The Impact of the Single Market of the European Union on the Manufacturing Sector in a Sub-Regional Economy

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This thesis is an investigation into aspects of the impact on the manufacturing sector in South Yorkshire of the Single European Market (SEM) legislation of the European Union. The SEM represents a major economic integration programme of the European Union. It is of interest, therefore, to assess how producers are reacting to the implementation of the programme of legislation. It is widely expected that the degree of competition for markets will be enhanced and it is relevant to consider which manufacturing companies are the most likely to be taking steps to prepare, and what forms of preparation activity are taking place. It is also of concern to gauge what impact, if any, this has had or is likely to have on corporate performance. The SEM represents a fundamental change to the trading environment in which producers operate and, although it is expected that winners and losers will emerge from this process, it is estimated that a net gain will accrue. The logic behind the introduction of the SEM, in terms of the standard theory of international economic integration, appears to be sound. It is a remedy to a previously fragmented collection of national markets, and estimates of the expected impact over the medium to long term have been rather dramatic. In the UK economic environment, as elsewhere in the EU, the SEM is just one of many business influences and pressures which are considered and reacted to by the corporate sector in pursuit of achieving a successful business outcome. Nevertheless, the impact of the SEM is expected to be significant. South Yorkshire is a good example of an industrial sub-region struggling to come to terms with the new and emerging realities of world trading. It has a high proportion of industrial sectors thought likely, on the grounds of market and production characteristics, to be vulnerable to the impact of the extra competition embodied in the SEM. It therefore forms a good case study.

The empirical analysis in the thesis is based on the results of a survey of 139 manufacturing companies located in South Yorkshire in March, 1994 (ie. not long after the official completion date for the introduction of the SEM legislation on January 1st, 1993). Data has been derived by questionnaire on the following company characteristics and activities: general corporate structures; activities in preparation for trading in European markets in general and, more specifically, in the SEM; recent company performance levels; and information and advice needs of companies with regard to trading in the SEM. A number of statistical analyses are applied to the data and the findings are presented within the context of the underlying economic rationale. An original contribution to knowledge is made in the following respects. The data reveals varied involvement of the South-Yorkshire based manufacturing sector with activities in preparation for trading in the SEM in particular and, more generally, for trading in more open European markets. The scale and extent of

involvement in preparation activity and the types of activity undertaken are shown. Five key strategies and two lesser but nevertheless important strategies are shown to be common forms of preparation activity. These are:

1. A marketing strategy.
2. A product development strategy.
3. A market position strengthening and staff recruitment/development strategy.
4. A short-term structural investment and staff training strategy.
5. A collaborative distribution strategy.
6. A long-term structural investment strategy.
7. A knowledge acquisition strategy.

Conclusions are also drawn about the advice and information preferences of manufacturing firms in their desire to find out more about the SEM, and certain characteristics of the companies typically involved or not involved in preparation activity. An assessment has also been made of the influence of the companies involvement in preparation activity on certain indicators of performance.

The results indicate that manufacturing firms are not taking the SEM very seriously although most have been alerted to the need for some form of preparation activity. This activity has centred, principally, upon improvements in marketing strategy although other strategies, based upon adapting to new standards and regulations, staff recruitment and development and, implementing a programme of restructuring and rationalisation, are also important. The firms surveyed have considered their conduct in terms of product, process and organisation and have adopted strategies related to marketing, product design and development, human capital investment, organisation restructuring and collaboration to improve the distribution network. A majority of the companies would like more advice and information about the SEM; especially in the field of EU financial assistance, although strong interest was shown also in other aspects such as appropriate marketing strategies and EU technical standards and regulations. Companies taking steps to prepare are much more likely to be branch\subsidiaries of larger companies with very large annual turnovers and competing mainly against rivals based beyond the borders of the UK. Those that have taken steps to prepare are more likely to be reporting increasing sales, market share and an ability to compete in not only EU and world markets but in domestic ones as well.

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Chapter One : Setting the Scene

1.1 Introduction

The original and continuing aims of the European Union (EU) have been to maintain a peaceful and unified economic space in Europe within which member nations can share in increased economic prosperity. The pursuit of these aims has been a pre-occupation of the architects of the EU since its inception in the post-war period. The legislation to introduce the Single European Market (referred to throughout this thesis as the SEM or Single Market) represents a further attempt to promote international economic integration within the union. The SEM legislation, which had a target completion date of the 1st January 1993, enshrines four key freedoms within the fifteen[1] member nations: freedom of movement of goods, freedom of movement of services, freedom of movement of people and, freedom of movement of capital. Progress towards the objective of completely free movement of these four entities has not proved to be easily achievable (see Dinan, 1995 for instance). However a significant amount of previously frustrating barriers have been removed and, particularly in the field of visibles (ie. goods), there has been much liberalisation of intra-European trade.

This thesis seeks to shed light on how manufacturing companies (as a sub-set of the traded goods sector) are reacting to what is, in fact, the deepening of the EU customs union (El-Agraa,1994), and secondly, to consider some of the implications of this reaction. In creating a 'level playing field' to encourage companies to engage more routinely in European wide markets, it is reasonable to expect that the level of competition in each particular market place will be enhanced. This is as relevant to those companies which trade largely at a local or domestic level as it is to those which are already engaged in trade across parts or all of Europe and, indeed, the rest of the world.

Footnote 1. The fifteen members are: Austria, Belgium, Denmark, Eire, Finland, France, Germany, Greece, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, UK.

The question concerning the extent to which the impact of the SEM can be seen in the corporate strategy of companies based in the member states is an interesting one and it is vital to consider not only the extent to which companies have felt the need to prepare for the SEM in some manner, but also to consider the actual type of preparation activity that has been carried out. To company strategists the SEM represents a threat and an opportunity at the same time, depending upon the extent to which an effective competitive position in each market place can be maintained or developed. Although it should be borne in mind that in the UK economy, like elsewhere, the SEM represents one of many factors which influence the corporate sector, the impact, nevertheless, is expected to be significant.

1.2 The relevance of the manufacturing sector.

The manufacturing sector of the UK was chosen as the sector in which to investigate the impact of the SEM. The introduction of this legislation is the logical extension of the traditional free-trade approach adopted by the EU which has seen the removal of barriers to trade - primarily in goods. The overriding aim of the proposals has been the removal of the remaining obstacles to the free internal trade in goods and free flow of factors of production.

When the SEM programme was first mooted it was because of the recognition of the need to improve the global competitiveness of the EU manufacturing sector via the unification of the fragmented and protected national market segments. This, it was thought, would allow the manufacturing sector, and especially high-technology goods producers, to develop as truly competitive companies at the global level.

Manufacturing can be regarded as the key sector in the creation of national economic prosperity in that the demand for exports of manufactured goods can be seen as the 'regulator' of national economic prosperity (Kaldor,1978). Kaldor relied upon the economies of scale assumption of orthodox, neo-classical economic theory (Hicks, 1959) which stipulated that principally the manufacturing sector, via the mechanism of the adoption of large scale production methods, was capable of achieving huge economies of scale and scope and, in consequence, lower unit costs. These benefits were seen to be available in the manufacturing sector and in some service sector activities (such as in the operation of international airlines) but hardly at all elsewhere. Notwithstanding the on-going structural economic change since the early 1980's which has occurred in, for instance, the financial services sector of the UK and, indeed, other advanced industrial economies, this still remains a valid argument.

Emerson (1988) showed that manufacturing sectors have more potential for gain from the introduction of the SEM than others and that manufacturing was more likely to be involved in restructuring. His investigation showed a larger estimated effect on manufacturing and generally a smaller effect on primary and tertiary sector activities, although the likely impact on financial services was thought to be substantial. Emerson's analysis was based upon a four stage investigation which proceeded, sector by sector, by examining the potential for cost savings arising from the completion of the SEM and estimating, under certain specific assumptions, the consequential welfare gains. In chapter three the economics of the Single Market are discussed and, in that section, the work of Emerson is explained in more detail. Table 1.01 illustrates the gains expected by Emerson from selected sectors.

Table 1.01 Expected gains from the implementation of the SEM in certain selected sectors.

SIC Division	Sector	Total impact (1,2) (Ecu's, billion)	Mid-range of total impact
0	Agriculture	1.9 - 4.2	3.05
1	Elec, gas, water	3.8 - 3.9	3.85
2	Chemicals	15 - 15.2	15.1
3	Mechanical engineering	13.3 - 14	13.75
3	Electrical goods	18.8 - 19.7	19.25
3	Motor vehicles	16.6 - 17.8	17.2
4	Food products	6 - 7.6	6.8
4	Textiles, clothing	3.1 - 3.2	3.15
5	Building, civil engineering	6.6 - 7.2	6.9
6	Wholesale, retail trade	5.1 - 5.3	5.2
7	Inland transport	1.9	1.9
8	Credit and insurance	11.6 - 11.7	11.65

Source: Emerson (1988)

Notes:

1. Combined effects of stages 1 - 4

Stage 1 - effects considered were the costs of barriers which were thought to produce a direct effect on trade. These were typically the direct costs associated with border controls and related delay costs.

