proprietor Characteristics, Complementary Finance Sources and Bank Lending: The Case of UK Business Starts', SME Centre Discussion Paper, Warwick Business School, 1992. In these papers the role of proprietor age in determining the availability and use of collateral is emphasised. Its role as an incentive to effort is also explored.

Figure 8.1 Long Term Loans as a Percentage of all loans, all sectors

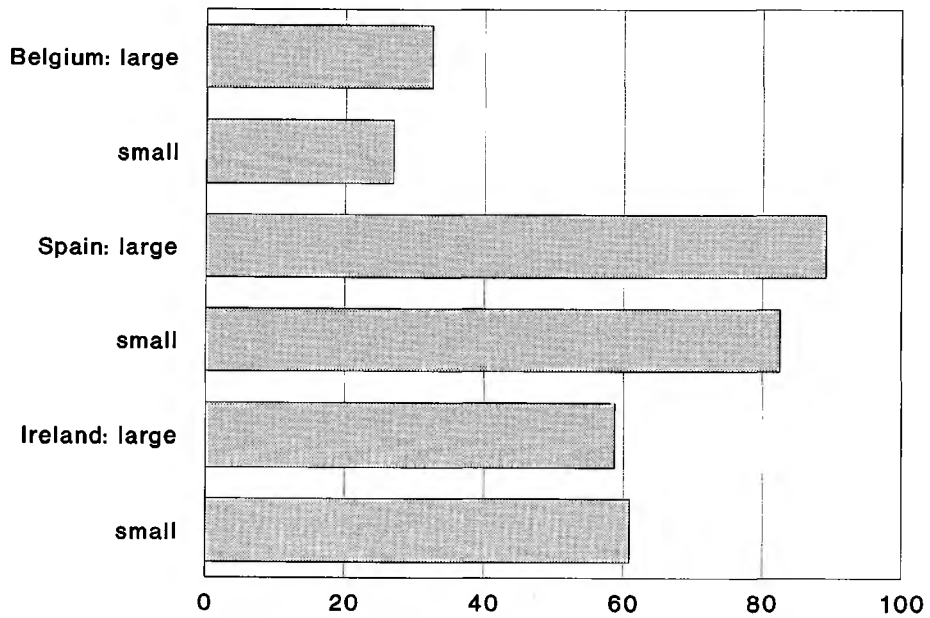


Figure 8.2 Long Term Loans as a percentage of all loans, manufacturing sector

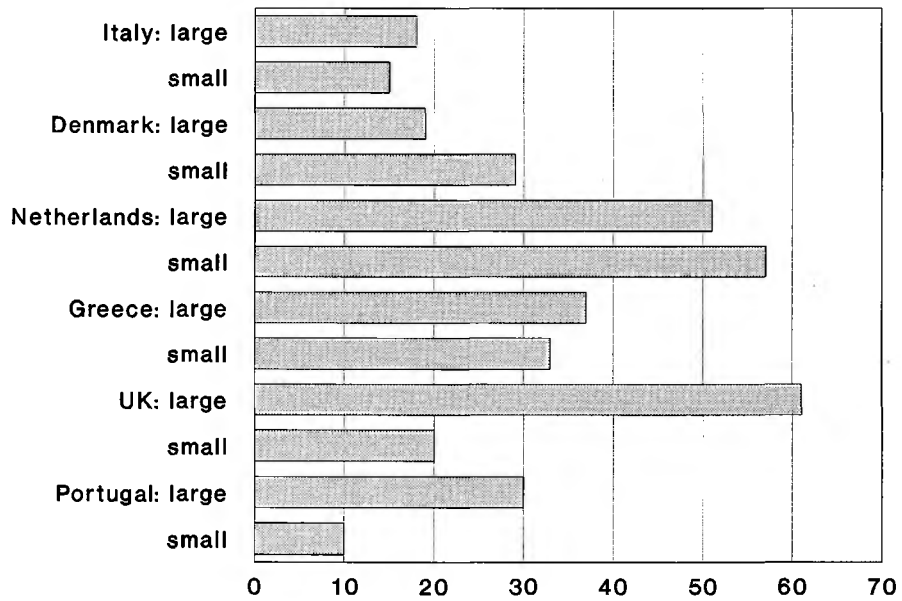
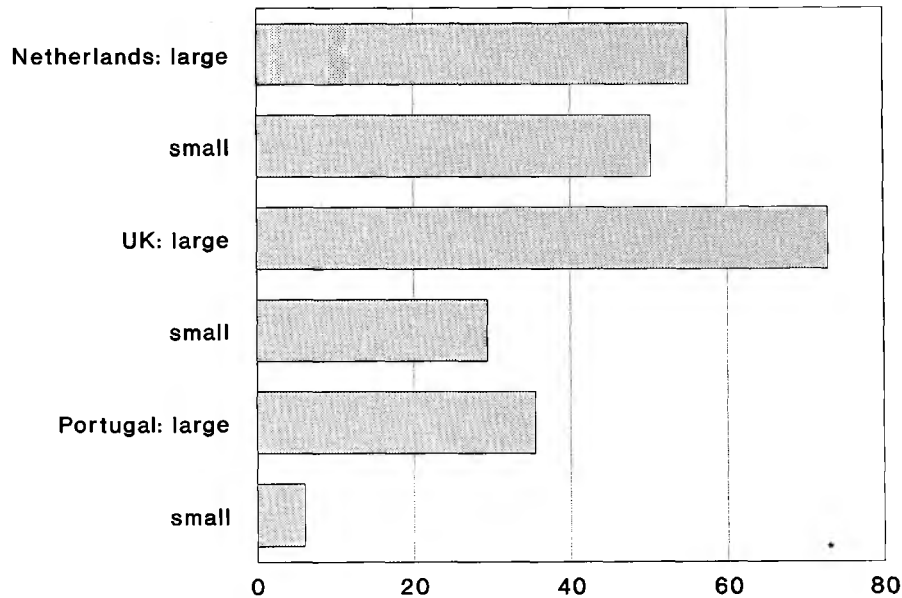


Figure 8.3 Long Term Loans as a percentage of all loans, non-manufacturing sector



8.2.2 Gearing: Debt/Equity Ratios

Gearing is a measure of the financial riskiness of a business. It refers to ratio of borrowed funds to funds provided by the issue of shares in the company, or the debt-equity ratio¹. A company with 'low gearing' is one financed predominantly with equity, whereas a 'highly geared' company is one which relies on borrowings for a large proportion of its capital. Higher gearing, other things equal indicates more bankruptcy risk since the probability of cash flow falling below debt-servicing requirements is higher the higher those payments are.

The Evidence

Considering *all sectors aggregates*, gearing ratios for Belgian, Irish and French firms of all sizes appear similar, grouped around the 40% figure. In contrast the ratio for Spain is around 150% implying a huge propensity of Spanish firms to use borrowed funds (see Figure 8.4). This is well above the European average and would seem to leave such companies potentially exposed to interest rate movements and general macroeconomic changes. However judgement must be reserved until it can be established whether there are compensating factors (e.g. high profitability) offsetting riskiness from this source.

¹ The debt/equity ratio is referred to as 'leverage' in some countries, particularly in the US.

Figure 8.4 Debt/Equity Ratios (in percent), all sectors

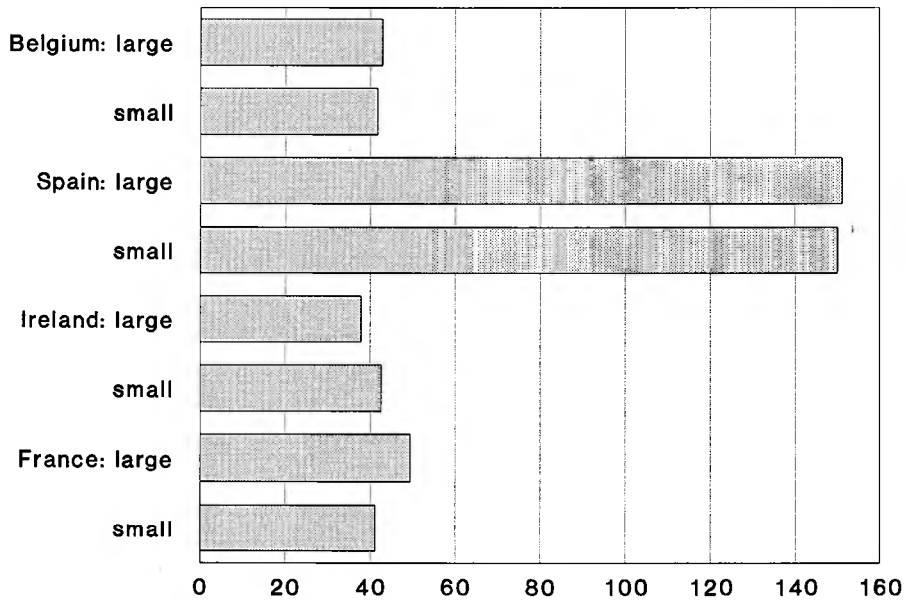
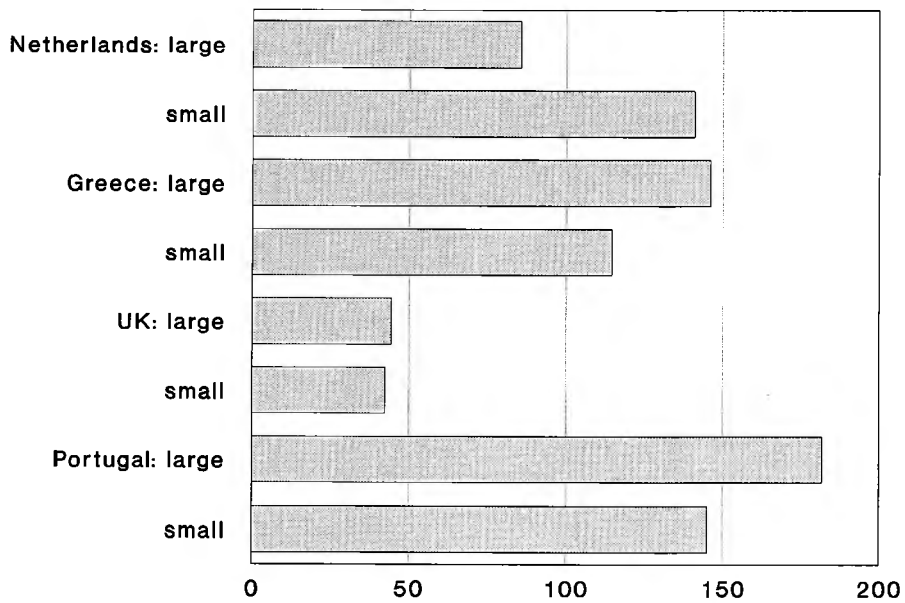
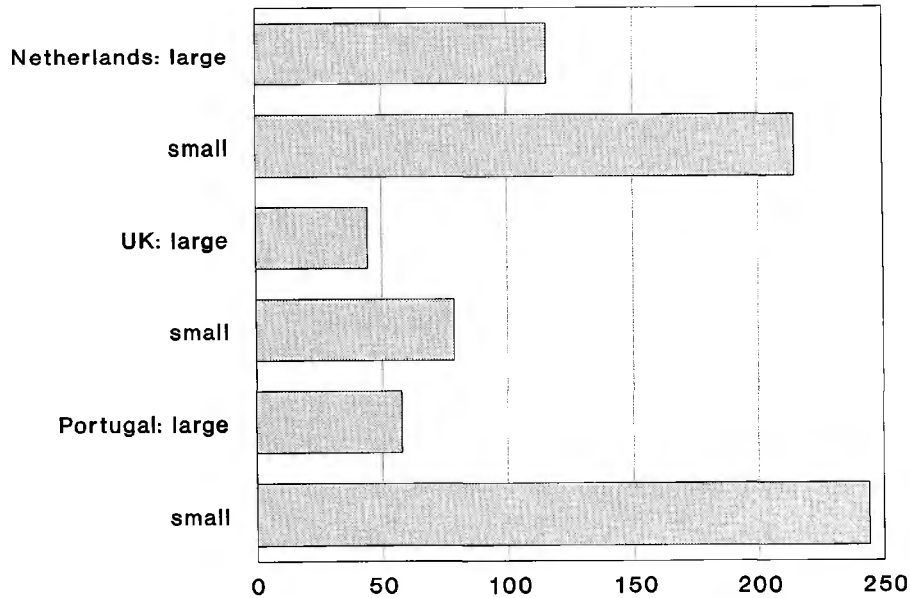


Figure 8.5 Debt/Equity Ratios (in percent), manufacturing sectors



Employment classes are 0-249 and 250 + for Ireland and 0-99 and 100+ for Greece.

Figure 8.6 Debt/Equity Ratio (in percent), non-manufacturing sector



Results for *manufacturing* (see Figure 8.5) show that SMEs in both Netherlands and Greece have above average gearing. Both large and small firms in Portugal have very high debt-equity ratios, again indicating a heavy reliance upon borrowed funds. The ratios for UK and Italian¹ SMEs are below average, indicating a relative preference for equity finance as opposed to borrowing. In the UK there is a well developed equity market for medium and large firms. However the disparity of large firm and SME ratios is much greater in the UK than Italy.

With regard to *non-manufacturing* (see Figure 8.6) Dutch SMEs were very highly geared using twice as much borrowed money as equity, as was also the case for Portuguese SMEs. UK SMEs on the other hand had a ratio of only 78.7%. Results such as these tend to suggest either (i) Dutch, Spanish, Greek and Portuguese companies are more bankruptcy prone, or (ii) that they prefer the autonomy associated with low outside equity involvement, or (iii) that financial markets are not providing the scope for SMEs to take on board equity partners.

¹ The Italian gearing data are not presented in the report, because only data are available for manufacturing sector.

8.2.3 Pre-tax return to net assets

The importance of profitability for survival and performance has been appreciated since the dawn of economics. However, only recently has the profitability of large versus small firms been studied empirically¹. From a theoretical standpoint we should expect larger firms, especially in manufacturing, to be more profitable because of their greater market power and economies of scale. This enables them to raise prices of outputs and lower prices of inputs, especially when dealing with their smaller counterparts. It may also be expected that they gain cheaper debt finance than SMEs².

In this respect one can refer to the relatively high Minimum Efficient Scales (MES) associated with many sectors in manufacturing as a whole. Large firms in an industry have already achieved MES and are operating profitably, whereas SMEs may still be attempting to achieve them and displaying less satisfactory returns. Another obvious explanatory variable for relative profitability is market structure. Since oligopoly tends to predominate in much of manufacturing industry, large firms can extract higher profits from the market.

However, the picture may be different in service industries where size may be considered less of an advantage. Finally recent empirical studies have shown that small firms even when entering an industry characterised by economies of scale can survive if they innovate soon after entry. Thus SMEs have a survival strategy even in these apparently adverse circumstances.

The Evidence

Consider first *cross-country comparisons* (Figure 8.7 - 8.9). On the first measure of profitability, pre-tax returns to Net Assets, there appear to be quite large divergences across EC member states, and to a lesser degree between SMEs and large firms. The UK achieved the highest overall levels for both SMEs and LFs (15.9% and 19.6% respectively) with Greece, Portugal and Spain the lowest (between 0.2% and 6.6%). The figures for the UK must however be treated with caution. They also reflect to some extent a period of high real interest rates

¹ For example, in the UK the first study of this kind was by Bolton, 1971. (See above). Beaver(1956) and Altman(1968) emphasised the role of profitability in the prediction of bankruptcy of Large firms. More recently Robert Cressy, in 'UK Small Firm Bankruptcy Prediction: A Logit Analysis of Industry, Trend & Macro Effects', *Journal of Small Business Finance*, 1(3), 233-253, examined the bankruptcy predictors for SMEs. Profitability (or the lack of) was shown to play a central role for SMEs too.

² For a UK empirical study of the effect of size on the cost of capital see Sigmund Prais, *The Evolution of the Giant Firm in Britain*, Cambridge University Press, 1973.

which may have marginalised investment, in effect ensuring that only firms with high historic returns carried out investment.

For the two countries providing *only sectorally aggregated* balance sheet information (Belgium and Spain, Figure 8.7), profitability was higher in SMEs than large firms and for both size classes Belgian firms were massively more profitable than Spanish firms.

In the *manufacturing sector* differences between SMEs and large firms were less marked than for sectorally aggregated data (see Figure 8.8) and in all cases, with the exception of Greece, larger firms were more profitable. In this case the data confirm the Minimum Efficient Scale theory. The Greek sample included very large 'ailing firms' with substantial losses during the examined period. Other reasons are the structural differences between the Member States' manufacturing sectors as well as the deterioration in competitiveness of Greek industry and economic stagnation.

Figure 8.7 Pre-tax Return to Net Assets (in percent), all sectors

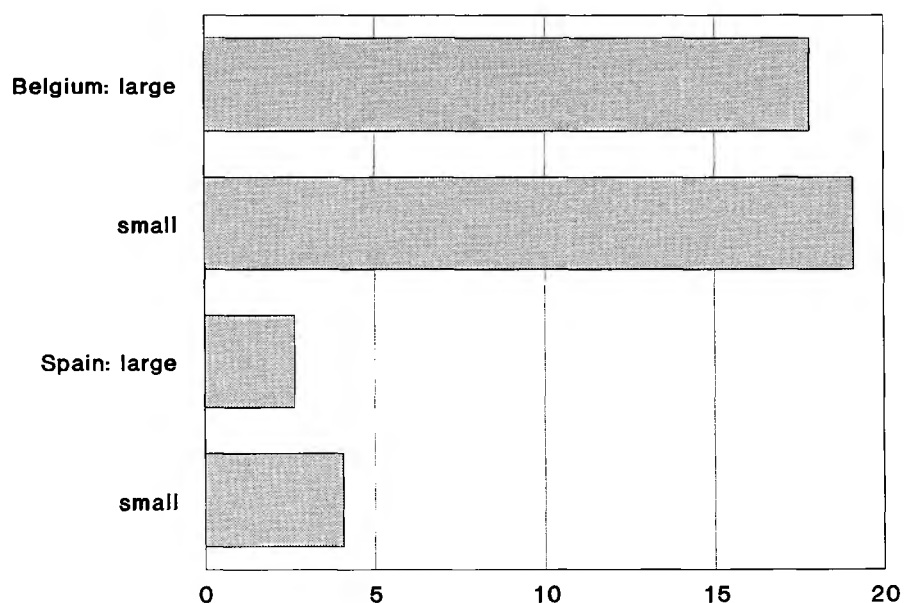


Figure 8.8 Pre-tax Return to Net Assets (in percent), manufacturing sector

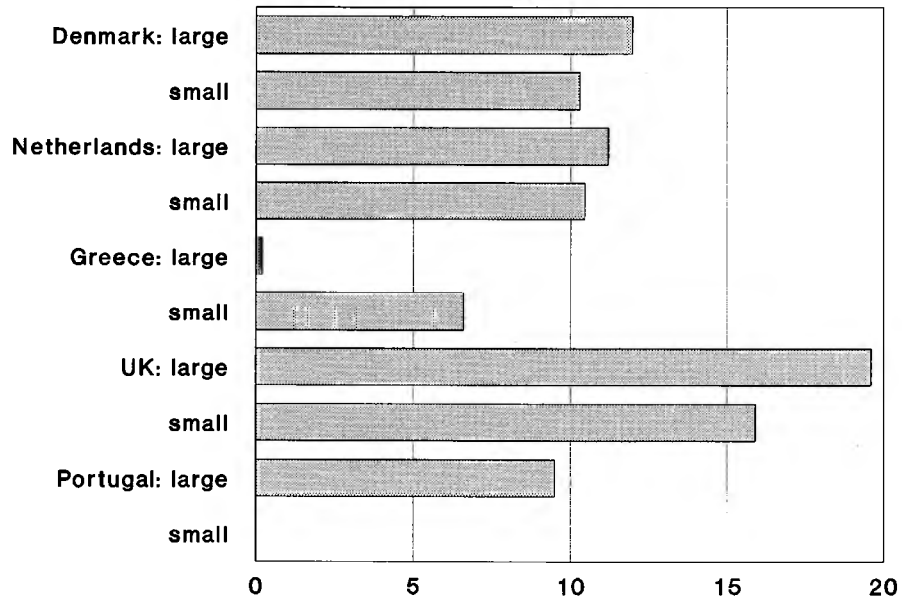
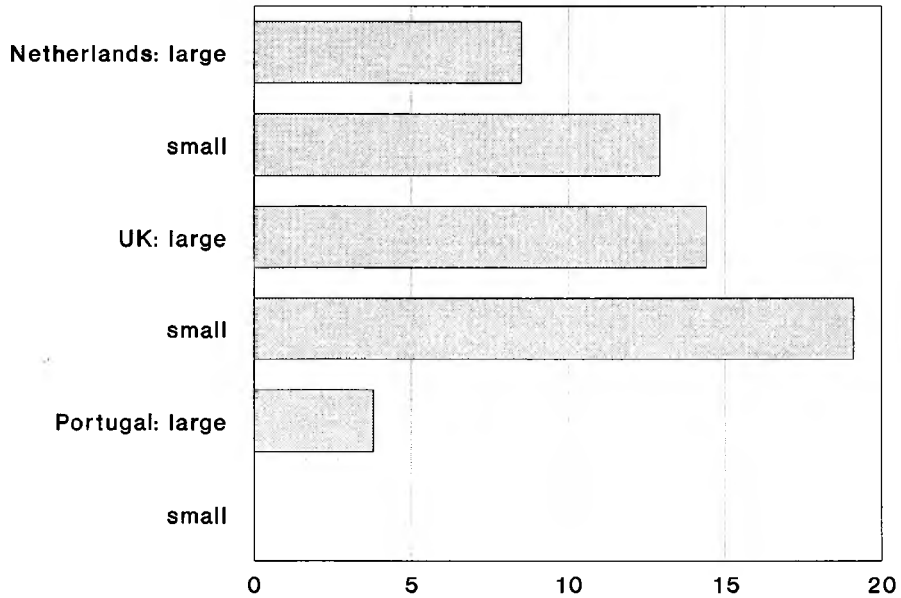


Figure 8.9 Pre-tax Return to Net Assets (in percent), non-manufacturing sector



In *non-manufacturing* the situation is quite different (see Figure 8.9). Although the data is restricted to three countries both UK and Dutch SMEs achieved significantly higher levels of profitability, leading to the tentative conclusion that

large firms in non-manufacturing sectors may be 'too' large and so experiencing diseconomies of scale. They may therefore lack competitive edge relative to smaller more efficient companies. However, other factors such as market dynamics, survival rates and growth are clearly also at work.

8.2.4 Pre-tax return to equity

The second measure of profitability calculated is pre-tax return to equity. The evidence using this measure shows greater disparity between countries and on an intra-country level between large firms and SMEs than was found using asset-based¹ measures. Once again Belgian companies of all sizes recorded much higher figures than Spanish firms who were barely profitable using this measure, whilst Belgian firms recorded figures of 32.1 and 33.8 for large firms and SMEs respectively².

The Evidence

For *manufacturing*, the results were inconclusive, with Dutch and Greek SMEs outperforming their large firm counterparts, whilst in Denmark (albeit only marginally), Portugal and for the UK the reverse was true (see Figure 8.10). In terms of ranking profitability, large UK firms achieved the highest levels of profitability, some 19.1%, whilst large Greek firms were barely profitable. At the SME level the most profitable were Dutch firms, achieving over 20% returns to equity. The least profitable once again were Portuguese firms.

In *non-manufacturing* SMEs once again outperformed large firms in both the UK and Netherlands. In fact Dutch SMEs were almost twice as profitable as larger Dutch firms (see Figure 8.11). The discrepancy in the UK was smaller, yet still significant. The reason for the high profitability is the high returns demanded by shareholders.

¹ That is total or net assets measures.

² Data for Belgium and Spain are not presented in the text, because figures for the different size classes are unavailable.

Figure 8.10 Pre-tax Returns to Equity (in percent), manufacturing sector

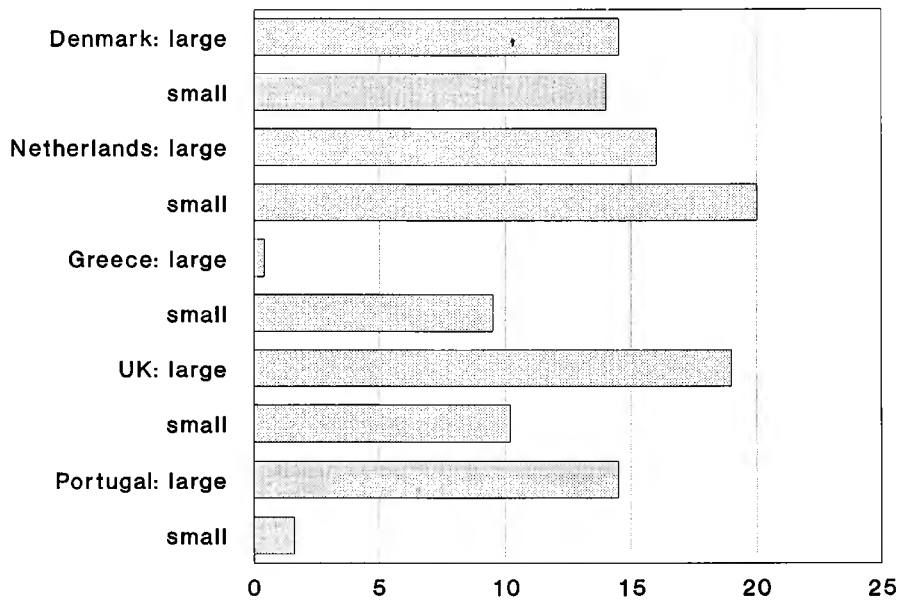
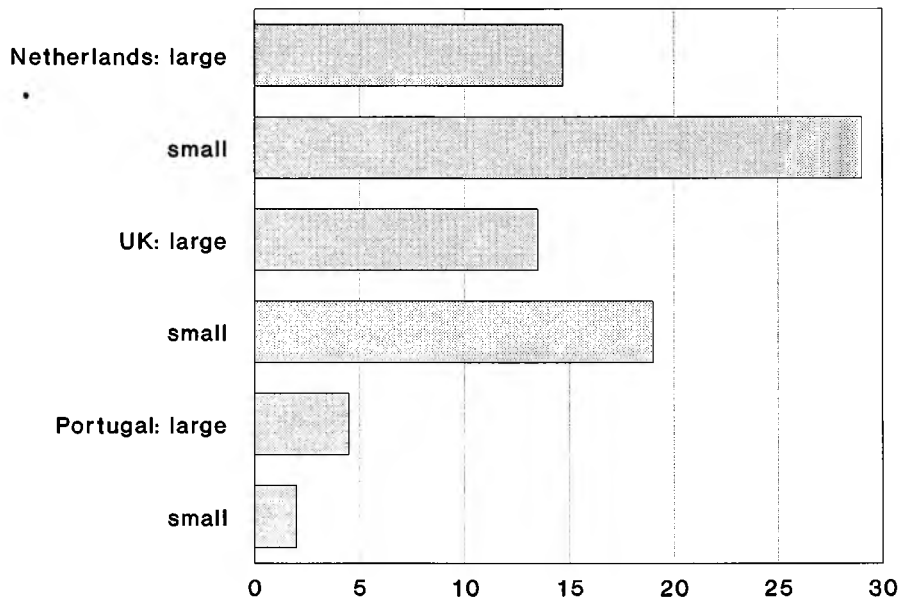


Figure 8.11 Non-manufacturing sector, pre-tax Returns to Equity (in percent)



Reservations however need to be made concerning the use of this measure of profitability. For example the proportions of debt and equity finance used

by SMEs and Large firms is quite different on both a national and pan-European level.

8.2.5 Liquidity: the current ratio

The Current Ratio (Current Assets/Current Liabilities) provides an indicator of the short-term solvency of firms. Intuitively a ratio greater than 1 would appear desirable since then the firm can be reasonably sure of meeting current obligations (creditors, interest payments etc) out of current assets (debtors, cash etc). Many empirical studies of bankruptcy have emphasised the importance of liquidity for solvency.¹

The Evidence

The evidence provided, on both an inter-country level and by SME/large firm split is striking, not because of the differences but because of the apparent lack of them. This holds true for both large firms and SMEs, manufacturing and non-manufacturing and across the full complement of countries who provided this ratio (7 out of 12 EC Member States). The ratios, with the exception of large Greek firms (0.98) and Portuguese SMEs (0.64) were all at or above unity, with a maximum of 1.81 for Spanish SMEs, and the majority of countries falling between 1.2 and 1.3.

8.3 VENTURE CAPITAL

Venture Capital consists of medium or long-run (mainly) equity investments in private businesses to finance a range of activities: (a) seed-corn funds: for researching, developing and assessing an initial concept before startup; (b) startup finance: to set up a business; (c) expansion finance: for internal growth or growth by acquisition of another company; (d) replacement capital: for purchasing existing shares in a company from shareholders who no longer have an active role in running the business; (e) management buyouts or buyins: to finance the purchase of a controlling shareholding in a company by its managers etc. Crucially VC is *not secured* finance (there is no collateral) and the provider takes a *stake* in the company.

Two generic types of VC will be distinguished in this chapter: (a) 'formal' or 'institutional' VC and (b) 'informal' or 'non-institutional' VC. 'Formal' VC consists

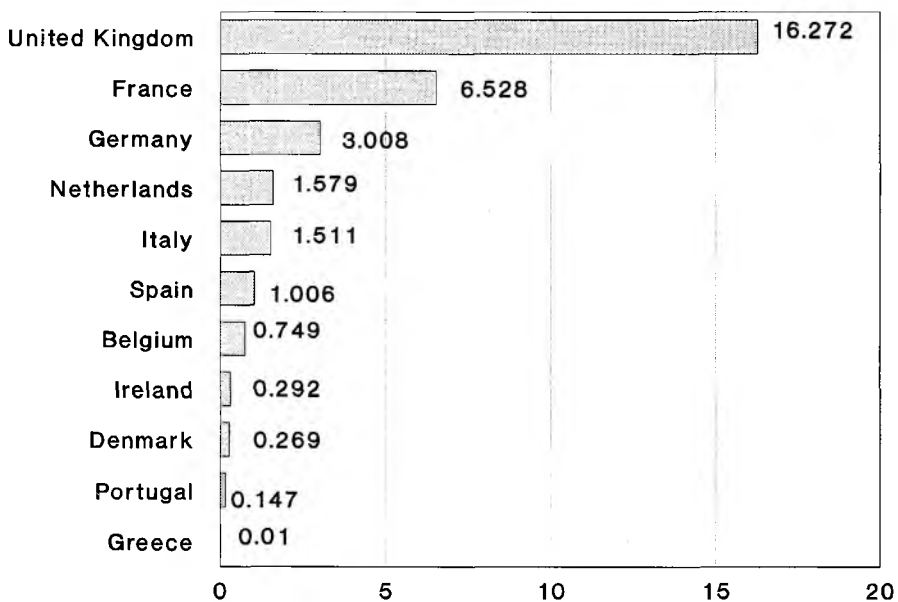
¹ For an analysis of the role of liquidity in UK SME bankruptcy prediction see Storey, Keasey Watson and Wyncarczyk, *The Performance of Small Firms*, Croom Helm, 1987.

of equity investments from corporate investors, government agencies, banks, pension funds, insurance companies, academic institutions and so on. The data employed here is taken from the European Venture Capital Associations Yearbooks¹. 'Informal' VC consists of equity investments by private individuals who are *not* part of the family (i.e. close relatives). In the USA these VC investors are often referred to as 'business angels'. Little is known about these investors or their investments. Data used in this Chapter come from *ad hoc* studies carried out by research organisations in the twelve Member States.

8.3.1 Formal venture capital

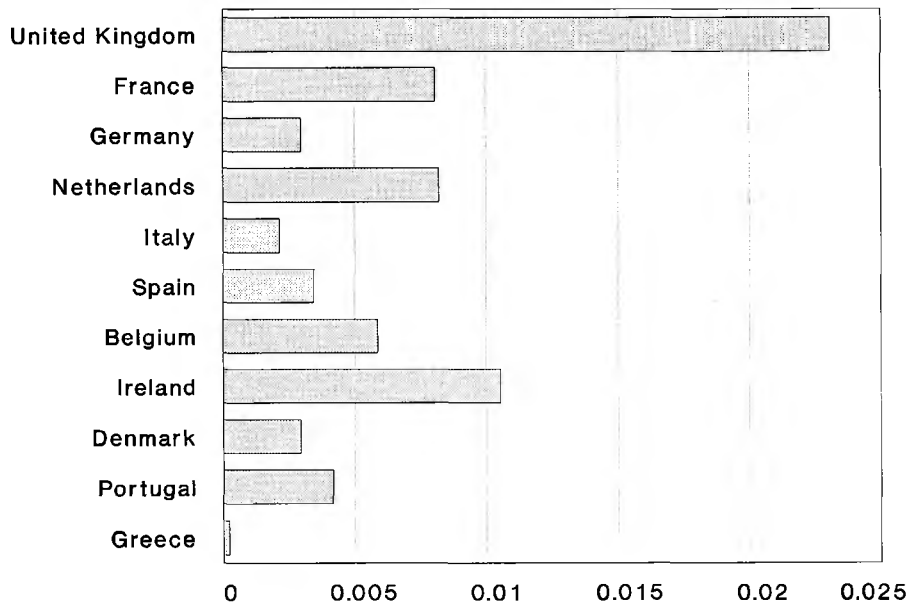
Consider first the trends in aggregate Venture Capital (VC) funds. These have increased dramatically in the last five years rising by some 140% from 1987 to 1991. In 1991, measured in terms of ECUs of cumulated investment, the UK (16bn ECU), followed by France (6.5bn ECU), Germany (3bn) and The Netherlands (1.6bn) were the leading states, with Ireland, Denmark, Portugal and Greece showing the least activity (Figure 8.12). The leading role of the UK is due to its highly developed capital market.

Figure 8.12 Stock of EC Venture Capital, 1991 (in billions of ECU's)



¹ European Venture Capital Association Yearbooks are compiled by Graham Bannock and Partners, UK.

Figure 8.13 Venture Capital stock as a proportion of GDP, 1991.



However when the figures are expressed as a *proportion of GDP* (allowing for the amount of output financed by VC and for a higher value-weighting to large firms) a different picture emerges (Figure 8.13).

Firstly, whilst the UK is still the leading player (2.25% of GDP), Ireland (1% of GDP) now emerges as the next most significant place for VC investment, displacing France which drops to fourth place after The Netherlands. Strikingly, Germany (.25% of GDP) moves down to below Spain (at approximately .75% of GDP). Thus whilst Germany has a large total volume of VC activity and Ireland a low volume, in Ireland VC is a much more significant financial phenomenon.

The countries for which VC is least important are clearly Greece, Italy, Denmark and Germany (in rising order.)

Sources of VC funds: Investor types

Regarding investor types contributing to the VC stock the financial institutions figure heavily. In an average year roughly one third of funds come from banks, slightly less than a third from Pension Funds and Insurance companies jointly, and about one tenth from realised capital gains available for reinvestment. The remainder comes from a variety of sources most notably Corporate investors (7%), private individuals and governments (each about 3%). There is some dispersion in these average figures across countries (see Figure 8.14). For

example, in the UK and Spain the financial institutions dominate the investment scene more than other countries, and only in France, Belgium, Netherlands and Spain does the government play a role in Venture Capital investment.

Targets of VC investment: Industrial Sector

Regarding industrial sector targets of VC investment, the data indicate that some 20% flows into the New or High Technology sector¹. 30% of European VC investment is attracted into the Industrial sector² and 25% into consumer-related areas.

10% of the investment flows into Industrial Products/services and 8% into Computer-related industries. The remainder is spread evenly across mainly hi-tech sectors as Communications, Other Electronics, Biotechnology etc.

In Denmark over half VC investments are in high-tech and in The Netherlands and Belgium some 25% of investment is attracted to this sector (see Figure 8.15). Countries with the least high-tech investment are (in ascending order) Spain, Portugal and Ireland, followed by Germany. The case of Germany while seemingly anomalous may reflect the fact that more high-tech business is carried on in Germany in large firms (e.g. Siemens).

These firms are financed by stock market equity rather than by Venture Capital.

Sources of VC funds: Geographical Area

Three-quarters of the VC stock is sourced domestically and the remaining quarter equally from other European and non-European countries. Thus there is a strong preference in all countries to supply funds from home sources. This is likely to reflect the relative expertise in (and possibly nationalistic preferences for) domestic firms. There is however some *cross-country variation* (see Figure 8.16). For example, whereas in the UK, Portugal, Belgium, Ireland and The Netherlands domestic sources predominate, amounting in aggregate to over 95% of investment, in Spain almost half of the investment is from other European countries, and in Germany about a quarter. Non-European investment is small in all countries of the Community, never exceeding 17% of total funds. It is highest in Italy(17%), Denmark(16%), and Spain(16%), reflecting mainly American VC activity.

¹ Defined as: communications, computer-related, other electronics related, biotechnology, medical/health-related.

² Defined as energy, industrial products and services, chemicals and materials, and other manufacturing.

Composition of Stock: Stage of investment

One half of the average year's investment is for *Expansion/ Replacement* capital, with more than one-third devoted to *Management Buyouts*. *Startup finance* accounts for under 10% and *Seed Capital* only some 1% of the total. In aggregate startup finance is thus a relatively small proportion of the total stock, and seed capital is almost negligible. There is however some interesting cross-EEC variation (Figure 8.17). For example, seed capital is highest in Belgium (9%) and lowest in France, Ireland, Italy and the UK where in each case the percentage is approximately zero. On the other hand, Startup finance is highest in Denmark and Spain (at around a fifth of the total in each case), followed by Belgium and Portugal (both at around 17%). By contrast Startup finance is almost zero in France, Germany, Netherlands and the UK. Expansion finance is least important in the UK constituting some one third of the total, and most important in Germany, Ireland, Portugal and Spain (three quarters/four fifths of total). Finally Management Buyouts (MBOs) dominate in the UK (a half of the total investment stock), Netherlands and France (about one third of the total), and Italy (one quarter of the total). They are however a negligible financing phenomenon in Belgium, Denmark, Ireland, Portugal and Spain.

Figure 8.14 Stock of EC Venture Capital, 1991; by investor type (in percentage of total stock)

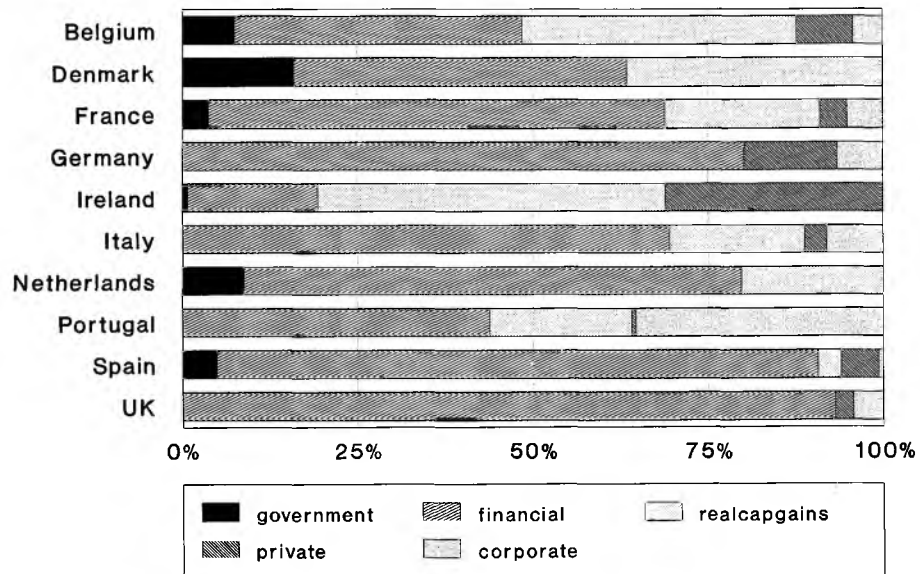


Figure 8.15 Stock of EC Venture, 1991; by target sector (in percentage of total stock)

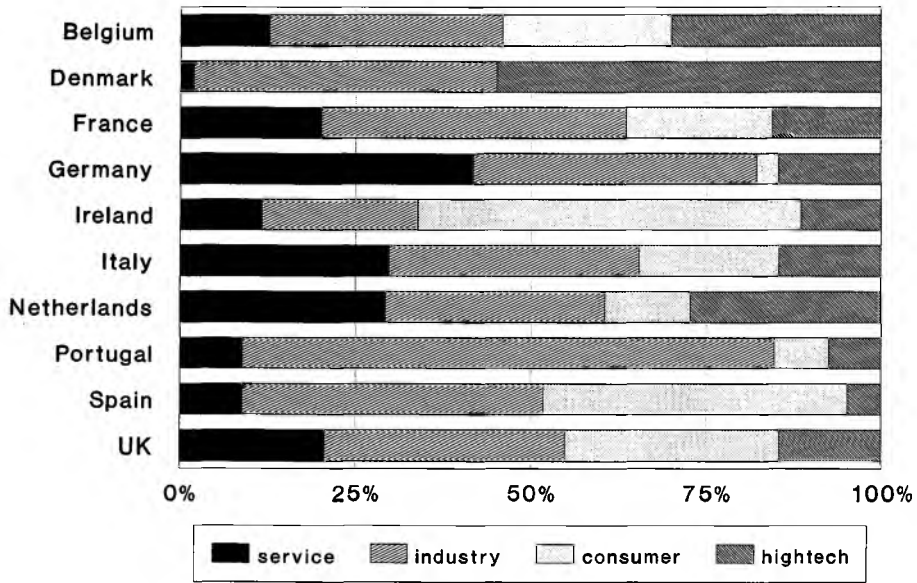


Figure 8.16 EC Venture Capital Stock, 1991; by geographical origin of funds

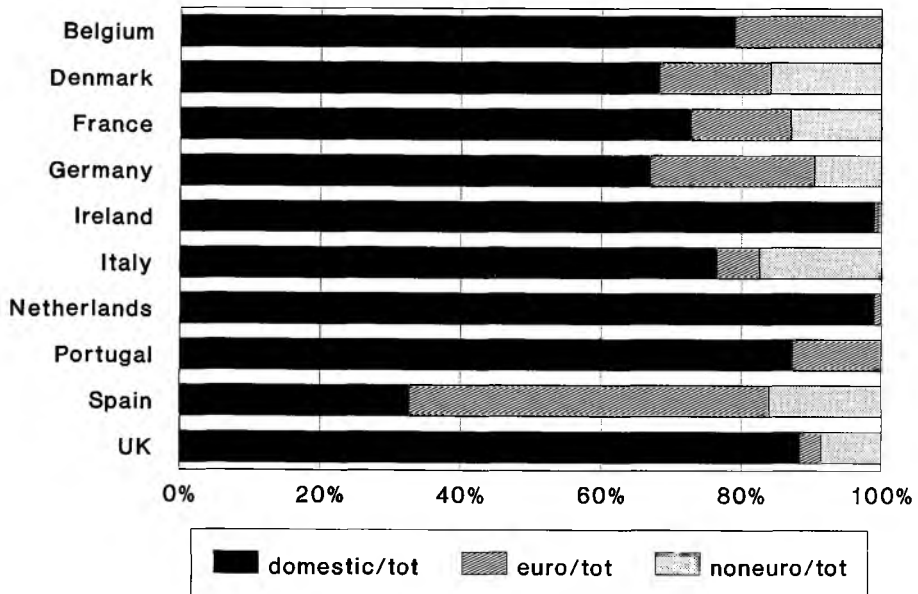
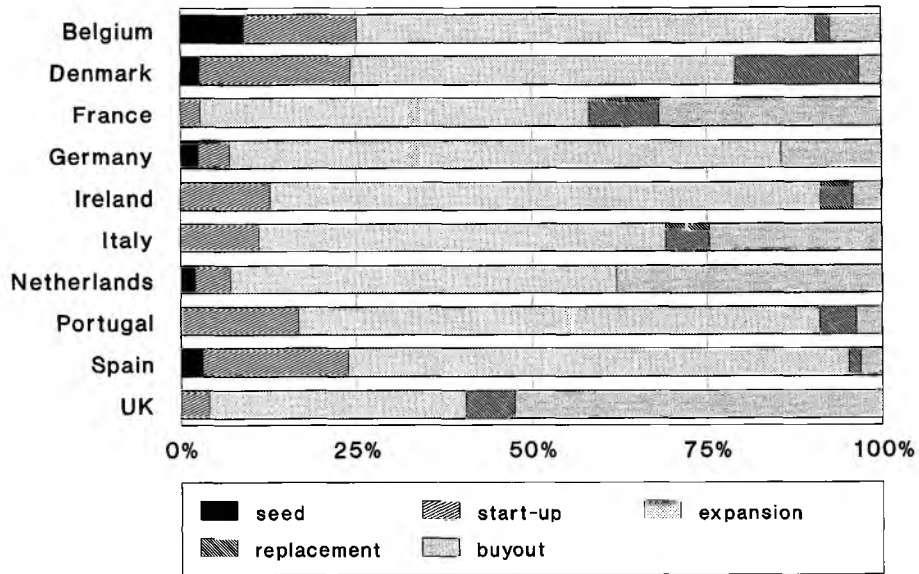


Figure 8.17 EC Venture Capital Stock, 1991; by stage of investment (in percentage of total stock)



Investment and size of recipient firm, 1991

Given an average (median) size of VC recipient firm of some 200 employees it is clear that Venture capital investment is concentrated in medium-sized rather than smallest firms in EC countries (Figure 8.18)¹. Not surprisingly the average VC investment in value terms increases with the size of recipient firm measured by employees, rising from 271 thousands of ECUs at 0-9 employees to 2500 thousands of ECUs at 1000-4999 employees.

Investment in VC in 1991

The picture with respect to *absolute investment* provides the same ranking amongst the top and bottom 4 countries as was observed for the stock figures discussed above. However in *percentage* terms the country ranking is dramatically altered (see Figure 8.19). Spain (+48%) followed by Germany (+44%), France (+23%) and Ireland (20%) are now the front runners with Denmark, UK, Netherlands and Portugal in the trailing group.

¹ A UK study in 1988 found some 2% of a random sample of 2000 startups used VC to commence in business. The average investment was some £1.5m or ECU1.875m.

Figure 8.18 Value of Formal VC Investments in the EC-12, 1991; by employment size of recipient firm (in percentage of total VC investments)

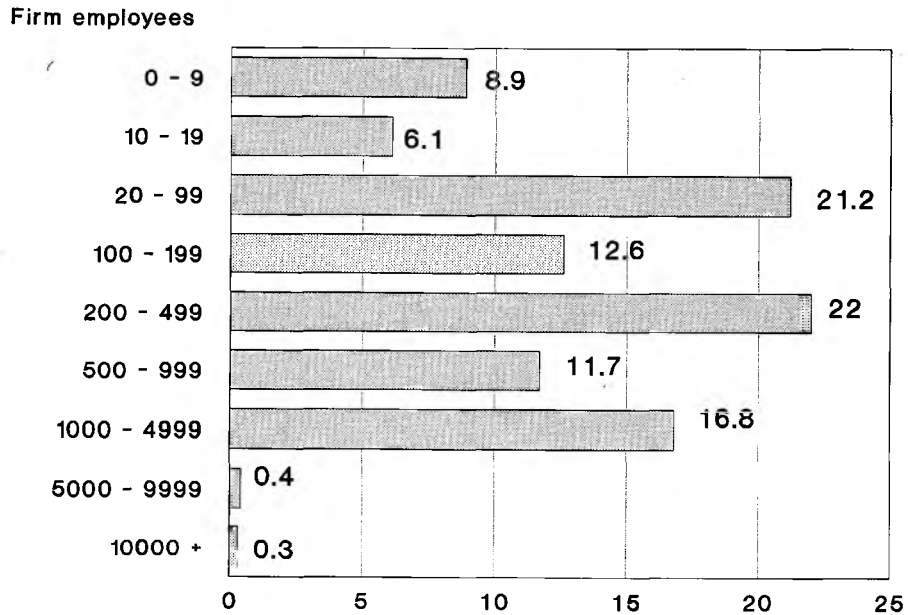
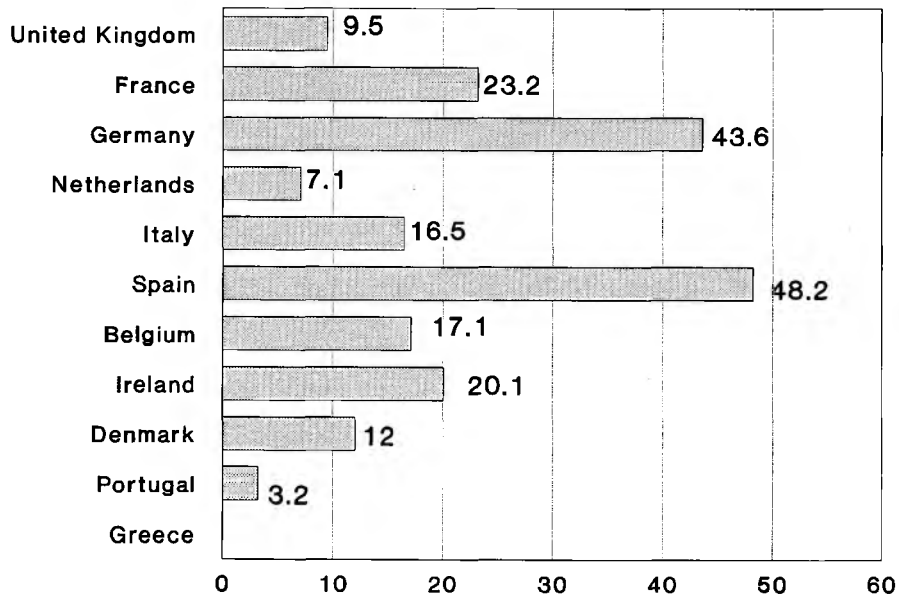


Figure 8.19 Changes in Value of EC Venture Capital Funds, 1991 (in percentage of change)



Changes in VC investment, 1991

Six out of the twelve countries experienced *growth* of VC investment funds in 1991, with four countries experiencing declines. In Portugal, the UK and Denmark this decline ranged from 45%-30% of investment funds for 1990.

All countries experienced growth in the number of VC investments in the period, apart from Belgium which experienced a decline of some 15%. Ireland had the fastest growing investment numbers (65%), followed by France (62%) and Denmark (56%).

From the data available we can conclude that in all countries except Ireland and Belgium (and to a much lesser extent Germany, Netherlands and Italy) the average size of VC investment decreased over 1991. For Ireland and Belgium the opposite was true, average size of investment increased during the period. Only in Belgium however did the numbers of investments actually decline.

8.3.2 Informal venture capital

National Level

There are currently secondary equity markets in eight of the EC member states although in at least one State (the UK) the Unlisted Securities Market is being phased out. In addition to this formal market activity there some less formal 'over the counter' trading in a number of states, most notably France and Germany, who are soon to be joined by The Netherlands.

The supply of equity in the EEC States increased during the 1980's. However there have been and continue to be problems for smaller firms in obtaining equity finance. For instance in Portugal all financing is provided by institutional investors who tend to favour larger firms. This also appears to be the case in Denmark where there is little use of informal investors due to the lack of suitable channels for contact.

The situation is more optimistic in Ireland, where the Dublin Investor Register Service arranges meetings between entrepreneurs and potential investors. Investors may then take equity stakes in firms if they fulfil their investment criteria. In Spain, off-stock market new issues accounted for around 40% of equity funding in 1990, whilst in Greece the most common form of informal venture capital was equity participation by friends and relatives.

In The Netherlands the structure of the market for informal venture capital appears to provide firms with the type of supportive 'hands on' approach which is maybe lacking in other countries. Typically in The Netherlands informal

investors have an in-depth knowledge of the sectors they are investing in, derived from years of work in related businesses. So the recipient firms tend to benefit from the managerial expertise of the investor.

As a consequence in The Netherlands there is a great deal more informal investment in start-ups than is the case for example in the UK. The average investment in The Netherlands is also around 100,000 ECU'S, which is slightly lower than the average investment in the less developed Danish market. There investments are relatively larger, around 158,000 ECU'S, but fewer investments are made. Finally, in The Netherlands the average equity stake is between 25% and 50%. This sort of share corresponds to that in recent attempts at SME equity participation by the Clearing banks in the UK. These latter however have fared badly in the recession of 1991-2.

In the 1980's in France and to some extent the UK, informal investment developed alongside or in parallel with the secondary market. In the UK the ratio of informal venture capital to formal venture capital was in the region of 1.4 to 4.5 in 1990.

Regional Issues

Despite the apparent growth in informal venture capital throughout the 1980's, questions must be asked about the spatial pattern of activity and the implications for regional economic development. In the majority of EC countries with secondary markets investment is concentrated around a major financial centre. (For example in Germany this is Frankfurt and in the UK, London.) Only France, with a market in Paris and six other cities, and Spain (Madrid and Barcelona) appear to have any diffusion. As a consequence, SMEs in peripheral regions are likely to encounter a lack of risk capital which will constrain their development and slow down the process of indigenously-generated economic development.

On the plus side several EC countries offer tax relief to informal investors, most notably Ireland and The Netherlands, a policy which appears to have encouraged more investment on an informal basis.

To sum up, there are quite significant differences in the role informal venture capital plays across EC member states, a factor that is still significant at a regional level within countries. A case can be made for a decentralised system bringing together informal investors and SMEs in different localities to provide benefits both in terms of regional economic development, and the provision of what can be termed 'local knowledge' by the investors. This process can be enhanced by the provision of advantageous tax benefits to informal investors.

8.4 EQUITY GAPS

An equity gap may be said to exist if the demand for VC exceeds the supply at any proposed level of funding and there is no tendency for price to rise to equate the two. Price may be measured by the cost of a unit share in the company. In the absence of market clearing there is a socially suboptimal quantity of equity finance available to businesses. This is likely to be the case with smaller quantities of finance since monitoring costs per Ecu lent decline with size of loan. Thus since SMEs are generally require smaller equity sales this sector is likely to suffer equity gaps. In the UK for example, a series of government committees have identified such a gap from as far back as the 1930s.

The evidence

There appears to be much circumstantial evidence that equity gaps do exist in the majority of EC member states but a lack of hard statistical data in support. Despite this, due to the consistency of cross-country evidence it is felt that broad conclusions can be drawn.

Several interlinked issues need to be explored here, including the apparent reluctance of entrepreneurs to permit external involvement (control-aversion), the structure of financial markets, the role of venture capital and the availability of clearing bank finance.

Control Aversion¹

M. Regalado² (1993) states that, 'SMEs (in Portugal) due to their genesis and nature tend to resist opening up their capital...'. Whilst this clearly holds true for Portugal it appears also to be the case for Belgian, Italian and UK SMEs. The implications of this are that firms ability to raise equity is severely limited. However, if this held true for the majority of SMEs then there would be no demand for this type of finance and hence no requirement to fill such a gap.

Structure of financial markets

Evidence on the structure of financial markets appears to indicate that the structure in many countries is not conducive to providing equity funds for SMEs. In many cases secondary markets appear relevant for only the very

¹ This terminology is introduced in Robert Cressy, 'Borrowing and Control: A Theory of Business Types', SME Centre Discussion Paper, Warwick Business School, 1992.

² Director of IAPMEI, the Portuguese partner in the ENSR.

largest of SMEs. In Spain, for instance no small firms in a sample survey were listed on the market whilst only 6.5% of medium sized were listed. Evidence from France indicates that half of all SMEs desire more equity involvement. In Italy investment trusts limit their activities to majority holdings in medium sized firms.

Role of Venture Capital

It is apparent that venture capital is beginning to play a more significant role in the EEC as a whole and it might be thought that venture capitalists are filling the 'gap' between bank finance and stock market listings. However the decline of stockmarkets since 1987 have reduced the available exit routes to Venture Capitalists and reduced returns to equity investment generally. In Ireland over 25% of survey respondents reported a shortage of equity, particularly firms looking to expand, and venture capital was almost non-existent for start-ups. Danish SMEs report that the equity gap has increased since banks began to ration credit to this sector, venture capitalists started to pull out of the startup market and the number of venture capital firms sharply declined. Belgian SMEs find difficulty raising venture capital as high short-term returns are required. German banks have however reacted to the perceived gap by developing SME participation schemes.

Conclusion

In conclusion it appears that there is a perceived equity gap in the majority of countries. There are significant difficulties in obtaining venture capital particularly at the lower end of the scale and in getting listings on secondary markets.

Part of the problem however is that SMEs are either reluctant to take on equity partners or oblivious to this type of funding a factor which is borne out by the small numbers of SMEs listed on secondary markets. In fact the Cowling, Samuels, Sugden (1991) study¹ reports that although 62% of small firms had considered equity funding 66.6% objected to banks holding equity stakes.

8.5 FINANCING OF INNOVATION

It is often argued that small high tech firms face great difficulties in raising finance for innovation. This is attributed in part to the large 'front-end' loading of costs to develop the product and also to the time lag before the product is

¹ See M. Cowling, R. Sugden, J. Samuels, Small Firms and Clearing Banks, Report for Association of British Chambers of Commerce, Department of Employment, December 1991.

manufactured, reaches the marketplace and generates revenues. Clearly there are greater risks to the potential lender in cases where the bulk of revenues attributable to the product are generated in the distant future. Indeed, in Denmark entrepreneurs and technological developments are not considered attractive investments for venture capitalists due to their perceived riskiness.

Evidence from an ongoing survey of high tech firms which located on UK Science Parks in 1986 shows that 25% of such firms face continual problems with access to finance, which has served to restrict the growth of these firms. As a result nearly 70% have used retained profits for at least part of their total financing requirements and under half used bank finance (mainly overdraft funding). In The Netherlands 20% of small and medium manufacturing firms financed product innovation entirely from internal sources and only 18% used 100% external financing. An important conclusion is that 1/4 of all innovations would have *failed* without some degree of external funding and a further 20% would have been 'seriously delayed'.

Interestingly Dutch start-ups financed 80% of innovation costs with external finance compared to 34% for established firms. This compares to UK start-ups of whom only 54.5% used external funds and small high-tech firms who recorded similar levels. The issue of collateral on bank lending was also apparent, most notably for Belgian SMEs, who viewed the collateral requirements as a significant constraint on obtaining external finance. In addition Belgian small firms were inexperienced in applying for government subsidies, which was not the case for Dutch or UK SMEs of whom 14% and 10% respectively financed innovation with government money.

8.6 BANK LENDING CONDITIONS

Since for the majority of SMEs bank finance is the only external source of funds, bank lending conditions in the form of interest rates, collateral requirements, loan availability and bank charges have major implications for SME financial performance. We address each of these points in turn.

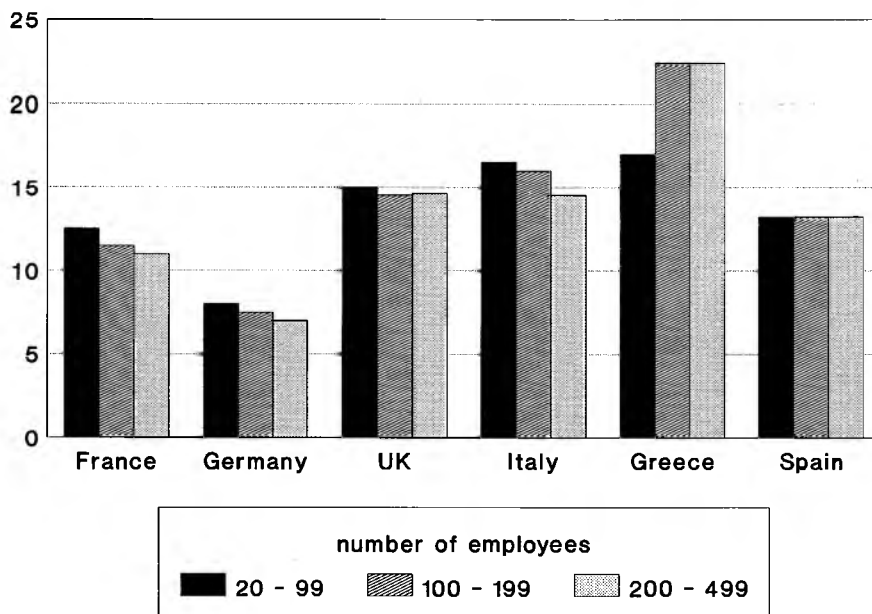
8.6.1 Interest rates

The issue of bank lending is of primary importance to the SME sector, particularly those firms who are too small to obtain other sources of funding i.e whose loan/financing requirements are less than the venture capital threshold.

The following analysis is split into two main parts, the first dealing with overdrafts and other sources of short-term funding, and the second dealing with long-term loans and finance.

Figure 8.20 shows nominal interest rates on overdrafts, and indicates that nominal rates on overdrafts in the majority of countries decline with firm size i.e the larger the firm, the cheaper the cost of finance. The figure for Greece is somewhat distorted by a Government 'Special Fund' designed to encourage lending to SMEs.

Figure 8.20 Nominal Rates of Interest on Short-term Credit by employment size

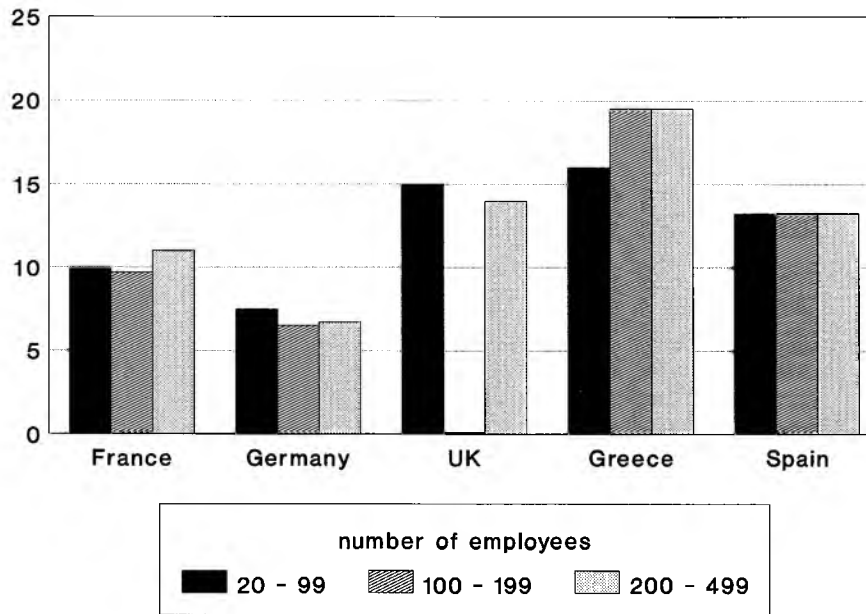


For Greece categories are 0-99 and 100+ employees.

If one considers real rates of interest on overdrafts, once again by employment size, it is clear that the same conclusions hold. SMEs pay more for their finance than larger firms. Interestingly, German firms of all sizes had access to the cheapest funds of the countries measured, Greek firms the highest.

For longer-term credit the picture is less clear, with SMEs in France paying lower rates than larger firms, whereas in Germany and the UK the opposite was true. In real terms of the countries measured, the UK had the highest cost finance and Germany the cheapest.

Figure 8.21 Nominal Rates of Interest on Long-term Credit, by employment size



For Greece categories are 0-99 and 100+ employees.

In nominal terms the picture was more or less the same, although the addition of Greece, whose firms faced the highest nominal rates allowed the UK to drop to second place in the cost ranking.

In the majority of countries however, bank interest rates were associated with loan size, not size of firm directly, although clearly there must be a significant correlation between the two.

The preponderance of evidence indicates that for European SMEs, as well as larger firms in general, short-term finance is more expensive than long-term finance. Interest rates also decline with loan size and almost certainly with collateral availability.

With respect to small firm premiums on bank finance, the evidence indicates that premiums are roughly about 1 to 2 percentage points over the rates that large firms are paying on short-term finance. This premium is reduced, (considerably on some cases) for longer-term finance.

It would appear that such premiums on what is generally considered banks most risky form of lending due to the high incidence of failure in the SME sector. They may however also reflect the existence of market power over SMEs on the part of EEC banks.

8.6.2 Bank charges

With regard to bank charges the information is fairly sparse, but the general impression is that SMEs are also disadvantaged here too. The system of fixed charges in operating in many countries penalises smaller firms undertaking lower volumes of transactions.

However a market power component in the charging system cannot be ignored.

8.6.3 Ease of obtaining credit: debt gaps

A debt 'gap' or credit rationing may be said to exist if for a given level of required borrowing, at a given rate of interest, security level, duration of loan etc there is a persistent excess demand for funds. In particular there is no tendency for the rate of interest to rise to equate demand and supply. The theoretical literature has discussed this issue for the last decade and generally concluded that SMEs are credit-rationed. Empirical studies in the US have tended to confirm this thesis.

Regarding the UK, Cressy (1992)¹ provides a summary of the empirical evidence and suggests that in general there is no debt gap for startups, especially in boom conditions. For fast-growing and hi-tech SMEs there may well be credit-rationing and this may be accentuated in recessionary situations. In particular this may be the case where other sources of finance (outside equity via OTC or USM markets) have become more scarce. Several EEC USM/OTCs have of course closed since the stock market crash of 1987.

8.6.4 Security for loans

The issue of security (collateral) on bank loans has been a prominent issue in all the major UK studies on the SME/clearing bank relationship. In fact 22% of SMEs in the Cowling, Samuels, Sugden (1991) study indicated that security was their major concern with existing bank practices.

¹ Debt Gaps in the UK: A Survey of the Evidence, SME Centre Working Paper, 1992.

The imposition of security on bank loans can be seen as a safeguard against loan default for clearing banks, in a sense providing them with insurance against risk. However, the requirement for security can also be viewed as a constraint on borrowing, a constraint that disproportionately affects both the smallest and youngest firms, firms that are less likely to have collateral to offer as security. In fact research in The Netherlands indicates that whilst 6 out of 10 initial applications for credit were successful (approved by banks) in 45% of cases where credit was refused lack of security was cited as the main reason by the banks themselves.

It is this very factor that may provide at least part of the explanation for the apparent increase in the use of personal assets as security on bank loans. One important issue here is the limited liability status that many SMEs enjoy. Provision of personal security may nullify this status.

The EEC evidence on collateral indicates that SMEs in a number of countries are discriminated against by banks on this issue, when compared to larger firms. For instance Dutch research shows that smaller firms are restricted by the low levels of collateral they can provide which makes it difficult for such firms to borrow from banks, and Greek commercial banks appear to discriminate against SMEs on the basis of both collateral and bank charges. In Belgium there has been an increasing use of personal assets by SMEs, a trend that is mirrored in the UK.

In terms of the security ratios imposed upon firms (value of collateral/value of loan) figures range from an average of 1.3 times the loan value in Ireland to 2 times the loan value in both the UK and Greece. In Spain SMEs set up a Mutual Guarantee System to combat the restrictions placed upon them by the high collateral requirements of Spanish banks, a system which appears to be successful and similar systems are already operational in other countries, most prominently Italy.

8.7 TRADE CREDIT

Trade credit represents a significant proportion of outstanding commercial debt in the majority of EC countries. In France, the UK and The Netherlands, for instance, trade credit represents in excess of 30% of balance sheet totals. SMEs, it would appear, receive less credit from their suppliers than they extend to their customers. This clearly has important implications for SMEs and raises the issue of market power. The suggestion is that SMEs are more reliant upon a smaller customer base and to maintain their loyalty are willing to extend

longer lines of credit. This applies irrespective of whether they are producing intermediate or final goods.

Another issue of apparent importance is the market power exercised by large firms who, in a significant number of member countries, extend much shorter credit lines than SMEs. For instance, in France payment periods for SMEs on credit averaged 40 days, whereas for larger firms the average was only 20 days.

In terms of volume, trade credit has expanded throughout the 1980's, most notably in Spain, France and Denmark. Average credit periods ranged from 30 days to 90 days across the EC, a factor that has increasing implications for SMEs in Europe. Italy, for instance, reports that SMEs are increasingly facing difficulties over trade debts, a situation that has led to a higher requirement for bank finance for working capital. In the UK the issue of 'late payment' of debt is arguably the most contentious one of the day, prompting considerable media and academic attention.

In conclusion, the implications of expanding trade credit and allowing longer average payment periods appear to be quite significant for SMEs. Increased debt burdens, reduced borrowing capabilities and 'underperformance', as well as the potential for 'debt cycles' to form, in which firms delay payment as they themselves are delayed payment by others, have damaging effects on SME survival prospects and performance. Whilst the imposition of interest charges on trade credit is fairly widespread in Europe, the issues are still there to be addressed, particularly in periods of economic downturn when SMEs are generally experiencing reductions in demand and reduced cash flows.

MAIN POINTS

- Out of a total of 345 million inhabitants in the European Community, roughly 10% live in intra-EC border regions, covering 15% of the Community surface.
- Elimination of border barriers is bound to have big impacts on border regions in the sense that natural flows will be stronger and cooperative relationships between enterprises will develop more easily.
- The border has in some regions created the 'border effect': underdeveloped basins at both sides of the border.
- Bordering regions with similar patterns of development appear to be rather unusual.
- Businesses like transportation, customs agents and retail trading were flourishing at border crossing points. SMEs and craft enterprises are overrepresented in these business activities.
- The Single Market leads to job losses in customs agencies and after tax harmonization certain cross-border shopping will be less attractive.
- Commuting will continue in the future, as long as differences in wages, social security and skill exist. However, in the long run these flows might slowly decrease.
- The concept of the single market promotes internationalization. Some forms of inter-SME cooperation are particularly suitable for neighbouring regions, eg. subcontracting.
- Objective 1 regions are less populated than the rest. the level of industrialization is 6% points below EC's average and the unemployment rate is 7% points higher.
- The Community supports Objective 1 regions in communication infrastructure, development of energy and water supply, vocational training and other services to SMEs and research and development.
- The absorption of Community Structural Funds by SMEs is rather poor, due to internal factors related to SMEs and to organizational bottlenecks in the various public administrations.

9.1 INTRODUCTION

This Chapter deals with regional aspects. Two main topics are distinguished: SMEs in the border regions and SMEs in Objective 1 regions.

Only intra-EC borders are considered in the part dealing with SMEs in the border regions. Firstly, attention is paid to a description of the internal border regions of the EC. Border regions usually introduce distortions in economic flows and delimit regions with different economic levels. Therefore, the border effect on economic performance is analyzed in the second section. Next, the current situation and prospects for overcoming the borders are considered. In this part three types of cross-border flows are distinguished: personal flows, institutional flows and business flows.

Consideration of SMEs in Objective 1 regions starts with a review of the economic structure of Objective 1 regions. Elements include: common characteristics shared by Objective 1 regions, statistics on these regions like population, unemployment, share of industrial employment and gross domestic product per capita. Furthermore, differences between SMEs in Greece, Ireland, Portugal and Spain and the remainder of the EC are considered. The Chapter ends with a section about the impact of EC structural funds on SMEs.

9.2 SMEs IN THE BORDER REGIONS

9.2.1 Internal border regions in the EC - A description

Elimination of border barriers in the frame of the internal market is bound to have big impacts on border regions, in the sense that *natural flows* will be stronger and cooperative relationships will develop more easily. Border regions are the seam of European physical unity. The phenomenon affects not only firms (e.g., enlarged markets, increased competition), but also public institutions (e.g., planning and management of services by bordering municipalities) and ordinary people (crossing for shopping and entertainment will be more frequent).

Considering only internal or intra-EC borders, the EC inner land borders taken together are 6,000 km long, as against 4,000 km for the outer border¹. Out of

¹ I.e., that stretching between Greece, France, Italy and Germany on the one hand, and their neighbours in Central and Eastern Europe on the other.

a total of 345 million inhabitants, roughly 10% live in border regions, covering 15% of the Community area.

Map 9.1 represents the areas involved. The territorial unit of reference is taken at the NUTS-III level. This is convenient for information purposes. But this level is far from homogeneous. Depending on the area this definition often turns out to be too large and in fact, many ongoing cooperation programs (e.g., the Interreg initiative) make use of narrower definitions.

As only intra-EC borders are considered in this Chapter, this definition leaves out all of Greece (no border with any other EC country) and the external Community borders of Germany, France and Italy. On the other hand, the English region of Kent (facing French Nord-Pas de Calais though the Channel) has been retained, given the obvious impact of the Channel Tunnel that links both nations.

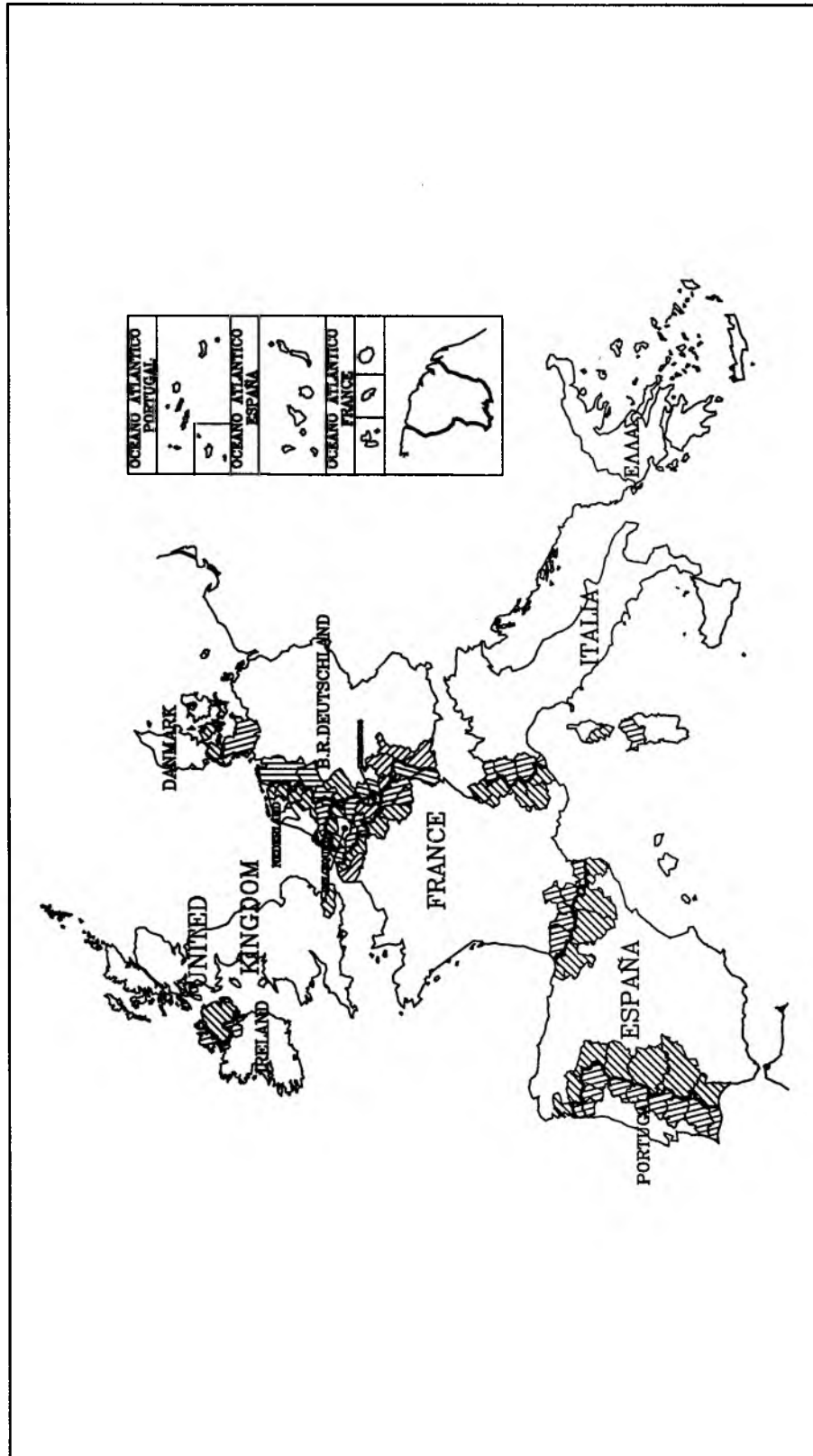
The starting point differs widely from one country to another. Borders have long been blurred in some countries (e.g., the Benelux regions) even though different administrative procedures, different legal and tax regulations, etc. have created artificial constraints for socio-economic development, by splitting off markets at both sides of the border. But in other countries borders are *physical* constraints due to lack of or difficult communications (e.g., around the Pyrenees between Spain and France and, to a lesser extent, between France and Italy). In other cases, borders with no physical barrier have created a real breach between similar regions because of the *border effect*: creating underdeveloped basins at both sides of the border, cut off from their more dynamic national centres. This is seen in the border between Portugal and Spain and, for different reasons, between the Republic of Ireland and Northern Ireland.

The relevance of the border also differs from one country to another. In fact, *border regions* can encompass rather large parts of some countries (Belgium or The Netherlands), and in the case of Luxembourg the whole country is a border region. In other countries border regions only affect scarcely populated areas. Big differences exist among them, even though it is usually the case that economic indicators in border regions are below their national average.

The border has also contributed to the development and growth of some business, usually at the crossing points. These businesses are connected with transportation and custom formalities, in addition to retail trading based on local differences.

Map 9.1

Border regions along the internal borders of the European Community



The formation of the Single European Market is bound to dramatically alter this situation. On the one hand, activities directly or indirectly connected to custom regulations will very rapidly fade away as all formalities concerning Community trade of goods and services have been eliminated as of January 1st 1993. This negative impact is already being felt at the relevant border areas.

On the other hand, as borders are effectively dismantled, markets at the border will *enlarge* both for goods and services and for factors of production (labour, land, capital). Some changes will take place very rapidly (cross-border shopping) but others (inter-SME cooperation) will take longer depending on the relative starting point. Firms that operate on the enlarged markets will not only gain more opportunities, but they will meet more competitors on the newly enlarged markets and on their traditional markets as well.

9.2.2 The border effect on economic performance

The borders: More than just a line on a map

Border regions usually introduce distortions in economic flows and delimit regions with different economic levels. In the EC, the impact of the border differs very much between countries, depending on whether there have been traditionally fluid relations and whether they share the same cultural values, and even language. In fact, several regions belonging to different countries bear the same name (e.g., Luxembourg, Limburg).

Especially in the case of long borders (Spain with France and with Portugal), bi-national borders turn out to be non-homogeneous¹.

The analyses of indicators show some interesting points in interregional comparisons among border regions.

First, in general, border regions have lower levels of wealth and prosperity in comparison with their national averages, apart from a few of the German regions, as well as the Italian and Spanish regions bordering France.

Second, border regions with similar patterns of development appear to be rather unusual. Perhaps the main similarities are in the Intra-Benelux border regions, the regions located at both sides of the French-German border and, looking South, the Spanish-Portuguese border regions and the French-Italian

¹ This is most clear in the Spanish-French border. Communications are scarce and difficult all along the Pyrenees Range (regions Midi-Pyrénées and Aragón) while easy and fluid at both extremes (País Vasco and Aquitain, and Cataluña and Languedoc-Rousillon). Between Portugal and Spain, flows and communications at the north (between Norte and Galicia) are important, while there are scarce and more difficult in the central areas (Centro and Alentejo with Extremadura).

border of Corsica and Sardinia. However, while the former two cases include highly developed regions, the latter two cases could be defined as frontiers of underdevelopment, characterized by low income levels and a backward economic structure where agriculture is predominant.

Nevertheless, the most common case is the one where disparities among border regions are important. Thus, the border between the United Kingdom (Northern Ireland) and Ireland is a clear example of this, with lower income and industrialization levels for the Irish region (however, unemployment is very high at both sides). Other examples can be found in the higher income levels of the German bordering regions compared with their Belgian and Danish counterparts, among the French-Belgian border regions (specially when moving eastwards) and finally the Belgian-Luxembourgian regions.

As far as unemployment rates are concerned, the main differences can be found among Luxembourg and its bordering neighbour regions, specially the French and the Belgian ones. Other important differences can be found among French and Belgian neighbour border regions. Nevertheless, the most striking differences can be found in the bordering Spanish-Portuguese regions, with differences of more than 17 points favourable for the Portuguese regions. In any case, this is probably due to different statistical methods in both countries and an overpresence of agricultural employment in the Portuguese regions.

In terms of economic structure, the main differences can be detected within the German/Dutch and the Belgian/Luxembourgian border and at some particular points of the Belgian/French border (specially when moving eastwards to Dinant/Ardennes and Arlon/Meuse), at the Spanish/French border (Gipuzkoa and Aquitaine) and the Belgian/German border (Limburg/Aachen). Another situation is where economic development is similar at both sides of the border, but there are big differences with regard to their respective national averages. This is the case of the Spanish and Portuguese border, a notorious example of a *frontier of underdevelopment*. To a lesser degree, it is also the case of the water border between Corsica and Sardinia. Even though this is the result of the pattern of regional development in each country, the existence of the border (as a factor that has historically conditioned national development patterns) is a relevant clue to the current situation.

Looking at other statistics, much bigger differences appear, e.g., in terms of unemployment. Rates are very different in nearby regions in almost all cases, even in the central core regions (e.g., between France and Belgium) or between Luxembourg and nearby regions.

In Table 9.1 a summary of socio-economic indicators illustrate some relevant characteristics of the border regions at NUTS-III level of Belgium/The Netherlands and France/Spain¹. To make comparisons easier, data have been assembled by border area.

Indicators on the development level in border regions in Belgium/The Netherlands show that industrial employment in these regions is generally higher than the national average. In the border region Turnhout/Midden-Noord-Brabant industrial employment as well the unemployment rate differ widely between both sides of the border. The unemployment rate in the border regions in the western part is lower than the national average, but as one moves eastwards unemployment rates rise and are generally higher than the national average. GDP in the Antwerp region is much higher than in the neighbouring Dutch region (West-Noord-Brabant).

In the case of the border regions in France/Spain some characteristics are apparent. The industrial employment in the French border regions is generally lower than the national average, while Spain shows the opposite pattern (with Huesca and Lérida as exceptions). The unemployment rate in the Spanish regions is - with the exception of Gipuzkoa - lower than the national average, while the unemployment rate is higher than the national average in four of the five French border regions. Furthermore, the income level in all Spanish border regions is higher than the national average but the opposite is true for the French border regions. The overall pattern is that the Spanish border regions generally compare favourably with the national average while in the French border regions the situation is generally less favourable than the national average.

Other differences, not shown in the table, stem from the communication network (roads, railways) connecting the border regions. Relative isolation may result from natural barriers (e.g., for islands, the Pyrenees between France and Spain that nearly cuts off all communications between Midi-Pyrénées and Aragón, and less acutely the Alps, between Italy and France) or historic regional trends (Portugal and Spain, Northern Ireland and the Irish Republic).

As a result, flows between the borders differ considerably (commuters, retailing, consumption, tourism, etc.). Most flows depend on relative prices (which in turn may be conditioned by reasons other than productivity, namely, different tax policies) and may change over time (as local productivity changes) or as a result of policy changes or currency devaluations. This is the case of retail

¹ These countries have been chosen as an example. Similar data of all border regions are given in the background documents.

Table 9.1 Key figures at Nuts III level in the border regions of Belgium/The Netherlands and France/Spain

REGIONS	Population 1990		Agricultural Employment 1989	Industrial Employment		Unemployment rate #1990-92 ^a	GDP/inhabitants #1988-90 ^a	
	1000	inhab ^b /km ²	%	Share Eur = 100	Change #ARC ^c	%	ECU Eur = 100	PPS ^d Eur = 100
BELGIUM	9967	327	2.5	91	-1.8	7.3	104	104
THE NETHERLANDS	14950	365	4.6	87	1.0	7.0	102	100
Brugge (B)	264	405	3.6	90	-1.5	4.5	110	111
Eeklo (B)	79	236	7.7	106	-0.9	5.1	79	79
Sint Niklaas (B)	215	454	3.2	124	-2.1	4.3	98	99
Zeeuwsch-Vlaanderen (NL)	107	122	--	114	1.1	5.1	133	130
Antwerpen (B)	924	924	0.8	96	-1.8	5.8	145	146
West-Noord-Brabant (NL)	560	411	4.3	109	2.2	6.0	101	98
Turnhout (B)	381	281	3.2	132	0.1	7.8	101	102
Midden-Noord-Brabant (NL)	443	425	4.9	104	3.0	6.4	82	80
Maaseik (B)	201	227	3.0	131	1.1	7.8	95	95
Zuidoost-Noord-Brabant (NL)	654	477	4.0	134	0.7	7.2	102	100
Midden-Limburg (NL)	209	315	5.8	118	2.6	6.6	99	96
Tongeren (B)	182	288	5.6	107	-2.3	7.9	68	68
Liège (B)	590	740	0.7	101	-4.2	11.8	94	95
Verviers (B)	253	125	5.0	94	-1.6	7.9	93	93
Zuid-Limburg (NL)	637	923	--	112	1.8	8.0	90	88
SPAIN	38958	77	11.9	101	0.1	16.8	65	74
FRANCE	56735	104	6.5	99	-1.3	9.1	115	112
Gipuzkoa (E)	686	343	3.2	161	-1.2	19.5	81	93
Navarra (E)	521	50	8.7	143	1.3	10.7	83	96
Pyrénées Atlantiques (F)	580	76	10.2	93	-1.5	10.3	109	106
Huesca (E)	214	14	20.2	94	-1.2	9.6	69	80
Hautes Pyrénées (F)	225	50	9.4	83	-3.0	9.4	94	91
Haute Garonne (F)	931	148	3.6	85	0.2	10.1	108	104
Lérida (E)	353	29	19.3	96	0.3	7.4	80	92
Ariège (F)	137	28	11.9	102	-2.0	7.8	73	71
Girona (E)	499	85	8.1	136	1.7	9.5	85	98
Pyrénées Orientales (F)	365	89	9.5	63	-2.1	13.0	80	78

Source: Eurostat 'Regional Indicators for the Implementation post-1992 of Structural Policies', December 1992, Luxembourg.

Symbols and abbreviations:

a. # average.

b. Inhab/km number of inhabitants per square kilometre (density).

c. # ARC average annual rate of change.

d. PPS purchasing power standard.

shopping flows in the Spanish/French border (it is interesting because this is an example of *recent* integration). Several years ago French consumers would crowd Spanish food stores while Spanish consumers would patronize French stores for electronic equipment or fancy textiles. Nowadays, higher Spanish prices have curtailed French buyers while changes in the consumer retail structure (a combination of large outlets and leisure areas) in the French regions attract Spanish consumers on grounds of price and diversity of supply from as far as 100 km inside the border.

In the following sections three types of cross-border flows will be considered:

1. Personal flows, including commuter or residence-to-work daily journeys, shopping, entertainment, personal services, etc.;
2. Institutional flows, including official ties between local or regional Public Administrations, Chambers of Commerce, educational institutions, etc.;
3. Business flows, which in turn may refer to commercial links (exports, imports), and cooperation between firms (commercial, financial, technical), etc.

As far as the first and the second type of flows are concerned, a lot of information is available, although spread over many sources. But as far as the third type of flows is concerned, information is rather scarce, and even more scarce relating to activities of SMEs in border regions.

9.2.3 Overcoming the border - Current situation and prospects

Attitudes towards the border

Borders have played a historic role of both limiting and protecting economic activities on each side. The wall effect has been more significant in bigger states where economic dynamics have been defined *from the centre*. When two such cases happened next to each other, divergence of border economies became more apparent, each of them literally ignoring the other. Quite frequently different life styles can be found across the border line (and thus different consumption habits and patterns).

On the other hand, in smaller decentralized countries personal and entrepreneurial flows across the border have been more frequent. Differences in administrative procedures, taxation, labour market legislation, social security coverage, etc. were more often seen as hindrances towards more fluid relations. To overcome the border firms usually resort to setting up local branches on *the other side*.

In all cases, however, the border has also been considered a haven for some type of activities, not only for those related to border crossing but also for those undertaking activities of a local nature such as house builders, civil construction, artisans, services, etc. In these cases, the border epitomizes the compendium of national regulations that keep national markets for national firms.

Overcoming the border

People regularly cross the border for different reasons: shopping for all types of durable and non-durable goods, sight-seeing, entertainment, work, buying personal services etc.

In all border regions cross-border shopping can be found. In many cases this is a two-way flow, but more often than not flows are not in balance. Firstly where large tax differences exist both flows are not balanced and as long as tax differences remain, cross-border shopping will remain. But price differences are not the only factor leading consumers to go to the other side of the border for shopping: special types of shops (e.g. large hypermarkets) and different opening hours are pull factors as well.

Integration into a European Market has eliminated restrictions to personal consumption that existed previously, thus enlarging the market for better prepared firms, but firms have to operate within the legal systems, which they cannot themselves change (e.g. regulation of opening hours).

Commuting is specially frequent in those regions where the same language is spoken: France-Belgium, Belgium-The Netherlands, France-Germany, Republic of Ireland-Northern Ireland. But commuting also takes place from Spain to France, from Italy to France, from The Netherlands to Germany. Except for the commuter crossing the Irish border, commuting is more prevalent in one direction than the other way around. Economic development (jobs, unemployment) and level of wages are the most important pull factors. Differences in social security systems and in job regulation are the most important hindrances to genuinely open labour markets.

Elimination of capital exchange mechanisms (and, eventually, unification of the financial markets) and liberalization of trade in services has meant that consumers can also make use of better financial conditions across the border. At the same time, this makes it possible to acquire houses across the border. Here too tax differences (taxes on personal income and property taxes) are a pull factor. Resettling of households is found along the Belgian-Dutch border, where the Belgian tax system attracts Dutch households, not just from border regions.

Germans settle in The Netherlands because prices of houses are lower and the Dutch regions have better environmental conditions. Spanish households settle in France attracted by favourable prices of land and higher wages.

Eliminating restrictions to the mobility of professionals, and improving the compatibility of different educational systems will allow residents in border areas to take advantage of different educational offers without jeopardizing their future employment prospects on either side.

Thus, personal flows across the borders are bound to increase¹, creating additional expectations for business activities, and thus for local SMEs.

In addition to these *demand effects*, bringing down the borders will also help SMEs if there are differences in prices or availability of resources between opposite sides of the border (e.g., industrial sites, energy, wages, qualified manpower) by allowing hiring or buying cheaper or better services or products across the border². Perhaps eventually involving the movement of the firm itself to the other side of the border. These may be termed *supply effects* on SMEs.

As a further step in this process the firm may contact other firms in the area and establish cooperation agreements of various types: technical, commercial, financial, etc.

The concept of a single market promotes the internationalization of the firm, first at the product level (increasing the share of imported inputs in "domestic" markets and of exports in total sales), then at the level of the management of the firm itself. Being present in more than one country requires organizational changes and developing a more complex commercial structure. For SMEs including craft enterprises, transnational cooperation may be a first *natural* step to move from just exporting to more complex forms of international activities, e.g. subsidiaries and joint ventures. Such internationalization and cooperation increases the need for information.

Some forms of inter-SME cooperation are particularly suited for neighbouring regions (e.g., subcontracting) while others not necessarily so, since they depend on the location of markets (joint ventures, commercial agreements, etc.).

¹ All of the cross-border flows mentioned are possible and have indeed existed for many years. However, the size of the flows has increased and will increase enormously.

² These differences will tend to offset themselves after an adjustment time lag.

For some firms the single European market may have negative consequences too. It may no longer be necessary to open branches at both sides of the border, and the complex of related enterprises in the retail and catering sector will lose clients (eg., truck drivers making obliged stops at the border). Many border regions also fear growing unemployment due to loss of jobs connected with administrative handling of cross-border transactions.

Organisations of enterprises, especially the Chambers of Commerce already cooperate in all border regions. But transborder cooperation is most needed at local government level. Planning of public needs and management of public services ends where the border starts. However, given the growing trend to increased personal and mercantile flows across the borders, public services should also take into consideration the transnational dimension:

1. to make better use of overall resources;
2. to cater for needs that are transnational themselves (e.g., transportation and communications, education and training);
3. to internalize external effects (e.g., in environment management);
4. to take advantage of economies of scale.