Stage 2 - the costs of barriers affecting production such as technical standards, regulations and preferential public procurement.

Stage 3 - further cost savings related to restructuring and increased production. Cost savings coming about due to the combined impact of the search for economies of scale, lower prices and market integration.

Stage 4 - benefits arising due to improved efficiency and the eradication of excess profits associated with firms in a monopolistic market situation. A consideration of competitive pressure on costs and profits.

2. Range of estimates given to reflect different databases.

In terms of the relevant time period for these gains, the barrier removal effects (in stages 1 and 2) were seen as 'once and for all' gains realisable in the short-run, whilst the market integration gains (in stages 3 and 4) were expected to accrue over the medium-term depending upon the extent to which industrial restructuring would take place. It should be borne in mind, though, that Emerson's estimates were dependent upon assumptions made about the measurement of the size of barrier effects and the responsiveness of companies to these changes. It is necessary, therefore, to exercise a degree of caution. In chapter three of this thesis Emerson's methodology is examined in more detail. Nevertheless his findings do suggest that, with the exception of the large expected gains in credit and insurance, the sectors which will gain most from the implementation of the SEM will be the manufacturing sectors (SIC Divisions 2,3 and 4) and especially those in Divisions 2 and 3.

Manufacturing in the UK can be seen to be a key source of wealth creation for the economy. In the mid-1990's manufacturing is in a strongly competitive position as a result, partly, of a dramatic rise in manufacturing productivity (which has outstripped the improvement in service sector productivity on an annual average change basis since the early 1970's) because of major structural improvements which have taken place (Kern,1995). Kern shows that over the period 1971 to 1994 manufacturing productivity increased at a rate of 3.5% per annum compared with annual rises of 0.9% for services productivity. In addition to this the decline in the exchange value of sterling in the post-ERM phase (since September, 1992) together with improvements in the supply side of the economy and the benefit, over recent years, of relatively low wage inflation have led to an improving competitive position (Pipe, 1996). Sentance (1995) used evidence of strong growth of exports to Europe and growth in investment in support of his assertion that manufacturing as a whole was very well placed to benefit from these factors since manufacturing companies dominate international trade and are major suppliers of investment goods.

Manufacturing is certainly more involved in export activity and the UK's relative dependance on visible trade is high. Manufactured exports derive something like 40% of all export earnings on the balance of payments current account in the UK (CSO Annual Abstract of Statistics, 1995), and MacDonald (1994) estimated that the value of UK exports of services were equal to 37% of the value of manufactured exports. He

also calculated that, in order to maintain a neutral impact on the balance of payments current account, a 2.5% increase in the value of exports of services was needed to compensate for a 1% decline in manufacturing exports. It is reasonable to expect that since manufacturing is relatively more orientated towards dealing in overseas markets or coping with foreign competitors, the sector as a whole will be a more fertile ground to examine the impact of developments in the area of international economic integration. Barrow (1990) found that in the context of company preparation for the SEM, manufacturing firms were more likely to be prepared than the service sector because of the higher tendency of the former to be involved in export activity.

One important consequence of the SEM has been to attract foreign direct investment (fdi) into Europe as a whole from all around the world as overseas companies have increasingly switched from exporting to overseas production (table 1.02). As a form of structural linkaging between countries to promote, among other things, an international division of labour consistent with dynamic comparative advantage, fdi is particularly important in the manufacturing sector (Dunning, 1996).The UK has been an important destination for a large proportion of fdi into the European area as a whole and, in the case of fdi from Japan, the UK has been the major recipient (Norman,1993).

Table 1.02 Flow of inward fdi by host region and country in 1993

Country\region	% of total
Western Europe[2]	42.5
UK	9.5
Germany	6.2

Source: Dunning,1995 pp 46 - 51.

Notes:

1.Total value of inward fdi in 1993 was equivalent to $2,079.5 billion.

2. Western Europe = EU 15 plus Norway and Switzerland.

In choosing manufacturing as the sector to investigate, the fact that in one regard the service sector can be seen to be subordinate to manufacturing could also be considered. A House of Commons report published in 1994 (Trade and Industry Committee,1994) estimated that 25% of all employment in services was directly dependent on manufacturing and suggested that, in any case, the service sector as a whole needed manufactured goods. The report gave examples of computing and data processing equipment as typical manufactured goods in this regard.

This is not to say that the service sector is not worthy of consideration in terms of examining the impact of the SEM. The service sector is dominant in the UK in output and employment terms (Kern,1995; Griffiths and Wall,1995) and the on-going globalisation of trade in some services (especially financial services) together with the progressive liberalisation of capital markets is likely to lead to an intensification of world trade in services (Vickerman,1992). This is especially the case since the Uruguay round of the General Agreement on Tariffs and Trade (GATT) meetings established, for the first time, comprehensive ground rules for trade in services (Greenaway,1994). On a regional economic footing the service sector may well have a vital role to play in regional development via, for instance, the development of tourism and via the link of producer services to the manufacturing sector (Begg,1993).

Nevertheless, the conclusion drawn for the purpose of this thesis was that the manufacturing sector as a whole would on balance be the more fertile ground for examining the impact of the SEM.

1.3 Background to the formulation of the research hypotheses.

The hypotheses to test in this thesis have emerged as a result of an on-going consideration of the literature and commentary in the public domain on international economic integration in general, and the impact of the measures embodied in the SEM in particular. The research questions have their roots in the existing literature but they can be put very succinctly:

- Do manufacturing companies gauge the SEM to be a significant development?
- What are the main forms of activity undertaken in preparation for the SEM?
- Do the companies which are active in preparation for the SEM have any common characteristics?
- Are active companies performing better because of their involvement in preparation activity?
- What do firms need to know about the SEM programme in order to more effectively compete?

One key question to address is related to the extent to which companies are regarding the SEM as a serious development in their own commercial and technical environments. If the Single Market is regarded by producers, for a number of potential reasons, as being irrelevant then they could possibly be excused for not devoting scarce corporate resources to the issue of adequate preparation. A study conducted on behalf of the EU by Nerb (1988; cited also in Emerson, 1988) suggested, on the basis

of 11000 replies from companies within the EU 12, that the SEM was a challenge to be exploited rather than a threat to be avoided. 56% of firms perceived the potential opportunities to outweigh the risks, and 49% of firms thought that, for their own country, the opportunities outweighed the risks. On the other hand only 7% of respondents assessed the risks as outweighing the opportunities, and 14% of firms thought that for their own country the risks were greater than the opportunities. Gray (1992), using data from a survey of UK small businesses conducted in 1991, found there to be a general lack of preparation for the SEM as the majority believed that their business would be unaffected, although they were gradually awakening to its significance. Despite this the majority of firms regarded the SEM programme as being representative of an opportunity rather than a direct or indirect threat (42% versus 17% and 21% respectively) although there was a regional, business activity and firm size (by number of employees) variation to these findings. Nerb's and Gray's evidence suggested that, on balance, firms were increasingly inclined to view the SEM programme as one worthy of serious consideration and ought, therefore, to have been taking significant steps to prepare for its impact.

There were, of course, firms which had been fully commited to trading in European and other international markets for many years and had consequently not done anything specifically to prepare for the impact of the SEM. However, it would not be unreasonable to expect a significant proportion of firms to have recognised the 'wind of change' blowing through their own market place, and one of the key themes of this thesis is to assess the extent to which the manufacturing sector has taken steps to prepare.

What are the main forms of activity undertaken in preparation for the SEM? This is a very important question. A number of assumptions of likely strategy have been put forward but there is little evidence to suggest what, if any, the common themes will be (Emerson,1988; Baldwin,1989; Porter,1990; Jacquemin and Wright,1993; Cassell,1994; Syrett,1996). Each firm in each manufacturing sector will react in a way which is suitable to its own situation and objectives but a number of common types of activity may be perceived. Some explanations emphasise the reactive nature of adapting to the new standards and technical legislation, whilst others emphasise the development of a pro-active approach to developing competence in specific commercial and/or organisational matters. Work related to the reorientation of marketing strategies or the implementation of some form of production restructuring would both be examples of a pro-active approach. Corporate attention to the marketing function and the rationalisation of production appear to be very important aspects of

behaviour vis-a-vis the SEM. These are two forms of activity, or 'strategies', which appear in the empirical research evidence considered later in the thesis.

The trading environment in the EU prior to the implementation of the SEM was regarded as a large but fragmented market and various sources of fragmentation served to add extra costs to EU producers. Dubbed the costs of 'non-Europe' (Cecchini, 1988), aspects such as delays in crossing internal frontiers, variable technical standards and regulations, variable taxation regimes and preferential public procurement policies were all significant additional cost sources in their own right. Collectively they were seen to lead on to a failure to exploit economies of scale and a continuing potential for 'x'-inefficiency. It was widely felt that the implementation of the SEM, because of the twin pressures of increased market size and extra competition, would lead to improvements in efficiency and competitiveness (Emerson, 1988; Baldwin, 1989). The Nerb study (as mentioned earlier) showed that producers overwhelmingly expected costs to be reduced and total sales volume to grow because of the Single Market. Based on the responses of 11000 companies in the EU 12, Nerb postulated that the average expected direct cost fall (not including the indirect cost consequences of restructuring and the exploitation of economies of scale) would be around 2% of the total unit costs for each company's main product line. Nerb expected this to be achieved principally by lower distribution costs, lower imported material prices and higher productivity in the production process.

At this stage, however, it is necessary to sound a note of caution. The disciplining effect that these pressures have had on corporate conduct should have secured net economic benefit in both the short run and the long run, but particularly in the latter as firms sought out economies of scale and improved their relative efficiency levels in the increasingly global market place. A number of doubts, though, have been raised as to the reliability of those estimates which showed a net economic benefit. Estimates tended to centre on significant putative benefits but most recognised that, in the short run at least, job losses would accompany attempts to restructure. Ramsey (1995) questioned the extent to which large multinational companies would pass on any efficiency benefits to the consumer in the form of lower prices. He also noted the potential for these companies to disperse the efficiency gains back to company head office which may, or may not, have been located elsewhere in the EU. In the case of a non-EU head office location, any gains emerging in the Single Market context could have been quite drastically dissipated.

The Nerb study showed that the business perception of the impact of the SEM on sales volume varied according to the geographical destination of sales, but the majority of respondents expected little change in the volume of domestic sales or in sales international markets beyond the EU. They did, however, expect an increase in sales to other EU countries. Overall a 5% increase in total sales volume was expected. The principal reasoning for this increase was based on the link between reduced costs and increased sales but other reasons given were related to the enhanced ability of firms to enter into new regional markets and also improvements in price and non-price competitiveness. This reasoning is important because it provides an insight into the likely behaviour that companies may have exhibited in reaction to the implementation of the SEM.

With regard to price competitiveness, respondents indicated a perceived need to reduce price/cost margins in addition to the fall in costs. The main improvement to non-price competiveness was seen as being the planned widening of the product range. Nerb concluded that with regard to SEM preparation strategy, firms indicated that the likely response would be to adopt measures to improve productivity and also to increase the search for international cooperative agreements. On balance the emphasis was seen to be on the establishment of cooperative agreements, and the firms which pursued this strategy expected to form an agreement with partners from non-EU countries. Firms also expected any agreements to be mainly related to research and development and the enlargement of the product range. The motivation to secure agreements of this sort was related to the need to develop competitive advantage in home markets for smaller companies and export markets in the EU for larger ones.

Marketing and distribution type activities have been presented as being highly likely to be part of any company's SEM related response strategy. Burke, Genn-Bash, Haines (1988) suggested that an effective corporate strategy should focus upon the importance of product development and differentiation, rationalisation to maintain and enhance specific competences, the development of a strong distribution system and effective rivalrous behaviour. Gray (op cit) found the majority of manufacturing firms to be taking some kind of positive action and, in particular, had 'above average' interest in conducting market research, seeking overseas partners/agents/distributors, attending seminars, reviewing their current plans and identifying the necessary market and skills changes. Despite the fact that firms had been slow to recognise and respond to the SEM, Cassell (1994) found that firms were engaged in activities related to the seeking of economies of scale and the reappraisal of manufacturing, marketing and distribution policies in Europe.

Restructuring appears to be a key activity in terms of preparation for the SEM. Firms were expected to restructure both in an internal capacity and via an external rationalisation typically made possible by merger/takeover. An increase in the tendency to cooperate, as firms pool resources through some kind of joint venture, was also expected to reveal itself. Corporate strategies to create sustainable competitive advantage seemed to centre upon general policies to improve productivity via a process of external and/or internal restructuring, increased strategic investment and increased cooperation with other producers (Jacquemin and Wright, 1993b; Porter, 1990; Cassell, 1994; Jacquemin, 1993).

Emerson (1988) expected that productivity would be improved thanks to a restructuring at both the internal and external level. At an internal level companies would be seeking to rationalise and concentrate on particular product lines whilst seeking to expand geographical coverage. Merger/takeover activity, geographical diversification of output and a greater international division of labour would all be evidence of external restructuring activity. Jacquemin and Wright (1993a) drew similar conclusions from their investigation into corporate strategies post-1992. In the search for competitive advantage, they found firms to be both internally and externally restructuring in order to safeguard and enhance their competitive edge in Europe, and to generate a 'leverage' effect for moving on to the world market. Like Emerson, they saw firms, with the twin aims of brand strength and market leadership in mind, seeking to concentrate on their main product line but extend the geographical market in order to establish a Euro-centralised product and selling structure with more destinations. Mergers and takeovers were a common method of external restructuring and these tended to be horizontal in nature (in order to specialise in company core products), on a transnational footing and, concentrated in those industries with much potential for reaping economies of scale (chemicals), with high non-tariff barriers (food) and where the implied costs of competition would be great (defence). Like Nerb they found joint ventures/cooperative alliances to be another method of externally restructuring and Jacquemin and Wright found a large increase in the incidence of this over the medium term - typically with non-European partners and mainly with respect to RTD, production and marketing activities. They contended that firms were seeking non-European partners because of the difficulties faced in forging alliances with European partners and because :

"strong national companies...do not wish to alter the terms of their competitive position (regarded as favourable) vis-a-vis their European rivals". (Jacquemin and Wright, 1993a, pp529).

In focusing on the impact of the SEM on small and medium sized companies operating in the Portuguese food sector, Syrett (1996) noted the presence of four significant areas of influence. One was the presence of increasing competition in domestic markets and the emphasis that firms had placed on cutting costs and modernising productive capacity, although he found little activity concerned with what could be described as more sophisticated strategies of product diversification, brand strengthening, new market development and adding value to existing products. The second impact was related to the effects of the changing technical standards and regulations on hygiene and safety and also the labelling and packaging of foods. The third impact was related to the effect of increased import and export opportunities. In terms of imports it appeared that patterns of supply were changing as domestic firms sought better and more reliable supplies from (usually) other countries within the EU. Few companies, he found, had perceived of any real export possibilities as a result of the SEM and it appears that the overriding consideration, in this respect, was to defend existing domestic markets rather than to develop new ones abroad. The fourth impact was related to patterns of support and collaboration. Syrett found that firms were not seeking to use local or national institutions as external resource support except in a few cases where firms were seeking marketing related consultancy. He did detect, however, more interest in the question of access to EU funds for corporate modernisation. Overall, it was notable to Syrett that the majority of firms which had successfully increased turnover and profits had developed important relationships with larger companies or groups of companies, either locally or nationally. His main conclusion was to note that in the smaller, indigenous type of company the principal concern vis-a-vis the SEM was to defend domestic markets rather than to develop new ones abroad; with emphasis on the need to cut costs and modernise productive capacity. In contrast to this, larger, foreign owned companies in the food sector were much more inclined to be active in seeking out new markets. Smith (1990) suggested that common preparation activities reported by firms were related to the need to address company weaknesses in long-term planning, human resource development, market research and information gathering with regard to potential opportunities emerging in the Single Market.

The general applicability of these suggested preparation activities to the manufacturing sector as a whole is highly relevant to this thesis. It is vitally important that the true reaction of companies to the implementation of the SEM legislation is understood and one of the purposes of this thesis is to make an original contribution to knowledge in this respect. In the studies quoted in this section of the chapter, companies have been shown to be taking steps to make themselves more capable of trading successfully in

highly competitive markets. They have variously sought, for instance, to improve or widen the product range, extend geographical coverage and reap economies of scale. In order to achieve these improvements various types of preparation activity have been suggested, including a wide range of actions related to physical capital investment, internal/external rationalisation and restructuring; human capital investment, strategic planning, collaboration and others. On balance, the need to adapt to new technological developments and the desire to take advantage of market opportunities, via the enhancement of the marketing function and the reorganisation of production, appear to be key forms of preparation activity. The evidence suggests that firms have placed much emphasis on these aspects of behaviour, and research hypotheses in this thesis have been formulated, in part, to reflect this.