Transborder cooperation in public administration is much more difficult to handle. However, the number of examples is increasing, with different levels of *commitment*, varying from occasional symbolic conferences to permanent institutions endowed with some sort of executive power.

Use of EC programs aimed at stimulation of cooperation between firms

Regardless of size, European SMEs and craft firms are increasingly thinking in terms of the European market as a whole. The number of SMEs interested in such EC instruments as BC-Net, BRE or Europartenariat is increasing. These programs are not constrained to cooperation in or between border regions, but there are good indications of the trend towards internationalization among SMEs.

The role of the Interreg Community initiative

Many border regions are eligible for Community help within the framework of the national Community Support Framework (CSF) given their below average level of development. However, border regions have problems of their own connected with the *border effect* which deserve specific treatment (cross-border cooperation) within the process of construction of a Single European Market.

The reform of the Community structural funds in 1988 made it possible for the European Commission to set forth different *Community Initiatives* independent

of the national CSF. Of these, the main one has been the *Interreg* initiative¹. Several pilot projects in 1990 under Article 10 paved the way for 14 programs approved in 1991 and another 17 in 1992. These 31 programs total 1,034 Mecu of Community funds.

The main goal of *Interreg* is to promote economic development through transborder cooperation, helping border regions to take advantage of the process of European unity. Given this goal, the specificity of the programme lies in the fact that funds are channeled to bi-national projects, thus requiring the previous consent of administrations operating in both sides of the border. This strategy has encouraged the setting up of transnational organizations with the partnership of central, regional and local authorities.

Two priorities of the program make it particularly interesting in the context of this report:

1. Emphasis on new employment opportunities to replace jobs jeopardized by the elimination of the borders, namely those connected to custom operations. Business activity and SMEs are at the centre of interest of the program;
2. Emphasis in the creation of permanent organizations of a transnational character.

Any activity contributing significantly to the above goals is eligible for help, be it of public or private initiative. Eligible regions are defined at the NUTS-III level even though many programs relate to smaller territorial units. Eligibility under Objectives 1, 2 and 5b is not a pre-requisite², but regions under Objective 1 will receive 83% of total funds earmarked for the program. Table 9.2 details the funds allocated by sector activity.

¹ Out of 86 programs approved in 1991 in the context of 11 Programmes and Community initiatives totalling almost 900 Mecu, programs under INTERREG accounted for 28% of the total.

² Funds from EFRD can only go to these regions. Regions not qualifying for these objectives can receive funds channelled through article 10.

Table 9.2 Interreg Initiative - Distribution of Funds

Sector of Activity	%
Transport and Telecommunications	45
Support to Firms	17
Tourism and national Heritage	11
Environment	10
Rural Development	7
Employment and Training	5
Transnational Organization	4
Technical Support and Management	1
Total	100
Source of Community Funds	Mecu
EFRD	824
ESF	30
EFROA	61
Article 10	119
Total	1,034

Source: EC, DG XVI.

The response to the Initiative bears witness to its success. Out of the 31 programs, 22 are concerned with EC internal borders¹ while the rest address the same issues in the EC external borders of Denmark (1), France (2), Germany (2), Greece (1) and Italy (3).

Direct support to firms with transnational activities gets the second highest share in the programs. Many projects on tourism and national heritage, environmental improvements and rural development have also a bearing on economic activity. Nevertheless, infrastructural projects to improve communications are predominant, as large road projects in the border regions of Spain, Portugal and Greece are contemplated. Even though these projects are not SME specific, their relevance to SMEs is clear since they will ease flows through the border, thus helping to *unify* and enlarge markets.

It is very early to evaluate results² but some preliminary findings are available. Firstly, the Initiative has attracted tremendous attention from all relevant bodies

¹ This number exceeds the number of binational borders because they have been split in several operational programs. E.g., the border between France and Belgium hosts three such programs (two with Wallonie, a third one with West-Vlaanderen). At the Franco-Spanish border, however, only one such program exists, even though there are three different regions on either side, with very different circumstances.

² Half the programs have been approved in 1992. All of them are due to finish by the end of 1993.

in border regions, making it clear that transborder cooperation is a vital issue in the Community at grass-roots level.

Secondly, some of the projects are concerned with the problems in the areas (loss of jobs, etc.), but much of the impetus is directed to the business opportunities (for reducing costs, raising incomes) that the unified *new regions* are bound to stimulate.

Thirdly, the Initiative has stimulated cooperation between all types of institutions private and public (educational bodies, Chambers of Commerce, trade unions, municipal agencies, etc.) In some areas, this type of cooperation has been brought forward by Interreg, in others, it preceded it. These forms of cooperation are bound to have a life of their own in the near future, irrespective of the continuation of the Initiative¹. In fact, in several cases the program is managed by *ad hoc* cross-border agencies, which have formed a key element in its success.

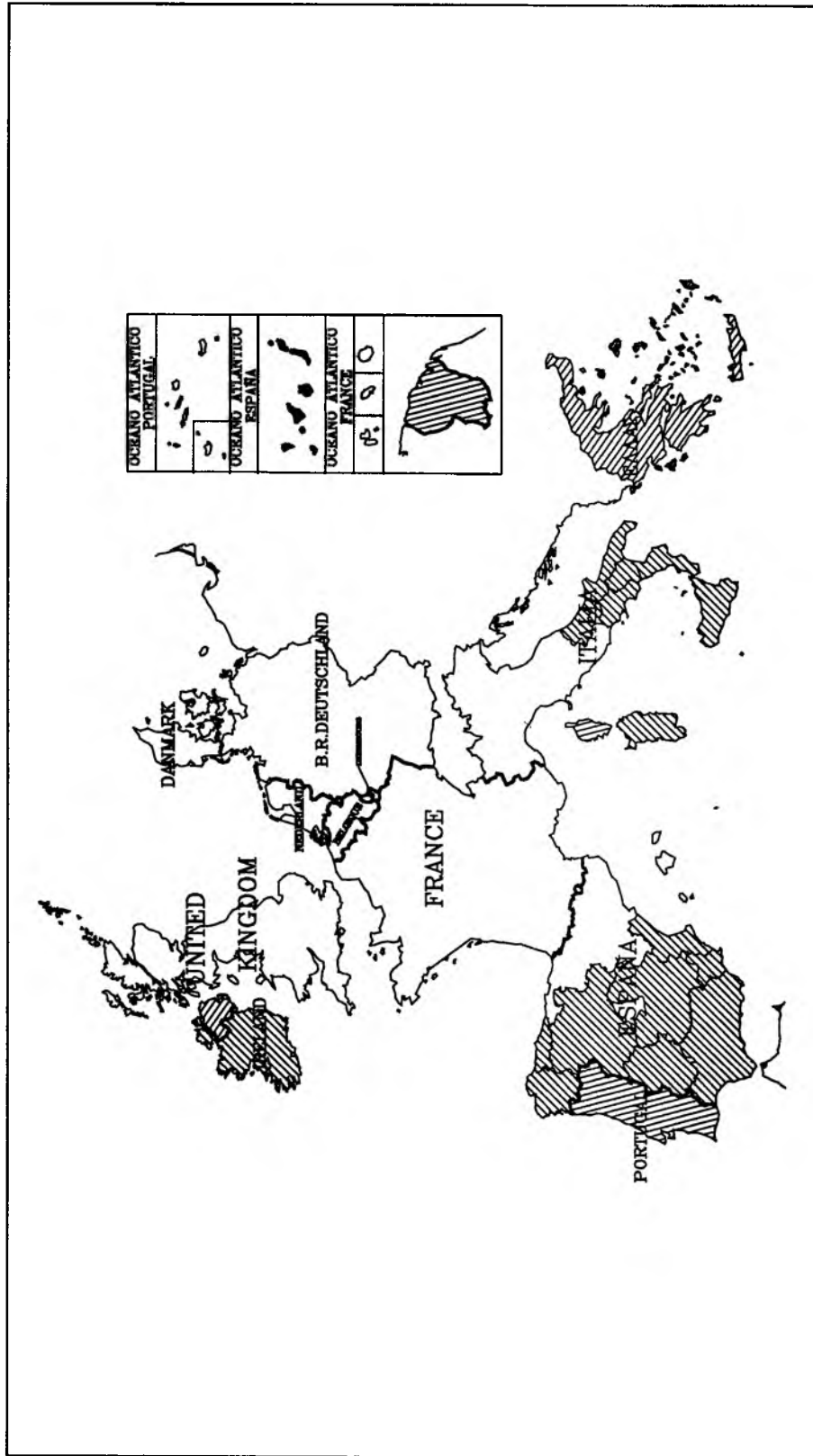
9.3 SMEs IN OBJECTIVE 1 REGIONS

9.3.1 Economic structure of Objective 1 regions

Regions considered under Objective 1 for Community regional policy are defined as less developed regions where gross domestic product per capita is 25% below the EC average. This definition includes three countries completely (Ireland, Greece and Portugal), a substantial part of Spain and Italy and some other regions (Corsica and the so-called *DOM* in France and Northern Ireland within the UK). Map 9.2 shows the regions involved. Three internal borders fall completely within this definition: between Portugal and Spain, between the Irish Republic and Northern Ireland (UK) and between Corsica (France) and Sardinia (Italy).

¹ An Interreg II is already in preparation for 1994.

Map 9.2 Objective 1 regions



Objective 1 regions share some common characteristics which usually imply some sort of handicap. To begin with, they suffer from severe limitations in their infrastructure (mainly in their transport, communications, energy and water networks) which, together with their geographical location give a certain degree of peripherality. Secondly, there is a relative lack of human capital and, especially entrepreneurial capacity. Thirdly, technology lags behind. In the cases of France, Italy, (to a lesser extent) Spain and Northern Ireland, there are also substantial economic differences between Objective 1 regions and their national averages.

Table 9.3 gives some basic statistics on these regions, which hold 22% of the total population of the EC. As can be seen, they are on average less densely populated than the rest, their level of industrialization is 6 percentage points below the EC average (the share of agriculture in total employment is 13 points higher) and their unemployment rate is 7 points higher.

Given the previous diagnosis, Community structural funds support different actions in those regions following the priorities as defined in their national CSF¹:

- Communication infrastructure to reduce the periphery effect.
- Development of energy and water supply and networks to reduce external dependence and improve the quality of life.
- Vocational training and support services to SMEs to create a positive environment for business development.
- Research and development to improve the competitiveness of SMEs.

As Table 9.3 shows, the gap between these regions as a whole and EC average has grown in the five years prior to the last reform of Community structural funds. Nevertheless, Spain (all regions except for Murcia), Northern Ireland and the Irish Republic have improved their relative positions, as have some of the Portuguese and Italian regions. The latest data available (up to 1990) show that the trend has continued.

¹ European regional policy follows a three-step planning process. First, the Member State elaborates the national regional development plan. Secondly, the State agrees with the European Commission the Community Support Framework (CSF). Finally, the State elaborates Operational Programs or other intervention operations to be implemented at regional or local level. The number of interventions approved in Objective 1 regions by the end of 1991 totalled 354. In addition, 32 operational programs for the new German *Länder* and a further 123 were approved under the twelve Community Initiatives.

Table 9.3 Objective 1 regions in the EC

Country	Population, 1987		Unemployment rate 1990 (adjusted)	% Share of agricultural employment	% Share of industrial employment	GDP in PPA per capita		
	Millions	Per km ²				1983	1988	1990
France	55.6	102	8.7	7.2	30.0	113.1	108.7	108.6
Objective 1	11.6	15	12.2	16.0	20.1	48.3	47.0	
Greece	10.0	76	12.1	28.5	26.2	56.4	54.5	53.0
Ireland	3.5	51	18.8	16.0	29.6	64.8	65.1	67.3
Italy	57.3	190	10.2	9.8	32.2	102.4	104.8	105.2
Objective 1	20.9	170	21.2	17.8	24.2	71.5	70.1	
Portugal	10.2	111	8.3	21.5	33.9	54.6	54.0	55.4
Spain	38.8	77	16.1	14.3	32.6	72.6	74.8	76.3
Objective 1	22.5	59	25.3	23.9	27.5	63.2	65.9	
United Kingdom	56.9	233	6.3	2.4	32.8	103.2	105.7	103.7
Northern Ireland	1.6	113	19.1	4.6	28.9	79.9	83.6	
TOTAL OBJECTIVE 1 REGIONS	70.3	76	18.6	21.3	27.5	67.9	66.9	
TOTAL ALL OTHER REGIONS	253.3	178	9.8	5.2	35.0	103.1	103.2	
EUR 12	323.6	144	11.4	8.1	33.7	100.0	100.0	100.0

Source: EC, Fourth Report on the situation and socioeconomic evolution of the regions in the Community, 1991.

9.3.2 SMEs in Objective 1 regions

The average firm size in Objective 1 regions¹ is below the EC average. Some important differences between Greece, Ireland, Portugal and Spain (Objective 1 regions) and the rest of the EC exist:

- Greece, Portugal and Spain have above average ratios of enterprises per 1,000 inhabitants, while Ireland has a substantial lower ratio (see Table 2.6).
- The average firm size in Objective 1 regions is considerably lower than in the remaining EC countries. The difference especially with the remaining smaller EC Member States is remarkable great: 3.3 for the Objective 1 regions versus 5.4 for the smaller remaining EC Member States (see Table 2.7).
- The employment share of SMEs in Objective 1 regions is considerably higher than in the remaining Member States (see Table 2.8).
- Comparisons on the employment share of SMEs per sector show that the SME employment share in Objective 1 regions is greater in every sector - with the exception of construction - in comparison with the remaining smaller

¹ Objective 1 regions are here considered - because of practical reasons - as the countries Greece, Ireland, Portugal and Spain. Although other Objective 1 regions do exist, it is not possible to acquire data about the state of SMEs in those regions.

EC countries. Especially in the manufacturing sector the difference is great. Whereas the share of SME employment in the manufacturing sector in Objective 1 regions is equal to the total, these figures for the manufacturing sector are lower in the remaining smaller EC countries (see Table 2.9).

An important conclusion in Chapter 2 is that: on average, the more prosperous the country, the greater average firm size in most sectors will be. As a possible explanation it is mentioned that rising prosperity correlates with a higher average wage level per employee, which can be a driving force of concentration processes. Apparently this process is overriding the countervailing influence of a rising share of the services sector, which has a lower average firm size than manufacturing.

The relative high number of enterprises per 1,000 inhabitants in Greece, Portugal and Spain is probably also affected by the fact that these countries still have many small scale private enterprises in agriculture. Given the increasing pressure in the last decade on agriculture, agricultural entrepreneurs have been searching for other activities. Furthermore, the high unemployment rate in the Objective 1 regions have been a stimulus for persons to try to set up a business on their own account.

9.3.3 Incidence of EC Structural Funds on SMEs

The expectations of entrepreneurs on the impact of the European Single Market in 1989 were systematically positive (more positive than negative) in all regions of the Community. A similar survey undertaken today would probably yield less enthusiastic results, even though it would be hard to differentiate between the impact of the single market and the overall effect of bleaker macroeconomic prospects. However, if anything, in deprived regions the response was less positive even in 1989 (Table 9.4).

Table 9.4 Expectations of entrepreneurs concerning impact of implementation of European Single Market on their firms, 1989

	Backward regions	Declining industrial regions	Advanced regions
Positive expectations (a)	36	32	38
Advantages equal disadvantages	29	37	37
Uncertain	16	18	13
Negative expectations (b)	19	14	13
Total	100	100	100
(a):(b)	1.9	2.3	2.9

Source: EC, Fourth periodical report on the situation and socioeconomic evolution of regions in the Community, 1991.

The economic objective of regional policy is to contribute to the equalization of the competitive position of European firms no matter where they are located. Given the problems of peripherality and limitations on infrastructures, a substantial share of funds has been channelled into infrastructural public works. However, ever since the first reform of structural funds in 1978, there has been a clear shift of emphasis towards the *self-help approach* and a growing proportion of funds is assigned to directly productive purposes (as against investment on infrastructure), either by means of direct support to investment by firms or by helping to set up structures directly benefiting business activity. Although this trend is more clearly the case in Objective 2¹ areas, it is also perceivable in Objective 1 regions.

Table 9.5 Allocation of funds from the Structural Funds (ERDF, ESF, EAGGF) to Objective 1 regions 1989-1993, in %

	France	Greece	Ireland	Italy	Por- tugal	Spain	UK	TOTAL
1. Infrastructure	31	36	25	33	19	43	24	33
- Communications	17	22	20	11	13	33	20	21
- Energy and water	9	12	3	22	3	8	1	10
- Social infrastr.	5	2	2	1	3	2	4	2
2. Productive activities	12	18	28	34	24	18	18	24
- Productivity gains	7	17	28	19	17	11	18	17
- Infrastructure	5	1	-	14	7	7	-	7
3. Others	57	46	47	33	57	39	58	43
- Horizontal measures	20	30	22	16	18	18	36	20
Total	100	100	100	100	100	100	100	100

Source: EC, 4th periodical report on the situation and socio-economic evolution of regions in the Community, 1991.

The impact of structural funds on SMEs can be evaluated in several ways. To begin with, one can examine in what proportion these funds are actually used (projects approved and money paid out). Secondly, one would like to know in what proportion SMEs do benefit from all the funds channelled to these regions and, thirdly, the really interesting issue would be to know what are the results on the performance of SMEs of the money actually spent.

The first type of evaluation is the easiest to do. The second one is difficult to undertake, since programs do not normally differentiate between firms of different sizes. However, in spite of this lack of information, given conditions prevailing in Objective 1 regions, one should expect that most if not all of those

¹ Objective 2 regions are regions faced with industrial decline and a more than average level of unemployment

funds should be used by SMEs. The third type of evaluation is a task for the years to come¹.

Table 9.5 shows the actual distribution of funds from ERDF, ESF and EAGGF in the period 1989-1993, while Table 9.6 gives the financial picture at the end of year 1991. It turns out that only 24% of Community structural funds in regions of Objective 1² go to activities that fall under the category of *direct improvement of production activities*, even though much of the remaining projects do have an impact on business environment.

Overall financial execution has improved with 100% of expenditures for the period 1989-1991 approved and 70% of payments made. As of 1991, execution has accelerated and expectations of the full use of resources for the whole period 1989-1993 are high. This depends on the ability of national governments to set up flexible procedures to deliver and administer the programs and, at the same time, to put forward the additional national financial contribution required.

Thus, approval and payments are proportionally much higher in Ireland (110% and 80% respectively) and Spain (107% and 76%), while Italy stays far below (91% and 51%).

Table 9.6 Financial execution of Objective 1, 1989-1991 (in mln ECU)

Country	ERDF	ESF	EAGGF	TOTAL FUNDS	% AP-PROVED	% PAID
France	225	177	89	491	100	71
Greece	1974	959	777	3710	99	71
Ireland	867	783	354	2004	110	80
Italy	2657	939	441	4037	91	51
Portugal	1939	1095	645	3679	97	73
Spain	3405	1211	620	5236	107	76
United Kingdom	206	190	77	473	97	71
TOTAL	11,273	5,35	3,003	19,630	100	70
		4				
New German Länder*	500	270	130	900	100	50

* 1991.

Source: Third annual report on the application of the reform of structural funds, 1992. Figures refer only to support measures included in Community Support Frameworks.

¹ A number of ex-post evaluation studies have been initiated in 1991 to empirically measure the effect of different programs (R&D, telecommunications, human resources, industrial services, etc.)

² This share is much higher (79% in the period 1989-1991) in regions of Objective 2. This is not surprising, since the main goal of regional policy in these areas is to redress the declining trend of their (mainly industrial) economies.

The degree of execution differs between the various funds because delivering systems are also different. Execution of ESF financed projects, which are especially relevant to SMEs, is usually the highest (excluding Italy and Portugal). In these projects participation of private agencies as managers is quite common (e.g., in Greece).

So far as the third type of analysis is concerned, several recent evaluation reports¹ are critical of the way in which the funds are made accessible to SMEs, especially in Objective 1 regions notwithstanding the high financial execution rate. In short, criticisms stem from several causes:

1. Programs are not earmarked for SMEs. Given the time restrictions, capability to absorb information and the ability to design projects, and considering management bottlenecks of the smaller firms, projects tend to be more beneficial for the larger firms.
2. In several countries national central administrations are slow and run into political and budgetary problems in expediting projects. Specialist programs, such as measures to promote innovation and technological change have the lowest absorption rates. They tend to be reduced by the extent of bureaucracy associated with access to support and raised by the time that a particular programme has been operating. On the other hand, countries which have a decentralized political structure to run the programs (Spain) or an efficient infrastructure of business oriented assistance networks (Ireland) offer a more satisfactory balance.

The structure of SMEs is one of the reasons why the absorption of Community funds by SMEs is small. In fact, success of some operational programs in several Spanish regions (Andalucia, Murcia) is attributed to the fact that they have been channelled through the global grants instrument (via local regional development entities). However, the number of global grants is still small as governments apparently distrust this instrument due to the loss of control it may entail².

¹ Ernst & Young, *An evaluation of the utilisation of the Community's Structural Funds by SMEs* (draft), Commission of the European Communities, August 1992.

² EC, *Third annual report*, 1992.

Conclusions based on the findings of the various national reports¹ are as follows:

- Efforts to increase the utilisation of Community assistance by SMEs are likely to be more effective if they focus, in the first instance, on intermediaries rather than the actual SMEs.
- Developing managerial resources is a high priority in less developed regions. It is therefore necessary to help and develop business assistance networks to provide for subsidized consultancy and information services to SMEs. Priority for this type of action should rank higher than support to actual direct investment.
- Financial bottlenecks also limit SMEs capability for innovative action. Many SMEs find Community support of no use when their financial structure is too weak to afford additional funds and the local financial institutions are too risk-averse to provide cheap financing. Thus Community programs should also shift their emphasis to alleviating financial burdens or to helping develop financial institutions geared to the needs of SMEs, like Mutual Guarantee Systems.
- The problems and needs of SMEs would be better understood and catered for if SMEs were represented on the bodies responsible for drawing up the CSFs and the associated OPs and on the monitoring committees.
- Application procedures need to be simplified and the decision process and release of funds speeded up².
- Procedures for the collection of statistics and for the monitoring and evaluation of the CSF should be improved in order to assess the specific effects of Community intervention on SMEs.

¹ Ernst & Young, *op cit.* and national reports prepared by TECSA (France), TPE (United Kingdom); Deloitte & Touche (Ireland); Ismeri Europe (Italy); Sympraxis (Greece), Quaternnaire (Portugal) and CEP (Spain).

² Nevertheless, much progress has taken place in this area, since at the end of 1991 70% of all funds approved for Objective 1 regions have been released.

PART B - THEME STUDY

MAIN POINTS

- Trade grows faster than production, and also other indicators of internationalization show generally rapid increases.
- The participation of SMEs in internationalization is increasing: SMEs are catching up with large-scale enterprise.
- Internationalization for SME means EUROPEANIZATION (Intra-EC flows).
- Small-scale sectors show intra-EC trade growing faster than extra-EC trade. However EC imports from 'the world' are growing even faster.
- Increasing shares of intra-EC trade is encouraged by harmonization and diminishing borders. Also firm competition on world markets is important.
- Firms operating in domestic markets only, are still affected by 'globalization', they meet international players in both input as well as output markets.
- On output markets decreasing domestic market shares and 'footloose' large firms have strong effects on SME subcontractors and general suppliers.
- Large firms from both inside and outside the EC are viewing SMEs as useful acquisitions giving them a foothold in the EC.
- Ex-ante, SMEs expect much influence from the 'Single Market'; actual effects and changes being made to firms' policies to date have been limited.
- While large firms face market-based barriers to trade, small firms face internal knowledge barriers.

continued

continued

- The Single Market addresses market and distribution problems, hence large firms are more likely to feel the immediate benefit than SMEs.
- This is not to say that the internal market is not important for SME: increasing harmonization of markets will directly reduce the information gap of SMEs.
- SME co-operation arises in many areas of strategy, e.g. sales and marketing; sharing distribution networks; after-sales service; production and R&D.
- The start of 'internationalization' is mostly (in)direct exporting, often as a strategic response to increased competition in the domestic market.
- Consequently, roughly speaking one third as many SMEs are active in FDI, and about one fifth as many SMEs in licensing abroad than in exporting.
- Given this 'stages' approach to internationalization, exports can be viewed as an indicator of future internationalization in a broader sense.
- Support services used are: market information and research; guiding exporters in local operations and preparation of business trips.
- Bottlenecks are good starting-points for export support policies. They should firstly address firms already seeking to enter the export market.
- Bottlenecks of entrepreneurs do not vary much between member states, this suggests that a general approach at Community level is feasible.
- In designing export support policies, the 'stage of internationalization of the firm' should be explicitly dealt with.

10.1 INTRODUCTION

This chapter will outline the internationalization of small firms¹ before the completion of the Single Market (1/1/1993)².

Developments in international trade at member state and EC level will be discussed in macro terms in section 10.2³ before examining firm-level internationalization.

In considering the effects of internationalization two aspects have to be distinguished:

- direct effects: internationalization of SME itself;
- indirect effects: various effects of internationalization of larger firms or economies. Such processes may significantly influence SMEs through changes in both input (raw materials and factor) markets and output markets.

Whilst general trends and indirect effects have been portrayed in chapter 3, here the focus is the participation of SMEs in cross-border economic relations. Export is only one element contained within the broader concept of internationalization. Classifications of alternative forms of internationalization at the level of the firm are found in literature⁴, for example:

- export strategy (indirect & direct exports, agents, joint-selling etc.);
- contract strategy (licences, franchising, technical co-operation, service and management contracts etc.);
- investment strategy (acquisitions, joint-ventures, participations etc.).

But Johnson and Wiedersheim-Paul (1975) argued that firms do not choose between alternative forms of internationalization but rather underwent a 'regular

¹ The study concentrates on analyzing material emerging from ad-hoc surveys in various member states not easily available at the European level. This has been done to maximise the original contribution of 'The Observatory'. Hence useful material like the country studies published in 'The Impact of the Internal Market by Sector: The Challenge for the Member States' (European Economy) has hardly been used to avoid unnecessary duplication. Some results from the study 'The participation of SME in Exporting Outside the Community' carried out for the European Commission in 1989 however have been used as this study has not been published. This is a study carried out in Italy (Bocconi University), UK (Durham University) and the Netherlands (EIM) and submitted by the EIM to DG XXIII in June 1989.

² Depending on countries and studies, references to both '1992' and '1993' are found.

³ This section is to a large extent based on EUROSTAT information.

⁴ See for a short literature survey: Oudewater, G. (1992), *Het internationaliseringsproces van middelgrote industriële productieondernemingen (internationalization process of middle sized manufacturing enterprises)*, EUR Rotterdam, 1992.

process of gradual incremental change¹. Four stages were distinguished:

- no regular exports;
- export through independent representatives;
- establishment of sales subsidiaries;
- establishment of production facilities.

These ideas have been questioned (for example: could experienced firms 'jump' stages) and elaborated upon by examining joint-ventures, licensing, other forms of foreign direct investments (FDI) etc.².

Keeping this literature in mind a conceptual framework has been adopted for the Observatory in which six distinct elements or stages are distinguished, viz.:

1. indirect international influences (e.g. subcontracting to exporter);
2. indirect export involvement (e.g. wholesalers or export-trading companies);
3. direct export involvement (including via agents, distributors, subsidiaries);
4. co-operation with foreign firms (e.g. R&D, marketing arrangements etc.);
5. international licensing (products, brand-names or production technology);
6. foreign direct investment (joint-ventures, mergers and acquisitions).

In this chapter, elaborating on Chapter 4, two items will be considered with much more detail and with special attention to the role of SMEs.

Exports

Discussions of internationalization focus on exports which are still - especially for SMEs - the most important element. It would be desirable to see whether distinct export patterns have emerged between small and large firms. However export data by size class are not easily available across the Community, therefore three relatively small-scale sectors have been chosen to compare with three relatively large-scale sectors. The sectors are used as a proxy for SMEs on the one hand and large-scale enterprise on the other. Thus intra- (from one member state to another) and extra-EC trade flows (with third countries) in these sectors are analyzed in section 10.3. Section 10.4 reviews numerous ad-hoc studies and surveys to identify major bottlenecks for the internationalization

¹ Johnson, J. and F. Wiedersheim-Paul (1975), *The Internationalisation of the firm - four Swedish cases* (*Journal of Management Studies*, October, 305-322) reprinted in the recently published reader: *The Internationalization of the Firm*, eds. Peter J. Buckley & Pervez Chauri, London 1993.

² For a review of the literature, see Young, S. et al. (1989), *International Market Entry and Development: Strategies and Management*, Hemel Hempstead.

of SME. Section 10.6 provides a more systematic assessment¹ of market-entry problems for SME in the various EC markets based on a survey² among key informants, who possess specific and prolonged experience in assisting firms entering foreign markets.

Beyond Exports

The other main contribution of this chapter is to go beyond exports. Section 10.7 widens the scope of the analysis by looking specifically at other elements of internationalization. For example foreign direct investment, international trade in licences etc. The participation of SMEs in these processes is assessed and the regional scope of the phenomena described³.

Hence, the Theme Study consists of eight sections, viz.:

10.1 Introduction

10.2 International trade

10.3 Exports of small versus large: 6 selected sectors

10.4 Bottlenecks Internationalization: 6 selected sectors

10.5 Exports: the role of small and medium-sized firms

10.6 Bottlenecks in market entry at firm level

10.7 Internationalization of SMEs: beyond export

10.8 Conclusions

10.2 INTERNATIONAL TRADE

In Chapter 4 it was shown that during the last decade worldwide trade has grown at a faster rate than world-production. The EC countries' experience has mirrored this trend. As a consequence high levels of national exports in GDP are attained. Figure 10.1 shows that this figure is around 20% for most member

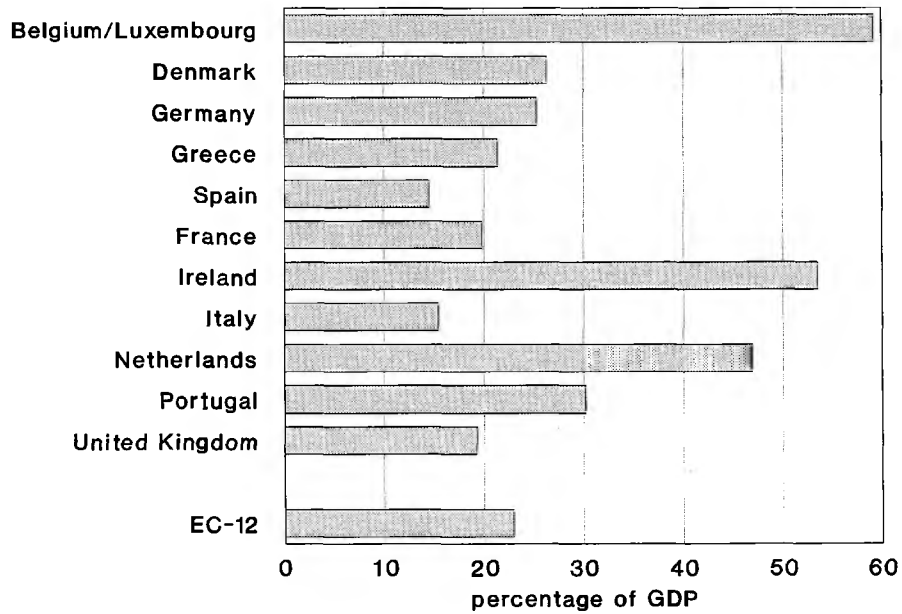
¹ A systematic survey across countries will add to the insight at firm level, because part of the variation found by comparing ad-hoc surveys in section 10.4 is associated with differences in the sources (scope and methodologies applied) rather than differences between markets.

² This survey has been implemented specially for the Observatory among trade officers of the Irish Trade Board (ITB) posted in various countries both within and outside the EC. In this way a homogeneous group of respondents could be identified, i.e. having a similar background and servicing the same client group. A questionnaire, developed by the EIM and ITB was filled up by officers of ITB permanently posted in EC countries and non-EC countries.

³ Due to the combined effect of limitations in space and diverging formats of available information across countries no uniform information for all member states could be presented to support the statements made. Throughout the chapter illustrations stemming from all twelve member states have been used to support the argumentation. Information from other countries, available in the background/country documents generally support the views given.

states, whilst Spain and Italy are lagging behind somewhat at 15%, The Netherlands, Ireland and Belgium score highest at 50% or more.

Figure 10.1 Export as a percentage of GDP, 1991 (12 member states)

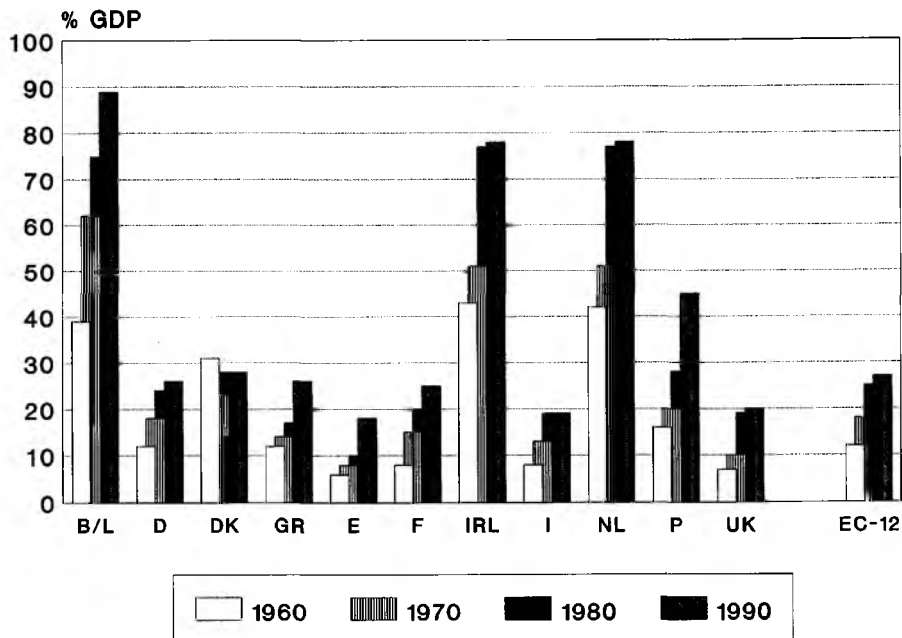


Source: Eurostat (suppl. Doelstell. 92 92/6)/EIM.

Distinguishing between intra- and extra-EC trade, it is found that the Intra-EC segment is growing even faster. For the EC as a whole the share of intra-EC trade in total foreign trade increased from 51% in 1976 to 61% in 1991¹. The development of intra-EC trade as a percentage of GDP for each member state is shown in Figure 10.2 for the 1960-1990 period. The sum of intra-EC imports and exports has been expressed as a percentage of GDP.

¹ Source: EUROSTAT.

Figure 10.2 Intra-EC Imports and Exports, 1960-1991 (as percentage of GDP)



Source: EC, as quoted by Vanheukelen, ESB, 20-1-1993.

Figure 10.2 shows that Spain (E), Portugal (P) and Greece (GR) rapidly integrated into the European market after joining the EC. It is clear that EC integration is a continual process. Even Belgium showing one of the highest levels in 1980 still witnessed a considerable increase in exports throughout the Eighties (1983: 70%, 1991: 75%). Belgian exports to both Portugal and Spain increased dramatically since these countries entered the EC.

10.3 EXPORTS OF SMALL VERSUS LARGE: 6 SELECTED SECTORS

Trends in international trade for small and large firms are analyzed by comparing three small- with three large-scale sectors¹. The six sectors used for the analysis are described below.

Selected small-scale sectors (NACE divisions):

- metal products, excluding machinery and transport equipment (NACE 31);
- footwear and clothing (NACE 45);
- timber and wooden furniture (NACE 46).

¹ Annex 10.1 contains a description of the goods selected within these NACE divisions.

Selected large-scale sectors (NACE divisions):

- basic chemical industries (NACE 25/26);
- office machinery and data-processing machinery (NACE 33);
- motor vehicles and -parts and accessories, aircrafts & parts (NACE 35/36).

Figure 10.3 presents employment shares of small and micro combined (1-99 employees), medium (100-499) and large enterprises (500+) in the three selected sectors. For reference the three major 1-digit industrial NACE divisions (sectors) are also included.

Figure 10.3¹ supports the idea that the selected NACE sectors are reasonably representative of small- and large-scale sectors in general, at least at the European level². In specific countries, e.g. Portugal³ and Greece⁴, the situation may vary as manufacturing is strongly dominated by SMEs.

¹ A similar figure focusing on turnover share of small and large firms in these sectors supports the argument.

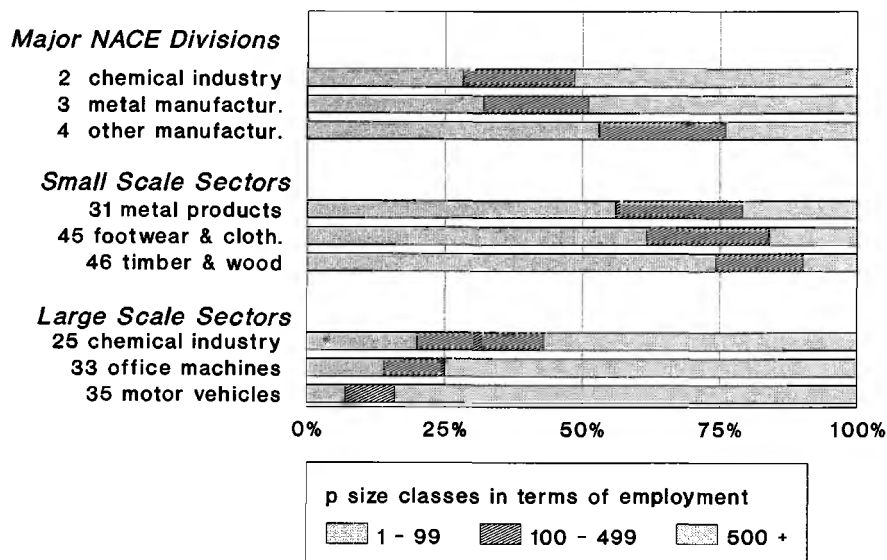
² In the background document to Chapter 9, the relative position of SME in these sectors, in terms of employment shares, is shown for 10 member states based on EUROSTAT data.

³ For Portugal (and Greece) the selected sectors are not considered optimal choices. Still, if one looks at data showing the distribution of total export value of sectors among size classes, it is also shown for Portugal that relative positions of small and large among the NACE groups are generally as expected: export value of firms above 500 employees is for small 9% (NACE 31), 17% (NACE 45) and 18% (NACE 46) and for large 11% (NACE 25/26), 99% (NACE 33) and 92% (NACE 35).

Source: IAPMEI/EIM calculations based on INE (National Institute of Statistics), and Foreign Trade Statistics.

⁴ In 1986 Greece's total industrial exports originated for over 60% from small (10-99) and medium (100-499) firms, while the corresponding figure for total exports was over 70% (see country document Greece, Table 12.1).

Figure 10.3 Size Structure of Selected Industries in the EC



Source: Eurostat (Enterprises 1992) EIM.

In Table 10.1, which refers to small-scale sectors, the export development of selected product groups within these sectors is shown in current prices. A distinction has been made in Table 10.1 between intra-and extra-EC trade. Table 10.1 shows that for all 'small-scale sectors' export growth within the Community outperforms extra-EC trade. For example in 'tools' intra-EC trade rose by 25% over 3 years whereas extra-EC trade grew only 13%. Differences are most marked in wooden furniture and packaging materials (NACE 46). To gain a clearer picture of the performance of EC producers, imports from third countries to the EC market are shown at the foot of Table 10.1. Thus at first sight developments in intra-EC exports appear quite satisfactory. For example in clothing intra-EC trade has grown about 50% and extra-EC trade 30%. However, Table 10.1 shows that imports from other parts of the world have increased some 60% between 1988 and 1991, indicating a loss of market share for EC producers¹. This also happens with: metal articles, men's coats and suits, footwear, and wooden packaging materials, i.e. with four out of six small-scale products. Only in wooden furniture do EC producers perform somewhat better than outside competitors.

¹ This reasoning neglects the domestic market supply within countries.

Table 10.1 Export Development in 6 selected small-scale Product Groups, Index 1991 (1988=100)

SELECTED SMALL-SCALE SECTORS (NACE DIVISIONS)												
	NACE 31		NACE 31		NACE 45		NACE 45		NACE 46		NACE 46	
	Tools		Metal Prod.		M. Clothing		Footwear		Wooden Furniture		Packaging Materials	
	Intr.	Extr.	Intr.	Extr.	Intr.	Extr.	Intr.	Extr.	Intr.	Extr.	Intr.	Extr.
Belg.-Lux.	133	91	165	120	170	134	114	112	125	106	172	93
Denmark	128	115	169	90	399	171	169	120	188	128	109	128
France	126	103	150	123	131	92	122	109	153	107	131	118
Germany	119	115	134	132	133	148	123	178	119	123	146	157
Greece	148	216	97	179	153	213	47	76	255	205	94	75
Ireland	136	77	335	2962*	96	42	130	52	134	294	190	43
Italy	128	150	155	177	142	128	113	109	142	103	99	98
Netherlands	115	104	128	111	149	137	123	248	143	142	144	128
Portugal	133	127	257	177	162	136	147	155	213	208	164	85
Spain	141	100	146	174	119	105	121	97	111	113	115	71
UK	134	109	125	101	140	113	132	135	159	100	130	96
EC-12	125	113	148	143	147	129	120	118	139	113	141	116
Extra-IMPORT127			162		159		169		132		285	

* Figures in the EUROSTAT database do indicate this tremendous increase, although from a low base.

In Table 10.2 the situation for large-scale sectors is given to allow comparison. The export performances of these large-scale sectors show a more varied pattern. For medicaments, office machinery and vehicles intra-EC export is much higher than extra-EC exports.

For fertilizers the situation is reversed. The imports from 'the world' on the EC market is a problem with intra-EC exports of fertilizers and aircraft lagging behind with 22% and 36% respectively. Only in office machinery intra-EC exports are growing faster than competitive imports¹.

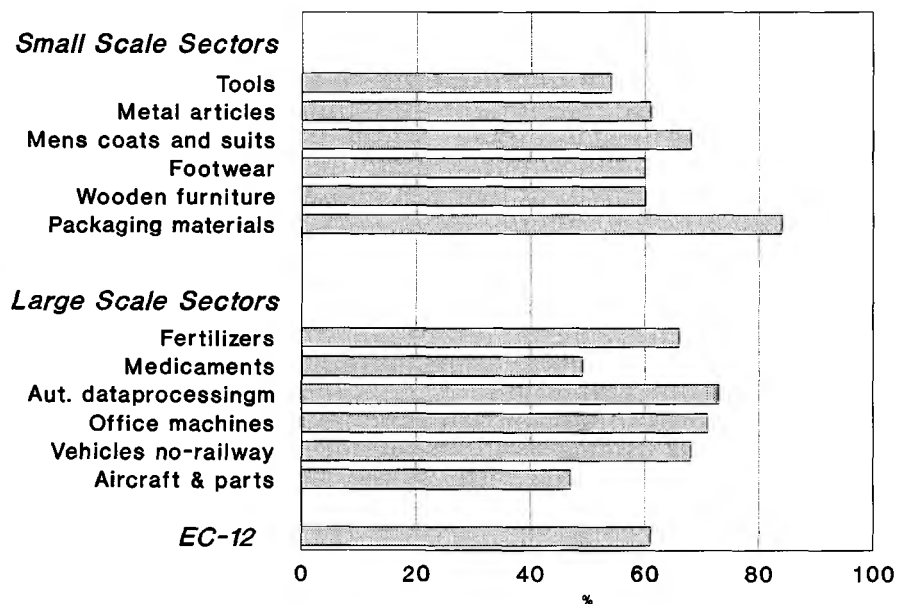
¹ This reasoning neglects the domestic market supply within countries.

Table 10.2 Export Development in 6 selected large-scale Product Groups, Index 1991 (1988 = 100)

SELECTED LARGE-SCALE SECTORS (NACE DIVISIONS)												
	NACE 25		NACE 25		NACE 33		NACE 33		NACE35/36		N 35/36	
	Fertilizers		Medicam.		Data-Proces- sing Mach.		Off. Mach.		Vehicles		Aircrafts	
	Intr.	Extr.	Intr.	Extr.	Intr.	Extr.	Intr.	Extr.	Intr.	Extr.	Intr.	Extr.
Belg.-Lux.	91	144	254	128	108	161	91	86	131	123	252	302
Denmark	23	54	108	76	93	224	29	81	174	112	193	517
France	125	89	169	129	133	106	168	94	147	104	177	177
FR												
Germany	74	152	76	83	107	149	111	132	113	103	202	138
Greece	294	58	168	318	384	618	145	367	339	107	65	163
Ireland	128	26	153	381	81	151	113	414	112	145	547	236
Italy	52	38	183	98	122	65	128	70	139	114	137	202
Nether-lands	104	77	150	109	146	120	198	95	131	152	170	160
Portugal	101	137	454	21	496	614	39	255	161	171	152	70
Spain	118	97	96	85	180	172	109	188	191	97	165	165
UK	106	77	160	130	110	98	111	84	222	96	115	63
EC-12	95	106	175	114	116	117	137	100	138	105	184	177
Extra-IMPORT	117		176		130		125		146		220	

Using the same EUROSTAT data, Figure 10.4 shows the share of intra-EC exports in total exports in these 12 product groups¹.

Figure 10.4 Share of EC-Trade in total trade of EC-12 (twelve selected product groups, 1990)



Source: Eurostat.

¹ See Annex 10.1 for a detailed description of goods and sectors.

As larger firms are generally perceived as having larger geographical targets for exports¹, it is natural to assume large-scale sectors would export to third markets more than small sectors. But Figure 10.4 shows that small- and large-scale sectors are each exporting about 60% to other EC markets. The process of Europeanization can explain this. Large-scale firms are increasingly likely to not just sell their products in foreign markets, but to actually produce goods in those markets. As has been described in chapter 2, manufacturing firms are increasingly becoming footloose: the location decision for production sites is becoming freer. As this process takes place mainly at EC level, large (inter-company) trade flows between member states in goods from large-scale sectors will result. An example might be the car industry: the manufacturing of certain models of Germany's Volkswagen in Spain brings about large intra-EC trade flows², as even models for the German market are imported from Spain.

Variance within large, respectively small-scale sectors is related to the characteristics of the commodity. Wooden packaging materials are mainly low-value goods not transported long distances and hence mainly traded within the Community. Whereas medicaments and aircraft(-parts) are high-value merchandise which are traded at great distances³ with the result of more extra-EC trade.

Based on assessments to be found in the background document of chapter 9, the relative importance of exports for the selected NACE divisions is analyzed by country. Figure 10.5 and Figure 10.6 show the share of export in gross output for eight member states in 1990 for small- and large-scale sectors⁴ respectively.

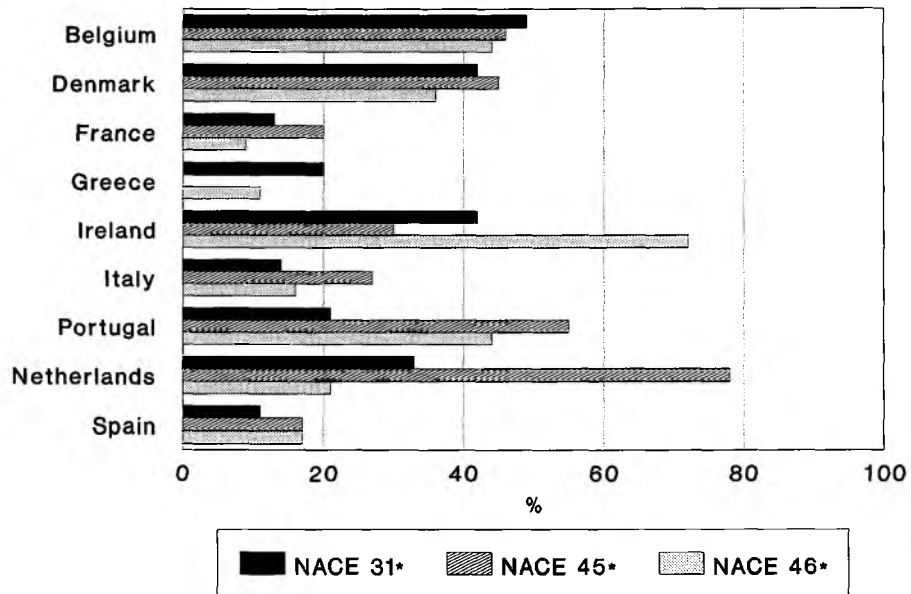
¹ SME exports concentrate on neighbouring countries. Investigations for the Netherlands have shown that although the share of intra-EC trade in exports may be equal for small and large, the share marketed in neighbouring countries is much larger for SMEs.

² See discussion on footloose industries in Chapter 4, section 4.4.2.

³ What matters is of course value in relation to weight and volume combined with economies of scale in manufacturing which may be decisive in deciding between one or two production sites.

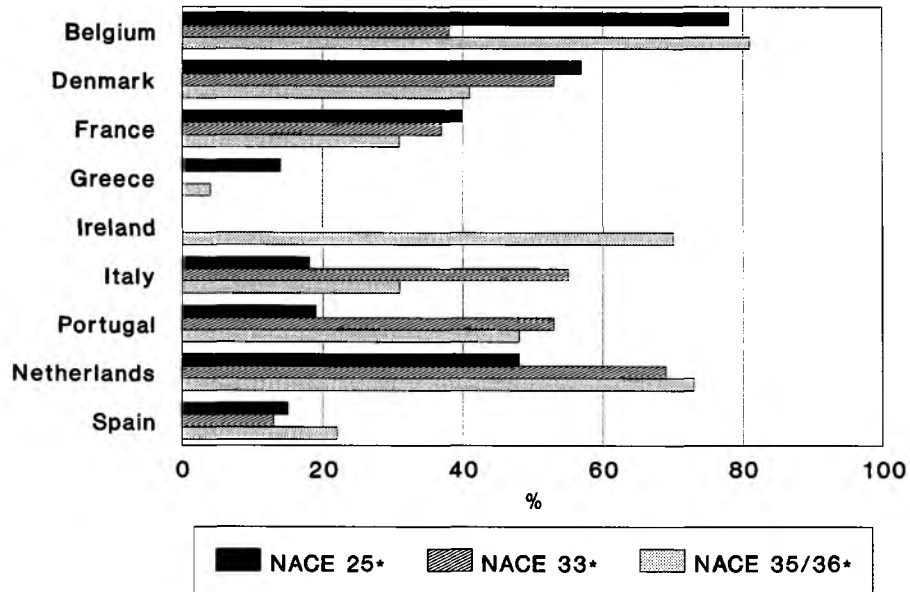
⁴ The data on Spain and Portugal refer to 1987, those on Ireland to 1989, and NACE 25 includes NACE 26. Luxembourg, Germany and the UK: comparable data are not available.

Figure 10.5 Export Share in Gross Output 1990
(three selected small-scale NACE divisions)



* See Annex 10.1 for a description of NACE groups.

Figure 10.6 Export Share in Gross Output 1990
(three selected large-scale NACE divisions)



* See Annex 10.1 for a description of NACE groups.
Source: Background documents.

In general export shares by sector and country seem to represent quite fairly the general macro-economic structure of the various economies. Small open economies, which were shown to have high export/GDP ratios (see Figure 10.4) such as Belgium, Ireland and The Netherlands, also have high export/turnover ratios in the selected sectors, in small as well as large NACE divisions. Portugal (fourth in the macro-economic ranking) and Denmark also show relatively high export/turnover ratios. Comparing small- and large-scale sectors two observations are in order, viz.:

- generally speaking, large-scale sectors show higher ratios than expected;
- in countries where SMEs dominate manufacturing in general, i.e. where 'large-scale sectors' still have a large SME component, like Portugal and to some extent Greece, this difference is not significant.

Conclusion

Although the differences are not marked, the two figures still show that small-scale NACE divisions have lower export shares than large-scale NACE divisions.

10.4 BOTTLENECKS INTERNATIONALIZATION: 6 SELECTED SECTORS

In this section an assessment is made of the bottlenecks encountered by entrepreneurs in realizing the trade flows discussed in section 10.3. Central theme is: 'Does the nature of problems differ for SME and large firms?'. Again, the selected six NACE divisions are used as a proxy for small-, respectively large-scale enterprises.

The graphs in this section are based on numerous ad-hoc surveys in all member states. Problems are classified in six categories for manufacturing in general. By distinguishing between selected small- and large-scale sectors (see section 10.3), a different score for SME and large-scale firms has been obtained. The score represents the frequency with which the problem occurred in a list indicating the top five bottlenecks for six selected sectors. Values should be interpreted as an indication only.

General

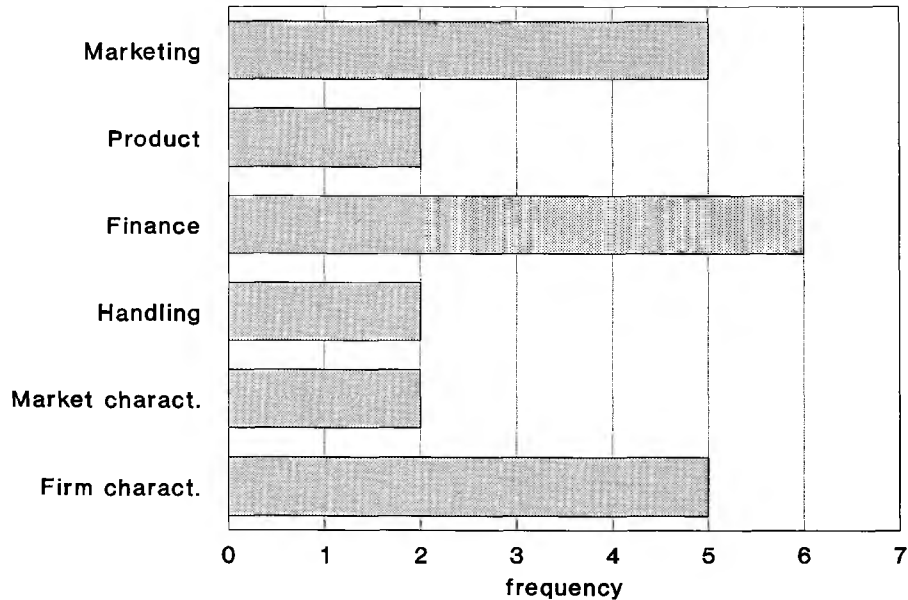
Before answering this question, export problems of manufacturing in general are commented upon. Figure 10.7 is based on surveys of export bottlenecks carried out all over the EC referring to manufacturing in general.

All export bottlenecks identified are classified into six categories. Annex 10.2 provides an overview. Three out of six main categories are most important, viz.:

- marketing problems;
- financial problems (including price setting);
- characteristics of the exporting firms themselves.

Marketing problems refer to issues like obtaining market information, identifying suitable representation in the export market (agents and distributors) and distribution channels. Financial problems refer to price setting, handling exchange-rate risks, qualifying for subsidies and payment procedures. Bottlenecks related to the firm itself are the lack of financial means, no ability to invest time, inappropriate internal organization, lack of knowledge and so on.

Figure 10.7 Export Bottlenecks (Manufacturing in general)



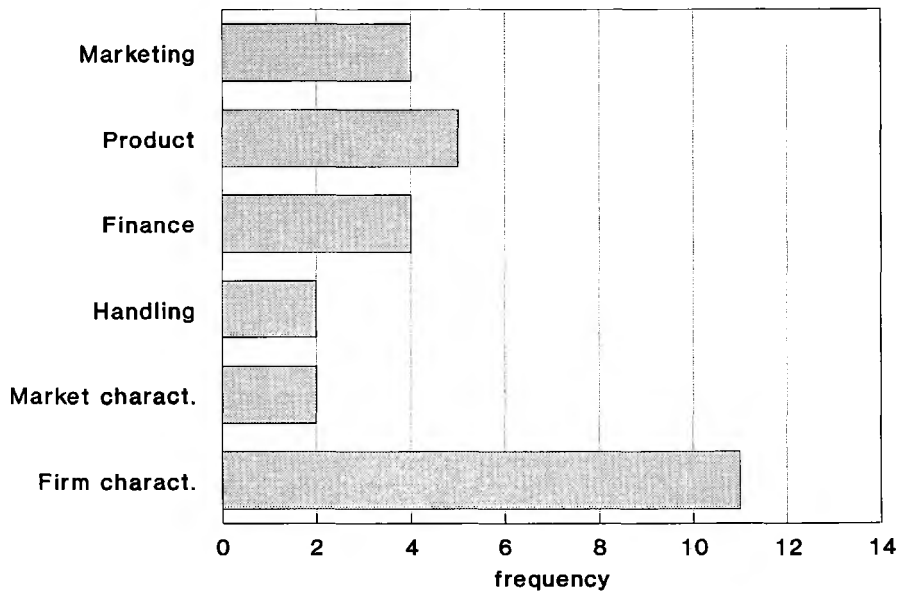
Small and medium-sized firms

Looking at the same bottlenecks for SMEs it turns out that characteristics of the exporting firms themselves are more important. The lack of knowledge and the small scale of the firms represent severe bottlenecks (see Figure 10.8). Of course financial bottlenecks or, to be more specific, exchange-rate risks, play a key role. Thus far the categories which may inhibit exports by small firms do not differ from the major bottlenecks for manufacturing in general. A third major category however is adjusting the product to meet requirements of export markets. It is difficult for small exporters to adjust products to local tastes or to specifications of foreign law. Last but not least marketing problems are more important than in large enterprises.

Generally speaking, most of the problems small firms have to solve are directly related to organizational aspects of the firm. Smaller firms often lack the sheer size to account for specialists like an export manager within management.

Small firms do - as with other investments - have more problems in raising funds to start an operation. Often it is difficult for a small production organization¹ to manufacture one product with varying specifications².

Figure 10.8 Export Bottlenecks, selected Small Scale Sectors in Manufacturing



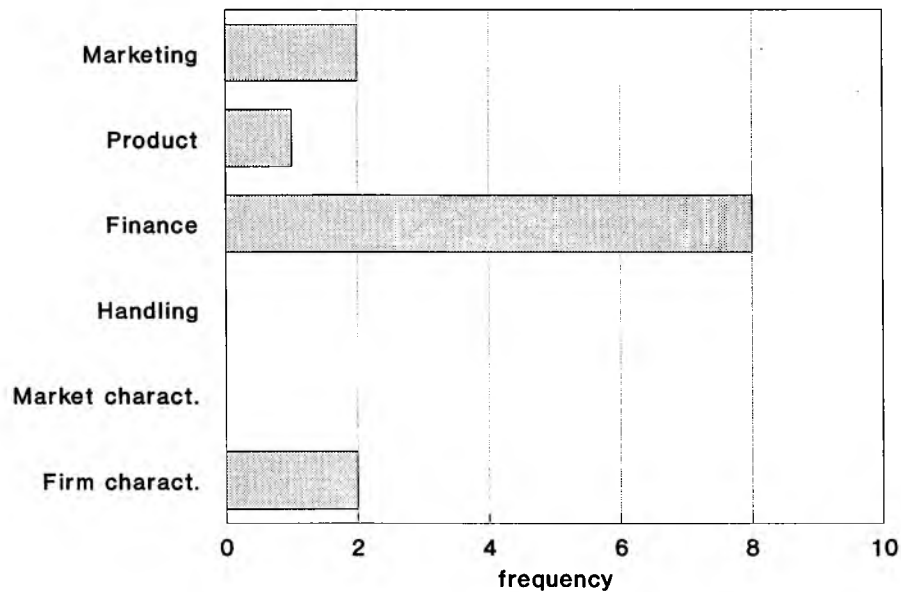
Large firms

For large firms there is only one category of bottlenecks that is really important: financial problems, especially price setting. This problem is more related to the outside world: market positions, competition and strategy.

¹ Of course it is common knowledge that small firms are more flexible. However one has to distinguish between reacting to changes in the environment of the firm and matters of economies of scale. The already limited scale of SMEs may not allow more varieties to be manufactured as series will become very small.

² European harmonization is very important in this respect.

Figure 10.9 Export Bottlenecks, selected Large Scale Sectors in Manufacturing



Handling and characteristics of foreign markets are not often mentioned in the survey. But each in its way can inhibit exports. Larger companies have already found ways to handle these problems. Smaller, less experienced companies simply have not yet encountered them or are preoccupied with solving their internal problems. But it goes without saying that reducing problems like paperwork, taking care of regulations and duties and so on will facilitate exports greatly. The same holds for uniformity in business laws and practices.

To wind up this section, it is useful to report that major bottlenecks as seen by entrepreneurs have not changed much over time. In Germany and The Netherlands we have compared surveys of the early 1980s and early 1990s, and conclude that a similar picture emerged.

10.5 EXPORTS: THE ROLE OF SMALL AND MEDIUM-SIZED FIRMS

This section discusses two issues, viz.:

- some general observations in § 10.5.1 and § 10.5.2;
- empirical observations from studies in all members states in § 10.5.3 (these are discussed in more detail in the background documents).

10.5.1 Export participation: SME versus large

Over the last 25 years much research has been published on the role of medium and small enterprises in exporting. The relationship between the size of the firm and exports has been seen in two ways:

- a. the percentage of firms exporting increases with size of the firm;
- b. the share of exports in turnover also increases with firm size¹.

Miesenbock, surveying approximately 140 studies in 1988², identified critical boundaries at 20 employees, and around 100 employees.

Which factors explain the lower export performance of smaller firms? The following observations are in order.

1. At the macro level SMEs are less involved in exports than larger firms due mainly to sectoral differences.
2. But after correcting for sectoral effects, firm-level differences remain. SMEs have their own distinctive characteristics.
3. Therefore it is important to distinguish between issues inevitably connected to SME (of which limited scale of operations and organization are the most obvious) and factors which might be partly offset by an adequate supporting institution or policy.
4. Size by itself asks for the following observations:
 - a successful exporting firm may find itself growing into a large firm;
 - even if all other factors are equal: 'a smaller scale of operations simply requires a smaller market', hence SMEs may continue supplying domestic markets rather than attempt to export.
5. One of the main differences between small and large enterprises is the close relation between the business-unit and the owner/manager. Therefore attitudes and perceptions are more important. Non-exporters may not be entering export markets because of misconceptions about associated problems³. Even problems perceived are important for policy-making: such 'reasons' are still forcing SMEs to abandon export plans.

¹ Exports as a percentage of total turnover of the size class, not so much at individual firm level. This is explained by point a: less participating of small firms.

² Miesenbock, Kurt J. (1988), 'Small businesses and exporting: a literature review', *International Small Business Journal*, Volume 6, no. 2.

³ Malekzadeh, A.R. and Nahavandi A. (1984), 'Small Business Exporting: Misconceptions are Abundant', *American Journal of Small Business*, Vol 9.

10.5.2 Irregular exporters

In most export studies and policy debates firms are classified either as exporters or non-exporters. This classification is based on the notion that exporters make a definitive decision and attempt an export strategy to widen their scope of activities and undertake a systematic export effort. Data from The Netherlands and Italy suggest such an approach may be incorrect.

The following observations can be made:

- smaller firms start exporting on an ad-hoc basis;
- start of exports is often induced by external factors;
- initially these firms are passive exporters (no active marketing strategy);
- chances are odd that firms often discontinue export activities;
- a rather substantial group of firms export rather irregular; some years they export, but in other years they do not.

Studies tend to underestimate the latter group, since depending on the timing of the survey they are either registered as exporters or as non-exporters depending on the reference period chosen for the question: 'Is your firm an active exporter?'.

With regard to formulating export support policies three classes can be identified: exporters, non-exporters and irregular exporters. Each group has different characteristics. Irregular exporters might, for example, be much better informed about export constraints than non-exporters. A similar reasoning may be relevant for other areas of internationalization.

10.5.3 Empirical observations

The role of SME in national exports

Over a quarter of all exports from Portugal are carried out by micro and small enterprises, i.e. firms with less than 100 employees, as is shown in Table 10.3. It should of course be noted that the average firm size in Portugal is rather small.

Table 10.3 Distribution of Exports by size of firm, Portugal 1989

Size of Firm	Percent of Firms
micro (0-9)	5
small (10-99)	22
medium + large (100+)	73
Total	100

Source: INE.

But also in a large economy, like Germany, SMEs play an important role in exporting (see last column in Table 10.4)¹.

Table 10.4 Share of Exports in Turnover and Distribution of Export Turnover in the Manufacturing Industry, Germany, 1987 and 1990

Size of Firm	Share of exports in Turnover		Distribution of Export Turnover
	1987	1990	1990
20 - 49	11	10	3
50 - 99	15	15	4
100 - 199	16	20	7
200 - 499	25	21	15
500+	38	41	72
Total	-	-	100

Source: IFM Bonn/Federal statistical offices of 9 Länder, firms with 20+ employees only, not all sectors fully covered (see background document).

Table 10.5 presents for a number of manufacturing industries in Italy the SME share of total exports. For small-scale sectors this share is more than 75 per cent, for large-scale sectors between 25 and 35 per cent. Table 10.5 confirms that the selected six NACE divisions are reasonable proxies for small- respectively large-scale sectors. In the background document 'Greece' comparable data may be found.

¹ In comparing 1987 and 1990 data, one should realize that the German unification may play an important role.

Table 10.5 Percentage of Export Value exported by SME, by sector, Italy, 1984

Sector	Percent of Export Value
Wood & Furniture	95
Leather and Footwear	90
Textile	87
Non-Ferrous Metals	80
Clothing	77
Food	77
Non-Electrical Machines	53
Chemicals	32
Electrical Machines	30
Ferrous Metals	28
Transport Equipment	24
Total	53

Source: Mediocredito Centrale (1987).

Finally, Italian data on 1987 illustrate two interesting phenomena¹:

- of all exporting firms 84% have an individual export turnover below 670,000 ECU (1,000 million Lire at the exchange rate in 1987), and another 12% between 670,000 and 3.3 million ECU (1,000-5,000 million Lire, 1987). These firms are responsible for 11% respectively 21% of total exports revenue;
- but about 50% of these 'smaller' exporters did not export each year in the 1982-1987 period.

This data refers to the same phenomena established in a Dutch study²: in terms of number of exporters a considerable group does exist that is not constantly and systematically exporting. Their share in sales is of course relatively low, but they could be regarded as a target group for export support policies. On the one hand much progress has yet to be made, yet these firms already have some experience and may have realistic ideas about the problems to be overcome before one has a structural market position abroad.

¹ Source: ICE (1988), *La struttura delle esportazioni italiane: un'analisi per imprese*, Rome, april.

² Elk, J.W. van (1991), and M. Overweel (EIM), *Met Kracht naar het Buitenland: exportmogelijkheden van het Nederlandse MKB (Full-Speed Abroad: Export possibilities of Dutch SMEs)*, ABN♦AMRO, Amsterdam, 1991.

The importance of exports for SME

The data for Germany presented in Table 10.4 already showed that in general export shares increase with firm size. Data for Italy in Table 10.6 show another general trend, found in most countries and sectors: the percentage of firms exporting increases with the size of firm. For all size classes a somewhat larger percentage of firms exported in 1984 as compared to 1978.

Table 10.6 Percentage of Firms Exporting, by firm size, Italy, 1978 and 1984

Year	Firm Size					
	11-20	21-50	51-100	101-300	301-500	more than 500
1978	32	50	66	77	83	87
1984	38	54	68	81	87	93

Source: Mediocredito Centrale (1987).

The share of exports in total production of firms shows only a modest increase with firm size in Italy, from 22% for firms with 20-100 employees to 27% for firms with more than 500 employees. However during the Eighties these ratios have been growing. For economies in which exports play a much more important role as indicated by exports/GDP ratios, i.e. geographically small countries, differences are more marked as illustrated in Table 10.7 for Denmark and by data for The Netherlands in Table 10.8.

Table 10.7 Export Shares by firm size, Denmark, 1991

Manufacturing		All Sectors	
Size Class Employees	Export Percent Sales	Size Class Employees	Export Percent Sales
10 - 19	37	-	-
20 - 49	46	10 - 49	29
50 - 99	52	50 - 99	40
100 - 199	57	100 - 249	42
-	-	250 - 499	43
200+	67	500+	52

Source: Manufacturing: Survey among 1,200 companies, DTI 1991.

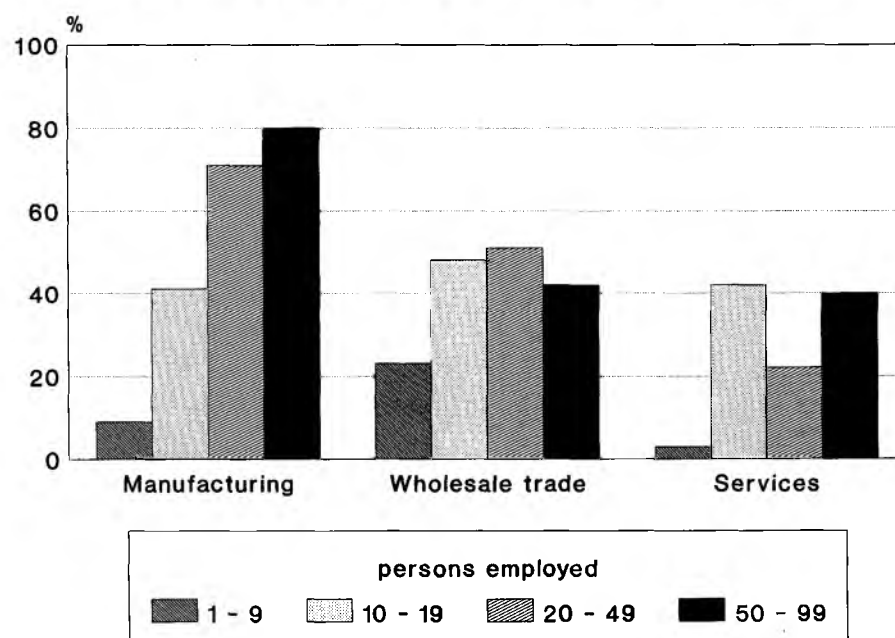
All sectors: Finansministeriet, statistical data on all registered companies, 1992.

Table 10.8 Export Shares (Export % in Total Sales) by size class and sector, Netherlands, 1988

Sector	Size Classes					SME	Total
	Micro	Small	Medium	Large			
Extraction	23	25	27	29	26	28	
Manufacturing	22	36	47	60	40	48	
Construction	1	1	3	3	2	2	
Trade	15	18	6	3	14	13	
Services	3	9	7	19	7	9	
Total	12	18	23	36	17	22	

Source: CBS/EIM.

Figure 10.10 Percentage of Firms exporting, by sector and size, The Netherlands, 1991



Source: NIPO Business Monitor, 1991.

The tables on Denmark (Table 10.7) and The Netherlands (Table 10.8) demonstrate a close link between size of firm and export share, particularly in manufacturing. However, the level of aggregation should be taken into account. The differences are mainly brought about by the percentage of firms that do participate in exports. Figure 10.10 shows that this participation rate varies con-

siderably with size of firm in manufacturing. This implies that for *exporting firms only* the export shares vary to a much lesser extent with size of firm. In some branches the export share of smaller firms is even higher than that of large enterprises. Still, almost 75% of Dutch exports originate from 100+ enterprises¹. However, it has already been shown in chapter 2 that exports of firms with less than 100 employees have grown faster during the last decade than exports of large firms, hence the share of small firms is increasing.

In Ireland the export orientation of all size classes in manufacturing is very high. The percentages of exporting firms range from 60% for 0-10 and 10-99 sizes to about 80% for firms with 100 or more employees.

Even in the very small economy of Luxembourg, a strong relation between firm size and participation of exports has been established for manufacturing SMEs (see Table 10.9).

Table 10.9 Export by Firm Size, Manufacturing, Luxembourg, 1991

Employees	Percent of Firms Exporting
0 - 9	28
10 - 99	66
100 - 499	95

Source: Investigation CEPS/INSTEAD.

The regional scope

A comparison of 1984-87 versus 1988-90 shows for The Netherlands that the regional distribution of Dutch exports did not change. Over 70% of exports are sold within the EC, of which the major share goes to neighbouring countries, especially Germany. Whereas the EC share of exports differs only slightly between small and large, neighbouring countries are much more important for SME. Similar patterns are found in other member states. This may indicate for peripheral member states that non-EC share for SME is relatively large, especially in border regions, i.e. from Greece and to the Balkan markets.

¹ Which is remarkably similar to the Portuguese figures presented in Table 9.3.

In Ireland, 27% of total exports are destined for the UK. For micro firms this percentage is as high as 45¹, for firms with 10-99 employees it is 36%. UK- and other EC markets taken together are responsible for 70% to 80% of exports by Irish firms.

10.6 BOTTLENECKS IN MARKET ENTRY AT FIRM LEVEL

10.6.1 Introduction

In section 10.4 bottlenecks for internationalization were discussed based on a literature survey of case studies and sample surveys of the six selected sectors. In order to get a better and more general understanding of the market barriers still present for SMEs at firm level, a survey was carried out by An Bord Tráchtála/Irish Trade Board in the Autumn of 1992² specially for the Observatory. Also in this survey among trade officials³ special attention was paid to the six selected NACE divisions. The investigation focused on bottlenecks faced by firms seeking entry to other markets both inside and outside the Community.

Using such an organisation has several advantages. Firstly, respondents have the same background, belonging to the same organisation and serving the same client group (Irish firms). Secondly, respondents have considerable experience in export matters (over 15 years) and in their duty country (over 5 years). Hence, any variation is likely to be associated with specific trade rules and thresholds for market entry in destination markets.

¹ The appreciation of the Irish Punt against the British Pound early 1993 created much difficulties for these exporters; one of the reasons behind the devaluation of the Irish currency ultimo January 1993.

² Bord Tráchtála, Irish national export promotion agency, has a network of offices and consultants, both within and outside the EC. The survey, implemented by Bord Tráchtála in cooperation with the EIM, compassed offices in: Amsterdam; Berlin; Brussels; Copenhagen; Düsseldorf; Glasgow; Lisbon; London; Madrid; Manchester; Milan; Paris and Stockholm; Trade consultants in Austria, Greece, Finland, Norway and Switzerland. Bord Tráchtála produced a report on the survey which is available as a background document: 'Post '92 Trade Obstacles, Bottlenecks to SME Internationalisation'. Seamus Bannon and Helen Carey, EIM/Bord Tráchtála, Dublin, December 21, 1992.

³ An alternative would be to survey large and smaller firms throughout the EC about their present export problems and expectation of the effects of EC '92. However this approach did not fit in the scope of the Observatory.

10.6.2 Characteristics of support services and client firms

Before looking into bottlenecks for internationalization we summarize the characteristics of firms using this type of internationalization support and the changes likely to be brought about by the Single Market.

Firms using these services are found in various stages of internationalization, viz.:

- considering foreign markets;
- firms planning to export;
- active exporters;
- firms looking for co-operation with local firms;
- firms interested in Foreign Direct Investments.

It is believed that there will be more enquiries after 1/1/93, i.e. once the Single Market has been fully realized.

Hardly any of these firms are engaged in invisible trade, e.g. selling of patents and licences. Most of the firms are manufacturing SMEs. Clients are also found among micro firms. These categories of clients will become even more important after 1/1/93. Wholesalers, export-trading companies and firms offering commercial services are only occasional users. This is not expected to change in the near future.

The types of services provided are mainly:

- general market information;
- market research;
- guiding exporters in local operations;
- preparation of business trips.

It is believed that demand for these services will increase after January 1st, 1993.

10.6.3 Bottlenecks by firm size

Here, based upon expert opinions, the same conclusion is reached as in section 10.4 which was mainly based upon views of entrepreneurs recorded in surveys. There is consensus about one major bottleneck: 'the characteristic of the small firm'. This is not surprising: small firms tend to lack the financial means and time to invest. Also the organization of small firms is often not capable of backing up export sales. Small exporters often lack the experience or an export manager to manage exports properly. For manufacturers of

wooden furniture adapting the product to 'local taste' is a major important constraint.

Another major bottleneck encountered by small firms is marketing and distribution, i.e. how to find a good agent or distributor?

The most important bottleneck for larger firms mentioned in the survey is meeting product specifications required by foreign law. Also the handling of export activities and problems around marketing and distribution are found to be important.

Size plays a major role in exporting. The problems of small firms are of another nature than those encountered by larger firms. Mature exporters refer to external problems, whereas the problems of small firms are within the firm or product itself; they lack knowledge foremost¹. The idea is therefore that the measures taken in the framework of the Single Market will produce different effects on small and large exporters.

A Danish survey confirms our conclusion that SME exports are being held back by internal factors, such as:

- lack of export experience;
- lack of language skills;
- lack of knowledge about foreign markets;
- lack of financial resources for export;
- lack of trained personnel.

But it also concluded that the most important external factors (mentioned by 50% of 654 Danish firms surveyed²) were technical trade barriers. Such barriers are expected to fall with the establishment of the Single Market.

10.6.4 The effects of the Single Market

Overview

The expected reduction in the following three bottlenecks is stated most often when asked about positive effects of the Single Market:

¹ Elk, J.W. van (1991), and M. Overweel (EIM), *Met Kracht naar het Buitenland: exportmogelijkheden van het Nederlandse MKB*, ABN♦AMRO, Amsterdam, 1991; or EIM (1989), *The Participation of Small and Medium Sized Enterprises in Exporting outside the Community. A study of exporters in the UK, Italy and the Netherlands on behalf of the EC*, not published. EIM (1989), op. cit.

² Strandskov et al. 1987.

- customs regulations, duties;
- paperwork (permits, licences);
- product specifications required by foreign law.

Other bottlenecks expected to become relatively more important include:

- insufficient organization to back up export sales;
- handling exchange-rate risks;
- price-setting.

Finding 'exchange-rate risk' in this category is surprising at first sight. The explanation has to be found in the lack of confidence in the positive effects of the ERM, brought about by the exchange-rate crisis taking place just before the survey ultimo 1992.

Small-scale sectors

There is consensus about the major bottleneck categories which are becoming less important in the near future: handling; finance and the characteristics of export markets. Reasons for these are: more simplified customs regulations; more transparent business laws and more uniform payment procedures. Meeting product specifications will become more easy for manufacturers of tools. As anticipated, bottlenecks becoming relatively more important are related to the organization of the small firms, as most of the measures taken by Brussels tend to seize upon external bottlenecks.

Large-scale sectors

The burden of paperwork, customs regulations and product specifications and payment procedures are expected to lessen. There is less unity about the major bottlenecks becoming more important. In 'fertilizers', paperwork and meeting product specifications required by foreign law will gain importance; in 'office machinery' the lack of financial resources and flexibility of the firm are mentioned. On the whole it turns out that the major bottlenecks expected to increase in importance are *within* the firm rather than outside.

10.6.5 EC versus non-EC

The major bottleneck encountered by exporters is, for EC- as well as non-EC markets, the identification of a suitable agent. This finding is confirmed by surveys referred to above among export managers directly. For non-EC markets 'local consumer tastes' and 'insufficient organization to back up 'export sales'

are more important than within the EC. The second and third most constraining bottlenecks in EC markets concern problems which after EC-92 should be largely removed: 'specifications by foreign law' and 'handling exchange-rate risks'.

Generally speaking, the difference between EC- and non-EC markets is the following: firms exporting to non-EC countries lack general knowledge about those countries and vice versa: those countries have a lower awareness of EC firms as suppliers. In supplying EC countries there is a deficiency in more specific market information, price setting and business culture.

10.6.6 Bottlenecks and export support policy

The survey of problems identified earlier in this section and in section 10.4, shows that bottlenecks as identified by entrepreneurs do not vary much between member states. Also results of the study 'The participation of SME in Exporting outside the Community'¹ suggests that a general approach at Community level is feasible. To enable comparisons, the top five export problems for EC and non-EC export markets as given by 1,000 SME exporters in this study are recapitulated in Table 10.10.

Table 10.10 Top five Problems of SME Exporters in Manufacturing, EC and non-EC markets

Bottlenecks	Rank (and Percentage of Firms)	
	EC	Non-EC
Price setting	1 (24)	3 (23)
Paperwork	2 (22)	1 (27)
Finding representation	3 (22)	2 (24)
Customs regulations & duties	4 (19)	4 (23)
Profitability	5 (18)	- (16)
Obtaining market information	- (16)	5 (21)

Source: Sample N= 1000, Italy, UK, The Netherlands.

¹ The study is based on uniform surveys among manufacturing SME in Italy, UK and The Netherlands. The report was submitted in 1989 to DG XXIII of the Commission by the EIM (three volumes, not published).

10.7 INTERNATIONALIZATION OF SMEs: BEYOND EXPORT

10.7.1 Introduction

The discussion so far has focused mainly on exports. So the question arises, to which extent are SMEs actually affected by and participating in the wider trend of internationalization?

In Denmark for example, the internationalization process has in general been dominated by factors such as¹:

- export of SMEs;
- foreign direct investment in Danish SMEs, especially by Swedish firms;
- increased export co-operation among Danish SMEs;
- professionalization of the role of SMEs as sub-suppliers.

Due to market developments Danish exporters have left some more complicated markets (e.g. USA) and concentrated more on EC markets.

To further illustrate that SMEs are actually involved in internationalization, an overview of international operations for 1,000 SMEs in Belgium is given²:

- exporting	46%
- importing	42%
- affiliates	15%
- using licences from abroad	9%
- production unit abroad	9%
- selling licences	7%

The percentage of firms involved shows that international operations of SMEs do not only refer to trading activities; overall about 53% of SMEs showed any international activity. These firms were asked about the effects of '1992' anticipated:

- more co-operation with foreign firms	81%
- more international activities by firm	80%
- possibility of merger	63%

¹ Source: country document Denmark.

² Findings from a recent telephone survey among 1,000 SMEs, operating almost all in secondary sectors, and ranging in size from 0-500 employees. Source: Rik Donckels and Ria Aerts (1992), *KMO's en internationalisering (SMEs and internationalisation)*, Koning Boudewijnstichting, Brussels.

- more competition 60%
- possibility of being taken over 56%
- more joint-ventures with Belgian firms 50%

However, it is generally assumed that business management of SMEs is less oriented to strategic issues (the other side of the coin is called flexibility). SME managers generally find little time to systematically consider developments in the environment, i.e. threats and options in the long run. Also in the field of internationalization and SME illustrations can be found.

- In the Belgian survey referred to above, 56% of entrepreneurs stated that the European Single Market, EC-1993, had not influenced their firms' policy in 1991 (year of survey), whereas 85% of the same entrepreneurs indicated that '1993' will affect business policies in the future.
- In the study '1992 getting ready' by KPMG consultants carried out in 1988, entrepreneurs all over the EC stated by a large majority that EC measures related to the Single Market would change their sales and marketing, manufacturing, R&D, financial and personal policies. Nevertheless, a subsequent study carried out by KPMG in 1992 in The Netherlands, showed that in reality only a very small minority did take '1992' into account in their business policies. Differences are striking: on average (across various business functions) less than 20% do so now, whereas only four years ago two-thirds expected to be doing so, a difference of almost 50 percentage points.

Finally, the French case illustrates the ongoing internationalization of European SME¹. The analysis, based on two French studies, focuses on a strategic issue: market orientation. Table 10.11 reveals that SME show the following tendency: concentration on the national market is decreasing, whereas concentration on both international as well as local markets is increasing.

Table 10.11 Market Orientation of SME, France, 1980-1990

Market	Percent 1980	Percent 1990
Local	10	13
Regional	22	25
National	38	28
EC	13	16
Worldwide	17	18
Total	100	100

Source: CEPME 1981, 1991.

¹ Information is based on a survey among 1,600 managing directors of firms with 3-499 employees in France in 1980 and in 1990 (CEPME 1980, respectively 1991).

A somewhat different classification of internationalization of French SME is given in Table 10.12¹.

Table 10.12 Internationalization of French SME

Classification	Description	Percent of Firms	Percent of Employment
Franco-Français	Only selling in France	40	25
Traditional Export	Exporting long time to countries traditionally linked with France	14	11
New Europeans	Developing especially sales in EC	33	42
Worldwide Export	Mainly active on export markets (average export turnover 55%)	14	22
Total		100	100

Source: Algoe, November 1989.

The group 'New Europeans' showed the highest positive developments, in terms of turnover, exports and employment in the period 1986-1988. The study also indicated that firms locally active are not aware of the increased competition from foreign firms on domestic markets.

The firms increasing their internationalization changed their market approach (sales network) in 1986-1989. They are increasingly creating their own set-up (+32%) or joint-ventures (+113%) in foreign markets, and hence decreasing the role of intermediaries like importing companies or agents (-16%).

After this introduction indicating the involvement of SMEs in internationalization, an overview of evidence of internationalization within the EC at country level will be presented. In three sub-sections the various elements of internationalization introduced earlier will be discussed, i.e. co-operation with foreign firms (§ 10.7.2), international licensing (§ 10.7.3), and foreign direct investment (§ 10.7.4). The role of SME in internationalization and the regional scope of the phenomena will be major elements in the discussion.

¹ A study by the French Ministry of Industry: PMI 90, Vers la compétitivité globale, Direction Générale de l'industrie, Algoe, Commissariat au Plan, based on a survey among 845 SMEs in manufacturing, especially medium-sized.

10.7.2 International co-operation

In the 1970s the UN Economic Commission for Europe¹ attempted to classify industrial cooperation into six forms:

1.	Licensing (licence or know-how against dues)	[12%]
2.	Delivery of plant or equipment (production line or equipment, payment by products produced)	[15%]
3.	Specialization and co-production (part 1 of product X exchanged for part 2 of product X, payments for the balance and assembling at one or two ends)	[43%]
4.	Subcontracting (definition used is producing parts on 'documentation' (i.e. on specification); information and payments are exchanged for parts)	[5%]
5.	Joint-tendering or construction in third countries (consortium)	[12%]
6.	Joint-ventures (production, or production and trade)	[14%]
		<hr/>
		[Total 100%]

Although this classification has recently been used to describe East-West Industrial Cooperation (between [...] 1989 data in % of total is given), it does not fully convey developments within the EC. The classification merely illustrates the various types of co-operation present in the manufacturing sector, which are mainly referring to the core production activities of the firms. Co-operation is also important elsewhere, for example in construction, trade and other services, and partnerships in other areas of business policy are very important, e.g. in R&D or marketing.

In Germany cross-border cooperation is rising. Figures by size class are given in Table 10.13.

¹ Analytical report on Industrial Cooperation, UN ECE, Geneva 1973, as quoted in: 'The structure of East-West Cooperation Forms During the Years 1970-1989', NEI, Rotterdam, 1992/4.

Table 10.13 Cross-Border Cooperation*, Germany, 1989

Size of Firm (employees)	Percent of Firms
1 - 49	25
50 - 199	29
200 - 499	30
500+	45

* Data are not representative for whole of Germany, as sample firms are mainly located in border regions.

Source: IFM Bonn, Survey 1989.

Especially in the smallest category the percentage is higher in trade (commerce) than in manufacturing.

Cross-border co-operation takes various forms. Co-operation is often targeted at sales and marketing, but also involves sharing distribution networks¹. Partnerships in the field of production and R&D also exist and may be effective. An example²: Junkers, a German firm, employs around 2,000 workers and is a subsidiary of an even larger company. A small Dutch manufacturer, ATAG Verwarming BV (70 employees), entered into a partnership with Junkers in 1990 to develop boiler technology for domestic heating. In this way the development capacity of this Dutch SME has been linked to the scale-advantages of the German partner.

In a study on international cooperation by Italian companies conducted during 1987 the type of agreement and the main goals of international agreements have been identified. These are shown in Tables 10.14 and 10.15.

¹ Buck Consultants International (1991), *Internationale Samenwerking in het MKB*, Rabobank, Utrecht/Nijmegen 1991.

² Euser (1992), op. cit.

Table 10.14 Typology of Agreements by Size of Firm

Type of Agreement	SMEs (<500 employees)	Large Firms	Total
Percent (N=260)			
Sale of Technology	25	31	27
Acquisition of Technology	10	16	12
Exchange of Technology	6	11	8
Marketing Abroad	30	17	25
Marketing in Italy	9	9	9
Other Commercial	21	16	19
Total	100	100	100

Source: CESPRI (1988), Università Bocconi - Milan for the Business Cooperation Centre of the SME Task Force of the European Communities, International agreements of Italian firms: An analysis with specific reference to the role of intra-EC cooperation (not published).

Table 10.15 The Italian Firms' Main Goals in Agreements by Size of Firm

Firms' Goals	SMEs (<500 employees)	Large Firms	Total
Percent (N=272)			
Strengthen Position on Actual Outlet Markets	57	48	51
Enter New Markets	28	41	36
Overcome Protectionist Barriers to Exports	13	14	14
Enjoy Higher Economies of Scale	35	28	31
Rationalize Product Mix	21	14	16
Diversify Production	27	19	22
Reduce Risk, Time, Cost of Research Activities	26	11	17
Acquire Technology and Know-How	22	17	18
Obtain Money Returns on Own Technology	23	15	18
Access to New Financial Funds	5	2	3

* More than one answer possible.

Source: Cespri (1988), International agreements of Italian firms: an analysis with specific reference to the role of intra-EC cooperation, not published (sample of 272 firms, agreements in the 1983-1987 period).

In a Belgian study¹, SMEs were found to cooperate internationally in the following fields (percentage of firms):

- manufacturing (24%)
- commercial
- agents (16%)

¹ See Background document.

- marketing (15%)
- distribution (13%)
- personnel (12%)
- R&D (9%)
- after-sales service (7%)

Referring to '1993', a high percentage of Belgian SMEs express the ambition to cooperate¹:

- on local market 50%
- EC countries 30%
- non-EC countries 40%

10.7.3 International licensing

Protected technical knowledge is also traded internationally. Table 10.16 shows that all EC member states have a negative technology balance of payments. Positive global players are Sweden, the US and New Zealand. Japan has a slightly negative balance.

Table 10.16 Technology Balance of Payments 1989 (France + Greece 1988)

Country	Receipts	Payments	Balance	Export/Import
Belgium	1614	2099	-485	0,77
Denmark	...	...	...	...
France	1479	1860	-381	0,80
Germany	4134	4919	-785	0,84
Greece	...	13	...	...
Ireland	...	...	...	...
Italy	515	1038	-523	0,50
Luxembourg	...	...	...	...
Netherlands	579	1311	-732	0,44
Portugal	...	...	...	...
Spain	289	1609	-1320	0,18
UK	1970	2055	-85	0,96

* ... = not available.

Source: OECD in figures, 1992 edition, Paris, July 1992.

The same source also provides data on the number of patent applications in each member state. It is shown that for almost all member states between 80% and 90% of patents applied for come from abroad. Only Germany and the UK perform a little better (64%, and 76% respectively). The number of patents used

¹ VBO (1989), op. cit.

abroad shows a varying trend. The ratio of patents exported/imported ranges from 0-10% (Portugal, Greece, Luxembourg), 11-30% (Spain, Belgium, Ireland), around 50% (The Netherlands), and above 50% (Denmark, France, UK). The position of Germany should be noted separately: although the technology balance of payment is negative, it exports 2.4 times more patents than are being imported.

Overall, there is no clear pattern. Even for similar economies like Belgium and The Netherlands diverging trends are found. While Belgium has become weaker in exporting knowledge, especially to the USA, over the last 20 years¹, the export of knowledge from The Netherlands increased by 70% from 1984/87 to 1988/90. Dutch exports of knowledge to Europe are particularly significant: EC and EFTA receive 60% of the knowledge exports.

Ireland has a peculiar position, as many of the SMEs in knowledge-intensive sectors (chemicals, electronic, electrical) are foreign-owned. Foreign firms, in all sectors, accounted for 80% of all earnings from technological agreements with overseas firms².

But elsewhere figures should be treated with care. They are in general closely linked to ownership patterns. This has not only been shown for Ireland with its high concentration of foreign-owned firms, but also in The Netherlands 70% of the sales of licences are to subsidiary enterprises of the selling firm.