Do the firms which are active in preparation for the SEM have any common characteristics? The firms which are likely to react most significantly to the SEM may have certain common characteristics and a knowledge of these characteristics is likely to be helpful in aiding the understanding of the impact of the SEM. Company size, the degree of involvement in export activity, the geographical location of a company's main competitor - to name just a few, may all be influential in determining the extent and style of involvement in preparation activity for the SEM. Smith (1990) presented evidence to suggest that the firms most likely to be preparing for the SEM were likely to be manufacturers (rather than service sector companies) which were established for at least ten years; which were involved in exporting; which were larger (rather than smaller) and which were faster growing. One of the key themes of this thesis, therefore, is to establish the characteristics of those companies reacting to the SEM.

Are active companies likely to be performing relatively better because of their involvement in preparation activity? It is not unreasonable to expect that those companies taking steps to improve their competitive ability should also report a relatively better level of corporate performance in indicators such as sales, self-assessed ability to compete, order levels and output levels. Indicators of performance are subject, of course, to the common and unique vagaries of daily economic activity but it is important to consider the effect that the adoption of preparation measures is having.

PACEC/RIDER (1991) and Buiges et al (1990) listed what they saw as those sectors most likely to be affected by the integration measures. Their analyses, based on market and production characteristics, identified a number of industrial sectors which were likely to be experiencing profound change in their EU trading environment. The

relative significance of these sectors to the national, regional and sub-regional economy is going to be of crucial importance in assessing the impact of the SEM. There has been much journalistic speculation on the subject of the net benefits (or otherwise) which are expected to flow as a result of the implementation of the Single Market (see, for instance, Financial Times,1991; The Economist, 1993). One line of journalistic inquiry has been to consider how the potentially positive impact of the SEM can be enhanced to secure greater economic prosperity for the nation as a whole (The Guardian, 1993; Goodhart, 1994). More recently, the potential benefit of the SEM, as a part of the European integration 'jigsaw', has been a factor in the informed public debate on the proposals for economic and monetary union (The Economist, 1996; Hutton, 1996).

With regard to the question of what it is that enterprises need to know in order to compete more effectively, companies have an on-going need for advice and information on a wide range of aspects of the SEM. Key questions to address relate to the type of information that is needed and the most appropriate organisations to exist as providers. This is helpful because a consideration of the question of which organisations should be the providers does facilitate a discussion as to the appropriate role of the public sector in engaging with the private sector in these matters. National government remains, of course, very influential in setting the framework within which economic agents work and the potential for national government to assist firms to compete more effectively in the SEM is huge (DTI,1995). But local authorities are possibly very well suited to fit in with the notion of territorial self-help since they are perceived as being highly commited to the objective of securing local economic prosperity and may well be best placed to tap into the indigenous potential which is supposed to exist. It is, therefore, of interest to consider the type of role to be played by the public sector in engaging with the private sector. The essential role of local authorities should perhaps revolve around the need to be the facilitator of economic development. Whilst not being direct wealth creators, local authorities can be influential, via the forming of partnerships with the private sector for instance, in establishing the best possible climate to let the local economy prosper. One key aspect of local authority engagement with the private sector is the provision of advice and information to enable firms ultimately to develop better their own competitive advantage. Companies themselves have an on-going need for information and advice from the public sector on a wide range of issues. Advice on financial assistance available under the guise, for instance, of UK regional policies is likely to be very important. Firms are likely also to be in need of advice and information related to commercial and technical matters in their own market places. Reliable and accurate

information is neither cheap nor easy to acquire and it may be that the public sector is in a position to be influential as either a direct provider of relevant information or an indirect provider via some system of sign-posting.

It has been established that local authorities can draw upon private sector skills and create a local economic strategy, involving the whole of the authority's policies, in a coherent and integrated management vision but the SEM integration proposals are encouraging businesses to functionally integrate into the European trading system at the expense, perhaps, of some territorial communities. It must be considered that there is now a much increased mobility of capital (Greenaway and Hine, 1991) and it is likely that, as firms organise their activity on a Europe wide basis, the accompanying rationalisation activity (which may well result in the location of different products or processes in different centres) may run counter to the notion of economically free-standing territorial communities.

1.4 Formulation of the hypotheses.

In the light of a consideration of this large body of commmentary and analysis, a number of hypotheses have emerged as the backbone to this thesis. These relate to the extent to which the SEM has been regarded by companies as a serious development in European markets; the corporate and performance characteristics of these companies; the types of activity undertaken by companies as they have sought to prepare for the implementation of the legislative programme; and, the subject content of the advice and information assistance which government can give to those companies located in any particular administrative area.

There are seven key hypotheses to test. There is a great deal of uncertainty involved in predicting how companies are being influenced by the implementation of the SEM, but what is beyond question is that the introduction of this legislation signals a change in the corporate trading environment as firms seek to win new markets or to defend existing ones against the threat of foreign competition. How seriously, though, are manufacturers taking the SEM ? It may be that only some types of companies or some industrial sectors are actively engaged in any form of preparation whilst the others continue the same patterns of commercial behaviour as before. It is probably the case, however, that the SEM is causing companies to take preparatory steps in one way or another and therefore the first hypothesis is that *the introduction and implementation of the SEM programme of the EU has caused the manufacturing sector to react in a significant manner, in preparation for trading in more liberalised European markets.*

What types of preparation activity are taking place ? It is likely that any preparation activity will be based upon the twin needs of accommodating to the technical standards and regulations outlined in the legislation and improving their own competitive position. The literature on this matter seems to assume that firms will be under greater pressure to reduce costs and remain price competitive and non-price competitive. This is intended to motivate companies to rationalise output, restructure their organisations and take steps to retain domestic sales whilst, at the same time, defining a wider export orientation (Emerson 1988, Muller and Owen 1985, Mayes 1994). The second hypothesis is based upon the notion that companies, in preparation for trading in liberalised European markets, have been mostly concerned with making reactive adjustments to their products and/or processes and that *the main form of preparation will be one of adapting to EU standards and technical regulations as contained in the SEM legislation concerning harmonisation.*

The next hypothesis is based on the effect of the predicted extra competition. In order to investigate the typical company response in terms of market orientation and specific marketing policies the third hypothesis is that *for companies, an important area of preparation for the SEM will be to review and develop their sales and marketing function or functions in order to trade in a more competitive home and overseas market place.*

The processes of output rationalisation and organisational restructuring are ones which are widely expected to follow on from the introduction of the SEM as general company structures or strategies in processes, products and organisation are reviewed. The expected motivating factor of this will be the increased level of competition, and the mechanism by which this will be achieved will be one of capital investment and/or the seeking of some form of collaboration or joint venture with another company. The fourth hypothesis, then, is that *a common form of preparation will be for companies to put into practice a strategy of restructuring and rationalisation based upon a programme of capital investment and/or a collaborative agreement of some kind with another company.*

Another important area of concern is to find out which companies are the ones making adjustments to their behaviour in order to trade more effectively in the SEM. It is probably the case that manufacturing companies have responded and continue to respond in different ways and with different levels of commitment to the SEM programme but it may be possible to identify certain common characteristics of companies on the basis of the existence and/or the type of preparation activity. Two

such characteristics are likely to be the size of company annual turnover (as a proxy for the size of the company) and the location of the company's main competitor (as a proxy for the source of competitive pressure). The fifth hypothesis, therefore, is that *those companies active in terms of preparation for the SEM have distinct characteristics and that a knowledge of these characteristics can be used as a guide for predicting the existence and type of preparation activity undertaken.*

Central and local government and other 'support' organisations will inevitably be required by the manufacturing sector to provide a leading role in helping to ensure that the competitive performance of producers is maintained and improved upon. This will be done, principally, by providing advice and information to companies. Informational needs will be diverse, of course, but the sixth hypothesis is that *companies, motivated by a desire to compete more effectively in the SEM, will have a definite interest in learning more about a range of relevant topics.*

The seventh and final hypothesis to test is one based upon the link between those companies taking steps to prepare for trading in more liberalised European markets and recent company performance, as measured by a number of self-assessed indicators. It is not unreasonable to expect to find a relationship between those companies actually taking steps to enhance their competitive advantage and improved recent corporate performance. This relationship, if it exists, may, of course, be two-way (in that those companies which are performing well are more likely to have the resources and initiative to take steps to prepare) but it will still be interesting to test for a relationship which suggests that, for some reason, those companies which are taking steps to prepare are also likely to be the ones performing better. The seventh hypothesis, therefore, is that *those companies actively taking steps to prepare for the SEM are likely to perform better than those not taking any steps.*

Here is a summary of the seven hypotheses :

1. *the introduction and implementation of the SEM programme of the EU has caused the manufacturing sector to react in a significant manner in preparation for trading in more liberalised European markets.*

2. *the main form of preparation will be one of adopting to EU standards and technical regulations as embodied in the SEM harmonisation legislation.*

3. *an important area of preparation for the SEM for companies will be to review and develop their sales and marketing function or functions in order to trade in a more competitive home and overseas market place.*

4. *a common form of preparation will be for companies to put into practice a strategy of restructuring and rationalisation based upon a programme of capital investment and/or the entering into of a collaborative agreement of some kind with another company.*

5. *those companies active in terms of preparation for the SEM have distinct characteristics and that a knowledge of these characteristics can be used as a source for predicting the existence and type of preparation activity undertaken.*

6. *companies, motivated by a desire to compete more effectively in the SEM, will have a definite interest in learning about a range of relevant topics.*

7. *those companies actually taking steps to prepare for the SEM are likely to perform better than those not taking any steps.*

These seven hypotheses will be tested against the background of the manufacturing sector located in South Yorkshire. A knowledge of how a sub-section of UK industry is reacting to the deepening of the customs union, as embodied in the EU's SEM legislation, will be a useful addition to the current academic literature.The findings will also be of much use to the industrial and commercial community of South-Yorkshire as it competes in a climate of enhanced European competition.