In a Belgian survey among 240 manufacturing SMEs, it was found that only 6% of firms issue licences abroad. 12% of the Belgian SMEs were producing or selling under licences from abroad.

10.7.4 Foreign Direct Investment

Overall development

Worldwide Foreign Direct Investments (FDI) increased rapidly in the late Eighties. Fostered by a favourable business climate and decreasing restrictions on capital movements, between 1986 and 1990 150 billion ECU have been invested each year in foreign companies. Eighty percent of this total flow

¹ Patel, P. and K. Pavetti, (1992) Europe's technological performance, presented at Merit, Maastricht, 1992.

² O'Doherty and McDevitt (1991), Globalization and the Small Less Advanced Countries: Ireland, report to Fast/Monitor programme, Dublin.

originates from the Triad (Japan, EC and US)¹.

The 'Single Market' has been a recent influence on these patterns:

- European entrepreneurs have shifted from third markets to other markets within the EC;
- Entrepreneurs from outside the EC have put more emphasis on the European market.

Member states, FDI and the role of SMEs

Foreign Direct Investments (FDI) into Portugal increased 24 times between 1986 and 1991, particularly into financial sectors (banking and insurance). Outward FDI from Portugal is still modest, nevertheless between 1989 and 1991 there has been a five-fold increase. Also Germany witnessed an increase in FDI (1976 - 1988), particularly to Portugal and the UK.

In Ireland little information is available at present, the Central Statistical Office in Ireland has² recently commenced a number of surveys to determine the size of FDI outflows. Results will be available in 1993.

In the last decade Greece has seen a growing trend towards 'mixed-type enterprises' in various sectors in Balkan countries. The joint-ventures are especially common with(in) Rumania and Bulgaria. In Albania options are presently being considered³.

Analyzing Italian FDI by year of investment and by size of parent company it is shown that about 20% of subsidiaries established in the Fifties and Sixties originated from firms with less than 500 employees, whereas for the investments made in the Seventies and Eighties this figure rose to 30%⁴. For international SME the average number of subsidiaries is of course relatively small at 1.6 (firms with 500-1,000 employees: 2.0 and firms over 2,000 employees: 12).

A survey in 1989 among 850 SMEs in manufacturing in France provides information on the objectives or fields of settlements abroad (see Table 10.17).

¹ Janning, J.M.J (1993), Naar een multinationaal MKB (towards multinational SMEs), ESB, 20-1-1993.

² Private communication from CSO (December 1992).

³ Background document Greece for Chapter 10.

⁴ Source: MITA database. Data do not reflect the number of affiliates actually established in every period due to considerable disinvestment in the past.

Table 10.17 Fields of Operation in Foreign Settlements, France, 1989

Description	Direct Settlement	Joint-Ventures
Distribution	88	45
Production	10	42
R&D	2	13
Total	100%	100%

Source: Algoe, November 1989, op. cit.

Information from the Dutch National Bank (DNB) indicates that outgoing direct investments aimed at foreign firms, i.e. excluding credit flows within corporations, more than doubled between the 1984-87 and 1988-1990 periods¹. These financial flows are dominated by the largest ten multinationals in The Netherlands. These 10 alone are responsible for about 40% of total outgoing flows. However, the growth of the top-10 is 110%, whereas for the somewhat smaller firms the growth rate is 163% (i.e. average annual growth rates of respectively 22% and 28%) While the process is still dominated by the largest firms, smaller 'multinationals' are catching up.

SMEs, firms with less than 100 employees, are increasingly involved. The stock of foreign direct investment of Dutch SMEs in foreign companies doubled from 1986 to 1990. The investment outflow of SMEs tripled over the period, i.e. an annual average growth rate of 50%. The share of SME in foreign direct investments has increased to more than 15% during recent years (10% of outward flows originate from Dutch SMEs, 25% of inward flows are targeted at Dutch SME). Outward flows of SME are going to neighbouring countries and to a lesser degree to Spain. 75% of the outward flow of SMEs originates from the business services.

The regional scope

The outward flow of foreign direct investments from The Netherlands has become increasingly concentrated on EC markets. In the 1984-1987 period the EC share was 42%. In 1988-1990 it had increased to 48%. If the largest ten companies, true internationals are excluded, the EC share of Dutch FDI was 63% in the first period and increased to 67% in the latter period mainly at the expense of North-America.

¹ However, conflicting information does exist for the Netherlands. An analysis of the 1983-1989 period based on financial statistics of the Central Bureau of Statistics (CBS), showed no significant increase over the period in the relative number of firms with international ownership patterns. Nevertheless about 50% of total capital is within these types of firms.

Of the outward flow of FDI from Portugal, which increased five-fold in 1989-1991, 75% is directed towards the EC, 2/3 of which (i.e. 50% of total) goes to Spain.

The destination of Italian FDI makes interesting reading. Of SMEs with subsidiaries, 50% of these subsidiaries are located in less developed countries (LDCs), whereas firms with 500-2,000 employees are more oriented to developed countries. Very large firms (>2,000) are also very active in developing countries. All size categories have about 20% of subsidiaries in Southern Europe¹.

The employment distribution accounted for by FDI of Italian manufacturing firms' is as follows:

- EC	53%
- other Western-Europe	2%
- Eastern-Europe & USSR	2%
- North-America	11%
- Latin-America	20%
- Other regions	12%

The rate of change over the 1985-1990 period is also interesting. Whereas total FDI increased by 91% in terms of employees abroad, Far East increased by 130%, Western-Europe (EC) with about 160%. But - starting from a low base - Eastern-Europe and the former USSR have shown a more than 1,000% increase².

¹ Source: figures 1985, MITA database.

² Source: Mariotti, Mutinelli (1992), based on REPRINT database, Cnel-R&P-Politecnico of Milan.

ANNEX 10.1 - SELECTED GOODS AND NACE DIVISIONS

6 NACE divisions were selected: three relatively small-scale and three relatively large-scale sectors.

Selected NACE/small:

- 31 METAL PRODUCTS, EXCL. MACHINES AND TRANSPORT EQUIPMENT
 - product 1 - tools (hand - & interchangeable for hand/machine tools)
 - product 2 - metal articles (table, kitchen & other household articles)

- 45 FOOTWEAR AND CLOTHING
 - product 1 - mens' coats & suits
 - product 2 - footwear

- 46 TIMBER AND WOODEN FURNITURE
 - product 1 - wooden furniture
 - product 2 - packaging materials of wood

Selected NACE/large:

- 25 BASIC CHEMICAL INDUSTRY
 - product 1 - fertilizer (animal/vegetable/mineral/chemical)
 - product 2 - medicaments (penicillin etc.)

- 33 OFFICE MACHINERY AND DATA-PROCESSING MACHINERY
 - product 1 - automatic data-processing machines
 - product 2 - office machines (typewriter/stencil/coin-counting/copy/etc.)

- 35/ 36 MOTOR VEHICLES, -PARTS AND ACCESSORIES, AIRCRAFTS & PARTS
 - product 1 - vehicles no-railway & parts
 - product 2 - aircraft & parts

See also Figure 10.3 in section 10.3 for graphs referring to the EC as a whole, indicating employment shares of these sectors.

ANNEX 10.2 - CLASSIFICATION OF EXPORT PROBLEMS

I. Marketing and distribution

1. Obtaining general market information
2. Carrying out business trips
3. Identifying suitable representation in export markets
4. Identifying distribution channels within export markets
5. Advertisement and communication
6. Proper after-sales service

II. Adjusting product to

7. Local demand
8. Product specifications as specified by foreign law

III. Finance

9. Payment procedures
10. Handling exchange-rate risks
11. Price setting
12. Subsidies

IV. Handling

13. Paperwork
14. Customs regulations and duties
15. Transport problems
16. Insurance

V. Characteristics of export market

17. Business practices, morals, customs
18. Business laws
19. Language
20. Culture

VI. Characteristics of exporting firms

21. Lack of financial means
22. Not ready to invest time
23. Insufficient organization to back up sales
24. Lack of experience/qualified export staff
25. Lack of flexibility

**PART C - SYNTHESIS AND POLICY
RECOMMENDATIONS**

11 SYNTHESIS

11.1 INTRODUCTION

In this chapter the major findings of the first Observatory report will be reviewed. Section 11.2 presents some quantitative key indicators of the SME-sector, both at the Community level and by Member State.

In section 11.3 the findings in each SME-field will be discussed. The discussion will also focus on the impact of the major trends on the SME-fields. For each field also a conjecture is given of how the impact of the internal market may evolve over time. Finally strong and weak points of SMEs are analyzed and major opportunities and threats are identified.

Section 11.4 deals with the monitoring of the internal market on SMEs. Firstly the situation at the outset of the completion of the internal market is analyzed. Some base line results for 1988 are presented by Member State. By monitoring these indicators in future reports the prospects of the internal market can be followed for each of the member countries. The divergence between the individual countries in 1988 is discussed in a separate section.

11.2 KEY INDICATORS

11.2.1 Key indicators at the Community level

The majority of the enterprises in the European Community are SMEs. This category of enterprise has a great quantitative importance in the economy of the European Community and is also extremely relevant from a macro economic point of view. In 1988 the non primary, private sector SMEs accounted for about 14.6 million enterprises, including the micro firms. This figure represents about 99.9% of the total number of enterprises. Some key indicators of SMEs (0-499) and of micro firms (0-9) are presented in Table 11.1.

Table 11.1 Key Indicators at the Community level

	SMEs (0-499)	micro firms (0-9)
<i>Structure (1988)</i>		
number of enterprises (x mln)	14.6	13.6
number of enterprises per 1,000 inhabitants	45	42
number of persons employed(x mln)	62.4	26.2
employment share in private, non-primary sector (%)	70	30
employment per enterprise	4.3	1.9
turnover per enterprise (x 1,000 ECU)	413	125
turnover per employee (x 1,000 ECU)	97	69
share of extraction ^a in employment (%)	3	1
share of manufacturing in employment (%)	27	14
share of construction in employment (%)	12	13
share of trade in employment (%)	24	30
share of other services in employment (%)	35	42
share of exports in turnover (%)	10	5
share of consumption goods in turnover (%)	36	38
share of investment goods in turnover (%)	9	8
share of intermediate goods in turnover (%)	45	49
<i>Performance^b 1989 -1992 (average annual growth)</i>		
turnover of consumption goods (%)	1.7	2.0
turnover of investment goods (%)	2.0	1.8
turnover of intermediate goods (%)	2.2	2.2
exports (%)	4.7	5.0
total turnover (%)	2.3	2.3
employment (%)	0.7	0.9
the number of enterprises (%)	1.9	1.9
<i>General indicators</i>		
venture capital as percentage of GDP 1989 (%)		0.8
annual real growth private consumption 1989 -1992 (%)		2.4
annual real growth GDP 1989 -1992 (%)		2.2
annual growth real labour costs per employee 1989 -1992 (%)		1.7
average birth rate of new enterprises, 1989 (%)		10
share of 15 -24 in population, 1990 (%)		15
share of 25 -64 in population, 1990 (%)		52
share of self-employed in total employment, 1990 (%)		13
share of craft-industry in non-primary employment, 1988 (%)		12-25 ^c

a. Including energy and metal processing.

b. Preliminary estimate with SME Accounting Scheme; growth of turnover is measured at constant prices.

c. Lower and upper approximation.

SMEs in 1988 provided employment for 62.4 million people, that is about 70% of the total employment in the non primary, private sector. Also based upon figures for 1988, SMEs have a turnover of 413,000 ECU per enterprise, whereas 125,000 ECU is turned over by the average micro firm. Turnover per employee is 97,000 ECU which is only 13% lower than in the average large enterprise. For the micro firms the same figure is 69,000 ECU.

Among SMEs, micro firms (including the self-employed) play an important role, and in terms of absolute numbers the typical firm is a micro enterprise. This type of firm represents 93% of all SMEs. In total micro firms provide about 42% of the employment in the SME sector. On average, micro firms employ about two people compared with 4.3 in the average SME.

Looking at the presence of SMEs in the five sectors which constitute the private, non primary sector, it is possible to distinguish micro dominant sectors, SME dominant sectors and large-firm dominant sectors.

Extraction¹ sectors have by far the largest average firm. Manufacturing is also characterized by a large average firm size, nevertheless SMEs have a strong position in manufacturing accounting for almost half of all jobs. The construction sector is SME-dominant. Trade industries are either micro dominant or SME-dominant. The other services industries are evenly spread over micro dominant, SME-dominant and large firm dominant segments.

The three most important sectors for SMEs are: other services, manufacturing and trade. The other services hold 35% of SME employment, manufacturing 27% and trade 24%.

The picture is slightly different for the micro firms. Here the most important sectors are other services with 42% of employment and trade with 30%. Manufacturing provides only 14% of employment in micro firms.

For SMEs the average annual growth² of turnover at constant prices in 1989-1992 was 2.3%. About 90% comes from domestic demand, and this share is even larger, 95%, for the micro firms. The share of intermediate goods (45%) and the share of consumption goods (36%) are the most relevant in SME turnover and these shares are even more important in the micro firms.

External demand, on the contrary, is less important for SMEs than for large firms. Nevertheless the average annual growth of turnover for this economic category in 1989-1992 was higher in SMEs (4.7%) than in large firms (4.3%). This is because SMEs are strongly oriented towards wholesale trade and other services which have enjoyed relatively high export growth rates. The annual growth of exports is even higher for micro firms (5%).

General indicators

The growth of economic activity in terms of GDP is an important indicator for SMEs, in fact there seems to be a positive relationship between the growth in

¹ Including energy and metal processing.

² Preliminary estimate with SME Accounting Scheme.

the number of enterprises and growth in real GDP. For the period 1989-1992 the annual real growth of GDP was 2.2%.

Another important general indicator is the annual growth of private consumption because, in general, the output of SMEs is relatively more dependent on developments in domestic demand. This indicator slowed down over recent years and its growth in 1989-1992 has been 2.4%.

SME performance is also closely linked with the developments of labour costs, due to their relatively high labour intensity compared to large enterprises. The annual growth of real labour costs per employee in 1989-1992 has been 1.7%. Size, composition and growth of the European population are other important indicators for SMEs. These factors both directly and indirectly affect the demand and the supply side of SMEs. In the coming decade the population of the EC will grow at a lower annual rate, 0.2% against 0.3% in 1980-1990, and we will observe dejuvenization processes and ageing of the population. The population of 15-24 years of age will decrease. Its share in the total population will decline from 15% in 1990 to 12% in 2000. This will be a substantial loss to the labour market of SMEs. However the population of 25-64 years of age will increase its share from 52% in 1990 to almost 55% in 2000.

11.2.2 Structure and performance by Member State

In addition to an overview of the SME-sector at the Community level, the Observatory project has also generated a great amount of information about SMEs in the individual Member States. This information has been presented topic by topic in the preceding chapters. In this section a summary is presented of some key indicators.

Structure

Regarding SME-presence the following six indicators are considered:

- firm size;
- firm size, adjusted for differences in sectoral structure;
- the number of firms per 1,000 inhabitants;
- the share of SMEs (0-499) in employment;
- the share of micro and small firms (0-99) in employment;
- the share of micro firms (0-9) in employment.

These are presented in Table 11.2.

SME-presence is strongest in the southern Member States: Greece, Italy, Portugal and Spain. These countries are all characterized by a large per capita number of firms, small average firm size and a large share of SMEs, in total employment. Also, the share of micro and small firms in total employment is

well above EC-12 average in these countries. As has been shown in Chapter 2, the strong SME-presence in three of these countries can partly be explained by their relatively low wage rate and per capita GDP, their small or medium size (in terms of GDP), as well as a low population density. As regards to Italy, which has a large economic size and an average per capita income, an explanation of the strong SME-presence may be found in its subdivision of a prosperous northern part, and a much less rich southern part. It is especially the latter part of the country which has strong SME-presence.

Table 11.2 Indicators of SME-presence, 1988

	average firm size	adjusted average firm size*	number of firms per 1,000 inhabitants	share of SMEs in employ- ment	share of micro and small firms in employment	share of micro firms in employ- ment
Belgium	5	5	53	69	53	28
Denmark	9	8	35	76	59	22
France	7	7	36	67	53	28
Germany	9	9	35	62	44	17
Greece	3	2	67	91	80	59
Ireland	6	7	36	83	65	34
Italy	4	5	55	82	71	49
Luxembourg	9	9	40	74	52	23
The Netherlands	10	10	28	73	54	28
Portugal	4	4	62	80	64	36
Spain	4	2	52	83	66	36
United Kingdom	8	8	46	65	47	26
EC-12	6	6	45	70	55	30

* Adjusted for difference in sectoral structure.

At the other end of the spectrum, France, Germany, the United Kingdom and The Netherlands show the lowest SME-presence. These countries are all characterized by large average firm size, as well as a low per capita number of firms and a low share of SMEs as well as small and micro firms in employment. There are several reasons for this. These countries all have high per capita GDP and wages, which have a positive influence on firm size. High population density has the same effect in The Netherlands. The large size of Germany, France and the UK has a positive effect on average firm size, especially in large firms, as well as a negative influence on the SME-share in employment.

The other countries, i.e. Belgium, Denmark, Ireland and Luxembourg hold a position between these two extremes.

Table 11.3 presents some key information about the sectoral composition of the SME-sector in the Member States.

Table 11.3 Indicators of SME Structure, 1988

	Relative Share of					Export Share of six Selected Small-Scale NACE-Groups 1988 (%)
	SME in Extraction and Manu- facturing* 1988	SME in Con- struction* 1988	SME in Trade* 1988	SME in Other Services* 1988	Exports in SME- Dominant Sectors** 1988	
Belgium	38	141	124	90	47	69.9
Denmark	91	119	113	92	76	46.1
France	43	130	126	89	132	28.8
Germany	51	150	125	102	54	n.a.
Greece	67	109	110	109	70	10.9
Ireland	61	120	117	73	42	14.7
Italy	71	116	119	91	68	23.2
Luxembourg	45	127	135	123	104	n.a.
Netherlands	57	133	118	88	59	48.9
Portugal	70	109	120	83	58	38.1
Spain	72	112	109	98	54	16.4
United Kingdom	34	140	133	93	39	n.a.
EC-12	58	126	121	94	67	33.0

* Relative to SME share in non-primary sector.

** Relative to share of exports in sales of LSE-dominant sectors.

Generally, SMEs are weakly oriented towards extraction and manufacturing industries. This follows from the fact that the share of SMEs in employment of these sectors is less than the country's average. This holds true in each Member State; in Belgium and the United Kingdom this phenomenon is particularly true, whilst in Denmark, SMEs have the largest relative share of employment in extraction and manufacturing. Also in Greece, Italy, Portugal and Spain, SMEs are comparatively strongly oriented towards extraction and manufacturing industries.

The weak orientation of SMEs towards manufacturing is mirrored by a strong orientation towards construction and trade. Indeed, in all countries the share of SME in employment of these sectors lies above the over-all share of SMEs in employment. This effect is weakest in Greece (construction) and Spain (trade), whilst being strongest in Germany (construction) and Luxembourg (trade).

For the EC as a whole, SMEs are somewhat underrepresented in other services. This, however, does not hold for all countries. In Ireland, the relative share of SME in other services' employment is well below the overall share of SME in employment; in Luxembourg, the share of SME in employment of other services is well above the national average.

The orientation of SMEs towards exports is measured by two indirect variables. Both show large differences between Member States. Especially in Ireland and

the United Kingdom, the share of exports in total sales in SME-dominated sectors is well below the share of exports in sales of LSE-dominated sectors. Conversely, in France SME-dominated sectors are more oriented towards exports than are the LSE-dominated sectors.

The share of exports in total sales of 6 selected small-scale NACE-groups is very low (between 11 and 17%) in Greece, Ireland and Spain, but in Belgium the same share is almost 70%.

Performance

Performance is measured by the following five variables:

- SME's turnover growth 1989 -1992 (estimated by the Accounting Scheme);
- SME's employment growth 1989 -1992 (estimated by the Accounting Scheme);
- the birth rate of new firms, 1989;
- total GDP-growth 1989 -1992;
- total consumption growth 1989 -1992.

Table 11.4 presents the information.

Table 11.4 Indicators of Performance, 1989 -1992

	SME turnover growth*	SME employment growth*	birth rate of new firms** 1989	total GDP-growth	total consumption growth
Belgium	2.5	0.3	12.3	1.7	2.2
Denmark	1.2	0.7	14.4	1.6	1.7
France	2.5	0.3	13.3	1.6	1.8
Germany	3.8	2.2	18.3	2.1	1.9
Greece	1.9	-0.2	n.a.	1.3	1.6
Ireland	5.7	1.0	6.9***	3.6	2.1
Italy	2.0	0.6	6.6	1.4	1.7
Luxembourg	3.1	3.2	14.4	2.6	3.6
The Netherlands	3.2	1.7	14.4	1.9	2.2
Portugal	3.5	0.7	10.7	2.4	4.2
Spain	2.9	1.5	7.2***	2.0	2.5
United Kingdom	-0.1	-0.6	5.9	0.3	0.0
EC-12	2.3	0.7	10.1	1.5	1.7

* Estimated with SME Accounting Scheme.

** Newly established firms as percentage of number of existing firms.

*** NACE 2-4 only.

From this table, the following picture emerges. Germany, Luxembourg, The Netherlands and Portugal show the highest SME-growth of all the EC-countries. These countries can be characterized by a strong macro-economic performance, an estimated relatively high growth of employment and turnover in the SME

sector, and a high birth rate of new enterprises. Conversely, Italy, Spain and the United Kingdom show a poor macro-economic performance, and - as estimated by the Accounting Scheme - SMEs in these countries lag behind those in other countries with respect to employment and turnover growth. Furthermore, the birth rate of new firms is relatively low.

Business environment

Table 11.5 presents some general indicators by Member State.

Per capita GDP in 1988 differed widely between Member States: it ranged from ECU 3,600 in Portugal to ECU 17,800 in Denmark, the EC-12 average being ECU 12,500. Wide differences can be observed in the wage rate as well.

The share of migrants from other Member States in population differed from 0.2% in Italy to 5.4% in Belgium. Belgium appears to be exceptional in this respect; the second highest share of migrants from other Member States was found in France (2.8%).

The use of venture capital amounts to 0.8% of GDP in the EC as a whole. However, the value of this variable ranges from 0% in Greece to 2.3% in the United Kingdom; in Ireland too, venture capital is used intensively.

In all countries, intra-EC trade constitutes a large part of total exports. In Denmark, intra-EC trade is lowest but still amounts to 50% of total exports. In Luxembourg, such trade makes up 75% of total exports.

Extra-EC exports equates to only 7 or 8% of GDP in France, Greece, Italy and Spain. The same amounts to 19% of GDP in Denmark and Luxembourg. For the EC as a whole, exports to non-Member States is 11% of total GDP.

Average inflation in the EC was 4.1%. However, inflation ranged from only 0.7% in The Netherlands to 17.5% in Greece

The real interest rate was on average 4.9%. Here, the range was between 1.8% (Greece) and 6.9% (Denmark).

Table 11.5 Indicators of General Economic Structure, 1988

	Per Capita GDP 1988 x 1,000 ECU	Labour Costs Per Employee 1988 x 1,000 ECU	Share of For- eigners from EC in Popu- lation 1988 (%)	Share of Use of Venture Capital 1988 % of GDP	Share of Intra-EC Trade in Exports 1988 (%)	Extra-EC Trade in GDP 1988 (%)	In- flation Trend 1988	Trend Real Long- Term Inter- est Rate 1988
Belgium	12.9	22.9	5.4	0.6	75	19	2.2	5.7
Denmark	17.8	22.2	0.5	0.3	50	16	3.7	6.9
France	14.5	22.9	2.8	0.8	62	8	3.2	5.8
Germany	16.6	22.3	2.1	0.3	54	13	1.5	4.6
Greece	4.5	8.9	1.0	0.0	65	8	17.5	1.8
Ireland	7.8	17.4	1.8	1.1	75	16	3.1	6.3
Italy	12.3	20.1	0.2	0.2	57	8	5.9	6.2
Luxembourg	15.3	22.2	n.a.	0.1	75	19	2.6	4.5
Netherlands	13.0	24.3	1.1	0.8	75	14	0.7	5.6
Portugal	3.6	6.0	0.3	0.4	72	10	11.7	2.5
Spain	7.5	15.0	0.6	0.3	61	7	6.6	5.1
United Kingdom	12.4	17.0	1.4	2.3	50	12	5.0	4.3
EC-12	12.5	19.7	1.6	0.6	64	11	4.1	4.9

11.3 STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS

11.3.1 Introduction

In this section the findings in each SME-field will be discussed including the subject of the theme study in Part B as an additional SME-field. This means that the following areas are summarized below:

- entrepreneurship and business dynamics;
- markets and sales;
- internationalization of SMEs;
- employment;
- capital and finance; and
- regional aspects.

Besides summarizing major results, the discussion will also focus on the impact of the major trends on the SME-fields. As outlined in Chapter 4, these trends are: macro-economic developments, demographic trends, technological change and internationalization. Also a conjecture is presented of the impact of the internal market in each field.

Finally a qualitative overview of the outcomes will be presented in section 11.3.8. Here strong and weak points of SMEs are analyzed at a European level and major opportunities and threats for SMEs, including the craft trades, are identified.

11.3.2 Entrepreneurship and business dynamics

Throughout Europe, the 1980s saw an increase in business dynamics after a decade of stagnation in the 1970s. Especially after the second oil crisis of 1979-80 and the following period of recession, the number of new firms rapidly increased in most European countries. In the period of expansion 1983 to 1989 dynamic entrepreneurship certainly allowed the introduction of technological and organizational changes in traditional, labour-intensive industries.

The emphasis on the role played by entrepreneurship and the deeper analysis of business dynamics are relatively recent lines of research. Statistical information is still scarce. The data are often not fully incomparable, due to differences in sources and definitions.

An important factor is the stock of enterprises. The total number of enterprises in the non-primary sector of EC-12 is estimated at 14.6 million in 1988. Across the Member States a close relationship emerges between the number of enterprises and total population size (+), average firm size (-) and the density of the population (-). In the EC-12 there is about 1 enterprise to 22 inhabitants. On average an enterprise in the EC-12 employs about 6 persons. Generally speaking the average firm size is positively related to the level of GDP per capita and country surface area. The average EC-firm in manufacturing employs 16 persons compared to only 4 in trade.

SMEs account for 99.9% of the enterprises in the EC. About 93% are micro firms (<10 employees), while only 0.1% have over 500 employees.

In the Mediterranean countries (Portugal, Spain, Italy and Greece) SMEs account for a relatively large proportion of all enterprises, especially in manufacturing industries. The central belt of Europe between the Atlantic Ocean and the Oder border (Northern-France and Southern-England, Belgium, The Netherlands, Luxembourg, and Central North Germany) is characterized by a greater proportion of large firms.

A rough indicator of business dynamics is given by changes in the number of the firms. The average annual growth rate of the stock of enterprises during the period 1988-1992 is estimated at 1.9%, which means an average growth of almost 300.000 enterprises per annum.

Portugal shows the highest aggregate increase in the number of enterprises (+ 6.8%) over 1986-91, whilst the other countries (except Greece) show positive but lower growth.

Also the growth rate of micro-firms (1-9 employees) is highest in Portugal (+ 7.4% yearly average 1986-91).

Small firms (with 10-99 employees) have grown in number in all countries, except in Ireland and Greece where the number of small enterprises was more or less stable.

Medium-sized firms (100-499 employees) have grown but at a slower rate in Portugal, Italy and Belgium, but the trend is strongly down in France and in Spain.

The number of large enterprises has increased in Belgium, The Netherlands, Portugal and the UK.

The evolution of the stock of enterprises is to a large extent the result of the births of new enterprises and the deaths of others. Gross natality rate of firms in the EC was 10.1% in 1989, which means more than 1.4 million start-ups.

Despite data problems some conclusions may be drawn: Denmark, Germany, Luxembourg and The Netherlands show the highest natality rates, whilst the United Kingdom has the lowest. Natality rates in manufacturing industries are relatively high in Italy, Denmark and Portugal.

However, in general, it seems that the boom in new firm creation ended at the beginning of the 1990s.

Mortality rates are correlated with natality rates: countries with higher natality rates have higher mortality rates as well.

The major causes of failures among new business start-ups are:

- lack of managerial competence, resulting in managerial, organisational and strategic problems
- lack of training and technical competence
- lack of marketing knowledge
- financial problems.

The main motivating factors in start-up decisions are:

- Self-realization (desire for independence, job satisfaction, social status and the like);
- the presence of a (perceived) business opportunity;
- a difference between current wage and expected income from entrepreneurial activity.

The main research findings concerning the character of new entrepreneurs are:

- that family history plays a significant role in some countries;

- that the vast majority of entrepreneurs are male, although women are increasingly of starting new firms, especially in the trade and service sector;
- that new entrepreneurs tend to be rather young; in all countries but Italy, the average businessman is 35-36 old, and the age class 19-39 accounts for 60 to 80% of total numbers;
- that age is linked to the level of education of the new entrepreneur. This is high, and has become higher in the 1980s. The percentage of entrepreneurs with no degree or only a primary degree is rapidly decreasing;
- that technical personnel and managers are more likely to set up their own business;
- ethnic minorities appear to have a relative high rate of entrepreneurship and new firm start-ups.

Impact of the internal market

The impact of the internal market in the field of business dynamics will be the result of several influences, with opposite effects on the number of SME's. Besides, they work out differently in the short, medium and long term, causing a "U-curved" development of SME's.

A general net decrease of SME's may occur in the short and medium term, especially caused by economic restructuring of the least developed member-states, and mutual penetration of domestic markets. Besides, LSEs are anticipating one market conditions, thus inducing scaling-up at rather short notice. In the medium and long term, however, scaling-down trends induced by economic growth and consequently demand differentiation and supply specialization will take over. These general trends are reinforced by increased cross-national contacts and reconsideration of make or buy-decisions, in favour of outsourcing.

Innovation will increasingly be generated by combining different specialisms. The internal market is clearly adding to the completion of such combinations. The number of SME's with international contacts is already increasing rapidly now. Such contacts are important stimulants in boosting business dynamics, and achieving the "compound interest" growth effects discussed in chapter 3.

11.3.3 Markets and sales

In the bigger countries with larger domestic markets, there is a definite tendency for sales to be more highly concentrated in large enterprises and this tendency is apparent in each of the five broad market sectors distinguished in this report.

The fact that the large countries in the Community happen to be characterized by a proportionately larger manufacturing sector does not play an overriding

role. This suggests that in the large single European Market there may be a tendency for sales to become more concentrated in larger firms, especially in those countries where large firms currently have a relatively small share.

SMEs will be faced with concentration processes and diminishing market shares in many industries. On the other hand, the Internal Market will also have favourable consequences for overall market growth in the Community, and SMEs are expected to profit from this even if their share in the growing total market falls somewhat.

In the manufacturing sector SMEs (including craft firms) have a share of about 50%. However, sales of SMEs are relatively highly concentrated in the trade, other services and construction sectors, in which they have shares of between about 70 and 90%. Therefore the well established growth of the service sector seems likely to benefit SMEs.

SMEs also depend on their domestic markets more than large firms do. This implies that the prospects for domestic demand in their own countries is still of particular importance for SMEs. In the short run (1993) the expected low growth rate of 0.7% for private consumption and the predicted decline in investment are obvious threats to the European SME-sector. Private consumption is a very important sales category for micro firms, and the continued slow growth of private consumption in 1994 will especially hamper their development. Over the longer run demographic developments may have an increasing impact on the sales potential of SMEs and craft enterprises. In particular, the rise of relatively well educated and affluent middle aged groups may boost demand for differentiated consumer goods and personal services relative to mass market goods and services.

On the other hand, the internationalization of the European economy implies a permanent process of import penetration on domestic markets. This means that SMEs will increasingly have to compete with foreign firms or their subsidiaries. However, there will also be increasing opportunities for SMEs to export goods and services to other Member States. These implications will be discussed in one of the later sections of this chapter.

It appears that micro and small firms tend to be operating in relatively segmented markets and to be dependent on a relatively small number of customers. This dependency is particularly dangerous if the SMEs and the craft firms have no clear competitive advantage in product or skill differentiation or if their market is characterized by short product life cycles. The vulnerability of such firms will be tested during a recession, and may also grow over time due to increasing competition in the internal market.

The relatively rapid growth of subcontracting opens up opportunities which are of particular relevance for SMEs and craft firms, since subcontract sales tend

to be of greater importance for smaller enterprises than for large firms. A clear shift in the strategy of large, and especially internationally operating, enterprises is apparent. Increasingly, the production of parts is contracted out and there is a tendency towards more permanent relationships between customers and their suppliers. SMEs can take advantage of these trends in their role as suppliers by gaining access to the technological and commercial know-how of large enterprises. Acting as suppliers can also stimulate product developments by SMEs themselves, thereby potentially enhancing their economic independence.

However, subcontracting also raises problems for SMEs and craft enterprises. The intransparency of their markets, the fierce international competition and inadequate information about rapidly changing developments are major issues. A lack of strategic knowledge about technology, quality standards, product innovation and logistics can be the outcome. Moreover, the development of subcontracting opportunities in a particular country does not necessarily guarantee that SMEs based in that country will benefit most, because contractor firms often have the option of sourcing subcontracted supplies from other countries.

Finally, apart from subcontracting many SMEs are involved in some other form of cooperation with other companies. In general such relationships are found to be beneficial to companies' competitiveness.

Impact of the internal market

The effects on SME Europeanization and business opportunities of abolishing physical and technical barriers to intra-EC trade are positive, be it with two notes.

In the first place some export formalities are only transferred from customs to other authorities, and new EC administrative requirements set up (for example VAT-clearing), sometimes even raising the burden. In the second place technical barriers can be very tough, because they are linked up with user preference, life of products and "conservative" replacement markets. Therefore they will only take effect fully in the medium term.

Larger markets will induce new scale efficiencies, favouring LSE's in a number of industries, ranging from manufacturing to trade and services.

Growing business opportunities across borders will be countervailed by import penetration increasing as well. As LSE's react faster, and often anticipate new market conditions better, they will take an initial lead in some trades and industries.

In the medium term, as SME export increases get under way, the secondary effect of having passed the first and highest hurdle will take effect: providing a starting point for continual exports.

Finally, the positive income effects of the internal market favour SME's, on balance: especially micro-enterprises' sales are sensitive to consumer purchasing-power developments. Besides, income raises are adding to demand differentiation, which in turn generates small scale specialist and niche markets. In the least developed member-states, however, the scaling-up effect at the cost of SME's, or perhaps rather the micro-enterprises, may prevail.

11.3.4 Internationalization of SMEs

Trade is growing faster than production, but such aspects of internationalization as direct foreign investments, cooperation and international licensing also show rapid increases. The participation of SME in this process is increasing. SMEs are catching up with large scale enterprise in most of these fields.

The regional scope of internationalization in the SME sector remains rather limited. Given the inflow of new entrants, and SMEs going international for the first time, it is not surprising to find many examples of SMEs taking an increasing share of the intra-EC flows. In international trade these trends are well documented, but in other areas scattered evidence also points in the same direction. So internationalization for SME and craft firms in Europe means *Europeanization*.

For all selected 'small scale sectors' intra-EC exports are growing faster than extra-EC trade. Imports from 'the world' (non-EC countries) on the EC market are growing still faster, indicating a loss of market-share for EC producers for 4 out of 6 small scale products.

As far as trade is concerned the increasing share of intra-EC trade flows might not only be brought about by positive factors (harmonization and diminishing intra-EC borders) but also negative factors, namely increased competition from non-EC competitors. The higher growth rates of imports from outside the EC than intra-EC trade flows for the selected small scale sectors, and hence the diminishing intra-EC market shares, may be interpreted as a warning.

The effect of these trends is that SMEs are actively involved in, as well as affected indirectly by, increasingly interlinked markets. Firms operating only in domestic markets, are still affected by the 'globalization' processes of international players in input as well as output markets: on the input markets the increased competition is generally beneficial to SME. However, the situation on the output markets is more diverse:

- domestic market shares are decreasing and the phenomenon of foot-loose (large) manufacturing units have significant effects on SME subcontractors and general suppliers;
- large firms from within and outside the EC are looking to acquire SMEs as useful footholds in an other member state or simply within the EC as a whole.

So far as export bottlenecks are concerned, it is well known that small firms experience relatively more internal, knowledge barriers whereas large firms face more external, market barriers. The single market addresses market and distribution problems in particular, hence large firms are more likely to benefit immediately. This is not to say that it is not also important for SMEs that these barriers diminish, but they first have to overcome the internal barriers. Measures taken to *harmonise* markets will directly reduce the information gap of small firms.

In most export studies and policy debates firms are classified either as exporters or as non-exporters. This classification is based on the notion that non-exporters make a definitive decision to widen their scope of activities and undertake a systematic export effort. Research has pointed out that this notion has to be rejected for the following reasons:

- smaller firms start exporting on an ad-hoc basis often induced by external factors;
- initially these firms are rather passive exporters;
- firms often discontinue export activities;
- there seems to be a rather substantial group of firms that export rather irregularly, some years they export, other years they do not.

Chances are high that this latter group of 'irregular' exporters is either not identified or underestimated. A similar reasoning may well be relevant for other areas of internationalization.

The main types of services provided by consultants on 'internationalization' are:

- general market information;
- market research;
- guiding exporters in local operations;
- preparation of business trips.

Clearly, the need for these types of services is not expected to decrease after the first of January 1993.

Research literature provides a conceptual framework for the 'Internationalization of SME' in which six distinct elements or stages are distinguished:

1. indirect international influences (e.g. subcontracting to an exporter)
2. indirect export involvement (wholesale, export trading company)

3. direct export involvement (including agents, distributors, sales subsidiary)
4. co-operation with foreign firms (in R&D, marketing, etc.);
5. international licensing
6. direct foreign investment (joint ventures, mergers, acquisitions).

Although some evidence is reported that firms may - benefitting from the collective learning curve - 'jump stages', generally speaking exporting is the start of the internationalization process. Often this preceded by international competition on domestic markets.

Given that internationalization occurs 'in stages', one can look upon *export* as an indicator for future internationalization in a broader sense. So an increase of SME export activity now is most likely followed by increasing SME participation in Direct Foreign Investments (DFI), co-operation agreements etc. In line with this reasoning, decreasing numbers of SMEs are found to be engaged if the scope of the analysis is widened from exports to other aspects of internationalization. Roughly speaking, at least three times fewer SMEs are active in DFI, and about five times fewer SMEs in licensing abroad than are engaged in exporting.

11.3.5 Employment

Total employment in SMEs (0-499) in 1988 reached 62 million jobs, and has probably grown further in the late eighties. This means that SMEs provide more than 70% of employment in private non-primary enterprises, and almost 50% of total employment in the Community (including agriculture, government and other non-market services).

SMEs are dominant in trade, construction, most service sectors (except transport, communication and financial services) as well as in a number of manufacturing industries. Taken together SMEs are dominant in sectors which jointly provide almost 80% of private non-primary employment.

Furthermore the relative importance of SME-employment seems to be rising. There are indications for several countries that in the late eighties employment growth in the SME-sector outstripped growth in large enterprises. More recently a wave of reductions seems to be sweeping the largest firms in the Community. This reflects a tendency towards rationalization, which is partly due to the cyclical downturn but also has to do with longer term processes such as a return to 'core' business and concern with 'managerial diseconomies to scale'. It is fair to say that there are no indications that the large firm sector will be a net creator of jobs in the nineties.

In the meantime unemployment in the Community is high and rising. There is little hope that demographics will reduce unemployment in the 1990s. In fact

the potential labour force (population aged 15-64) will continue to grow, although at a lower pace than in the 1980s. Besides labour force participation of older people and married women will probably rise.

This all means that SMEs will have to play an even more vital role in job creation than in the 1980s. Considering the evidence presented in Chapter 7, start ups of new firms and new entrepreneurs as well as the expansion of existing SMEs can make a significant contribution. In chapter 12 the ways policy makers can strengthen this job creation potential will be discussed.

Some characteristics of small firms jobs are apparent from the evidence presented in this report.

Firstly, compared to their larger counterparts smaller firms have a higher percentage of relatively cheap, young workers (under 25 years of age). In this respect it is significant to note that in the nineties the supply of young workers will decrease quite strongly. This implies that many SMEs will be faced with higher costs of labour, when having to restructure their staff.

There are also indications that women's share of employment is somewhat higher in SMEs and especially the micro firms. Also the relative importance of part time work seems to be higher in the SME-sector. So it seems that SMEs are reasonably prepared to accommodate the rising numbers of female and part time workers likely to be seeking jobs in the 1990s.

Average earnings of employees in most cases tend to fall with enterprise size. However, more detailed studies taking industry, occupation and other relevant factors into account are needed.

Regarding the manufacturing sector, average labour costs per employee in large enterprises are between 30 and 50% higher than in small firms (20-99 employees). There are however no implications for unit labour costs in small firms because low costs per employee are offset by lower labour productivity (as measured by value added per employee). In the industrial sector labour productivity in large firms is up to two thirds higher than in small enterprises.

Impact of the internal market

The completion of the internal market produces virtually no direct, short term effects on employment levels. Different social systems still constitute obstacles to unrestricted labour mobility.

Furthermore, labour cost differences have only slight effects to SME anyway, probably even in the medium term: because of productivity differences, strong

barriers such as social security and pension arrangements, and wage convergence tendencies already showing now.

An exception is the extra impulse to mobility of the higher educated, to staff and management functions elsewhere in the European Community. SME will play their part in this, because the scope of their markets is extended.

The stronger development of labour productivity in LSE manufacturing industry as opposed to the trade, services, craft and other SME dominated sectors is raising the SME employment share on balance. The least developed member-states may show more LSE employment in the medium term, because a restructuring process, reducing the present large SME employment-share can be expected.

Finally, the completion of the internal market may induce a *polarization* of the European employment structure in the long run, comparable to the situation in the USA: the completion of the internal market is boosting both high and low quality employment. Average SME wages are lower, mainly due to the "weight" of labour-intensive SME's with relative low-skill employment in the trade and services sector. They are rather polarized as well, however. Accelerated substitution of labour by capital makes industries more "knowledge-based", including (part of) their SME suppliers and subcontractors on the one hand. On the other, "minimalistic" EC social policies lead to lower social standards in the European Community, pushing and attracting low quality employment.

11.3.6 Capital and finance

There is evidence that SMEs and craft enterprises tend to use a higher proportion of short term finance. SMEs seem to have inadequate access to lower cost, long term lending due to lack of collateral. Besides SMEs are disadvantaged relative to large firms by higher interest rates, particularly on small short term bank loans. The evidence indicates that small firm premiums on bank finance in many countries are 1 to 2 percentage points over the rates that large firms are paying on short term finance.

Besides this restricted ability to raise bank finance at economic rates of interest, there is also evidence of equity gaps for SMEs in the majority of Member States. There are significant difficulties in obtaining venture capital at the lower end of the scale (seed corn, start ups). Secondary stock markets appear relevant for only the very largest of SMEs. Informal venture capital networks are, by comparison with the USA, relatively underdeveloped in the EC countries. In view of current trends affecting SMEs and craft enterprises these facts must to be considered as serious drawbacks. Technological change implies a great need for seed capital and financing innovations. The debt gaps for fast growth, innovative SMEs diminish the proven potential of small firms to make a contri-

bution to innovation. The completion of the internal market and the subsequent increase of competition necessitates investment and innovation by SMEs and craft firms. Finally rising unemployment in the Community implies a great need for a recovery of investment in all sectors and for a further increase in business start ups.

There is also evidence that small firms extend more trade credit than their larger counterparts. While the volume of trade credit has also expanded throughout the 1980s. Particularly in periods of recession, late payments on trade credit may be harmful to performance and survival prospects of SMEs.

Impact of the internal market

The completion of the internal market is a strong impulse to the scaling-up trend in the financial services sector. Yet, competition increases as well. This clearly affects SME's in the European Community.

In the first place lending conditions improve. The SME-market will be the European banks' main area of competition, as the LSE market is divided already. Besides, the widened market scope is likely to encourage applying "scoring system based" lending decisions, causing more transparent lending markets and competition on price.

In the second place the single market sets going a restructuring of the relatively inefficient financial services sector in the Southern member-states, particularly favouring SME lending conditions here.

In the third place, only a limited number of major financial centres will be left in the long run. These tend to include the secondary venture capital market that is particularly important to SME. This may in turn produce a relative lack of risk capital in the peripheral regions.

In the fourth place a potential lack of finance for start-ups and new businesses may be a consequence of integration. Informal venture capital networks are less developed in Europe at present. Emerging big finance and scoring system based decisions may add to this. On the other hand, in view of the virtual absence of venture capital in some member-states, an improved supply may result in the medium term.

11.3.7 Regional aspects

Considering only internal or intra-EC borders, the EC land borders taken together are 6,000 km long, as against 4,000 km in the outer border. Out of a total of 345 million inhabitants, roughly 10% live in border regions, covering 15% of the Community surface area.

Elimination of border barriers is bound to have big impacts on border regions, in the sense that natural flows will be stronger and cooperative relationships between enterprises will develop more easily.

The existing situation differs widely from one country to another. Borders have long been blurred in some countries (e.g. Benelux), in other countries borders are represented by physical constraints (Pyrenees).

In some border regions there is a big difference between both sides of the border regarding sector structure, unemployment rate and GDP per capita. In other border regions hardly any differences occur.

The border has in some regions created the 'border effect': with underdeveloped basins at both sides of the border. However, the border has also contributed to the flourishing of some business, namely at the crossing points. These businesses are connected with transportation, custom agencies and retail trading, and SMEs and craft enterprises are overrepresented in these activities.

The formation of the Single European Market is bound to alter this situation. In the custom agents business job losses will occur, and after the tax harmonisation certain cross-border shopping will no longer be attractive. For some activities the border acted as protection, these include house building, civil construction, artisans, services. In these cases the border epitomizes the compendium of national regulations that keep national markets for national firms. Elimination of border barriers will release this protection and will affect those small scale sectors more than large scale activities.