1.5 Outline of the thesis.

The joining of any member states into a regionally integrated economic area is both a profound and a substantial development with an impact which is multi-faceted and multi-sectoral in nature. The introduction and implementation of the legislation to bring about what has become known as the SEM is a significant step in the direction of trade liberalisation and has brought with it a new trading climate. The economic, political and social consequences of this represent a rare opportunity to study how private economic agents respond to a sea-change in their trading environment. It is also interesting to consider what type of integration the SEM actually represents since the performance of producers (and, therefore, the welfare of the population as a whole) within any trading system is necessarily influenced by the form of integration in existence. The development of any economic integration initiative will have some

benefits and some costs but it is generally hoped that at least some net economic benefit will emerge. The purpose of chapter two, in part, is to present the case for and against international economic integration in general terms based on the principles of neo-classical economic theory. Neo-classical economic theory attempts to evaluate the balance between the positive and negative welfare consequences, arising in the short run, from the establishment of, for instance, a customs union. The theory also attempts to measure the consequences of the resultant dynamic forces for growth which occur in the long run such as in the impact of the exploitation of economies of scale.

The UK economy is a dynamic and evolving framework of economic agents. Companies engage in a constant process of renewal as they seek to upgrade and adjust in the search for economic advantage within the markets in which they operate. Countless emerging influences and pressures are all considered and reacted to in the process of achieving a successful business outcome. The second purpose of chapter two is to show the nature of this evolving environment and to set these changes in the context of the impact of the SEM. The fundamental principle driving the SEM programme of legislation is the supposed necessity of giving equality of opportunity to compete. A system of free and integrated European markets should serve to introduce a powerful force for change as firms recognise the need to enhance their own competitive advantage in order to defend their existing position and, perhaps, seek out new markets abroad.

Public authorities have the potential, of course, to be influential agents in promoting regional economic development, whether it be at the national, regional or sub-regional level. In a fundamentally private economic enterprise system such as that of the UK, public authorities, at a local and national level, are well disposed towards assisting economic development and will do so in order to help ensure a more favourable outcome is achieved. Public authorities will typically do this by assisting private enterprise to raise their own level of performance and prosperity. The philosophy guiding the level and form of engagement between public and private sector has and does change but the philosophy prevalent in the literature can be associated with what has been called a 'territorial' philosophy - based upon the principles of self-reliance. This represents a decentralised approach to the encouragement of economic activity; where localised authorities take on a relatively greater responsibility to help the private sector in the geographical administrative area under the jurisdiction of the particular local authority. The challenge for the public sector is to create the right environment within which economic activity can prosper in all shapes and forms.The public sector is therefore relevant as a facilitator and motivator at local, regional,

national and, within the EU, international level. The crucial issue is that, generally speaking, the competition and market access impact of the SEM, together with the change taking place in the context of the globalisation of the trading economy and techno-industrial system, will have a largely disruptive effect on the productive fabric of the less favoured regions.

Steinle (1992),in his attempt to identify which EU regions will benefit most from the implementation of the SEM, identified the four key factors of regional competitiveness within the producer sectors as: average company size, levels of research activity, innovative capacity and export orientation. These factors are clearly influential to some degree on the quality of a business location, and it seems sensible for the public sector to look for ways in which these supply-side aspects may be manipulated. The aim of the public sector then is to encourage growth via reconstruction, regeneration, adoption and adjustment of economic activity in an ever changing world. How this may be achieved, both in terms of policy prescription and of the theme of intervention, is an important question to address. A third purpose of chapter two, therefore, is to show how the philosophy guiding the level and form of engagement of the public sector with the private sector has changed; the aim being, here, to establish a framework for the involvement of the public sector. The response of local authorities in their encouragment of local economic development is one countering force to the potentially disruptive effect of the implementation of any economic integration measures. It may well be the case that a conflict of interest is emerging between the impact of the SEM, as a force which serves to increase the functional integration of the European trading system, and the increasing desire of public authorities, especially at the local level, to better manage their own economic hinterland as a territorially balanced economic community.

In chapter three the economics of the SEM are discussed. The SEM programme has had a rather troubled birth and, although progress towards a truly open market has been slow, important macroeconomic and microeconomic consequences have followed which together represent a fundamental change to the dynamic international trading environment in Europe. A number of estimates of the potential impact of the SEM, at both the microeconomic and macroeconomic level, have been published and some of the findings are considered here. It is also vital to consider these issues at an international, national, regional and sub-regional level since the implementation of the SEM will have a varying impact depending upon, on the one hand, the national and regional economic performance, and on the other, the sectoral performance of those

industries predominant in each nation or region. Finally, then, the UK position in terms of the SEM is analysed, for this is the national economic framework within which producers in South Yorkshire must operate. It may well be the case that the completion of the SEM causes a more detailed assessment of the competitiveness of European cities, regions or sub-regions rather than the competitiveness of countries as a whole, and one of the worries of the SEM is that the resultant influence on the location of economic activity may serve to attract economic resources to the existing prosperous regions at the expense of the less well developed ones. This has been termed as a core/periphery split within the EU by some; by others it has been cast as more of a North/South divide (Shepley and Wilmot, 1995; Neven and Gouyette, 1995; Dunford and Perrons, 1994).

In chapter four the sub-regional economy of South Yorkshire is analysed. The primary research evidence in this thesis has been produced from responses to a questionnaire which was sent out to manufacturing companies in South Yorkshire which, itself, was chosen as a representative industrial sub-region of the UK economy. South Yorkshire, it is shown, is a good example of a sub-region struggling to come to terms with new and emerging realities in world trading and, for a number of reasons, is considered to be particularly sensitive to the impact of the SEM. This programme of trade liberalising measures is bound, of course, to have a differential impact on different industrial sectors. As mentioned previously, some companies are going to witness more profound change in their trading environment than others and it is worrying to note that in South Yorkshire there exists a relatively high proportion of companies operating in sectors which will be particularly sensitive, it is thought, to the introduction of the SEM.

In chapter five the research framework and survey results are set out. With regard to general survey design characteristics and considerations, the primary research data source is a questionnaire. This was distributed to a sample of manufacturing companies located in the administrative area of South Yorkshire in March of 1994. One hundred and thirty-nine companies contributed data on the following areas: general corporate characteristics; activity in preparation for trading in European markets in general and, more specifically, in the SEM; recent company performance levels; and, information and advice needs of companies with regard to trading in the SEM. Company characteristic information was used in order to differentiate respondents by size, organisational structure, broad product group and the physical location of each company's main competitor. This information was necessary because of the need to identify the types of manufacturing companies most likely to be

active/inactive in relation to preparation activity for trading in the SEM or more open European markets in general. Information on preparation activity was used to identify the most commonly occuring forms and to provide a comparison with the activity suggested by the academic literature. Behaviour and performance information on companies was used to decide whether the relationship between active preparation and enhanced corporate performance was a reliable one. Responses relating to the information and advice needs of companies were used to look at the demand for leadership and guidance. The magnitude of the revealed need to learn more about the SEM has been used to gauge, firstly, the extent to which companies are taking the SEM seriously and, secondly, to assess the existence and size of the knowledge gap vis-a-vis operating effectively in the SEM.

Evidence is presented to show that firms have responded to the introduction of the trade liberalising measures by looking at market orientation and specific marketing policies and their structures or strategies with regard to processes, products and organisation. Not all firms have responded to the introduction of the SEM in a positive manner, however, and it is shown that the reasoning behind this is based upon the perceived insignificance of international competition and the lack of time or opportunity to do anything in preparation.

Companies were asked to indicate their relative performance levels measured over the 12 months immediately prior to completion of the questionnaire. They were asked to indicate their self-assessed performance in terms of sales, market share and ability to compete; and order, output, employment and operating floorspace levels; and evidence is presented which reflects a generally favourable performance. Firms were asked also about the types of advice and information they would like to have with regard to trading in the SEM and their responses were used as a basis for assessing the degree of engagement of companies with public sector agencies and local organisations in providing advice and assistance to the changing trade environment. The data show that most respondents had a desire for more information on a range of SEM relevent areas; especially with regard to potential sources of EU financial assistance, although interest was shown in finding out more about appropriate marketing strategies and technical standards and regulations as well. In the final section of chapter five the results of a simple ranking of companies (by the number of registered responses to the suggested preparation activity) exercise are presented. The findings in chapter five reveal some interesting characteristics of companies which may be deemed to be the more active ones. The typical company featuring in the survey sample is a single site, free-standing one which competes principally at the national level and has an annual turnover in the

region of £750,000. An active company, however, can be distinctly characterised as a branch/subsidiary of a larger company, a company whose main competitor is based in a country beyond the UK and has a much larger annual turnover (in the region of over £5 million). This exercise also reveals that those companies regarded as being inactive can be characterised as single site, free-standing enterprises and with much more locally based main competitors ie. in South Yorkshire, North Derbyshire and North Nottinghamshire.

In chapter six the results of a number of statistical analyses are presented in order to confirm the main findings suggested by the data discussed in chapter five. In the first section a cross-tabulation exercise is used to identify specific relationships in the data. Using the Pearson chi-square test of independence, certain aspects of three relationships (between corporate characteristics and European trading preparation activity; between active companies and recent corporate performance; between inactive companies and recent corporate performance) are tested and found to be significant at the 1% and 5% levels. The second section reports a principal components analysis. A wide variety of activity in preparation for trading in the more liberalised European markets was indicated by respondents across many aspects of corporate behaviour and functions, and this analysis condenses the information into a smaller number of underlying dimensions. These underlying dimensions are seen to statistically represent the real variables in a satisfactory capacity and are, therefore, suitable for further analysis. Seven principal components are produced which are both proactive and reactive in nature and which represent the corporate functions related to:

- marketing
- investment
- staff development
- advice/information acquisition
- product and packaging development and,
- rationalisation and reorganisation.

It appears that firms have considered their conduct in terms of product, process and organisation and have pursued strategies which have been both aggressive and defensive in nature. Once these seven principal components are established the analysis proceeds by deriving a set of scores; where each score is a value for each of the seven principal components for each company featuring in the sample. These scores can then represent the standing of each company on the latent variables which emerged as principal components.

These scores are utilised in two ways. First of all, a high score represents a strong association between a company and a particular principal component and, when high scores occur, there is usually a stong relationship between them and those corporate characteristics pertaining to company structure, size of annual turnover and the location of the company's main competitor. High scores are not particularly associated with corporate characteristics of company age and legal status. The findings show that those companies active in a range of preparatory behaviour have characteristics which are quite distinct to the typical company featured in the sample. This confirms the findings presented in chapter 5 which suggested that, in contrast to this typical company, active companies are likely to be branch/subsidiaries of a larger firm (rather than a free standing, single-site ones) and competitors of companies based beyond the UK (rather than nationally based ones). The second use of principal component scores covered in chapter 6 is to use them as the basis for statistically discriminating between companies on the grounds of certain corporate characteristics. In this section the results of a multi-discriminant analysis are featured which use the principal component scores as seven independent variables, and certain corporate characteristics (coded dichotomously) as the dependent variable. The multi-discriminant analysis function is derived, validated and then interpreted with a view to obtaining a reliable rule for classifying each company into one of the two groups of the dependent variable. Three main findings are developed and discussed and these suggest that:

- Branch/subsidiaries of larger firms are much more likely to be active than the other major sample category of single site, free-standing businesses and are especially involved in preparation activity related to marketing, staff development, product development and short term structural investment.

- Companies with main competitors located beyond the boundaries of the UK are much more likely to be active than companies with main competitiors located within the UK and are especially involved in preparation activity related to marketing, staff development, product development and short term structural investment.

- The larger turnover companies are likely to be more active, especially in preparation activity related to marketing, staff development, product development and collaboration activity to distribute products in Europe.

The implementation of the SEM and consequent access to the very large internal market will inevitably impact on the corporate strategy of firms as they seek to put themselves in a position to take advantage of the opportunities emerging. It may be the case that some firms seek to integrate some or all aspects of their activity into the European context (Millington and Bayliss,1995; Collins and Schmenner,1995; Diller and Bukhari,1994; Jacquemin and Sapir,1989). For others, though, this may be part of a wider process of integration towards a global strategy (Egan and McKiernan,1994;

Birkinshaw et al,1995). The purpose of chapter seven is to consider the potential impact of the SEM on the corporate strategy of companies based in the EU as a significant force in its own right and within the context of globalising industry.

The potential for local authorities to play a key support role in assisting local economic development is outlined in chapter eight. Firms have revealed a need for advice and information on a range of commercial and technical matters including the SEM, as they seek to enhance their own competitive advantage. Many providers of information and advice exist at both national and local level but it is suggested that local authorities, for a number of reasons, are in a very influential position to plan, manage and monitor the provision of vital assistance to their local producers (Regional Policy Commission,1996; Esher,1996; Minns and Tomaney,1995; Bennett,1993).

Chapter 9 concludes the thesis by summarising the main findings of the research and examining the extent to which each of the hypotheses specified at the begining of this chapter can be accepted or rejected. In particular it is shown how the companies in the survey have reacted to the introduction of the SEM. Some of the consequences of this reaction are considered and an appropriate public policy response is suggested.

Chapter 2: Analyses of the impact of the Single European Market

2.1 Introduction

The empirical research which forms the backbone of this thesis is based upon an investigation into how manufacturing industry is reacting to the implementation of the EU's economic integration legislation known as the SEM. In the following chapter the theoretical structure of the thesis is laid out. The very existence of the SEM legislation is a testament, in part, to the belief that the fostering of international economic integration is a justifiable activity, and supporters of this view would point to the micro and macroeconomic benefits which are said to accrue as a result of steps taken towards the establishment of various forms of integration. An essential purpose of this chapter, therefore, is to set out the case for the implementation of the SEM of the EU as a form of international economic integration.

The SEM programme is designed, on the basis of a number of important eoconomic, political and social justifications, to encourage the development of a wider and deeper integration of the economies of the member nations, and a key objective is to increase EU per capita living standards via an improvement in the economic performance of European wide business. The reaction of the manufacturing sector to the SEM will, of course, vary in form and extent but it cannot be denied that the Single Market represents a significant structural change to their business environments. This is just one factor to be considered, though, as firms seek to maintain or enhance their ability to exist as profitable organisations, and a review of the key causes of change in the business economy, both in a theoretical sense and in the case of UK manufacturing, is therefore necessary. The second essential purpose of this chapter then is to set the impact of the SEM within the context of the change already underway in the manufacturing sector of the UK economy.

In terms of the macroeconomic impact of the SEM legislation, decision makers may well be content with the outcome provided that a 'net' benefit emerges. One cause for concern, though, is the existence of spatial areas which may suffer an economic reversal of fortune within the general increase in economic welfare. South Yorkshire may well turn out to be a region or sub-region less well favoured in terms of the effect of the SEM and, with this in mind, it remains vital that the public authorities, influential position that they are in, take steps to protect their

'domestic' manufacturing economy. They should do what they can to encourage as successful an economic outcome as possible. The third essential purpose of this chapter, then, is to establish the framework for the engagement of the public sector with manufacturing industry.

2.2 International Economic Integration

a) The nature and benefit of international economic integration.

Economic integration can be defined as a state of affairs or a process leading to the amalgamation of separate economies into larger regions (El Agraa, 1994). Pinder (1969) saw integration as the process of reaching some sort of state of union. It usually takes the form of a geographically discriminatory grouping of countries which seeks to remove trade impediments and/or establish certain elements of cooperation and coordination between members. In this respect integration is a process which reduces the economic significance of national political boundaries within a geographical area. The motivation for countries to join any form of international economic integration may be based, however, upon a pro-trade outlook and the desire to pursue trade liberalisation objectives. More defensively, they may wish to join in order to raise trading barriers against third countries. Different forms of economic integration can be seen to exist :

- free trade area - tariffs are eliminated between members but they maintain their own national protective barriers against outsiders.
- customs union - tariffs are eliminated between members but they have a common external tariff against goods entering any of the members from outside.
- common market - as above but labour and capital can move freely within the market.
- complete economic union - a situation of fixed exchange rates among member's currencies, with monetary and fiscal policies to support these rates, and coordinated public policies in general.