Commuting occurs in many cases, and is mostly one way. As long as there are differences in wages, social security and skill these flows will exist. On the long run they might however slowly decrease. Price differences in tax, land, energy and water provide a reason for households and firms settle on the other side of the border. Different fiscal systems also introduce distortions in business investment decisions.

Elimination of capital movement restrictions and liberalisation of services, elimination of restrictions on the mobility of professionals and increasingly compatible educational systems will increase the flows across the borders, creating additional opportunities for business activities for local SMEs and craft firms.

Some forms of inter-SME cooperation are particularly suited for neighbouring regions, e.g. subcontracting. The concept of the single market promotes internationalisation. As a result some plants will disappear with negative effects on SME and craft enterprises. This happens also when the necessity of having a plant on the other side of the border disappears. In some other cases the single market will have a positive effect on SME and craft firms, particularly when new

cross border markets for subcontractors will develop due to the harmonization of norms and standards, the opening-up of public procurement, etc.

Transborder cooperation is most needed at the local administration level, given the trend to increased personal and mercantile flows across the borders.

Interreg is a special program to promote economic development through transborder cooperation. There are two priorities:

- Emphasis in new employment opportunities to replace jobs jeopardized by the elimination of the borders. Business activity and SMEs are in the centre of interest.
- Emphasis in the creation of permanent organisations of a transnational character.

In Community regional policy so-called Objective 1 regions are distinguished. They are defined as less developed regions where gross domestic product per capita is 25% below of EC's average. This definition includes three countries completely (Ireland, Greece and Portugal), a substantial part of Spain and Italy and some other regions. Together these regions have 22% of the total population of the EC. Some characteristics of these regions are:

- they are less populated than the rest;
- their level of industrialization is 6% points below EC's average;
- the unemployment rate is 7% points higher.

Community regional policy supports:

- communication infrastructure;
- the development of energy and water supply;
- vocational training and other services to SMEs;
- research and development.

Some Objective 1 regions have improved their relative position, but the gap (in terms of GDP per capita) between the Objective 1 regions as a whole and the EC average has grown in the recent past.

In the period 1989-1993 24% of Community structural funds in Objective 1 regions went to direct improvement of production activities.

Projects in the European Social Fund are very relevant to SMEs and craft firms. However, the absorption of Community funds by SMEs is rather poor, due to internal factors related to SME (lack of managerial skills, lack of time, etc.) and to organizational bottlenecks in the various public administrations.

Impact of the internal market

The impact of completing the internal market is strongly different for border regions and for peripheral regions.

Intra-Community border regions gradually cease to be border regions. This is an immediate impulse to economic restructuring, affecting customs services and economic activities directly related to national cost and price differences first. The penetration of domestic markets is likely to start here as well, particularly inducing inter-SME competition. The secondary effect is gradual economic restructuring, finding out and adjusting to the strengths and weaknesses on both sides. In the longer run economic "centres of gravity" will be redefined, and some peripheral regions in a national context will join emerging "Euregions".

For regions that are peripheral in the European Community context, on the other hand, negative consequences to SME might prevail. This is mainly the case in the Southern member-states. Economic restructuring may reduce the present large share of SME and SME employment. Besides, the already strong regions are likely to benefit from the integration impulse in the first place, causing inter-regional differences to increase. This may reinforce migration from peripheral regions to the economic booming areas in turn, and a further decline of the former as a result.

11.3.8 Strengths, weaknesses, opportunities and threats

On the European level the major findings as presented before, can be approached from the angle of strong and weak aspects of the SME sector including crafts in Europe (see table 11.6). Also the threats and opportunities for the SMEs in the coming years can be summarized (see table 11.7).

Some noteworthy strong points are:

1. greater business dynamics obvious from the high natality rate and the increase of the educational level of entrepreneurs;
2. the increasing participation of SMEs in international trade, direct foreign investment, and
3. the promising job creating potential, induced by new firms created, market opportunities but also by the low labour productivity growth in the SME sector.

Important weak points that can be registered are:

1. the high mortality rate; linked to the high natality rate leading to a high volatility of business in the EC;
2. weak market orientation due to lack of strategical marketing approaches and operating on small segmented markets;
3. low productivity of labour leading to high unit wage costs in spite of the relatively low wage costs per employee;

4. the financial situation of SMEs remain a weak point due to the low equity/debt ratio and difficult and costly access to financial markets.

Table 11.6 Strengths and weaknesses of European SMEs, by field

	Strengths	Weaknesses
<i>Entrepreneurship</i>	<ul style="list-style-type: none"> - high natality rate - growing share of women and ethnic minorities - increasing level of education 	<ul style="list-style-type: none"> - high mortality rate - lack of management skills - financial obstacles for start-ups
<i>Markets and Sales</i>	<ul style="list-style-type: none"> - high share in services - high share in subcontracting - high involvement in cooperation - niche orientation 	<ul style="list-style-type: none"> - segmented markets - small number of customers - lack of marketing knowledge
<i>Employment</i>	<ul style="list-style-type: none"> - high employment share - job creation potential 	<ul style="list-style-type: none"> - high percentage young workers - low productivity in micro and small firms - high unit wage costs
<i>Capital and finance</i>	<ul style="list-style-type: none"> - medium-sized firms relatively strong in venture 	<ul style="list-style-type: none"> - high costs of lending - equity gaps for micro/small - lack of long term loans

<i>Internationalization</i>	<ul style="list-style-type: none"> - increasing participation in exports - increasing participation in direct foreign investment 	<ul style="list-style-type: none"> - loosing market share in EC - internal barriers to internationalization - internationalization is not a strategic choice

These weak points give rise to a relatively difficult starting position for SMEs in the new European Community.

The analysis of the different trends in the macro economic environment, demographics, technology and in the development of the internal market shows that there are some important opportunities for SMEs in the near future or the medium-term. But threats have to be faced as well, especially in the short run the recessionary period will definitely be affecting all business life and not in the least that of smaller enterprises.

Major opportunities are related to technological developments, bringing forward more flexible systems to which SMEs are geared, enabling them to compete better with large enterprises on the internal market as well as on third markets. Demographic developments are leading to new market segments but also new types of entrepreneurship and specific labour supply changes.

The harmonization of policies in the EC and further integration leads both to new opportunities in the markets of goods and services, higher incomes (prosperity effect) and new market niches, but also capital markets will become more open. On the other hand import penetration and increased concentration of production in larger firms are also at work.

Some striking opportunities that can be mentioned are:

1. New entrepreneurship springing from the increasing number of unemployed in the short run and the demographic developments as well as the internal market in the medium term.
2. The growth of the small-sized service sector, due to increasing prosperity and the subcontracting of services.
3. Small enterprises meeting new challenges due to the smaller scale application of new production processes and the managerial diseconomies to scale (back to the core) and the decrease of the minimum efficient scale of production.
4. Export opportunities are positively influenced by the reduction of non-tariff barriers in the EC. Increased specialization due to the internal market will also create opportunities for SMEs.

Contrary to this positive perspective, some major threats for SMEs can be categorized as follows:

1. Especially in the short run the market growth, both domestically and globally, will be limited.
2. A strong exposure to international competition from larger and small foreign enterprises, leading to risks of higher import penetration. The internal market will in some sectors result in concentration of production in larger firms, particularly in the least developed member states.
3. Footloose large firms will impose stronger criteria on smaller supplying firms concerning standards, quality, etc. Consequently the subcontracting market will become more international as well more competitive.
4. Job creating potential may be eroded due to labour saving technologies and higher labour costs in small enterprises.
5. Although the capital market liberalization offers advantages for SMEs, negative aspects could be the weakening of the secondary stock market, which is of special importance for the medium-sized firms. Furthermore, late

payments may lead to liquidity problems and consequently to higher capital costs.

Opportunities and threats are to be faced by the SME sector and consequently by the policy makers. Taking into consideration the weak points of SMEs and the short run threats, it can be expected that the job creation potentials of SMEs will be difficult to exploit in the coming years. The SMEs will be inclined to sustain employment instead of creating it. However, in the longer run when the recessionary influences have been overcome, excellent prospects for economic growth and employment creation can be expected in the SME sector. The opportunities created by the completion of the European internal market, an increase in prosperity as well as the adoption of 'SME-made' technology will influence the development of entrepreneurship and small and medium-sized enterprises beneficially.

Table 11.7 Opportunities and threats for European SMEs, by field

	Opportunities	Threats
<i>Entrepreneurship and business dynamics</i>		
- rise of middle age potential entrepreneurs	+	
- high unemployment stimulates start-ups	+	
- increase of failure rates (in recession)		-
- new business opportunities in internal market	++	
- more competition from abroad		--
- free movement of persons (entrepreneurs)	+	
- economies of scale		-
- specialization trend	+	
<i>Markets and Sales</i>		
- slow growth domestic market		--
- long run growth of services	++	
- rise of middle age consumers	++	
- decrease young consumers		-
- increase of subcontracting	++	
- higher (technological) standards in subcontracting		--
- flexibilisation production systems	+++	
- export as a first step to Europeanization	+	
- outsourcing foot loose large firms		--
- abolishment physical barriers	+	
- abolishment technical barriers	++	
- higher import penetration		--
- concentration in large internal market		---
- opening-up public procurement	+	
- higher prosperity (internal market)	+	
<i>Employment</i>		
- rising labour costs		--
- labour saving technology		--
- increase migrant workers	+	
- dejuvenization labour supply		-
- rising female labour participation	+	
- managerial diseconomies to scale	++	
- competition with high productivity large firms		---
- free movement of persons	+	
- harmonisation social policy	+	
<i>Capital and finance</i>		
- weakening secondary stock markets		--
- increase of late payments		--
- falling interest rates	+	
- financing acceleration innovation		-
- internationalization capital markets	+	
- supply of venture capital	+	
- competition lending market	+	

11.4 THE INTERNAL MARKET

11.4.1 SMEs at the threshold of the internal market

One of the aims of the Observatory is to monitor the impact of the completion of the internal market for SMEs in the Member States. Hence, it is necessary to first outline the present situation in Member States at the outset of the internal market. The preceding chapters have represented the outcomes of the attempts made to reveal the many aspects of the position of SMEs.

In this section factors considered most suitable to be used as tools for analyzing the impact of the internal market for SMEs, will be highlighted. The variables chosen are both relevant for considering the position of SMEs in the internal market and are available for all (or most) Member States. In this section, the state of these variables in 1988 will be discussed. The year 1988 was chosen as a base year because it seems an appropriate time to commence monitoring the consequences the completion of the internal market, since in subsequent years, effects of anticipation to the internal market program could already be observed. Also, 1988 is the most recent year for which data on (almost) all of the selected variables were available. In the next Annual Report, also their evolution over time will be analyzed, so as to monitor the consequences of the internal market for SMEs in the Member States. As knowledge of the European SME-sector grows, in future reports other factors and variables may be added to the monitor.

Selected factors

Two groups of variables are distinguished, *i.e.* factors describing SME's presence and structure, and factors related to the general economic structure of each Member State.

With respect to *SME's presence and structure*, the following factors were selected:

1. average firm size;
2. the per capita number of firms;
3. the share of SMEs (in the broad sense, *i.e.* firms employing less than 500 employees) in total employment of non-primary, private enterprise;
4. the share of micro and small firms (thus, firms employing less than 100 employees) in total employment of non-primary, private enterprise;
5. the share of micro firms (which employ less than 10 employees) in total employment of non-primary, private enterprise;

6. the birth rate of firms;
7. the share of exports in total turnover in SME-dominated industries (see chapter 2) relative to the share of exports in turnover of LSE-dominated industries;
8. the share of exports in 6 selected small-scale NACE-categories (see chapter 10).

Firm size is defined as the average number of persons employed (including self-employed) in a firm¹. The per capita number of enterprises measures the degree of entrepreneurship in the economy. The share of SME in total employment is a simple measure of SME-presence. The share of micro firms and micro and small firms in total employment are added to this list as to provide more detailed insight into the size-class distribution of the market sector.

The birth rate of firms can be viewed as an indicator of SME's business dynamics.

The final two factors are added since they provide information about the orientation towards exports of SMEs, which is an important characteristic of SMEs in the light of the completion of the internal market.

The *general economic structure* of each Member State is described by means of the following variables:

9. per capita GDP;
10. labour costs per employee;
11. the share of foreign, EC-Member State citizens in population;
12. the use of venture capital (as a percentage of GDP);
13. the share of intra-EC trade in total exports;
14. the share of extra-EC exports in GDP;
15. inflation trend;
16. real long term interest rate.

Per capita GDP is taken into account as the main indicator of economic prosperity, which has also been shown to be positively correlated with average firm size. As labour costs are a crucial cost category for the labour-intensive SME-sector, labour costs per employee are considered. Also, such costs are a driving force in concentration processes. So, convergence in this factor will have a strong impact on SMEs in many Member States.

Demographic factors are taken into account because the removal of frontier barriers might increase intra-EC migration.

Since economic integration in Europe is expected the ease flows of capital between Member States, the use of venture capital is also considered.

¹ Thus, firm size is *negatively* related to SME-presence.

Trade-indicators are taken into account. Firstly, because opening up national markets will increase intra-EC trade, and secondly, completion of the internal market is expected to increase international competitiveness of Member States. Finally, the monetary factors are selected because completion of the internal market is expected to imply convergence of inflation trends and interest rates.

11.4.2 Base-line indicators for 1988

Country profiles

All data described above have been transformed as to make them comparable on one scale¹. In figure 11.1, for each Member State the transformed data are presented. This section seeks to highlight some remarkable results for each country.

Belgium lies close to EC-12 average for most factors relevant to SMEs, with the exception of the large share of exports in selected small scale NACE-groups compared with EC-12 average. On the other hand, this coincides with a relatively low ratio between the share of exports in turnover of SME-dominant sectors and the export-share of LSE-dominant sectors. Belgium also features a high share of migrants from other Member States in its population; partly, of course, a result of the location of the European Commission in Bruxelles. Also, per capita GDP and wages are well above EC-12 average. Intra-EC trade constitutes a large fraction of total Belgian exports. Also, extra-EC exports as a share of GDP are relatively high.

Denmark, as can be concluded from Figure 11.1 has a rather weak SME-presence. Such a conclusion is the consequence of a high average firm size as well as a relatively low per capita number of firms. Furthermore, the share of micro firms in employment is low. This coincides with high per capita GDP and labour costs per employee. Denmark has a relatively low share of intra-EC trade in exports, together with a large share of extra-EC trade in GDP. This might well be the result of Denmark's peripheral location.

Denmark's real interest rate is well above average. This is partly related to the country's relatively low inflation rate in 1988.

France can also be characterized by weak SME-presence, as is apparent from the low per capita number of enterprises as well as the low share of SME in employment. The relative share of exports in turnover of SME-dominated

¹ This transformation is described in Annex I. The transformed data are indexed such that EC-12 = 100.

Figure 11.1 Base-line indicators for 1988, by Member State (EC-12 = 100)

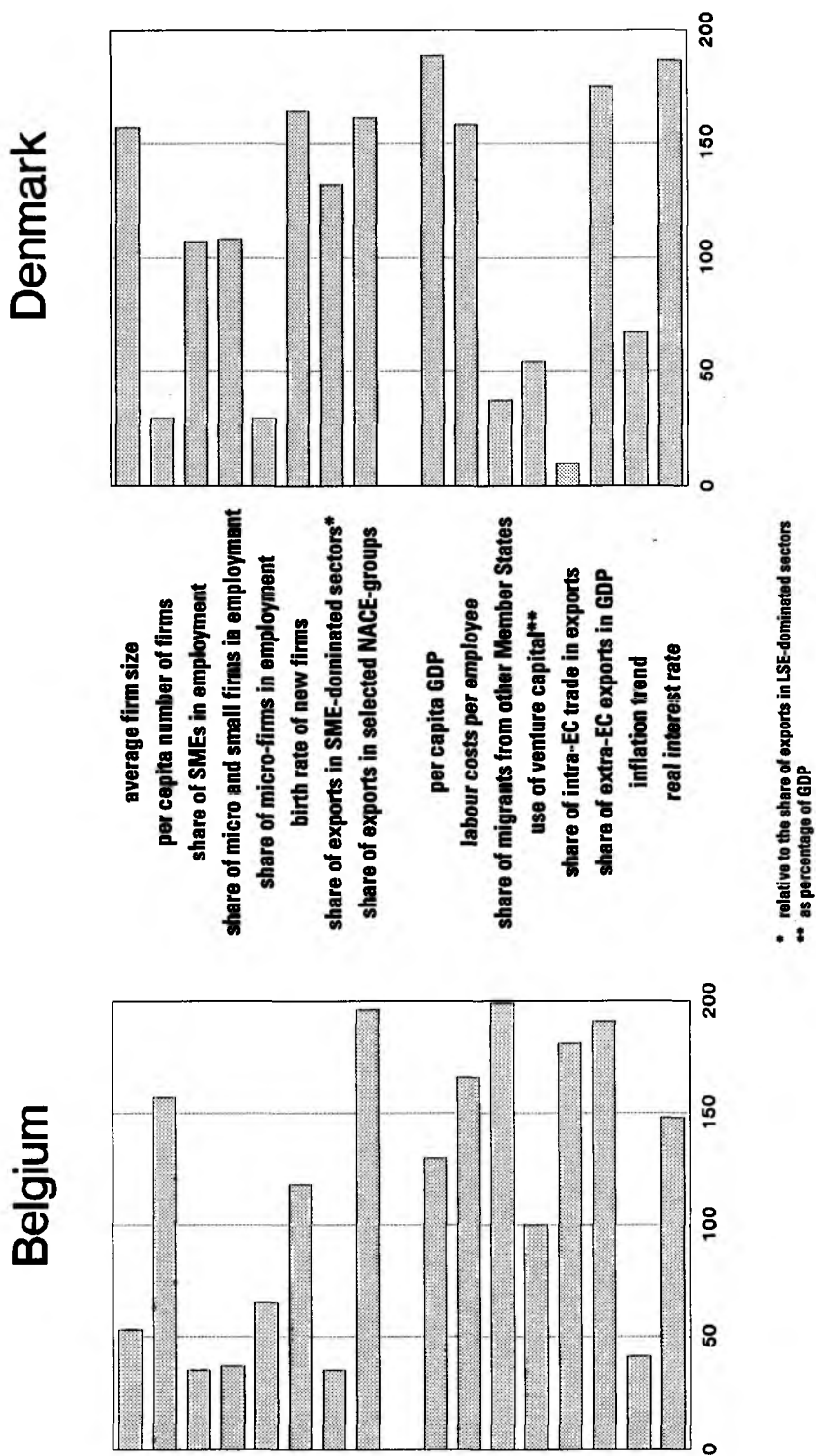


Figure 11.1 Base-line indicators for 1988, by Member State (EC-12 = 100) (continued)

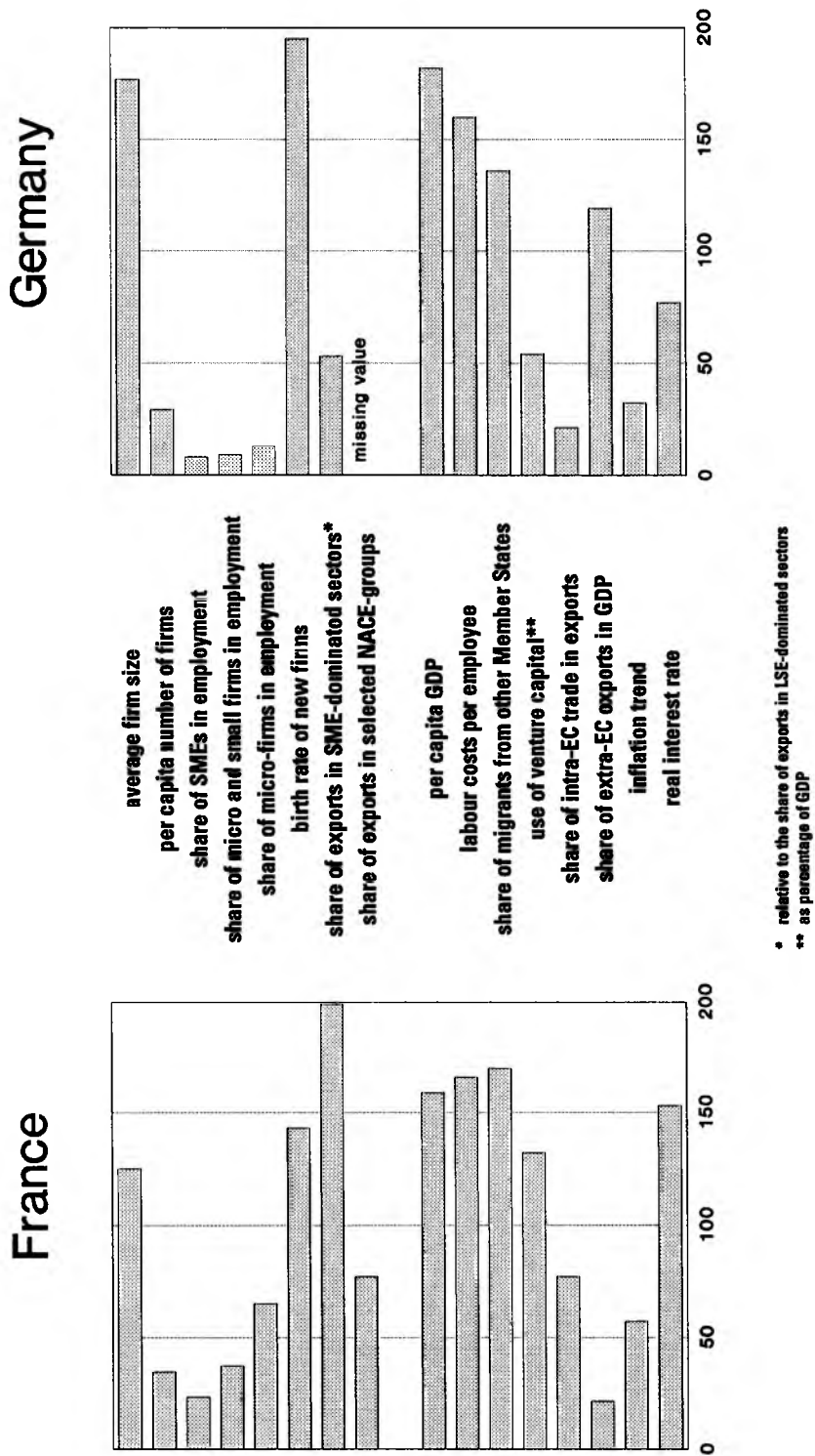


Figure 11.1 Base-line indicators for 1988, by Member State (EC-12 = 100) (continued)

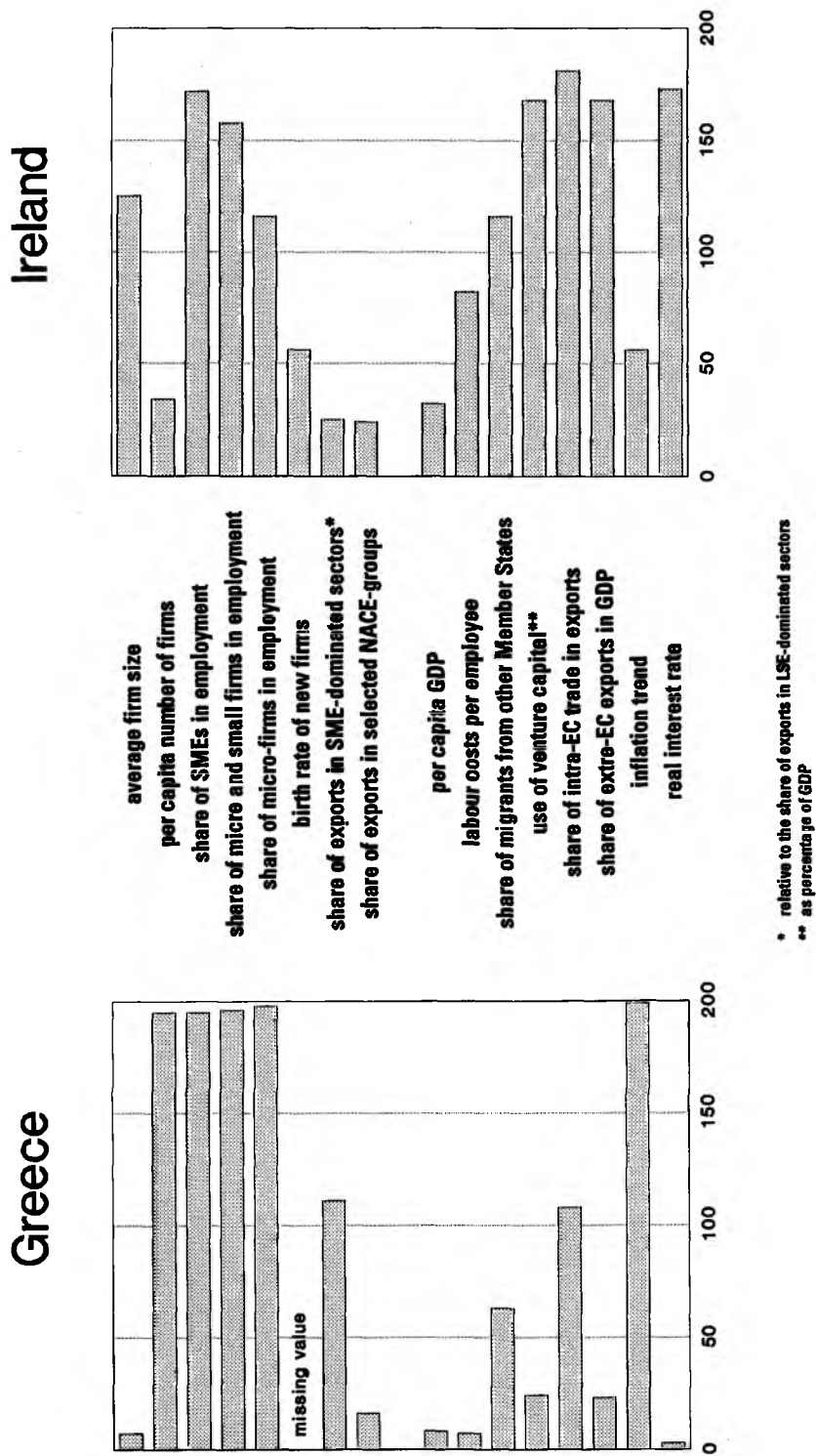
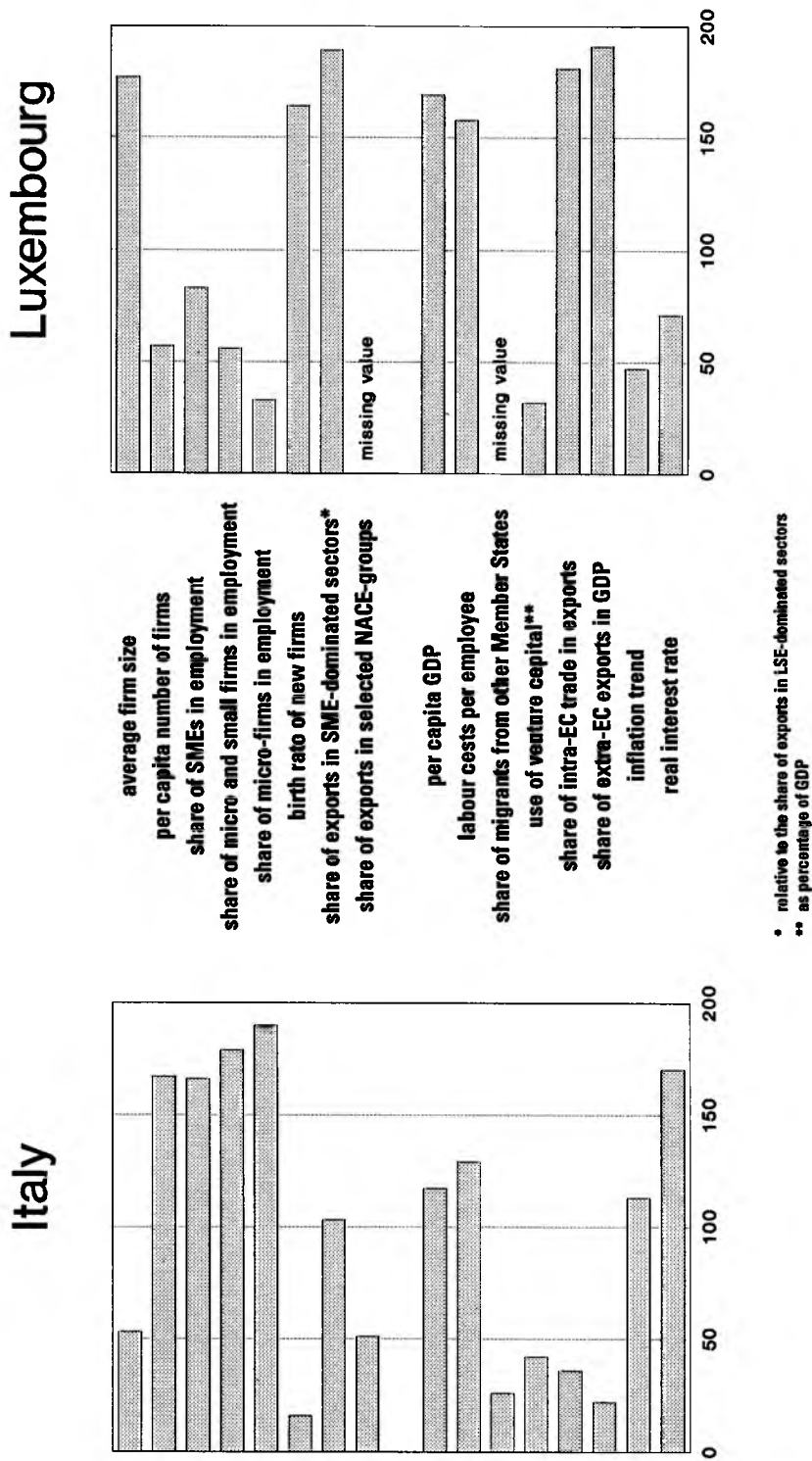


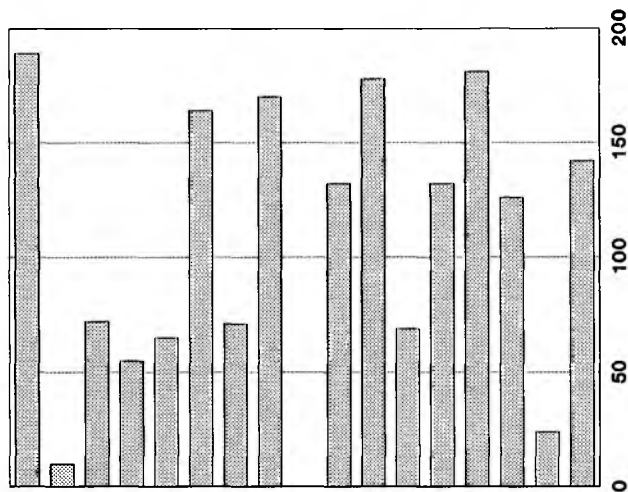
Figure 11.1 Base-line indicators for 1988, by Member State (EC-12 = 100) (continued)



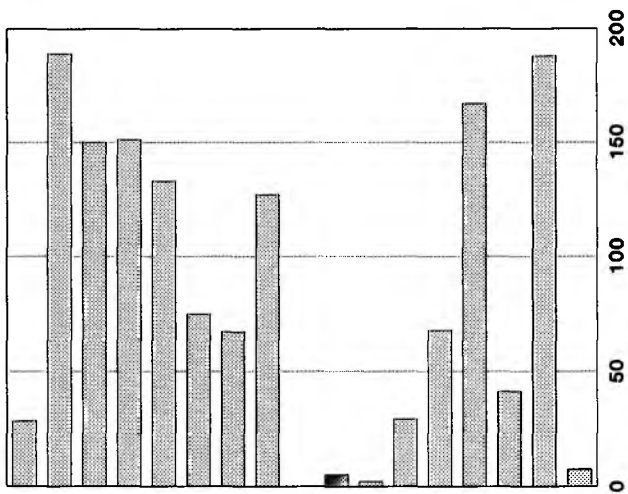
* relative to the share of exports in LSE-dominated sectors
 ** as percentage of GDP

Figure 11.1 Base-line indicators for 1988, by Member State (EC-12 = 100) (continued)

The Netherlands

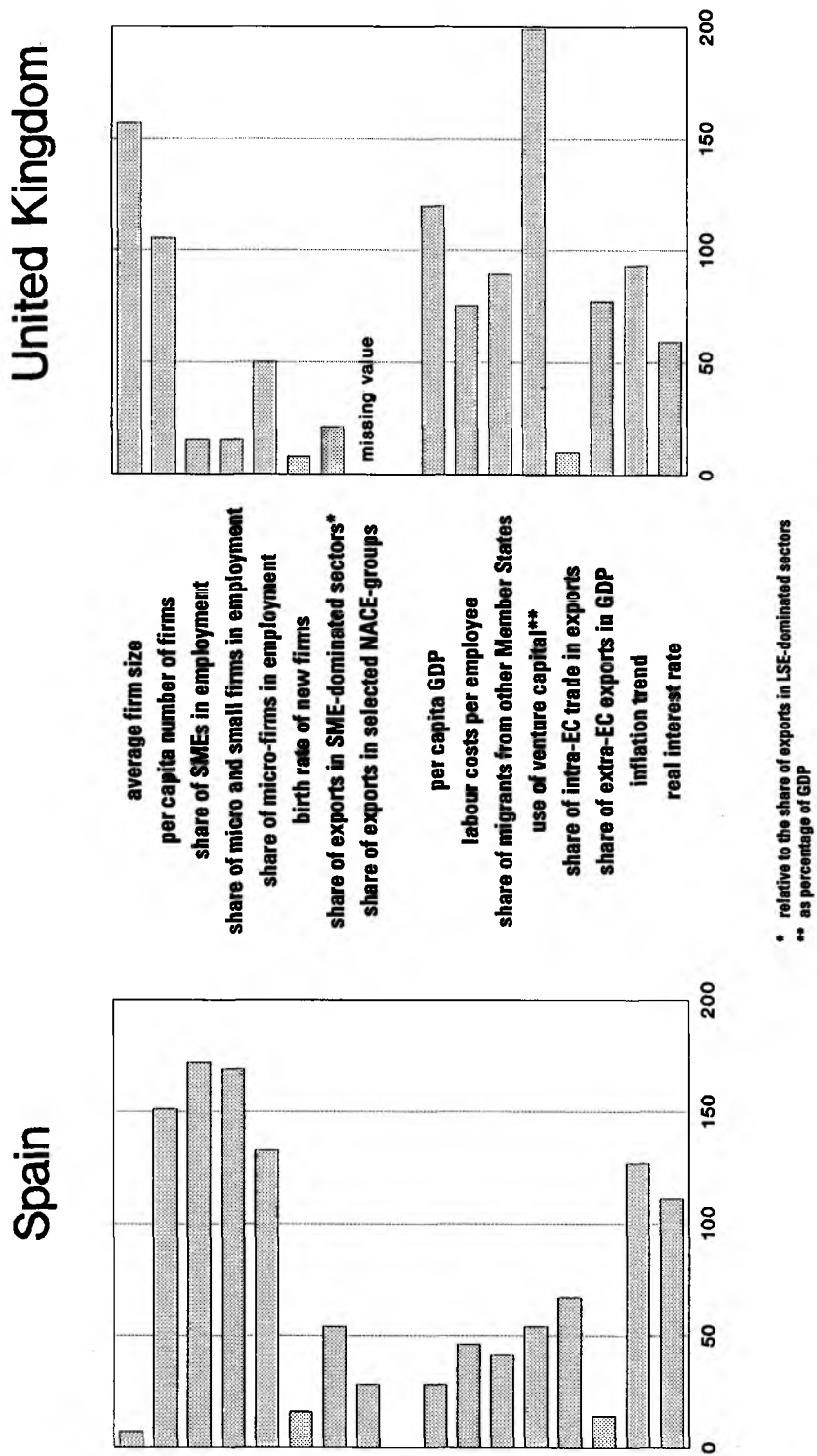


Portugal



* relative to the share of exports in LSE-dominated sectors
 ** as percentage of GDP

Figure 11.1 Base-line indicators for 1988, by Member State (EC-12 = 100) (continued)



* relative to the share of exports in LSE-dominated sectors
 ** as percentage of GDP

sectors is extremely high; this is particularly a result of the large share of exports in wholesale trade. Per capita GDP and wages are well above EC-12 average. So is the share of migrants from other EC Member States in population. France's exports is only to a limited extent directed towards other Member States. Furthermore, exports to non-EC countries constitutes only a small share of total GDP.

Germany too has to be characterized by a weak SME-presence. As in France, per capita GDP and wages are well above EC-12 average. However, the birth rate of new enterprises in Germany is the highest of the EC. Also, intra-EC trade represents only a relatively low part of total exports. Extra EC-trade in GDP is above average. However - compared to France - SMEs seem to be less oriented towards exports. Germany's inflation in 1988 was rather low, compared to EC-12 average.

Greece is characterized by a very strong SME-presence, as can be seen from its small average firm size and the large share of SME in employment. The latter does not only hold for SMEs as a whole (all firms with less than 500 employees) but especially for firms with less than 100 employees and even in micro firms. The share of exports in sales of selected small-scale NACE-groups is relatively low, which indicates that Greek SMEs are only geared for exports in a limited manner. Per capita GDP and wages are amongst the lowest in Europe, which might explain the strong SME-presence in Greece. Extra-EC trade constitutes only a limited share of GDP. Inflation is far above average. Partly as a result of that, the Greek real interest rate is the lowest in Europe.

Ireland shows a relatively low number of enterprises compared with population; on the other hand, the share of SME in employment is relatively high. This coincides with low per capita GDP and wages, compared with the EC-12 average. The share of migrants from other Member States is relatively large. Venture capital is used extensively in Ireland. However the birth rate of firms is rather low by EC-norms. Intra-EC trade constitutes a large share of total Irish exports. Also, exports to non-EC countries is important for the Irish economy, as can be seen from its large share in GDP. However, Irish SMEs seem weakly geared towards exports.

In *Italy*, SME-presence is strong. This can be seen from the small average firm size, as well as from the large share of SMEs in employment. Also, micro and small firms have a large share in employment. This can not be explained by low (average) per capita GDP or wages, which are above average. Instead, an explanation may be found in the regional distribution of prosperity in Italy, with low prosperity and strong SME-presence in the South, and high prosperity and

low SME-presence in the north. The birth rate of firms, however, is relatively low.

The share of exports in sales of selected small-scale NACE-groups is relatively low. There are relatively few migrants from other EC-countries in Italy. The use of venture capital is rather low in Italy. Also, Italian firms are only weakly oriented towards other Member States regarding their exports. Furthermore, extra-EC exports constitute only a small part of total GDP. Inflation and real interest rates are above average.

As in France and Germany, *Luxembourg* shows a weak SME-presence, by way of a large average firm size as well as a low per capita number of firms. Also, the share of SMEs in employment is relatively low. This holds true especially for micro firms. On the other hand, the birth rate of firms is high compared to the EC-12 average.

The share of intra-EC trade in total exports is relatively high. The weak SME-presence can be explained by relatively high per capita GDP and wages. Intra-EC trade constitutes a large fraction of total exports. Also, exports to non-Member States is important as a portion of GDP. Furthermore, SME-dominated sectors are rather strongly involved in exports. Inflation is relatively low.

The Netherlands also have a weak SME-presence. It has the highest average firm size, and SMEs have a relatively small proportion of total employment. Also, the per capita number of enterprises is low. The birth rate of firms, however, is well above EC-12 average. The share of exports in sales of selected small-scale NACE-groups, and the share of intra-EC trade in total exports is remarkably high. Labour costs per employee are amongst the highest in the EC. Inflation trend is relatively modest.

As in Greece and Italy, SME-presence is strong in *Portugal*. This coincides with low per capita GDP and wages, which are in fact lowest of all Member States. Intra-EC trade constitutes a large part of total exports. On the other hand, exports to non-EC countries form only a limited part of Portuguese GDP. Inflation is high in Portugal, whilst the real interest rate is relatively low.

Regarding SME-presence and SME-structure, *Spain* very much resembles Greece, Italy and Portugal and has strong SME-presence, which coincides with low per capita GDP and wages. Also, as in Greece and Italy, the share of exports in sales of selected small-scale NACE-groups is relatively low. The share of intra-EC trade in exports is only slightly below average. However, exports to non-Member States constitutes only a minor fraction of GDP. The birth rate of firms is at a low level. The real interest rate is high, compared to the EC-12 average.

As in France, Germany, The Netherlands and Luxembourg, *The United Kingdom* has a weak SME-presence, as is evident from the large average firm size and the small share of SMEs in employment. This coincides with a relatively high per capita GDP. Venture capital is used to a large extent. Intra-EC trade constitutes a relatively modest part of total exports. The real interest rate is at a low level.

Divergence per variable in 1988

In Table 11.8, the data on SME-presence and structure, as well as on the general economic structure of Member States for the base-year 1988 have been summarized to demonstrate the differences that still exist between Member States. In some cases, differences between Member States - in terms of both SME-presence and SME-structure as well as the general economic structure - are wide indeed, as has already been explained in section 11.2.2. In subsequent Annual Reports of the Observatory a dynamic analysis of the process of convergence will be presented.

Table 11.8 Base-year Results on Divergence (1988)

	minimum value	EC-12	maximum value
<i>SME-presence and structure</i>			
firm size	2.9 (GR)	6.1	10.0 (NL)
number of firms per 1,000 inhabitants	28 (NL)	46	67 (GR)
SME's share in employment (%)	62 (D)	70	91 (GR)
share of micro and small firms in employment (%)	44 (D)	55	80 (GR)
share of micro firms in employment (%)	17 (D)	30	59 (GR)
birth rate (%)	6 (UK)	10	18 (D)
relative share of exports in SME-dominated sectors	42 (IRL)	67	132 (F)
share of exports in small-scale NACE groups (%)	11 (GR)	29	70 (B)
<i>General economic structure</i>			
per capita GDP*	3.6 (P)	12.5	17.8 (DK)
wage costs per employee*	6.0 (P)	19.7	24.3 (NL)
share of migrants from other Member-States in population (%)	0.2 (I)	1.5	5.4 (B)
use of venture capital**	0.0 (GR)	0.8	2.3 (UK)
share of intra-EC trade in exports (%)	50.0 (DK)	60	75.0 (L)
share of extra-EC exports in GDP (%)	7 (P)	11	18.7 (B)
inflation trend (%)	0.7 (NL)	4.1	17.5 (GR)
real interest rate (%)	1.8 (GR)	4.9	6.9 (DK)

* 1000 ECU.

** as percentage of GDP.

12 POLICY RECOMMENDATIONS

12.1 INTRODUCTION

General

Based on the information collected and analyzed earlier concerning the market developments, in particular the international markets, the business dynamics and entrepreneurship, the capital markets and financing, the employment and regional developments, several issues on which SME-policy making should concentrate can now be considered. The policy recommendations will be focusing on the major interactions between the various fields and the internationalization and integration of the European economy as well as some general trends affecting the development of SMEs, like macro-economic, demographic and technological changes.

As in this first issue of the European Observatory of the SME sector the number of subjects to be handled had to be limited, so are the number of policy recommendations discussed.

Specific questions which are important, e.g. training and administrative simplification, are not covered in detail in this report and will accordingly be discussed only indirectly when they are of importance for the fields analyzed. The same holds for policies concerning the different sectors or branches that can be distinguished within the SME sector.

It could even be said that recommendations are not always of equal relevance for the different size classes within the SME sector. In principle most of the recommendations are related to the majority of the enterprises, being rather micro and small than medium-sized. More reflection on sectoral divisions and size distribution is necessary in future.

Although primarily the European Commission policy for SMEs and the craft sector is the object of the policy recommendations, the more general debates can be highly useful for policy makers on local, regional and national levels as well.

Basic assumptions for the following debate on the policy recommendations are:

- that on the Community level the SME policy should be concentrating on creating a favourable environment for enterprise development in particular for the SME and craft sector;
- the subsidiarity principle is setting limits to the extent to which the Commission can develop policies;

- the policy should be less interventionistic in terms of fiscal and financial incentives and more orientated towards creating appropriate and stimulating conditions to exploit the full potentials and the opportunities of the SME and craft sector as well as to strengthen the weak characteristics of the sector and to diminish or curb threatening developments;
- that financial instruments should be used only to compensate SMEs for serious drawbacks or to offset the discriminatory position of SMEs in the fiscal and/or banking systems (like guarantees);
- that the compliance costs of the policies developed are in balance with the effects strived for.

In the different paragraphs attention is paid to aspects of European integration to which policies in the field of SME should be oriented. Prior to these specific discussions it should be said that in the transitional period in which the non-tariff barriers are lifted specific attention should be given to the administrative burdens placed on the SME sector. Transparency of new legislation is very important to the small entrepreneur. But new systems of legislation and regulations can easily lead to extra costs being incurred by SMEs to fulfil the necessary requirements. Such new burdens should be avoided or minimized.

In the debate specific objectives of the SME sector will be explicitly addressed, like:

- creation of employment and economic growth;
- ensuring competition on markets, in particular related to the internationalisation process.

Organizational aspects of SME policy

It is important for a full approach of strengthening the small business sector in the European Community that policy makers both on national and supranational levels should not concentrate on aspects only directly of relevance for the sector. A harmonious policy for the SME sector should be well integrated with all aspects of business policy. A more integrated policy should be strived after instead of a limited one specifically geared to the SME sector, e.g. fine tuning of SME policy with industrial policy and general economic policy in particular is of high importance.

To strengthen SME policy making on the European level initiatives should be taken to discuss the policy issues intensively with organizations or representatives of the small business and craft sector. This is important in both the preparatory and implementation phases. It should even be a target of the Commission to strengthen the Europeanization of these organizations both horizontal and vertical in order to establish a Europe-wide opinion on this sector.

Information and SME policy making

Sound policy making should be based on exact information concerning the subject of policy. In establishing this first Observatory report quite a lot of relevant and precise information on the SME sector has become available. However, most of the information is not always available for all Member States and not always harmonized between countries. And some specific information is only available in a very few countries. Information gathering should be stimulated to strengthen the initiatives already underway to arrive at an improved and appropriate data base on official statistics by Eurostat.