When trade liberalisation policies take their effect, economic integration can make possible a range of sources of economic gain which accrue in both short-run and long-run situations. In a customs union, for instance, increased specialisation will lead to efficiency improvements, economies of scale, better terms of trade, competition benefits and quality improvements. A common market will add extra gains as a result of factor mobility, monetary and fiscal policy coordination and common goals of macroeconomic objectives in, for example, the pursuance of an anti-inflationary policy requiring coordination at

the member nation level (El Agraa 1994). Of relevance here are the customs union aspects of the neo-classical theory of economic integration which was originally set out by Viner (1950) and then Meade (1955), Tinbergen (1959) and Balassa (1961); and then gradually modernised as international economic integration agreements have become more a focus of analytical investigation (Jacquemin and Sapir,1989; Molle,1990; Brown and Hogendorn,1994). The short-term impact of trade flows on welfare and the international distribution of production can be examined via the use of two important concepts: trade creation and trade diversion. 'Trade creation' refers to the replacement of expensive domestic production with cheaper imports from a new partner and makes production within the preferential trade area more efficient. 'Trade diversion' means the replacement of cheaper initial imports from a country in the outside world with more expensive imports from a partner and makes production within the preferential trade area less rational. Trade creation, because of the welfare gains accruing, is widely thought to be economically beneficial; whereas trade diversion, because of the associated welfare losses, is regarded as being economically undesirable. In the case of trade creation a customs union expands trade amongst partners as they remove trade barriers with each other. In the case of trade diversion, though, the customs union expands trade amongst partners at the expense of third countries because of discriminatory treatment. Effects on economic welfare are considered in assessing the relative impacts of trade creation and trade diversion and only if the positive effects of trade creation outweigh the negative effects of trade diversion is the creation of a customs union said to be justified. The net benefits of a customs union will be greater when production structures in partner countries are more competitive, when the customs union is larger, when the initial tariffs are higher, when transaction and transportation costs are lower and when the ability to respond to new prospects is greater (Molle,1990). This, in fact, is why the SEM legislation is so important. Not only will the clearing away of the remaining barriers create a level playing field, but the subsequent boost to competition and competitiveness will give European producers a strong support in their response to new world-wide emerging economic prospects.

Because of the relative sizes of trade creation and trade diversion effects arising from economic integration measures, the best solution (or first-best solution) is regarded as being the unilateral adoption of free trade. The next best (or second-best) solution is a geographically limited form of free trade - a customs union. There is, though, some doubt as to the empirical validity of the welfare

improvements caused by the operation of customs unions. The first-best solution certainly favours the creation of a customs union since the move towards free trade is seen as the best way to maximise world welfare. However, it was pointed out by Viner (1950) and others that the second best solution would more commonly occur when compared to the 'simplistic' first-best solution. The basis of this view was that a customs union would result in free trade between members but could represent protectionism against non-members which may cause trade diversion as well as trade creation. It is the relative strength of these two effects which figure in the outcome as to whether a customs union is economically beneficial. But it is difficult to measure the impact on trade and welfare of the development of regionally integrated areas since the Vinerian framework is not well suited to quantifying the effects of removing the new emerging forms of trade discrimination such as the practice of establishing voluntary export restraint agreements. Also, changes in the pattern of trade are not reliable predictors of the welfare consequences of free trade (Srinivasan 1993). As to whether or not a customs union is net trade creating or net trade diverting, certain points must be borne in mind relating to things like the stucture of production and costs of production in members countries and the effect of the union on the height of tariffs. Cooper and Massel (1965) investigated the relative size of trade creation and trade diversion effects in trade on a global scale and found that, in certain conditions, a policy of unilateral tariff reduction would be better, in world welfare terms, than the formation of a customs union. Subsequently the real rationale for the creation of a customs union may well be protectionism. Johnson (1965) also contributed to this 'conspiratorial' view by concluding that trade diversion may be more preferable to trade creation since a more likely outcome would be the continued existence of domestic production.

Longer run customs union theories consider the way that economic integration produces a dynamic force for growth of the collective GNP of the nations within the union (El-Agraa,1994; Molle,1990; Baldwin,1994; Porter,1990; Pelkmans,1984; Balassa,1961; Lintner and Mazey,1991). El Agraa highlights scale economies (internal and external), polarisation boosts (as a consequence of the localised impact of export led growth), increased investment levels, enhanced competition and reduced trade uncertainty as significant sources of gain. Methodological difficulties exist in the definition and quantification of these gains but long-run effects, such as the development of larger companies on faster learning curves and with better growth rates, are said to be significant and greater than the short-run effects noted above. This was demonstrated by Pelkmans

(1984) when he showed that increased competition improved technical efficiency to such an extent that the long-run benefits greatly outweighed the short-run ones.

In looking at the impact of economic integration, Baldwin (1994) presented the economic effects of trade arrangements in terms of (static) allocation effects and (dynamic) location and accumulation effects. He adopts a conventional approach in demonstrating the 'allocation' of trade creation versus trade diversion benefits but, in using the term 'location effects', he is referring to the impact of integration on a region's economic geography. Agglomeration of activity on a large scale, according to Baldwin, is likely to take place in a manner in which will lead to a system of 'circular causality' - a mutually amplifying interaction as firms locate near to large markets and the consequential increase in market size serves to attract further economic agents. Accumulation effects are the engine of growth as an induced physical capital formation over the medium term, and a permanent change in the rate of economic growth in the long term, are seen to take effect. Integration is seen as the boost to investment which sparks off an accumulation of factors of production which, in turn, leads to productivity improvements.

Enhanced levels of productivity can be seen as being vital for economic development in an environment where firms more and more compete on the basis of labour costs per unit of output (The Economist,1996a). Porter (1990), for example, sees an improvement in national productivity as the key building block in securing a more economically prosperous future. According to Porter, technical change in its broad sense accounts for much of economic growth, and a greater interest in the determinants of productivity will help to create an environment where firms are able to improve and innovate faster than their foreign rivals in any particular industrial sector. The work of Michael Porter is referred to later when some of the factors at work in shaping the business environment are discussed.

Dynamic gains from trade are not necessarily evenly spread out so one should also bear in mind the presence of problems emerging, for instance, in the distribution of gains, a debilitating domestic impact on those home producers which are relatively less competitive (Jones, 1980) and terms of trade effects which may be more significant than the theoretical assumptions of neo-classical theory allow (Jacquemin and Sapir,1989). The counter-balance of these factors to the sources of gain noted by El-Agraa and others may also be substantial and, in fact, nullify the gains to be had as postulated by dynamic customs union theory.

Nevertheless, on balance, it is perhaps possible to conclude that the most likely outcome of economic integration measures will be enhanced economic development. Notwithstanding the cautionary points made, amongst others, by Srinivasan, Cooper and Massel and Jones the continuing development of trade arrangements, which move toward a state of free trade, appear to be the most efficient way of maximising world welfare.

b) The EU and economic integration

The justifications for international economic integration put forward in the previous section are rather theoretically stale without a consideration of the practicalities involved in a major integration initiative. The initiative of interest in this thesis is the gradual implementation of the SEM programme of the EU. The progession of EU trade liberalisation via the SEM, in this way, is a system of 'managed liberalisation' (Winters 1993; Borchardt,1995). Integration can be negative or positive in approach - in that negative integration is the term used to describe the removal of impediments to trade or the elimination of any obstacles to the process of trade liberalisation; whilst positive integration represents the modification of existing instruments and institutions and/or the creation of new ones to promote free trade. The EU's current position vis-a-vis these concepts is one of less than complete negative integration plus some positive integration. A further point is that different forms of economic integration are not necessarily stages in an 'integration' process since the EU is both a customs union and a common market, and is on the way to becoming a complete economic union if or when the Maastricht provisions (and beyond) are implemented (Dinan,1994; George,1994; Pinder,1994). One should also consider that the Common Agricultural Policy and the European Coal and Steel Community are examples of sectoral integration within the EU.

There is an economic rationale for further economic integration in that with the establishment of a common market the integration of factor markets becomes necessary in order to allow the proper integration of goods markets. Resources must be allowed to be free to be used to produce other goods as the development of new sectors is enhanced or the presence of old ones is extended (Molle,1990; Lindert,1986). In turn, a common market will not function properly without some form of harmonisation of allocation policy such as a common market-wide competition policy. Since the presence of a common market implies the increasing interdependence of economies and the consequent reduction in scope for the use of independent macroeconomic stabilisation policies, it may be the

case that some form of economic and monetary union becomes desirable (Thygesen,1990). According to Wistricht (1991) Europe is becoming more and more economically interdependent anyway:
'unfettered national soveriegnty is obsolete and economic and political independence is giving way to growing interdependence betwen nation states' (Wistrich, 1991, p.1)
However, it may be argued that the political posturing and largely negative public debate about the possibility of the introduction of the European single currency seem to weigh against the likelihood that a system of economic and monetary union will be introduced within the EU at the appointed time.