In the frame of the European Observatory the information collected will be stored and in the coming years it will be supplemented, harmonized and improved. Consequently this information will be available for EC policy makers in order to develop an appropriate policy for the small business and craft sector. This is not only of relevance for formulating policy but it can also be highly instrumental for assessments, monitoring and evaluation of SME policies as well.

12.2 ENTREPRENEURSHIP AND BUSINESS DYNAMICS

Background

Stimulation and promotion of entrepreneurship needs special attention in the structural strengthening of the European economy to remain competitive on a global scale, to create employment and to overcome the present recession. Entrepreneurial activity can be considered as an engine of economic growth. The recession and its limited market opportunities are not providing favourable conditions for new start ups or for existing SMEs. In particular the many micro enterprises working on the edge of survival and failure.

In the 80s the interest in the dynamics of the economy and especially the supply side of the economy has increased considerably. Opportunities, conditions and the will of persons to start a business on their own account is a major element of these dynamics. In general, the objectives of the government for start-up policies are varied: to stimulate new enterprises, to create jobs, to increase competition, to promote the viability of new enterprises and also the possibilities for growth after the initial stage.

This variety of objectives illustrates that the scope is much wider than just stimulating start-ups. However, rather recently all Member States have developed a wide variety of measures consisting of different instruments to encourage persons to start their own business. Financial support, information and counselling and training are the instruments favoured by governments in their policy implementation.

Each Member State provides opportunities for financial support for starting an enterprise. The type of financial support varies strongly between Member States

and also within a Member State several types of financial support can be available. The measures vary from state guarantees on loans, to the provision of loans and the provision of grants and assistance in obtaining equity capital from venture capital funds. In some countries (including Belgium, The Netherlands, Portugal and The United Kingdom) special financial support and/or tax facilities are available for unemployed persons wishing to start their own business. Information and counselling is also a major instrument in supporting start-ups. The general features of this type of support in Member States is that it mainly focuses on information and some basic assistance in drafting a business plan and the supply of information concerning all kinds of registration procedures. Furthermore, governments have set-up special campaigns to promote the awareness of opportunities of starting your own business. In training supporting measures generally take the form of courses especially organized for new entrepreneurs. The EC itself implements no measures or initiatives for supporting start-ups.

Recommendations

Apart from stimulating and promoting new entrepreneurship the survival of existing firms needs special attention. Experience shows that there is a wide difference in survival rates of start ups. More attention should be paid to developing instruments to lift the barriers and bottlenecks faced by new start ups in their first years of existence.

This can be done by improving managerial attitudes and skills and providing wide-ranging information. Specific attention should go to credit availability and financing facilities during the first years of life. Moreover, the market mechanism should be supported through the constitution of public services in providing information on legal, technologies, credit, production, competition and other affairs.

The present unemployment situation not only requires an offensive approach to create favourable conditions for new start ups but also offers opportunities to stimulate new entrepreneurship by offering the unemployed new perspectives on becoming entrepreneurs.

Creating a favourable climate for new start ups and for minimizing failure rates is in general not only related to positive economic and juridical conditions, like expansive markets, low entry barriers, ample and adequate capital markets, an accessible system of business advisory services and a juridical and regulatory framework that is transparent and not too complex.

More socio-psychological conditions should be taken into consideration in promoting entrepreneurship, like increasing the credibility of entrepreneurship in society and offering people possible choices in their professional careers.

In this respect the EC should stimulate the individual member countries in exchanging experience in creating favourable economic and socio-psychological conditions for new entrepreneurs. Giving attention to entrepreneurship and stimulating awareness can be promoted by mass campaigning, providing proper information to pupils and students, as well as creating entrepreneurship training schools at secondary and higher levels.

A European Entrepreneurship Promotion Programme should be started at a European level which can be linked to existing national programmes and can strengthen these programmes.

In these promotional activities special attention should be paid to population categories that are highly responsive to new entrepreneurship. In this respect not only the unemployed should be mentioned, but also the ethnic minorities which seem to be rather under-represented in entrepreneurship. In some countries experiences have shown that the willingness of ethnic groups to start their own business is rather high.

Under-representation among female entrepreneurs is also found in most of the EC-countries, which demands special and 'tailor made' attention in promotional activities.

The aging population also requires special attention that policy makers give to the so-called 'superceders' - entrepreneurs that are in the second half of their career - and 'reverters' - people in the phase of late and post career - who may also choose to take the entrepreneurial path.

To stimulate more innovative entrepreneurship in order to keep abreast of new technological developments, special attention should be concentrated on students in higher education and research workers in universities. The awareness for entrepreneurial opportunities there seems to be rather low and training programmes at this level are rather limited in many European countries.

Channelling into and recruiting for entrepreneurship can be realised by special programmes. The EC can fulfil the role of exchanging information on experiences in this respect and of initiating cooperation between universities and polytechnical schools in setting up small business management programmes and eventually in strengthening the exchange of 'potential entrepreneur' students between countries.

Another opportunity for stimulating highly qualified and new entrepreneurs is to stimulate action by multinational firms to develop career planning for highly qualified (research) staff for whom the entrepreneurship track ('spin-off') is under consideration. Due to the recession this is currently of particular importance as many large firms have to dismiss large numbers of employees. Stimu-

lating new entrepreneurship within this group should be more easily done by employers, employees and their organizations as well as by policy makers. Supporting instruments by the EC should be developed.

Further integration of the European economy demands and also brings to the fore the need for greater mobility of entrepreneurs.

Existing barriers in business licensing and regulations, should be lifted, particularly in border regions where differences are most marked. Stimulation of European trade associations to develop quality standards for their national associations should also be considered. This would be aimed at achieving a more transparent European-wide quality concept for entrepreneurs or small businesses.

The actions undertaken by the EC to arrive at new juridical forms for businesses (such as the European Economic Interest Grouping, the European Association, the European Cooperative Society and the European Mutual Society) should be supported in order to augment international business cooperation and to lift the existing barriers. Monitoring and evaluating these new European businesses should be carried out in order to adjust such worthwhile initiatives to the new business conditions in Europe.

In selecting instruments to stimulate new entrepreneurs attention should be paid to crowding-out effects. From a macro-viewpoint these are not always harmful. However on micro level the policy may engender social problems with financial and budgetary consequences.

Most of these initiatives could be undertaken at national or even at local or regional level, while on the European scale the exchange of information on different experiences in promotion and stimulation of new start ups as well as in minimizing failure rates is in order. Supporting national initiatives and broadening them to other countries should be considered as well. Moreover Community policy should be aiming at general regulatory problems and the communities institutional framework in which national schemes are envisaged to operate.

12.3 MARKETS AND SALES

Background

Stimulating business activity can in principle be approached by influencing demand in markets in which businesses operate or by adopting a supply-side approach. This increases the viability of enterprises and the conditions under which they operate.

During the last decade much emphasis has been laid on the latter, while recently more attention seems to have been devoted to influencing aggregate demand, in particular the government expenditure component.

Indirectly, markets or demand are influenced by wage/price or competition policy operating on the internal and external market.

Direct approaches to stimulate the SME markets by government procurement policies are rare in the Member States and at the EC level. This implies no explicit preferential market stimuli for SMEs but such policies do affect SMEs and larger enterprises differentially.

Sales of the SME sector are oriented more towards the internal market than towards external markets. Moreover SME penetration is stronger in the consumer market and/or the market for services. In this respect economic policy making, either on a national scale or in the form of concerted international action, has to take into consideration the fact that macro-policy will affect small and large business differentially. For example, an expansionary policy by increasing consumer demand will have a stronger impact on SMEs than an increase in government investment.

Recommendations

Bearing in mind the recessionary state of the European economy, a careful expansionist policy might be advocated to exploit the employment creating potentials of the SME sector. Such a policy should also, however, be focused on restricting labour costs and on a sound pricing policy to strengthen the competitive position of the business sector - including SMEs - in the global markets.

Structural and business cycle policy should foster small businesses in order to maintain competitiveness and the smooth functioning of markets for final goods and services. In the present recessionary period, and with particular emphasis in several Member States, there is a tendency for small business to be pushed aside by larger enterprises. This will endanger competition in the long run.

Certain demographic developments will lead to a greater segmentation of consumer markets, in particular of markets for consumer goods and services. Fewer young and more middle-aged and elderly consumers implies changes in the structure of market demand. There is a need for small businesses to be well informed in this area. Although on the national level specific tasks can be identified, the EC should also attempt to enhance information flow on market developments for SMEs paying particular regard to their increasing international dimension. This can be achieved by stimulating trade associations or branch organizations to cooperate more effectively on a European scale. This in turn

will establish a sound financial basis for information access and adequate branch information.

Special attention must be devoted to the subcontracting market both on the national and the international level, as markets become increasingly international.

At present a few countries run subcontracting programmes as part of industrial policy. These programmes mainly consist of information and counselling activities. EC policy in the field of subcontracting is centred on two themes. The first is the creation of a favourable legal climate and the second the improvement of communication between contractors and subcontractors.

On a European level strengthening of the subcontracting relations between large and small firms will be necessary when technology-intensive products are under consideration. Business services could also be better integrated into subcontracting or cooperative networks.

Certification of SMEs should be promoted to strengthen their market position internally and externally. The basic principle for the EC in this respect should be to make the subcontracting markets more transparent and to stimulate horizontal and vertical partnerships. Instruments to accomplish this could be the assembly of data banks and/or catalogues, the organising of trade fairs etc. A better regulation of SME participation in EC-technology programmes could be very helpful in inter-relating new high-level networks in advanced technology sectors.

The reduction of non-tariff barriers in the EC evokes stronger competition. SMEs have to face more and stronger competition on their home markets as well as having to compete more effectively on foreign markets. In this large and more competitive European market economies of scale and scope can be better utilized. Small enterprises should be enabled to remain competitive and to grow to exploit economies of scale by adopting a policy based on an adequate information system and helping to strengthen cooperation between firms.

Important in this respect is the strengthening and upgrading of the existing information and cooperation instruments such as EIC, BCNet, Europartenariat. Non-manufacturing firms need to have more explicit recognition in forming EC-policy in this respect.

12.4 EXPORTING AND INTERNATIONALIZATION

Background

Although many opportunities seem to be available to SMEs, the road to export is dotted with obstacles limiting their potential export performance.

All Member States seem to be aware of bottlenecks for SMEs in exporting and the instruments of 'financing' and of 'information and counselling' are commonly used to support SMEs in their exporting activities. This pattern corresponds to the major bottlenecks generally observed in this area.

Many countries provide special schemes for financing export activities. Most support financing transactions by means of credit insurances. Other forms of financial support consist of soft loans (e.g. loans with interest rate subsidies) and special banks for export loans and credit insurance. Another commonly used scheme is the stimulation of corporate cooperation in export activities. This is supported by e.g. grants to cover joint export activities by a group of companies, by trade federations or by professional associations. Most Member States have set-up fully state-funded organizations which are responsible solely for supporting exporting. Their tasks include the supply of information and counselling, market research, arranging participation in foreign trade fairs and/or the forming of export combinations. In many Member States Chambers of Commerce play an active role in providing information and counselling for SMEs to support export activities. In some countries (Belgium, Denmark, France, United Kingdom) the government assists SMEs by means of grants to cover some of the costs of external consultants or the costs of external export analyses.

EC support in the field of export consists of three elements: Euromarketing, cooperation with third countries and contacts with non-Member States.

Recommendations

European integration and harmonization of non-tariff barriers in the EC seems to have had a substantial positive impact on the larger exporters than on the smaller ones. For smaller firms face, in addition to the same external bottlenecks as large enterprises, many internal bottlenecks.

Full attention both from national and supranational authorities should in this respect focus on compensating small firms for their internal problems limiting both their external trade and their other international activities to other EC-countries and to third countries.

These internal problems are mainly related to steps to be taken before the act of exporting. The main bottlenecks for SMEs here are: lack of information on market opportunities and distribution channels, the identification of agents or distributors and lack of financial means to enter new markets. Other problems

are connected with trade barriers like custom control procedures, insurance, currencies and quality requirements.

The EC should use the EIC to inform the smaller entrepreneur better on market opportunities and developments, but also on current national regulations and conditions.

This information could be made available more systematically as a result of analyzing market developments. Regular surveys in this area should be stimulated.

An EC-wide information system on qualified importers, exporters and wholesalers should be reconsidered to assist SMEs in finding the appropriate distribution channels to foreign countries, especially within the EC. Exports to third countries can be supported by providing selective information on relevant adjacent regions like the EFTA, Maghreb and Middle and Eastern European markets.

It ought to be emphasized that cooperation between SMEs in exporting activities should be strengthened by providing appropriate information on relevant 'candidate export partners'.

As export financing remains a major problem for SMEs it is not clear to which extent export credit guarantee schemes are existing and distorting exportation between SMEs in the Member States. More insight may be needed to find out ways and means to eliminate these distortions.

There is some evidence that in recessionary periods SMEs tend to improve their export performance, the stimulus being insufficient demand on local or domestic markets. The recessive periods can be considered as learning periods for SMEs on how to export. Especially in this period good information is to be provided to SMEs to go abroad. But for the future it is also of great importance to sustain and to improve the export competence acquired in this period. This requires special programmes, training and information focusing on these exporters. Special attention can be devoted to networking and/or cooperation for exporting SMEs.

To counteract the strong import penetration of the EC from outside, a strong emphasis should be put on improving the quality and technological performance of the SME sector, as has been advocated before.

Moreover, on a national level specific attention should be paid to the development of wages and social insurance costs in the labour-intensive SME sector, to enable it to remain competitive on external or global markets.

The SME sector should be seen as part of the European production chain, with firms delivering components, spare parts and services to each other and to large enterprises. Reinforcement of the total production chain is needed to guarantee the position of the European industry in the global markets.

To stimulate the technological renewal of the SME products and processes, SME should be encouraged to take part in licensing agreements with larger high technology companies. Special attention can be channelled by the EC through the different information or cooperation programmes of the EC in this field, like EIC, Europartenariat etc.

12.5 EMPLOYMENT AND HUMAN RESOURCES

Background

It is widely recognized that SMEs are a major source for creating new jobs. The present high unemployment rates in many Member States raise questions about improving the employment situation. Several advantages occur in the situation with higher employment levels:

- self-development and self-realization leading to greater social participation.
- The preservation of welfare by means of a broader supporting base for social security and the improved utilization of human capital.
- Reduction of unemployment (including hidden unemployment among women and incapacitated persons), broadens the economic supporting base. It is also socially desirable since many people aspire to paid work.
- Higher employment levels will reduce the gap between labour costs and net incomes.
- Demographic pressure, e.g. on social security systems, will be reduced.

Besides these general objectives to stimulate employment, additional reasons can be put forward because of specific SME internal labour market issues.

It appears that a wide variety of instruments are deployed in the policy field employment. The three most registered instruments are: financing support, information and counselling and training.

The financial instruments refer in general to government contributions in the form of grants, subsidies or lower social contributions for enterprises offering employment opportunities for long-term unemployed or unemployed young persons. Other instruments include the matching of demand for and supply of labour in SMEs, recruitment assistance for employees for SMEs, the improvement of human resources management, the training of disabled persons and the design of special regulations for temporary contracts.

The majority of measures are directly aimed at reduction of unemployment. This general feature seems to more or less pass over the specific opportunities and needs of SMEs in the employment field. Of course, this is a generalisation and one has to take into account the fact that a large number of measures are aimed at the specific circumstances and needs of SMEs. Nevertheless, a certain

tension seems to exist between objectives of governments and opportunities and needs of SMEs in the field of employment policy.

Human resources management is increasingly considered a major productive factor. Education and training facilities are provided by both private institutions and the regular education system.

Many Member States deploy activities to support SMEs with financing and training instruments in the education policy field. Portugal and Italy however do not implement specific measures in the education policy field to support SMEs.

The combination of financing and training facilities is mainly aimed at reducing the costs linked with education and the training of employees and entrepreneurs. A contribution to the costs by the government also encourages enterprises to take part in training courses.

All Member States have basic educational systems with opportunities for vocational training, as well as possibilities to follow evening classes for various occupations. Some countries (including Belgium, Germany and The Netherlands) promote a dual-system for young people: on-the-job training through a combination of part-time employment and part-time education. Enterprises which employ such trainees can apply for a grant to obtain a reduction in employers' social insurance contributions.

Other specific training programmes appearing in Member States are:

- programmes for employers and employees, geared to the situation in each individual company;
- special training schemes for women and ethnic minorities;
- special attention to the possibilities of self-employment in regular higher education.

The EC has two measures in the field of education to support SMEs. The first one is a programme for managers in the run-up to 1992 and the second one is a programme for training craftsmen and the enhancing of skills of spouses employed in firms.

At the EC level, the European Social Fund, the European Investment Bank and the European Coal and Steel Community operate in ways which impinge on the employment field and which are of direct or indirect importance for SMEs.

Recommendations

The high and rising unemployment rate together with the existence of hidden unemployment in the EC demand a much stronger concerted action by the EC. Strengthening and integration of policy instruments and programmes originating in the different Directorates General should be major policy strategies in the

coming years. A realistic strategy should be developed in close cooperation with the social partners at the European level.

The small business and craft sector, which hosts about half of the total labour force, needs special attention in such a policy. The more so because the potential for job generation by SMEs is significant. SMEs offer ample opportunities for particular groups on the labour market, like young workers, women, part-time labour, older employees and self-employed. Policies should be orientated to increase the demand for employees by developing and stimulating the labour-intensive SME sector in general as well as by improving job-matching on the labour market.

Stimulation of the SME sector should be based on viable economic reasoning and recognising the fact that SMEs are not the only subject of a social policy to diminish unemployment. Both large and small enterprises should be targeted for schemes to diminish unemployment.

On the supply side of the labour market policies should be geared towards upgrading and training personnel conform the demands requested by SMEs. This usually implies in particular vocational training for the potential labour force, but also the emphasizing of permanent training for multi-skilled staff. This will keep the labour force more abreast of new technological developments and make it more responsive to change both internal and external to the firm.

The demographic, technological and internationalization developments will demand more and more supplementary training and retraining programmes for keeping the older members of the labour force particularly up to date in their profession or adaptable to new demands in the production process.

Small firms lack facilities to implement this internally. The setting up of 'external' systems in cooperation between enterprises and governments should be pushed for. This will increase the quality of the labour force in the SME sector. In this respect the EC can play a role by stimulating international exchange of information, ideas and schemes. Due to the expected increase in international mobility (in particular in border regions of the EC) the EC can play a more active role in stimulating exchange of information on the qualities of the different professions by e.g. harmonizing certificates, or by providing information on the quality of the different national certificates.

Although most of the labour market problems should be tackled on a national or even a regional scale, the European Commission should, apart from the aforementioned actions, emphasize training, in particular taking into consideration the changes in the internal labour relations resulting from changes in the structure of the labour force, technological developments and the phenomenon of internationalization.

Entrepreneurs should be adequately informed or trained in management principles to adapt their organization to these processes. In this respect the programmes of CEDEFOP are relevant.

Exchange of experiences in effective unemployment and training programmes in the member states could stimulate the application of the best instruments to solve the unemployment.

Policy interventions need to reflect the lower productivity achieved in the small and micro firms in comparison to middle sized and larger firms. Measures designed either on the national or at the supranational level to raise the 'social wage' may have a disproportionate effect on the SME sector and particularly on employment in that sector, unless steps are taken to raise labour productivity levels.

12.6 FINANCING OF SMEs

Background

SMEs need finance for investments and working capital for their business operations. Sources of financial means can be found internally within the enterprise (profits, reserves) or external outside the enterprise by increasing the equity capital or by contracting long-term and/or short-term loans.

The financial needs of enterprises vary substantially according to their financial situation, the type of investments being done, and so on.

Member States provide supporting measures in the form of financial instruments. Some other additional measures exist and are of a fiscal or information and counselling nature. Fiscal measures can generate additional internal financial means for business operations. Information and counselling refer to the provision of information or consultancy to assist SMEs with financial issues. All countries provide financial instruments to SMEs, but within these instruments one can envisage a broad variety of types. Some Member States apply a number of financial instruments, while others rely on one or two financial instruments.

Some Member States (including The Netherlands and The United Kingdom) are focusing mainly on the supply of loan guarantee schemes. In general such schemes are set up for enterprises having problems acquiring loans from banks because of a lack of collateral.

Most countries (including Belgium, Denmark, Greece, Ireland, Italy, Luxembourg and Portugal) have provisions to support SMEs by means of grants for investments, soft loans and/or interest subsidies. These kind of support schemes are

mainly intended to improve the financial position of enterprises with investments in fixed assets.

Furthermore, some Member States (including Belgium, France and The Netherlands) are involved in one way or another in the supply of venture capital to SMEs.

The government can be involved by direct participation in Venture Capital Funds or indirectly through facilities e.g. guarantees to compensate losses of Venture Capital Funds.

Measures of the EC in the field of finance are:

- a. seed capital funds;
- b. Venture Consort and Eurotech Capital programmes;
- c. mutual guarantee schemes; and
- d. cooperatives, mutual societies and associations.

Recommendations

Investments by SMEs should be stimulated to contribute to the growth process and job creation in the European Community. However, the financing of investments by SMEs and start ups is hampered by the limited equity capital of the small firms, the limited access to capital markets and in particular access to long term funds and venture capital. This arises from liquidity problems due to late payments which hit SMEs harder than larger enterprises.

The fact that SMEs have more reliance on short term funds is consistent with a lack of demand for longer term funds but also with a lack of collateral to provide for long-term loans. Loan Guarantee Schemes and Mutual Guarantee Systems have been introduced in a number of EC-countries to cope with the latter. This policy might be extended to other member states. The EC should also strengthen its policy to establish these guarantee schemes. Guarantee schemes are in particular of importance for start ups having limited access to venture capital funds.

The establishment and promotion of risk capital funds should be strengthened by the EC, especially in view of the skewed availability of these funds in the different member states.

There are significant difficulties for the smallest firms raising venture capital. As the micro or small firms will have less access to the more formal funds, the EC should investigate ways to mobilize informal risk capital.

Tax incentives to informal venture capitalists appear to have a beneficial effect on investment levels.

Policy intervention should also be geared to increase the self financing by SMEs, which can be stimulated by tax facilities. In this respect the different legal forms of enterprises, especially occurring in the SME sector, should be taken into consideration. The EC can take the lead in informing member states of the different systems applied and to stimulate the self-financing by SMEs accordingly.

SMEs extend more credit to their customers than do large firms. Measures both on a national level but also by the EC on a supranational level should be taken to ensure prompt payments of debts. The policy of the EC should be strengthened and supported in attacking late payments by both the private and (particularly) the public sector. In this respect special attention is also required to stimulate the efficiency of the banking system, reducing the transfer times of cross-border financial transactions.

As small firms are strongly rooted in their regional or local environment, investment promotion and accordingly financial incentives or means should be put available at regional or local levels. Establishment of regional venture capital funds may be a solution to the problem of local equity gaps. Strengthening of links between the widely dispersed banking systems and advisory or information centres for SMEs, including those initiated by the EC, is needed.

With regard to bank lending small firms are disadvantaged relatively to large firms by higher interest rates on short term bank loans. These loans are more important for SMEs than for large enterprises.

It should be investigated whether this phenomenon is due to a lack of collateral, other asset evaluation techniques by the banks, or to less bargaining power of SMEs.

In order to stimulate SME-investments in R&D or innovation the EC could consider linking participation of SMEs in the different technology programmes of the EC to financial schemes under development by the EC or already available in Member States.

12.7 REGIONAL ASPECTS

In the analysis attention is paid to the border regions and the so called 'Objective 1'-regions, where the gross domestic product per capita is 25% or more below the EC average.

Border regions

Let us first concentrate on the border regions, where quite different degrees of integration can be found, due to differences in historical background, culture, physical barriers and economic structure.

Further European integration is required for a proper 'zipper-type' of integration of the adjacent regions at the border of countries. In particular further convergent development is needed in legislation that prevents markets from being unified, e.g. social benefit and fiscal systems influencing the relative prices on input and output markets are still bottlenecks for mobility of labour, capital and goods.

Small enterprises and craft firms are usually more involved in local and regional developments but also dependent on their direct business environment due to their limited action radius, low strategic perceptions and lack of information.

Strengthen the regional policy makers in deciding on policies for specific regional conditions, to optimize the allocation of EC funds and to solve the structural differences within the border region more effectively.

Developments in the cross border regions should be monitored and assessed thoroughly in order to get better insights into the progress of integration, the effectiveness of the different activities and the real needs of business.

International cooperation requires information. There is still a shortage of mutual knowledge at the three levels of households, business activity and public administration. Therefore, information exchange in border regions, in particular of relevance for SMEs and craft enterprises, is a priority. Transnational databases and public information agencies must be supported or should be developed.

For example cross-border operations in the construction sector are usually hampered by different quality requirements, standards and norms. Better information for the SMEs and craft firms in this sector is needed to have an appropriate marketing strategy established.

Planning by municipalities and other administrative bodies must increasingly integrate cross-border aspects. Ad-hoc transnational bodies (*Eurodistricts*) should be set up and gradually receive mandatory powers. Systematic creation of transborder *Enterprise zones* could be considered to melt and integrate differences within the border regions.

Special attention should be paid to develop technological and innovation programmes in the cross-border regions; one of the weakest points at present.

Strengthening the exchange of experiences in this respect between the different Euregions is desirable.

Transnational educational programmes should be further encouraged, both at the basic level (national languages and culture) and management level, preparing the professionals to work in and with firms and administrations of both sides of the border.

In the labour market area, the specialized bureaus should focus more strongly on matching demand and supply across the frontiers, taking into consideration the different educational, vocational and professional backgrounds. Detailed information on labour qualifications in the whole region should be developed.

Objective 1 regions

It is considered that SMEs in the less developed regions (Objective no. 1) have to bear more 'costs' in relation to those of the developed regions in order to adapt to the situation and to benefit from the single market, because of the low competitiveness of their products, their low technology, as well as their low level in management and organization skills and inadequate institutional infrastructure.

Because of the limited capacity of the local markets and distance from the important trade centres, they have to bear increased transport, communication, distribution and sales promotion costs to compete in the faraway markets.

The better organized and technologically more advanced enterprises located in the developed areas, sustained by an appropriate institutional infrastructure (agencies, financial institutions, consultants and various other services), will gain much more advantage from the elimination of the barriers and the custom procedures as well as other administrative burdens among the member states, and of the opening of the public procurements. This situation risks, in most cases, major cutbacks among the less organized and technologically less developed SMEs in the less developed regions.

On the other hand, new opportunities are offered to the SMEs of less developed regions through the opening of the European Market and the simplification of the administrative procedures concerning international trade.

For these enterprises easier access will be provided to a broad and harmonized single market for the sale of their products and the purchase of raw materials, and, for cooperation with partners of other member states in the fields of subcontracting, technology transfer and marketing.

In order to take advantage of the opportunities, the means should be provided for these firms to increase their competitiveness, to enlarge their local field of activity, to fit in the requirements of the European customers and follow the rapid evolution of the technology.

The European Community has set up the Structural Funds to finance development programmes for the less developed regions of the Community. These funds include the financing of assistance to the SMEs.

Increasing the utilization of assistance by SMEs is likely to be more effective if the assistance focuses, in the first instance, on intermediaries rather than directly on SMEs themselves.

Developing managerial resources of these intermediaries is a high priority in less developed regions. It is therefore necessary to help and develop business assistance services and networks to provide for consultancy and information services to SMEs. In this context special attention should be paid to the improvement of the functioning of existing intermediaries rather than creating new ones, and to the establishment of network links between them on a regional, national or Community level.

In this field Community support could be given for the exchange of experience and the diffusion of best practice on methods and mechanisms for delivering assistance as well as for the establishment of transnational networks of intermediaries.

Priority should be given for this type of action.

Financial bottlenecks also limit SMEs capability for innovative action. Many SMEs find Community support of no avail when their financial structure is too weak to afford additional funds and the local financial institutions are too risk-averse to provide for cheap financing. Thus Community programmes should also shift their emphasis to alleviating financial burdens or to helping develop financial institutions geared to the needs of SMEs (like Mutual Guarantee Systems) in these regions in particular.

The problems and needs of SMEs would be better understood and catered for if on the regional scale the SME and craft organizations would be stronger and better integrated in the decision making process, in the implementation of the Operational Programmes and in their monitoring.

In general a uniform approach to Objective 1 regions should be avoided. Community assistance should be more 'tailor-made' to the specific needs and weaknesses of the regions.

ANNEXES

ANNEX I - METHODOLOGY

1 INTRODUCTION

In section 2, this Annex presents some of the main definitions used in this publication. It deals with size-breakdown and sector classification.

Section 3 refers to the major statistical database of the Observatory project. One of the cornerstones of the statistical information used in the Observatory stems from Enterprises in Europe. This publication contains information on each EC-country concerning the number of firms, employment and turnover¹ by sector (2-digit NACE classification).

However, this publication can not offer all the disaggregated information required to frame a comprehensive picture of the enterprise sector in Member States, disaggregated by size-class. First, for some countries, no complete data was available. Therefore, estimates had to be made. These will be described in section 3 of this Annex. Second, Enterprises in Europe mostly focusses to the situation in 1988. Thus, it is not possible to describe recent developments whilst using this publication. To resolve this problem, an accounting scheme² has been developed to estimate economic development - turnover and employment - by sector and size-class in each of the Member States. The accounting scheme will be discussed in section 4 of this Annex.

Section 5 of the Annex describes the construction of the base-line indicators used in section 11.4.

Section 6 includes a summary table of divisions and classes of the NACE-70 classification of economic activities used in this publication.

2 DEFINITIONS

Size breakdown

There is no formal, unique definition of what constitutes an SME. In practice a wide range of definitions is used for legislation, programmes and research in individual Member States as well as at the Community level. As many of these definitions are meaningful within their specific context, an absolute definition of SMEs remains elusive.

To define an SME usually some measure of size is used such as the number of people employed, turnover or sales or the balance sheet total. Usually an absolute cut off or threshold level determines whether or not an enterprise is

¹ For some countries, information on value added is provided as well.

² SEAS: SME in Europe Accounting Scheme

an SME, but sometimes large firms are defined as being the largest 'x' percent of firms and the remaining firms are defined as SMEs.

One of the aims of the Observatory report is to present an overview of the size and structure of the SME-sector at the Community level and in the Member States. Within that framework a common definition promotes comparability and consistency. For that reason the conceptual framework as presented in the Eurostat publication¹ 'Enterprises in Europe' has been used in the Observatory whenever possible. This especially holds for intercountry comparisons regarding the number of enterprises, their turnover and their employment. For those purposes the SME-sector is taken to comprise enterprises in the market sector - except agriculture, hunting, forestry and fishing - employing less than 500 employees. Within the SME-sector the following broad size classes are distinguished:

- micro enterprises: 0 - 9 employees
- small enterprises: 10 - 99 employees
- medium-sized enterprises: 100 - 499 employees

Non-primary enterprises employing 500 or more employees are regarded as large-sized enterprises (LSEs).

However, in some cases such as the comparison of financial characteristics, this definitional framework would be unduly restrictive. In such cases available information from national statistical offices, and from other sources which may employ a different size breakdown, has also been used for the Observatory project.

Industry classification

Throughout the Observatory use has been made of the official general industrial classification of economic activities within the European Community, the so-called NACE-70 which was established by Eurostat in 1970. In some cases however information based on national classifications has been used.

NACE-70 divides economic activity into 10 divisions (one-digit level), subdivided into industry classes (two-digit level) and further. A summary table of these divisions and classes is presented in section 6 of the Annex.

Following the Eurostat-publication 'Enterprises in Europe', the Observatory has excluded enterprises in the primary sectors agriculture, hunting, forestry and fishing (NACE-0 division) from the analysis. Within NACE-9 units active in public

¹ For a more thorough exposition of the methodology used by Eurostat the reader is referred to the publication 'Enterprises in Europe'.

administration, national defense and compulsory social security (NACE-91) have also been excluded, and whenever possible non-market services have been filtered out from the third digit NACE-groups¹. However, certain of these services might be mainly provided by non-market institutions in one country, and by market institutions in another.

The data-processing for the Observatory has usually been carried out at the two-digit level. The presentation of results most often takes place at either the one-digit level or at the level of the following clusters of activities:

- industry (NACE 1-4)
- construction (NACE 5)
- distributive trade (NACE-classes 61-65)
- other services (NACE 66, 67, 7, 8, 9)

Industry as defined here is extremely heterogeneous from the point of view of firm size, and includes activities ranging from extraction of fuels to typical SME-activities as other manufacturing industries. Therefore a further sub-division of industry has often been used:

- extraction (including energy and metal processing; NACE 1, 21-24)
- manufacturing (NACE 25, 26, 3, 4).

3 A COMPREHENSIVE DATABASE OF EUROPEAN ENTERPRISES BY COUNTRY, SECTOR AND SIZE-CLASS FOR 1988

For each individual Member State, Enterprises in Europe provides a fairly detailed picture of the economy disaggregated by sector and size-class in 1988. However, to provide a comprehensive database by country, sector and size-class, a number of additional estimates had to be made. These estimates were made on a fairly low level of aggregation, *i.e.*:

- by 56 2-digit NACE classes (see section 6 of this Annex);
- 7 size-classes, as outlined below:
 - micro-firms: 0 and 1 -9 employees;
 - small firms: 10 -19 and 20 -99 employees;
 - medium-sized firms: 100 -199 and 200 -499 employees;
 - large firms: 500 employees or more

However, presentation of in the Observatory report is usually on the much higher level of aggregation as discussed in section 2 of this Annex.

¹ Third digit NACE-groups are defined on a sectoral and institutional basis.

Four groups of problems in constructing this database could be mentioned:

- firstly, for some sectors - and in the case of Denmark and Spain, all sectors - data on turnover were missing;
- secondly, for some countries, data on enterprises, employment and turnover only covered part of the economy - usually industry;
- thirdly, in some cases only the number of employees has been provided instead of total employment;
- finally, in a number of cases, Enterprises in Europe had combined sectors and/or size classes (because of lack of data or for confidentiality reasons).

In this section, it will be discussed how these problems were resolved. Subsequently, since the SME in Europe Accounting Scheme needs data on turnover disaggregated by macro-economic category (consumption goods, investment goods, intermediate goods and services, and exports), it will be explained how total turnover, as can be derived from the database, has been broken down into these categories.

Additional estimation of missing data on the number of firms and employment

The estimation of missing data, or the further disaggregation of available data (in case sectors and/or size-classes were combined in Enterprises in Europe) has been done by merging existing statistical data with expert knowledge from partners from within the ENSR, supplemented with other estimates. First, checks have been performed to see if any additional information on the number of firms and/or employment by sector and (eventually) size-class was available from national sources. This has been used as a benchmark for the first-round estimates. Second, data from the Labour Force Survey have been used as a benchmark for sectoral employment. Finally, using appropriate ratios (firm size, distribution of firms over size-classes, etc.) from countries assumed to be comparable, remaining gaps in the data have been closed.

Of course, at all stages consistency-checks with Enterprises in Europe have been performed.

Additional estimation of missing data on turnover

Missing data on turnover are estimated in the same way as missing data on enterprises and employment. The estimation starts with the ENSR-partners investigating which information on turnover by sector and size-class is available. However, in many cases no data on (sectoral) turnover are available. Thus, sectoral output data (from national accounts) have been used, under the assumption that the turnover/output ratio does not differ much between Member States. In those cases in which no size-class distribution of sectoral turnover was available, assumptions regarding apparent labour productivity had to be made.

Again, at every stage estimates are checked against Enterprises in Europe.

Preliminary estimation of the distribution of turnover by macro-economic category

For each country, the distribution of output by macro-economic category and sector is known from input-output tables and national accounts. The following macro-economic categories are distinguished:

- consumption goods and services;
- investment goods and services;
- intermediary goods and services
- exports.

Turnover includes, in addition to output, the value of purchased goods. It has been assumed that the ratio between turnover and output is the same within each size-class within a sector of industry for every macro-economic category. So, total turnover can be assigned to macro-economic categories for each size-class according to the distribution of output to categories at the sectoral level.

This procedure provides an initial estimate of the distribution of sales.

For a number of countries, the distribution of turnover between exports and domestic sales by size-class is known. This information has been used to adjust the initial estimates.

All estimates have been performed at the lowest level of aggregation. In the Observatory, only data for 5 sectors are presented. On this level of aggregation, differences between size-classes regarding the composition of sales depend upon:

- differences between size-classes regarding their sectoral structure;
- differences between size-classes regarding their propensity to export (if this information was available from the ENSR-partners)

These estimates have been made for NACE-classes within NACE-divisions 1 - 8 (excluding NACE-15).

4 SEAS: SME IN EUROPE ACCOUNTING SCHEME

Since the database only contains data for 1988, additional tools have to be developed to estimate and analyze more recent development of SMEs. Such an instrument is SEAS: the SME in Europe Accounting Scheme. This accounting scheme is designed:

- to link turnover development by sector and size-class to macro-economic developments;
- to derive changes in employment by sector and size-class from turnover development and wages and prices.

These calculations have been performed for all individual Member States. So, in fact the Accounting Scheme consists of twelve separate, independent country models.

This section provides a description of SEAS. First, SEAS itself will be discussed. Then, the way SEAS is actually operated will be presented.

Description of SEAS

The development of turnover by size-class in SEAS is derived in three stages:

- firstly, macro-economic demand indicators are transformed into final demand by sector and macro-economic category;
- secondly, using a multisectoral input-output model, output of intermediate goods and services by sector, and thus total output, is calculated;
- finally, for each sales category turnover by sector and size-class is derived.

It should be noted that SEAS only calculates turnover figures in constant prices; the price-setting process is not accounted for in the system.

In the second stage, employment development is calculated on the basis of turnover development and macro-economic information on real wages.

Thus, the first step in SEAS is the calculation of the sectoral development of output for each final demand category. Three categories of final demand are distinguished:

- consumption goods. Sales of consumption goods and services are calculated as follows. First, macro-economic consumption demand is broken down into goods categories. For each country, at least two goods categories are distinguished, *i.e.* food and non-food. This breakdown is performed using long term demand elasticities. Information on the share of these goods categories in total output of consumption goods by sector makes it possible to calculate potential output of each sector. Finally, an elasticity between potential output and actual output - which is usually smaller than one because of import penetration - makes it possible to calculate actual output of consumption goods.
- investment goods. Basically, the procedure is the same as with consumption goods. However, the distribution over equipment and buildings is exogenous. Furthermore, the elasticity between potential and actual output is usually lower than for consumption goods.

- exports. The variable 'export markets' as published by the Commission¹ is used as the explanatory variable, and directly linked to sales abroad by means of a constant elasticity for each sector. On average, this elasticity is equal to one.

So, generally, final demand by sector and category is linked to the associated macro-economic demand variable. Stockbuilding - which is part of gross production as well - is directly linked to the growth of output (total output, that is, inclusive of output of intermediate goods and services).

Output of intermediate goods and services is modelled by means of an input-output model for each country. With output of intermediate goods and services, import penetration is allowed for as well. So, potential output of intermediate goods is modelled by using the traditional Leontief matrix.

At this stage, output by sector and macro-economic category is known. Using this information, turnover growth by sector, size-class and macro-economic category is calculated². For each sector and macro-economic-category, it is assumed that:

- on average, turnover growth equals growth of output³;
- smaller firms are more vulnerable to import penetration than larger firms. Since the difference between actual and potential output in the sectoral submodel described above is a result of import penetration, in case actual output grows less than potential output, this will have most serious effects in smaller firms. Of course, the reverse holds as well. Note, however, that these effects are very small.

Whilst all calculations are performed for second-digit NACE-70 classes, only results for five broad sectors, as described in section 2 of this Annex, are presented. Differences between size-classes at this level of aggregation result from:

- differences between size-classes regarding their sectoral structure;
- differences between size-classes regarding their propensity to export;
- differences regarding the development of macro-economic demand.

¹ European Economy - Supplement A, No 1/2, january/february 1993

² This is done for all sectors distinguished in SEAS except for those in NACE-9. So, the sectoral sub-model of SEAS covers the whole economy (thus including agriculture, non-market services and government as well), while the size-class submodel only covers NACE-classes 1 -8.

³ Note that turnover includes output as well as the value of purchased goods.

Development of sales is basically modelled in a top-down fashion: starting from macro-economic demand indicators, output by sector and category is calculated, and subsequently, sales by size-class is derived from that. Employment however, is modelled in a bottom-up manner. This is because there are vital differences in how small and large firms hire and fire employees.

Because of the existence of threshold labour, lack of information, etc. SMEs are relatively slow to react to production changes. Secondly, because of the large share of labour in total costs in SME, the wage elasticity of employment in SME is larger than that in LSE. Finally, autonomous labour saving technological progress is slower in SME compared to LSE.

Employment growth by sector and size class is a function of:

- turnover growth. Here, using a lagged adjustment of actual to desired employment, it is assumed that SMEs react more slowly on demand shocks than do LSEs;
- the real wage rate (exogenous; taken from macro-economic data);
- a (negative) constant term, reflecting autonomous technological progress.

Use of SEAS

Basically, SEAS can be run using only its exogenous variables - macro-economic consumption growth, investment growth, export markets, and the real wage rate in each country - as an input. However, the system is updated with statistical information whenever possible. So, information on the export performance of sectors of industry from Industrial Trends¹ - has been used to calibrate export sales. Furthermore, information on GDP development from the European Economy² has been used to calibrate domestic output in each country and each respective year. By so doing, the business cycle in each Member State is taken into account as well. With respect to employment, information from the Labour Force Survey as well as European Economy has been considered.

Thus, design and use of SEAS has been such that knowledge about the way the economy functions, as well as statistical information about actual economic development have been integrated to produce an estimate of SME's development between 1988 and 1992 for each Member State.

¹ EUROSTAT: Industrial Trends - monthly statistics (various issues).

² European Economy - Supplement A, No. 1/2, January/February 1993.

5 BASE LINE INDICATORS OF ECONOMIC CONVERGENCE

In section 11.4.2 of the main report of the Observatory, country profiles regarding SME-presence and the structure of SMEs, as well as the general economic structure of each Member State are presented. This is done by presenting indices of each of the variables concerned. Indices are used to make variables mutually comparable. In this section, the construction of these indicators is described.

The indicators had to satisfy the following requirements:

- they should be dimensionless;
- EC-12 should have a bench-mark value of 100;
- for ease of presentation, the indicators had to lie within a certain range.

This has been accomplished in two steps:

- 1 the original data x are standardized, multiplied by 100, and subsequently 100 is added. This transformation provides a dimensionless index y with EC-12 = 100:

$$y = 100 + 100 \cdot (x - x_{EC-12}) / \sigma_x$$

where	x	the original observation
	y	transformed value of x
	σ_x	standard deviation of x

- 2 the resulting y can still take on an infinite range of values. To make sure the transformed variables will be between 0 and 200 (these limits being chosen somewhat arbitrarily), the transformation is completed by calculating z as:

$$z = \frac{200}{(1 + \alpha \cdot e^{-\beta y})}$$

where z rescaled value of y

The transformed variables z are between zero and 200. The parameters α and β are chosen such that at $y = 100$ (thus the original observation x equals the EC-12 average):

- z= 100. So, if a country scores above 100, it is above EC-12 average, and conversely, if it scores less than 100, it is below EC-12 average.
- the slope of the curve coincides with the 45°-degrees line.

For the next Observatory reports, it is intended to add to this an indicator showing whether during the completion of the internal market, convergence or rather divergence with respect to the selected factors appears.

6 SUMMARY TABLE OF DIVISIONS AND CLASSES OF THE NACE-70

0. AGRICULTURE, HUNTING, FORESTRY AND FISHING
 - 01 Agriculture and hunting
 - 02 Forestry
 - 03 Fishing

1. ENERGY AND WATER
 - 11 Extractions and briquetting of solid fuels
 - 12 Coke ovens
 - 13 Extraction of petroleum and natural gas
 - 14 Mineral oil refining
 - 15 Nuclear fuels industry
 - 16 Production and distribution of electricity, gas, steam and hot water
 - 17 Water supply: collection, purification and distribution of water

2. EXTRACTION AND PROCESSING OF NON-ENERGYPRODUCING MINERALS AND DERIVED PRODUCTS; CHEMICAL INDUSTRY
 - 21 Extraction and preparation of metalliferous ores
 - 22 Production and preliminary processing of metals
 - 23 Extraction of minerals other than metalliferous and energy-producing minerals; peat extraction
 - 24 Manufacture of non-metallic mineral products
 - 25 Chemical industry
 - 26 Man-made fibres industry

3. METAL MANUFACTURE; MECHANICAL, ELECTRICAL AND INSTRUMENT ENGINEERING
 - 31 Manufacture of metal articles (excepts for mechanical, electrical and instrument engineering and vehicles)
 - 32 Mechanical engineering

- 33 Manufacture of office machinery and data processing machinery
- 34 Electrical engineering
- 35 Manufacture of motor vehicles and of motor vehicle parts and accessories
- 36 Manufacture of other means of transport
- 37 Instrument engineering

- 4. OTHER MANUFACTURING INDUSTRIES
 - 41/42 Food, drink and tobacco industry
 - 43 Textile industry
 - 44 Leather and leather goods industry (except footwear and clothing)
 - 45 Footwear and clothing industry
 - 46 Timber and wooden furniture industries
 - 47 Manufacture of paper and paper products; printing and publishing
 - 48 Processing of rubber and plastics
 - 49 Other manufacturing industries

- 5. BUILDING AND CIVIL ENGINEERING
 - 50 Building and civil engineering

- 6. DISTRIBUTIVE TRADES, HOTELS, CATERING, REPAIRS
 - 61 Wholesale distribution (except dealing in scrap and waste materials)
 - 62 Dealing in scrap and waste materials
 - 63 Agents
 - 64/65 Retail distribution
 - 66 Hotels and catering
 - 67 Repair of consumer goods and vehicles

- 7. TRANSPORT AND COMMUNICATION
 - 71 Railways
 - 72 Other land transport (urban transport, road transport etc.)
 - 73 Inland water transport
 - 74 Sea transport and coasting shipping
 - 75 Air transport
 - 76 Supporting services to transport
 - 77 Travel agents, freight brokers and other agents facilitating the transport of passengers or goods; storage and warehousing
 - 79 Communication

- 8. BANKING AND FINANCE, INSURANCE, BUSINESS SERVICES, RENTING
 - 81 Banking and finance
 - 82 Insurance except for compulsory social insurance
 - 83 Activities auxiliary to banking and finance and insurance; real estate transactions (except letting of real estate by the owner), business services
 - 84 Renting, leasing and hiring of movables
 - 85 Letting of real estate by the owner

- 9. OTHER SERVICES
 - 91 Public administration, National defence and compulsory social security
 - 92 Sanitary services and administration of cemeteries
 - 93 Education
 - 94 Research and development
 - 95 Medical and other health services; veterinary services
 - 96 Other services provided to the general public
 - 97 Recreational services and other cultural services
 - 98 Personal services
 - 99 Domestic services

ANNEX II - SME POLICY IN COUNTRIES OF THE EC

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1 SME POLICY IN COUNTRIES OF THE EC

1.1 INTRODUCTION

The international dimension of SME policy has increased considerably in recent years. Both at EC and OECD level¹ the attention paid to SMEs has accelerated. Its increasingly vital role and the dynamics of the economy have both contributed to this. At the national level many countries have for some time recognized the vital role for SMEs and have pursued a special SME policy.

The increasing international scope of and for enterprises - not only for manufacturing, but also increasingly for services - has led to more emphasis on the competitiveness, strengths and weaknesses of SMEs. In general, governments are responding to or have already responded by the creation of a favourable business climate and by special policy initiatives to support SMEs.

1.2 GENERAL CHARACTERISTICS OF SME POLICY

1.2.1 The objective(s) of SME Policy

Competition, the creation of employment and economic growth can be considered as issues to justify paying special attention to promoting and stimulating SMEs.

It appears that in general the SME policy in Member States is converging on the creation of a favourable business climate in combination with additional measures to support specific SME needs. This view can be observed in the attitude of governments that small and medium-sized enterprises constitute an integral part of the business sector, and therefore that the creation of a favourable business climate is an appropriate policy both for SMEs and large enterprises². Therefore, the importance of the macro-economic environment - as described in Chapter 2: Trends - has been increasing over time. Additional

¹ DG XXIII, Report by the Commission on administrative simplification work in the Community in favour of enterprises, in particular SMEs. OECD, *Industrial Policy in OECD countries, Annual Review 1992*.

² A.C.P. de Koning and J.A.H. Snijders, *Policy on Small and medium-sized enterprises in countries of the European Community*, EIM, Zoetermeer, The Netherlands, 1991.

specific SME policy is only implemented in those cases where there is a demonstrable case that SME's needs are not covered by general measures and that specific additional measures are necessary to relieve the problems of SMEs. The maintenance and enhancement of competition both at the national and international level is a major underpinning for the implementation of such 'business climate' policies.

Other general policy issues include e.g the creation of employment, support of existing companies and the support of business start-ups to enhance business dynamics. This type of SME policy is implemented by Germany, the United Kingdom, France, Belgium, the Netherlands, Luxembourg and Denmark. Although Denmark is placed in this group, it must be mentioned that no indication of general or specific SME policy is given, as the entire business sector is considered to be small or medium-sized.

A more interventionistic approach can be observed in Portugal, Greece, Ireland, Spain and Italy. Ireland however has not formulated a specific SME policy, because almost all Irish enterprises are SMEs. Nevertheless, Ireland has a special Small Industry Programme. SME policy in these Member States is defined by identifying a number of specific objectives, like:

- attraction of foreign companies;
- development of internationally competitive manufacturing companies;
- modernization of manufacturing companies;
- innovation and revitalization of traditional sectors;
- adoption of innovation;
- creation of employment;
- removal of discrimination.

The characteristics of SMEs in these Member States, the internal market and the internationalization of enterprises, combined with structural funds from the EC and other special funding programmes (Portugal) have contributed to the implementation of these policies in those (regions of) Member States. In general it can be stated that a common feature in (regions of) those Member States is that SMEs lag behind in acquiring a competitive position.

1.2.2 SME policy by national and regional authorities

In this paragraph the analysis is focusing on the level - national and/or regional - at which SME policy is supported. Nevertheless, in several Member States decentralization is a major issue and regional governments are important in supporting SMEs. Therefore, it is necessary to have an indication of the extent to which regional governments and agencies support SMEs.

An important distinction has to be made between the formulation of SME policy and its implementation. E.g. in many Member States the formulation of SME policy is for the major part at the level of the central government, while the implementation of certain measures is executed through a network of regional agencies.

If the central government formulates SME policy, the measures are in general meant to support SMEs nationwide¹. This means that these measures are more far-reaching in comparison with the situation where a regional government formulates SME policy measures only for their region. The interest of regional authorities in supporting SMEs has increased in the eighties, because of the dramatic rise in unemployment at the outset of the decade.

In most Member States - Denmark², Greece, Ireland, Luxembourg, The Netherlands, Portugal and the United Kingdom - only the central government has the legislative authority to introduce measures to support SMEs. Nevertheless, the supply of the support can be markedly decentralized. In the case of the United Kingdom, small business support tends to be very decentralized and reflects the Government's desire to have activities delivered more flexibly to meet local needs. Regional and local authorities and training enterprise councils (LECs and TECs) are at the forefront of this network of support services.

In the other Member States - Belgium, France, Germany, Italy and Spain - both central and local authorities can pursue policies to support SMEs. In Belgium the position of the regional authorities - Flanders, Walloon and Brussels - has increased substantially in recent times. The regional authorities are now much more independent, and their importance in pursuing policies to support SMEs is also enhanced. The Federal Government in Germany and the 'Länder' act as cohesive cooperating partners. Their partnership is based on a consensus between the general objective of support and their instruments. The regional impact however is set by the 'Länder', being more aware of the specific needs of the region. In France and Italy support measures can be introduced by regional authorities. Legislation of the regional authorities in these countries is subject to the approval of central government representatives. Since the late 1970s, Spain has witnessed an increasing process of political and administrative decentralization, the 'Comunidades Autonomas'. These regional authorities

¹ Of course, the central government can establish special programmes for indicated regions.

² Industrial policy in Denmark is the responsibility of the central government. However, in practice the counties and municipalities did initiate and participate in activities encouraging regional and local industrial development. During the last 5 to 10 years the counties as well as the municipalities have expressed an increasing interest in participating more actively in encouraging the regional and local industrial development.

implement their own policies regarding SMEs, in some cases using either their own resources or the financial resources received from the central government.

The decentralization of power to pursue SME policies in the Member States seems in general to be related to the size of a country. The basis for this pattern can be deduced from the government's need for effective feedback from private enterprises required to coordinate their policies. The larger a country, the more difficult it will be to maintain direct contacts with SMEs which are representative for the whole country. Of course, political and cultural developments in Member States have also contributed to decentralization processes.

In the situation where both central government and regional authorities have the possibility of pursuing SME policy, fine-tuning is, or should be, a major issue. Policy aimed at creating a favourable business environment seems unlikely to distort the 'fair' competition among enterprises, but a more interventionistic policy (financial and/or fiscal support) can certainly lead to overlapping, duplication and distortions in competition. In Spain several problems concerning coordination among regional authorities and central government have taken place during the last years, resulting in overlapping and duplication. This problem has been aggravated with the arrival of the EC funds for support of enterprises, since most of them are implemented at the regional level without coordination from the Spanish central government.

1.2.3 Organization of SME policy

This section deals with the responsibility for SME policy at the central government level. The main issues are: whether or not responsibility should be dispersed among several ministries, and whether special SME departments or divisions should exist within a given ministry.

In general, enterprise policies for both large, small and medium-sized enterprises are carried out in Ministries of Economic Affairs and/or Ministries of Industry and Trade (or Commerce). This implies that policies to promote and stimulate are developed within the domain of the Ministry in charge. SMEs are also supported through measures in the field of employment, education etc. which are the domain of other ministries. The responsibility for policy measures for SMEs in these fields is with the Ministry of Employment or the Ministry of Education in several Member States.

To guarantee a proper treatment of the specific situation of small and medium-sized enterprises, adequate coordination and fine-tuning of measures have to be taken for SMEs. This coordination role can be played e.g. by a special Ministry for SMEs or an SME department within the Ministry of Economic Affairs.

Belgium and Luxembourg both have a special Ministry of Middle Class, representing crafts, trading companies and the catering trades.

Some Member States have special departments at their disposal which are responsible for, or partly responsible for SME policy within the Ministry of Economic Affairs or Ministry of Trade and Industry etc.

Germany and The Netherlands have an SME department within the Ministry of Economic Affairs¹. France has a special SME department within the Ministry of Industry and also within the Ministry of Trade, Craft and Services. There is a Minister of State for small firms in the UK and a special department - the Small Firms Division - within the Department of Trade and Industry. The Minister of State is responsible for coordinating the SME policies of various departments. Greece, Portugal and Spain have special SME organizations at national level attached to the Ministry of Industry, although with a high degree of autonomy. These organizations advice and/or cooperate with the Ministry in the designing of SME policy.

The remaining Member States do not have special SME departments within a Ministry, and SME policy (when in existence) tends to be dispersed over several Ministries.

Thus, policies affecting SMEs and special SME policies tend to be dispersed over several Ministries. Some Member States have created special SME departments within a Ministry. They have a role in the formulation of SME policy and in the coordination process on SME issues which are the responsibility of other Ministries. It is obvious that the dispersion of policies over several Ministries influences the structure of a complete SME policy in a Member State. Special conditions and organizational structures are or have to be created for directing attention to the specific needs of SMEs and support of SMEs in all relevant Ministries.

¹ As stated above, the German 'Länder' are very important for supporting SMEs. At the 'Länder' level, every 'Land' has its own constitution and as a consequence one can notice that some 'Länder' maintain a special SME-department and others do not.

1.3 ORGANIZATIONS AND SCHEMES IN SELECTED POLICY FIELDS

1.3.1 Start-ups

Background

In the 1980s the interest in the dynamics of the economy and especially in the supply side of the economy has increased considerably. Opportunities, conditions and the desire of persons to start a business on their own account is a major component of these dynamics. Stimulating start-ups is important for the promotion of economic growth, competition, employment and the enterprise culture. New enterprises also contribute to the modernization and dynamics of the business sector by encouraging initiatives and by their positive effect on existing enterprises. In general, the objectives of the government in formulating start-up policies are varied: to stimulate new enterprises, to create jobs, to increase competition, to promote the viable new enterprises and to enhance the possibilities for enterprise growth after the initial stage. This variety of objectives demonstrates that the scope of policies is much wider than just stimulating start-ups.

Bottlenecks and needs

In general the creation of enterprises can be encouraged in the educational system by stressing the possibilities of becoming an entrepreneur. In this way, people become aware of entrepreneurial opportunities at an early stage of their development. In addition other measures can be developed which apply more directly to the needs and obstacles faced by persons wishing to establish their own enterprise. Common problems are: lack of financial means (in combination with a lack of collateral), no clear business plan and ignorance of regulations, conditions and procedures which have to be fulfilled.

Pattern of supporting measures

All Member States have developed a wide variety of measures consisting of different instruments to encourage people to start their own business. This is illustrated in Table 1. Both financing, information and counselling and training are the instruments favoured by governments in their policy implementation. These instruments appear to correspond with the - earlier mentioned - common problems in starting an enterprise.

Each Member State offers financial support for starting an enterprise. The type of financial support varies considerably between Member States. Within a Member State several types of financial support can be available. Measures

vary from state guarantees on loans, the provision of loans and the provision of grants to assistance in obtaining equity capital from Venture Capital Funds. In some countries (including Belgium, Greece, The Netherlands, Portugal and The United Kingdom) special financial support and/or tax facilities are available for unemployed persons wishing to start their own business.

As illustrated in Table 1, information and counselling is also a major instrument in supporting start-ups. A general feature of this type of support in Member States is that it focusses on information, basic assistance in drafting a business plan and on the supply of information concerning all kinds of registration procedures. Furthermore, governments have initiated special campaigns to promote the awareness of opportunities of starting your own business. Supporting measures in training refers in general to training courses especially organized for starting entrepreneurs. As illustrated in Table 1, the EC implements no general eligible measures or initiatives for supporting start-ups.

Table 1 Policy field: Start-ups

Country	Instruments				
	Financing	Fiscal	Info & Counsel.	Training	Others
Belgium	X	X	X	X	X
Denmark	X		X	X	
France	X	X	X		X
Germany	X		X	X	X
Greece	X		X	X	
Ireland	X		X	X	
Italy	X	X	X	X	
Luxembourg	X	X	X	X	
Netherlands	X		X	X	
Portugal	X		X	X	
Spain	X		X		
United Kingdom	X		X	X	X
EC					

Date of start

An investigation demonstrates that Belgium, Denmark, France, Germany, Italy and the United Kingdom in particular have a great variety of measures and organizations to support start-ups.

It also appears that the vast majority of measures are of rather recent creation. Most incentives have been established during the 1980s. This trend may be related to the greater attention given to the supply side of the economy in the

In 1988 the Danish Ministry of Industry implemented a special programme to promote start-ups. This Coordinated Programme has the objective of promoting the establishment of new enterprises within manufacturing industries and knowledge-based services expected to contribute to the improvement of the balance of payments and of employment. Initiatives in the programme are: The Scholarship Scheme, Grants for development of high potential product ideas and a Start-up Scheme. Furthermore, Denmark implements the Enterprise Allowance Scheme aimed at unemployed persons starting their own business. Such persons receive half of the unemployment benefit as long as they run their own business, up to a maximum of 3.5 years.

In 1992 an evaluation study was carried out. It appears that owners received public grants from the scheme in 13% of all newly established enterprises in a given year. The report concludes that 40% of the grant recipients would have started a business anyway and that approximately 30% would have considered starting up for themselves even without public support, while only 30% would have started because of the presence of public grants.

1980s, insight into the importance of start-ups to the economy and the recession at the beginning of the 1980s and the acknowledgement of governments that new initiatives had to be taken to improve the dynamics of the economy.

Target groups

In almost all cases¹, enterprises in all sectors are the target group, although Ireland is an exception. Their programmes target enterprises in manufacturing and internationally traded services. IAPMEI's (Portugal) target groups are SMEs in manufacturing, trade and services (excluding communication, transport and tourism). In general the schemes apply to start-ups in the whole country, but there are some exceptions (including programmes for the Mezzogiorno in Italy,

¹ For all measures in each selected policy field an investigation is conducted to the target group. Three separate types of target groups have been investigated: target group by size class, target group by sector and target group by geographical dimension (national, regional, less developed regions).

regional programmes from regional authorities in Belgium, regional incentive scheme of the central government in Portugal).

Responsible Ministry

In general the national Ministry of Economic Affairs¹ is responsible for SME policy. If other Ministries are (also) involved in conducting policies to support SMEs, it means that the gathering of the essential information is more complicated and difficult for SMEs. Also the lack of knowledge of specific bottlenecks and needs of SMEs in other Ministries can hamper the design and implementation of measures to support SMEs. Therefore, special attention to coordination is needed in those cases².

An investigation of the collected information demonstrates that the Ministries responsible for measures in the field of start-ups is very diversified. In most cases either the Ministry of Economic Affairs or the Ministry of Employment is responsible, but also the Ministry of Finance is in some cases named as the responsible ministry. Even within several Member States one can envisage more than one Ministry responsible for measures in the field of start-ups.

The wide variety of Ministries responsible points to the danger of duplication and overlapping in supporting measures in Member States. In combination with the large number of measures created in several Member States, it is evident that coordination and fine-tuning is essential for an efficient provision of support to start-ups.

1.3.2 Subcontracting

Background

As illustrated in chapter 6: Markets and sales, SMEs play a key role in the subcontracting business. Many of the SMEs - especially in manufacturing and services - are suppliers to large enterprises. Recently, developments on the international sourcing market have led to significant shifts in the relation between the suppliers and their contracting customers. The shift in strategy of large, especially internationally operating, enterprises is typical. Increasingly, the production of parts is contracted out as they are not part of core activities.

¹ Member States do not have similar names, functions and responsibilities of Ministries or Departments. With using the name Ministry of Economic Affairs it is meant to cover also Ministries or Departments of Trade and Industry and Industry and Commerce.

² This important issue will also be investigated in the other selected policy fields.

The trends is towards a more permanent relationship between customers and their suppliers.

SMEs in the role of supplier can take advantage from these trends by acquiring access to the technological and commercial know-how of large enterprises. Acting as supplier, activities can also generate product developments by SMEs themselves, enhancing their economic independency. In relation to this, technological, productional and organizational adjustments are necessary.

Bottlenecks and needs

Several problems arise for SMEs in this rather new policy field. The opaqueness of their market, fierce international competition and inadequate information about rapidly changing developments are major issues. A lack of strategic knowledge about technology, quality standards, product innovation and logistics can be the outcome.

Supporting measures should be addressed to these apparent problems. This can take the form of setting up and comparing the information infrastructure to enable the acquisition of relevant information for suppliers, mediation between customers and suppliers, and assistance in setting up special courses.

Pattern of supporting measures

Measures in the field of subcontracting are mainly applied through the instrument information and counselling as illustrated in Table 2. This picture corresponds with the problems for SMEs mentioned above. Nevertheless, a number of Member States do not have any specific measure to support SMEs in the field of subcontracting. However, this does not imply that SMEs in these countries are not faced with bottlenecks there. It is possible that SMEs in these Member States have specific needs, but that these needs are not fully recognized yet by the government. This may possibly be due to the fact that the changes in the system of supply and subcontracting are a rather recent phenomenon. Even where they are recognized it would not necessarily imply that governments should take action.

Furthermore, one can propose that the needs are met by several kinds of generally applicable measures e.g. in the field of 'information and counselling' and 'training' and that the government is not convinced of the need for more specific tailor-made supporting measures. EC policy in the field of subcontracting is centred on two themes. The first one is the creation of a favourable legal environment and the second one is the improvement of the communication between contractors and subcontractors.

Table 2 Policy field: Subcontracting

Country	Instruments				
	Financing	Fiscal	Info & Counsel.	Training	Others
Belgium					
Denmark					
France					X
Germany					
Greece			X		
Ireland			X		
Italy	X		X		
Luxembourg					X
Netherlands			X		
Portugal			X		
Spain			X		
United Kingdom			X		
EC	X		X		

Date of start

Only a few specific measures - if any - exist in the field of subcontracting in the Member States. If these measures point to organizations, the presentation of information and counselling on subcontracting is often an additional activity. Most of these organizations have been established many years ago.

If the measures point to specific programmes or schemes, the starting date of such measures is rather recent (during the second half of the 80s).

Target groups

The limited number of measures and the variety of target groups makes it almost impossible to present a clear general pattern. The Irish programmes are eligible for all enterprises in respect of size classes. The Dutch programme is for enterprises with less than 100 employees, while the UK programme is for enterprises with less than 500 employees.

In case of target groups with the sector as target, the programme in The United Kingdom and The Netherlands have the enterprises in manufacturing, construction and services as target group, whereas the Irish Linkage Programme is valid for enterprises in the manufacturing sector.

The supporting schemes are generally eligible for enterprises nation-wide.

The Supply and Contracting Programme in The Netherlands aims at increasing the adaptive capacities of Dutch suppliers and thereby the opportunities for potential customers to contract out parts of their production.

An active information campaign has been started under the programme. Additionally, demonstration projects are carried out aimed at different product-market combinations, such as: the automobile industry, audio-visual production and the aircraft industry. Individual subcontractors and groups of subcontractors can participate in these demonstration projects. Also feasibility studies on cooperation between subcontractors or between subcontractor and the firm contracting out can be subsidized under this programme.

The following projects were carried out in the 1988-1991 period:

<i>type of project</i>	<i>number of projects</i>	<i>number of firms/participants</i>
<i>studies/reports</i>	14	
<i>informat./meeting</i>	13	897
<i>brief audit</i>	109	109
<i>individual projects</i>	29	29
<i>projects in cooperation</i>		
– <i>with other firms</i>	15	397
– <i>other projects</i>	7	32

Responsible Ministry

The measures in the field of subcontracting are executed under the responsibility of the Ministry of Economic Affairs. This clear pattern is favourable for enterprises in search for assistance in the subcontracting field.

1.3.3 Exports

Background

In general the export pattern of SMEs is quite different from that of large enterprises. While SMEs international orientation is mainly directed towards

neighbouring countries, large enterprises operate also on more world-wide markets.

In the smaller Member States, SMEs are more dependent from export than in the larger Member States, as illustrated in Chapter 2: Trends and Chapter 6 and 10. European integration has been a reason for SMEs to think and act more internationally than before. Many barriers for an efficient cross-border trade have been partly or totally abolished in the European Community. This certainly has led to many opportunities for SMEs to deal directly with customers abroad or indirectly through supplying parts or finished products to exporting enterprises.

Bottlenecks and needs

Although a lot of opportunities seem to be in place for SMEs, the road to export is normally still dotted with obstacles which can limit their potential export performance. These obstacles are mainly related to steps to be taken before the realization of export. The main bottlenecks for SMEs are: lack of information on market opportunities and distribution channels and lack of financial means to enter new markets. Other problems are connected with trade barriers like custom control procedures, insurance, currencies and quality requirements.

Pattern of supporting measures

In some Member States the objective of SME policy is directly related to export and/or internationalization. For example, in Portugal the aim of SME policy is the on-going internationalization of Portuguese SMEs and in Ireland industrial policy is aimed at developing a strong internationally competitive industrial sector. SME policy in Greece is increasingly aimed at the improvement of the access of SMEs to new markets. This is part of their policy to support SMEs in tackling their difficulties associated with reorientation or adjustment of activities to the challenges of the internal market.

All Member States seem to be aware of bottlenecks of SMEs in exports. The instruments 'financing' and 'information and counselling' are most commonly used to support SMEs in their exporting activities. This pattern corresponds with the major bottlenecks generally observed in the exporting activities of SMEs.

Many countries provide special schemes for financing export activities. Most of them are related to support financing transactions by means of credit insurances. Other forms of financial support are soft loans (e.g. loans with interest rate subsidies), special banks for export loans, and export credit insurance. A commonly used scheme is the stimulation of corporate cooperation

in export activities. This stimulation is supported, e.g. by grants to cover joint export activities by a group of companies or by trade federations or professional associations. Most Member States have set up fully state-funded organizations which are purely responsible for supporting export. Their tasks include the supply of information and counselling, market research, arranging participation in foreign trade fairs and/or forming export combinations. The Chambers of Commerce in many Member States also play an active role in providing information and counselling for exporting SMEs. In some countries (Belgium, Denmark, France, United Kingdom) the government assists SMEs by means of grants to cover some of the costs of consultants or the costs of external export analyses.

EC support in the field of export consists of three elements: Euromarketing, cooperation with third countries and contacts with non Member States.

Table 3 Policy field: Export

Country	Instruments				
	Financing	Fiscal	Info & Counsel.	Training	Others
Belgium	X		X		
Denmark	X		X	X	
France	X		X		
Germany	X		X	X	
Greece	X		X	X	
Ireland	X	X	X		
Italy	X		X		
Luxembourg	X		X	X	
Netherlands	X		X		
Portugal	X	X	X		
Spain	X		X	X	
United Kingdom	X		X	X	
EC	X		X		X

Date of start

It can be concluded that each Member State has established a number of measures to support export activities of SMEs. Especially information and counselling and credit insurance are popular incentives and have in general a long tradition in the Member States. More specific measures (e.g. Targeted

The Export Initiative in the United Kingdom is aimed at encouraging potential exporters to think seriously about selling overseas and existing exporters to sell more overseas.

The Export Initiative consists of a number of supporting schemes.

- 1. The Department of Trade and Industry (DTI) has linked up with the private sector to set up a network of Export Development Advisers. They are export specialists whose job is to help new and inexperienced exporters at all stages.*
- 2. The Export Market Information Centre provides access to a self-help information facility to research a firm's market.*
- 3. Export Intelligence is available in two ways. Firms can specify the products and markets in which they are interested which is then matched with available information. Alternatively firms can access on-line databases supplied by the Profile Information.*
- 4. The Market Information Enquiry Service can:*
 - advice on product suitability;*
 - provide information on local competition;*
 - advice on marketing methods;*
 - test local response to products;*
 - provide lists of local contacts.*

Marketing Consultancy and the Trading Houses in Ireland, the activities in Portugal and Italy and the Export Initiative in the United Kingdom) are more recent incentive schemes to promote export by SMEs.

Target groups

In general the measures for supporting the export activities of SMEs are eligible for all enterprises irrespective their size class. Only a few exceptions are registered. In these cases the measures are only eligible for smaller enterprises. These findings does not correspond with the theoretical approach that SMEs have specific needs and bottlenecks in their export activities. Governments do not seem to be convinced of the need for specific measures to support SMEs or they have implemented measures to support all enterprises, but because of the nature of the measures they are more essential for SMEs.

In the vast majority the measures are valid for enterprises in all sectors and are valid nation-wide.

Responsible Ministry

In the field of export one can find many measures in which either the Ministry of Economic Affairs or the Ministry of Foreign Affairs or the Ministry of Finance is responsible for the policy. Although a wide variety of measures is observed, it is remarkable that within a Member State generally one of the aforementioned Ministries is responsible for policy measures. This implicates that it is hard to find a common view about responsible Ministries among the Member States, but that within the Member States a clear policy in terms of responsibility has been deployed.

1.3.4 Financing

Background

SMEs need finance for longer-term investment and working capital for their day-to-day operations. Sources of financial means can be found internally within the enterprise (profits, reserves) or outside the enterprise by increasing the equity capital or contracting long-term and/or short-term loans.

The need of enterprises for financial means varies with their financial situation, the type of investments etc.

Bottlenecks and needs

One of the major problems hampering the creation and development of SMEs consists in the ready access of SMEs to sufficient funding at reasonable costs. In the field of loan capital which is often the only practical source of additional funding to the great majority of SMEs, the main difficulties encountered are the high levels of collateral demanded by lenders and accompanying high levels of interest rates (special additional charges). The justification given by lenders is in terms of the greater degree of risk associated with SMEs and higher administrative costs involved in establishing and servicing a large number of relatively small loans. Furthermore, the expansion of an enterprise can lead to financial problems, because too much capital is needed in relation to the available assets of the enterprise. Finally, for investments with a high-risk profile it is sometimes hard to find external financial means because of insufficient knowledge of would-be providers to assess the impact of such investments.

Pattern of supporting measures

Table 4 illustrates that all Member States provide supporting measures in the form of financial instruments. This pattern supports the theoretical point of view about the problems of SMEs to attract sufficient financial means in their business activities. Some other additional measures do occur and are of a fiscal

or information and counselling nature. Fiscal measures can generate additional internal financial means for business operations. Information and counselling refer to the provision of information or consultancy to assist SMEs with financial issues.

As shown, all countries provide financial instruments to SMEs, but within these instruments one can envisage a broad variety of types. Some Member States apply a number of financial instruments, while others rely on one or two financial instruments.

Some Member States (including The Netherlands and The United Kingdom) are focusing mainly on the supply of loan guarantee schemes. Such schemes are set up for enterprises having problems acquiring loans from banks because of a lack of collateral.

Most countries (including Belgium, Denmark, Greece, Ireland, Italy, Luxembourg and Portugal) have provisions to support SMEs by means of grants or fiscal allowances for investments, soft loans and/or interest subsidies. These kind of support schemes are mainly intended to improve the financial position of enterprises with investments in fixed assets.

Furthermore, some Member States (including Belgium, France and The Netherlands) are involved in the supply of venture capital to SMEs.

The government can be involved by direct participation in Venture Capital Funds or indirectly through facilities e.g. guarantees to compensate losses of Venture Capital Funds.

These measures are aimed at improving the balance sheet of SMEs by extending the equity capital. This is often necessary in case of expansion, since major investments in this expansion phase will put too much pressure on the balance sheet of the enterprise. In these circumstances, loans are not the solution to solve such problems.

Measures of the EC in the field of finance are:

- a. seed capital funds;
- b. Venture Consort and Eurotech Capital programmes;
- c. mutual guarantee schemes; and
- d. cooperatives, mutual societies and associations.

Table 4 Policy field: Financing

Country	Instruments				
	Financing	Fiscal	Info & Counsel.	Training	Others
Belgium	X				
Denmark	X	X			
France	X	X	X		
Germany	X	X	X		
Greece	X				
Ireland	X				
Italy	X	X			
Luxembourg	X	X			
Netherlands	X				
Portugal	X		X		
Spain	X		X		
United Kingdom	X				
EC	X				

Until the end of 1992, Portugal benefitted from the stimulus of productive investments through the application of specially created EC funds and programmes. Examples included financial support granted under the umbrella of PEDIP (and more specifically in the case of productive investments of SINPEDIP), the region-based incentives system (SiBR), the incentives system for the rational use of energy (SIURE), the financial incentives system for small investment projects (PPI) and the increase of innovation in information technology (AITI). The instruments have proven to be adequate for overcoming the technological and financial gap evidenced in Portuguese companies.

The Alternative Financing Schemes aim at preferential conditions of access to credit schemes suitable for specific needs for technically and economically feasible companies. The schemes may entail the creation of special credit lines, systems of leasing and factoring and the provision of venture capital.

Date of start

Most Member States have deployed several or many measures in financing. Especially in Italy, Spain and Portugal the measures have been set up recently. In Spain and Portugal this pattern is influenced by their entrance as Member of the European Community. This has led to a renewed attention to the competitiveness of Spanish and Portuguese enterprises and the restructuring in parts of the enterprise sector has been accompanied by financial schemes to relieve the problems and to encourage the modernization in the enterprise sector.

Target groups

A very large number of measures have been created in the Member States in the field of supporting SMEs in financing. Many of these measures are only eligible for SMEs or only small enterprises. The size-class criteria vary widely among Member States and within the Member States (some measures eligible only for SMEs and others eligible for all enterprises). Although the pattern of eligibility by size class is rather diversified, it certainly demonstrates the acknowledgement by governments that special financing measures are essential in supporting SMEs. Relatively more measures are specifically aimed at SMEs in comparison with the pattern signalled in the policy fields subcontracting and export.

In the majority of Member States enterprises in all sectors are eligible for the measures. In other countries, such as Greece, the measures are targeted towards SMEs in manufacturing and, more recently, in the trade sector. Occasionally, some Member States (including Ireland and Italy) deploy specific measures for enterprises in a specific sector.

Portugal and Spain and to a lesser extent Italy and the United Kingdom implement a part of their supporting measures for special indicated regions. Nevertheless, the majority of measures are nation-wide in operation.

Responsible Ministry

In general the vast majority of measures to support financing of SMEs is implemented under the responsibility of the Ministry of Economic Affairs. Occasionally the Ministry of Finance is mentioned as the responsible governmental organization. This pattern does not give rise to coordination and/or fine-tuning issues in advance.

1.3.5 Employment

Background

It is widely recognized that SMEs are a major source of new jobs. High unemployment rates in many Member States raise questions about improving the employment situation. Several advantages occur in the situation with higher employment levels¹:

- Employment facilitates self-development and self-realization and so leads to greater social participation.
- The preservation of welfare by means of a broader supporting base for social security and improved utilization of human capital.
- Reducing unemployment (including hidden unemployment among women and incapacitated persons), both broadens the economic supporting base and is socially desirable since many people aspire to paid labour.
- Higher employment levels will reduce the gap between labour costs and net incomes.
- Demographic pressure will be reduced².

Besides these general objectives to stimulate employment, additional reasons can be put forward because of specific SME internal labour market issues.

Bottlenecks and needs

The specific SME internal labour market issues consist of discrepancies between the demand and supply of labour (not a well-balanced link between education - labour market), relatively undeveloped internal training facilities and a lack of staff or a lack of interest in appropriate human resources management.

Other issues are the opinion of many entrepreneurs that young people are not well trained at school and the problem of keeping the well trained people in the enterprise (it happens regularly that higher paid jobs are offered by large enterprises).

One has to acknowledge that many of these issues are not ones purely of employment, but a combination of employment and education/training.

¹ See for example: EIM, *The State of Small Business in The Netherlands 1992*, EIM, Zoetermeer, The Netherlands, 1992.

² An example for The Netherlands: For every 100 (non-indisposed) employees in The Netherlands in 1990, 65 received social benefits, and this figure could rise to 93 by the year 2020.

Measures are classified according to their objectives. In this paragraph the angle is measures to stimulate employment. Therefore, in case measures in the field of education/training are put in place with the aim of improving the skills and quality of the persons employed, they are dealt with in the next paragraph.

Pattern of supporting measures

It appears that a wide variety of instruments are deployed in the policy field employment (see Table 5). The three most registered instruments are: financing support, information and counselling and training¹.

The financial instruments refer in general to government contributions in the form of grants, subsidies or lower social contributions for enterprises which offer employment opportunities for long-term unemployed or unemployed young persons. Other instruments are e.g. assistance in the matching of demand and supply of labour in SMEs, assistance in recruitment of employees for SMEs, improve human resources management, training disabled persons and special regulations for temporary contracts.

Table 5 Policy field: Employment

Country	Instruments				
	Financing	Fiscal	Info & Counsel.	Training	Others
Belgium	X	X			
Denmark	X		X		
France		X	X	X	
Germany	X		X	X	
Greece	X		X	X	X
Ireland	X				X
Italy	X		X	X	
Luxembourg	X				
Netherlands	X			X	
Portugal	X	X	X	X	
Spain	X		X		
United Kingdom	X		X		X
EC	X			X	

The majority of measures are directly aimed at the reduction of unemployment. This general feature of most measures seem to pass more or less the specific

¹ Luxembourg is a special case, because the only measure is the reimbursement of social security paid for apprentices. The reason is that Luxembourg has a very low unemployment rate and special measures to support employment are not so much needed than in the other Member States.

opportunities and needs of SMEs in the employment field. Of course, this statement is too general and one has to take into account that a large number of measures are aimed at the specific circumstances and needs of SMEs. Nevertheless, a certain tension seem to exist between objectives of governments and opportunities and needs of SMEs in the field of employment policy.

At the EC level, the European Social Fund, the European Investment Bank and the European Coal and Steel Community implement some of their activities in the field of employment which are of direct or indirect importance for SMEs.

A major employment scheme in Greece is the Job Creation Scheme. The objective is the reduction of unemployment, particularly long-term unemployment, through the creation of new jobs in the private sector. The amount of subsidy differs according to the characteristics of those appointed by private businesses. The amount of subsidy is higher for young workers (from 18 to 25 years old), women, returning migrants and particularly for women taking on specific jobs as plumbers, electricians, drivers, machine-operators and other occupations which are mainly performed by men. The length of the grant period for each appointee is 12 months and the duration of employment after the appointment must exceed the period of 18 months. It must be stated that the target group are the unemployed and not the enterprises. An evaluation of the scheme demonstrated that in 1987, 44% of the jobs created were for women. Relatively many young people found a job in the service sector rather than in the manufacturing sector. Remarkable is the fact that the participation of university graduates is very small in comparison with their unemployment level.

Date of start

In general the Member States have created a number of schemes and organizations to promote employment. Special schemes have commonly been developed during the 80s. This is logical if one analyses the unemployment pattern in the course of time. After the first oil crisis (1974) unemployment started to rise, but from a very low level. The awareness of more structural problems concer-

ning unemployment was still limited. In 1979 the unemployment rate in the EC was 5.5% - compared with less than 3% at the beginning of the 70s - although apparently it did not lead to a special employment policy focusing on SMEs. The rapid increase of the unemployment rate in the middle of the 80s to more than 10% has certainly affected the creation of many incentive schemes during this period. Ireland is an exception with the creation of employment grants in 1960, but it has to be said that Ireland has experienced relatively high unemployment rates compared to other countries since a long period.

Target groups

The pattern of supporting measures in combination with the eligibility by size class is diversified. Quite many measures are only eligible for small or small and medium-sized enterprises, although common criteria for the size class breakdown is hard to find. Sometimes measures are for enterprises with 0-9 employees or 0-99 employees or 0-199 employees or 0-499 employees. Nevertheless, it is evident that in many cases SMEs or only small enterprises are the special target group for governments in their employment policy.

An overview of measures in respect of eligibility by sector shows that the majority of measures are eligible for enterprises in all sectors, but that quite many measures have enterprises in manufacturing as their target group. This illustrates the difficult employment situation in manufacturing in many Member States caused by restructuring processes and the diminishing share of employment of the manufacturing sector.

In general, measures are implemented nation-wide, although some Member States deploy specific measures for less developed regions.

Responsible Ministry

Ministries of Employment are generally the responsible governmental organization for measures in the field of employment. Occasionally the Ministry of Economic Affairs or the Ministry of Finance has been mentioned as responsible for implementation of a measure. It is remarkable that the Ministry of Economic Affairs - which is normally responsible for SME policy - is responsible in only a few cases. This can lead to the conclusion that employment policy for SMEs is not really an SME policy focussed on bottlenecks and needs of SMEs, but an employment policy aimed at reducing unemployment.

1.3.6 Education and training

Background

Education is an important field for the promotion of knowledge and competence. Human resources management is increasingly considered as a major factor in the whole range of production factors. Education and training facilities are provided by private institutions and the regular education system.

Bottlenecks and needs

Complementary to education and training facilities provided by private institutions and the regular education system, specific government activities can be required concerning the provision of adequate educational and training facilities to the specific needs of SMEs. The activities can be directed to two target groups - employers and employees - with different implications.

First, education and training for entrepreneurs with the objective of promoting the quality of the entrepreneurship. The aim of education is to enlarge the knowledge level, to widen the scope of knowledge and to improve the qualities of the entrepreneur.

One can distinguish two types of education for entrepreneurs. The first one is the so-called initial education, which aims at delivering a minimal package of knowledge, insight and capabilities which is sufficient to operate as an entrepreneur. The second one is the so-called application education which aims at deepening and widening of the actual knowledge and qualities.

Secondly, sufficient vocational/educational facilities have to be secured to meet the requirements which SMEs can expect from their employees.

Pattern of supporting measures

Many Member States deploy activities to support SMEs with financing and training instruments (see Table 6) in the education policy field. Portugal and

Italy do not implement specific measures in the education policy field to support SMEs¹.

The combination of financing and training facilities is mainly aimed at reducing the costs linked with education and the training of employees and entrepreneurs. A contribution in the costs by the government also encourages enterprises to take part in training courses.

Table 6 Policy field: Education and Training

Country	Instruments				
	Financing	Fiscal	Info & Counsel.	Training	Others
Belgium	X			X	
Denmark				X	
France			X	X	
Germany	X		X	X	
Greece	X			X	
Ireland	X			X	
Italy					
Luxembourg	X			X	
Netherlands	X			X	
Portugal				X	
Spain	X		X	X	
United Kingdom	X			X	
EC	X		X	X	

All Member States have basic educational systems with opportunities for vocational training, as well as possibilities for following evening classes in various occupations. Some countries (including Belgium, Germany and The Netherlands) promote the dual-system (on-the-job training through a com-

¹ In the section about the policy field 'Employment' the combination of employment and education and training as a regular pattern has been mentioned. Whereas the employment issue in most cases refers to specific government policy with the primary aim focused on the unemployed, the education and training is much more focused on the needs of the enterprises.

The combination of these two issues can lead to certain problems, like in Ireland. As illustrated by the name of FAS, this organization is involved in employment and training issues. According to the Report of the Industrial Policy Review Group 'A time for change: Industrial Policy for the 1990s' [page 52], '... there should be no subsidies or grants for firm-specific training. But good general training needs both subsidy and a new approach, with additional emphasis on enterprise, productive systems and technological application. The provision of training for work is inadequate. New structures are needed to remedy the situation. An institutional reorganization of FAS should be adopted to reflect the sharp distinction between support activities for the unemployed and industry-relevant training. These two activities should, as a minimum, be separated into two distinctions; in the longer term a more radical approach may be necessary.'

ination of part-time employment and part-time education) for young people. Enterprises which employ such trainees can apply for a grant to obtain a reduction in employers' social insurance contributions.

Other specific training programmes appearing in Member States are:

- programmes for employers and employees, geared to the situation in each individual company;
- special training schemes for women and ethnic minorities;
- special attention to the possibilities of self-employment in regular higher education.

The EC has two measures in the field of education to support SMEs. The first one is a programme for managers in the run-up to 1992 and the second one is training craftsmen and enhancement of skills of spouses employed in firms.

Ireland promotes training by means of the Job Training Scheme and the Training Support Scheme, aimed at increasing the performance of industry through a better trained workforce. The scheme was first announced in 1991, but only put into effect in mid 1992.

The Job Training Scheme is a quality work-based training programme provided by employers in cooperation with Foras Aiseanna Saothair (FAS, the Training & Employment Authority). The benefits for employers are a trained potential workforce and improved company performance. The scheme provides full-time training for between 26 and 52 weeks. The scheme is open to all employers with employment potential in the private sector, the commercial state sector or voluntary sector who have a capacity to provide training with certification to the required level.

The Training Support Scheme is designed to increase and improve training within Irish industry at all levels in order to increase competitiveness. FAS pays a certain percentage of the course costs depending on the size of the company.

Date of start

Also the schemes in the field of education are created rather recently. The combination of higher unemployment and the objective to stimulate the supply side has certainly influenced the attention for education in the course of time.

Target groups

The general pattern is that the measures in the field of education are eligible for all enterprises irrespective of their size class and their sector. The vast majority of measures are operational on a nation-wide basis.

Responsible Ministry

A wide range of Ministries has been mentioned as the responsible governmental organization for supporting measures for SMEs in the field of education. The most common mentioned Ministries are: the Ministry of Economic Affairs, the Ministry of Employment and the Ministry of Education. In most Member States several Ministries - of course depending on the type of measure - are responsible for supporting SMEs in the education field. Also in this policy field coordination and fine-tuning is necessary to take the appropriate actions in dealing with the bottlenecks and needs of SMEs and to avoid duplicities and overlapping in the policies.

1.4 CONCLUSIONS

General characteristics of SME policy

The following characteristics have been dealt with in this chapter:

- the objective(s) of SME policy;
- SME policy by national and regional authorities;
- organization of SME policy.

Analysis of the observed patterns concerning these elements in the Member States leads to the conclusion that a common set of general characteristics of SME policy across all Member States is absent. Nevertheless, resemblances in some characteristics between sub-groups of Member States have been observed.

In the case of the objective(s) of SME policy it appears that in general the SME policy in Member States is converging towards the creation of a favourable business climate in combination with additional measures to support specific needs of SMEs. Especially in the Mediterranean Member States and Ireland a more interventionistic approach in SME policy is observed.

It is expected that the converging programmes for the Economic and Monetary Union will contribute to a greater similarity in macro-economic environment for enterprises in the Mediterranean Member States. This may lead to a shift from a more interventionistic approach of SME policy towards the creation of a favourable business climate in these Member States, eventually in combination with an interventionistic approach, in some policy fields.

More emphasis on the creation of a favourable business climate may be associated with greater emphasis on the use of the information and counselling instruments, whereas the interventionistic approach may be associated with more emphasis on the provision of financial instruments.

The creation of a favourable business climate can also be associated with more emphasis on a generic policy with measures relatively more eligible for all enterprises. This is not the case in the EC. Especially the Mediterranean countries and Ireland have a more interventionistic approach and the measures are mainly focussed on manufacturing, but they eligible for all enterprises. This is due to the fact that the competitiveness of manufacturing enterprises - large and small - is a major issue. Although the eligibility of measures for enterprises by size class looks similar all over Europe, the reasons can be quite different.

In half of the Member States only the national government has the legislative authority to introduce measures to support SMEs. In the other Member States both national and regional authorities are in this position. It has to be emphasized that the interest of regional authorities in supporting SMEs has increased in the eighties, which has been influenced by the soaring unemployment in the early part of the decade.

Observation shows that policies affecting SMEs and special SME policies are dispersed over several Ministries in the Member States. This can affect the understanding of bottlenecks and specific needs of SMEs in all Ministries involved in SME affecting issues. Especially in those Member States without a special SME department within a ministry, more attention to special arrangements for coordination and fine-tuning is essential in developing an effective and efficient policy to support SMEs. Results can be that SMEs are out of touch of relevant information or duplications and overlapping of measures.

Policy fields

Six policy fields have been investigated and analysed:

- start-ups;
- subcontracting;

- export;
- finance;
- employment;
- education.

An analysis of the five instruments: financing, fiscal measures, information and counselling, training and others, used to support SMEs in the various policy fields has been carried out. In the first instance it has to be mentioned that almost all Member States implement an extensive number of measures to support SMEs. The combination of financial, information and counselling instruments is of major importance in the policy fields of start-ups, exports, financing and employment. For start-ups the training instrument must additionally be considered important. In the education field a combination of financial and training instruments has been traced. Finally, subcontracting is mainly covered with the information and counselling instrument, but it has to be emphasized that only a few measures have been found in the Member States.

Most measures in the policy fields start-ups, subcontracting, employment and education have been established during the (second half of the) 80s and can therefore be considered as of recent origin. Common measures like information and counselling and credit insurance in the export field have already been in place for some time, whereas specific measures (e.g. trading houses, export consortia) to support exporting of SMEs are of rather recent creation. In the financing field a distinction can be made between Italy, Spain and Portugal with many recently established measures and the other Member States which have a tradition of financing measures.

Many measures - with the exception of measures in the policy field start-ups - can be characterized by general eligibility of all enterprises irrespective of size class. Nevertheless, the policy fields subcontracting, finance and employment can be characterized as a mixture of measures with and without size-class criteria. This is remarkable in the light of the very specific needs of SMEs in the selected policy fields. Given these needs it was expected that tailor-made measures would have been established. The eligibility of measures for all enterprises has on the one hand the advantage that the measures are in general more transparent, but on the other hand runs the risk that specific needs of SMEs are not being covered by adequate government programmes.

Finally, this research has made clear that the responsibility for measures to support SMEs in the six policy fields is dispersed across several ministries in the Member States. This can cause inadequate awareness of the characteristics and needs of SMEs and the deployment of inappropriate measures for their support.

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