It was seen earlier in this chapter that the theory of economic integration in the literature rests upon two fundamental concepts; trade creation and trade diversion. These are terms coined in order to refer to welfare gains or welfare losses which arise as a result of output price differentials developing as a direct consequence of some form of economic integration. Using the customs union branch of the theory of integration, El-Agraa (1985 and 1994) concluded that, within the EU, a strong general case for integration did exist at a national level especially where potential economies of scale were evident that were currently external to national industries. It appears that integrated action does offer some scope for potential gain even when market imperfections exist which may or may not extend beyond national boundaries. Whilst it may be true that gains emerging from a second best solution may be more easily achieved via appropriate unilateral national action rather than the pursuit of some form of international integration, El-Agraa stated that, in the EU context of (prior to 1992) fragmented national markets, a strong general case for integration did exist :
'In [customs] unions where economies of scale may be in part external to national industries, the rationale for unions rests essentially on the recognition of the externalities and market imperfections which extend beyond the boundaries of national states. In such circumstances, unilateral national action will not be optimal while integrated action offers the scope for potential gain.'(El Agraa, 1994, pp 105)

It is necessary now to examine the extent to which economic integration had occured in the EU prior to 1992 and what the broad consequence of this has been. Prior to the introduction of the Single Market there was a relatively low degree of price convergence in the EU over the years of its existence (Emerson

1988). Emerson looked at variations in prices for commodities and services in 9 EU countries over an 11 year period from the mid-1970's to the mid-1980's and found that, although price levels were still widely dispersed, they were slowly converging. Relative inflation rates have moved in a broadly similar direction in the EU and, leading up to the abrupt departure of sterling from the ERM of the European Monetary Union in September 1992, there was a much reduced frequency of realignments of the actual exchange rate mechanism when compared to its early years of operation (Bank of England, 1994). Movements in monetary aggregates for countries within the ERM (Eichengreen 1990) seemed to imply greater convergence amongst member nations and this trend was enhanced recently as member nations sought to achieve the common qualification or 'convergence' criteria which were agreed at Maastricht in the run up to the possible introduction of a single currency. Peschel's comprehensive analysis of trade flows between countries, using OECD data (1985 and 1990), demonstrated impressively stable trading patterns within the nations of the EU over the medium/long term. This principally appeared to reflect distance factors and political factors. In an earlier study, Peschel (1981) had concluded that the factor of distance was less important as an impediment to trade than political and other barriers to trade. In fact her 1985 study did show the UK to be integrated only at a relatively low level over the period 1900 - 1975 when compared to other member nations; with obvious implications for the impact of the SEM on the UK economy since the level of integration may well be reflected in the balance of gains and losses to be had as a result of the SEM programme.

Convergence at the regional level within the EU has not really occured. Molle's indices of disparity of regional GDP per capita, over the period 1950 - 1985, show that regional disparity has declined by similar relative amounts, but this actually implies a widening of the absolute difference between regions since, over the same time period, average incomes have risen. Using the 'Economic Potential' approach, Keeble (1982 and 1988) also concluded that integration within the EU had resulted in a widening of disparities as measured by regional GDP. There still exists, therefore, a wide disparity across the EU of economic prosperity as measured by a range of indicators. As Vickerman (1992) concluded: 'It has become clear that although there are clear signs of convergence in many indicators..... there is still a long way to go before it can be argued that there is, in any real sense, economic cohesion within the community' (Vickerman, 1992, p.79)

Trade theory is traditionally based on a comparative advantage, inter-industry trade criteria, but trade within the EU is also very much on an intra-industry footing. This cross-hauling (trade between two countries which both produce and trade the same type of good) is primarily associated with imperfectly competitive product markets (where consumers have diverse preferences and the production function is subject to increasing returns to scale and/or the markets can be segmented) and with movement of goods within companies (Greenaway and Milner 1987). This was measured by Neven (1989) in the EU context and he found that intra-industry trade was a particular feature of trade between the more advanced northern countries of the Community and especially of the UK. The Single Market, and the associated move towards greater integration may, however, change this pattern of trade as firms search for gains from inter-industry specialisation (Greenaway and Hine 1991).

With regard to the process of integration, the commitment to deeper European integration, as seen by the SEM, may well be the result of the influence brought to bear by a range of economic agents but especially by internationalist pressure groups; in particular the 'constituency' of multinational companies. George (1992) called this a neo-functionalist explanation of EU integration in that multinational companies were keen to use the introduction of the SEM as an opportunity to facilitate a more efficient deployment of factors of production. George refers to the concepts of functional spillover and political spillover. Functional spillover follows a certain technical logic where integration in one economic sector leads to pressures for integration in other sectors. Political spillover occurs, for instance, when regions and local authorities in the UK apply pressure for further integration not just on UK central authorities but also directly on the EU itself. The central prediction of neo-functionalism, that onward economic integration becomes inevitable is, perhaps, questionable in the light of the ground-swell of political opinion set against the potential loss of member nation sovereignty to some higher European authority, but there is some logic to this explanation of the commitment to integration.

The SEM programme has had a rather troubled 'birth' and, in many cases, progress towards a fully open market has been painfully slow. The Economist (1996b), for instance, reports on the continuing disruption caused by member governments reacting to the instinct of national self-interest and delaying the translation of single market regulation into national law. It is, however, beyond doubt that the existence of the SEM, with significant macroeconomic and

microeconomic consequences, represents an absolutely fundamental change to the dynamic international trading environment in Europe. The logical interpretation of the economic reasoning behind the introduction of the SEM suggests that it is the need to improve the performance of companies previously operating in fragmented European markets which has been the driving force.

2.3 Structural change and the changing business environment.

The economic prosperity of a given spatial entity is highly dependent on the performance of its constituent parts and, with this in mind, it is vital to consider the reaction of manufacturing companies to the implementation of the SEM legislation. The changing of a largely fragmented market in Europe to one where capital and goods are increasingly mobile is a profound one, and it is essential to understand how all economic agents, and especially producers, are likely to respond.

The purpose of this section of the chapter is to identify the forces which are said to be causing change in the business environment. Firstly, theoretical explanations are put forward. These seek to emphasise the structural impact of developing technology in an increasingly globalised trading system where companies are seeking to respond to their perceived local needs whilst, at the same time, retaining a world-wide corporate identity or structure of organisation. The impact of the SEM on UK manufacturing industry is the main focus of interest in this thesis and it is necessary to identify some of the key structural changes occuring within the UK economy. This economy is seen to be in the process of change as a result of a number of cyclical and other fundamental pressures. The likely corporate response to the implementation of the SEM is then described. Much emphasis is placed on the role of the entrepreneur in taking advantage of the trading opportunities which emerge, and developing a strategy which allows firms to compete in the climate of enhanced competition. Central to these estimates of likely preparation behaviour is a view that much internal and external restructuring will take place as firms seek to raise efficiency levels and rationalise output. The relevance of this discussion will emerge in later chapters when empirical evidence is presented to show the kinds of preparation activity actually taking place.

a) Theoretical explanations

Theoretical explanations of the causes and consequences of changes taking place in modern corporate activity can be categorised into three broad theoretical groupings: Longwave theories, World system theories and Regulationist theories.

Longwave theories emphasise the cyclical fluctuation of economies over long time periods (Allen and Massey, 1988). Change is said to be part of a regular sequence of these long waves. The empirically observed bunching of innovation and technical change and the relationship between innovation and entrepreneurial activity is significant (Hall, 1988). Booms and slumps occur because innovations (in products and processes) tend to be compressed into fairly short time periods.Waves of innovation are generated by industrial enterprises and, according to Kondratiev (Benko and Dunford, 1991), tend to be bunched together every 55 years.The UK is said to be at the limit of its development with technology emboddied in the fourth 'Kondratiev' and in a state of flux whilst the economy waits to embark upon the fifth Kondratiev wave of economic development based upon the information technology industries (Goddard, 1992).It appears that the role of new technology (especially I.T.) in the next wave of development is going to be absolutely vital.

A neo-schumpeterian interpretation of this is that the so-called 'computer revolution' is the latest in a series of creative waves of destruction (Benko and Dunford 1991). This interpretation emphasises the crucial role of information technology as innovations in electronic hardware and software become inter-related with other innovations in order to develop inter-product and inter-process linkages which may well have implications for the spatial organisation of the productive system. Currently developing clusters of inter-related technologies have led to a strong emphasis on communication and convergent information technology together with the entrepreneurial activity associated with the emerging systems of information processing and exchange have generated a wave of economic development which has been called the 'carrier wave' (Hall and Preston, 1988). One implication of the carrier wave is that the speed of economic change is increasing and therefore the economic slowdown associated with the end of the fourth 'Kondratiev' may be shortlived before the onset of rapid economic growth in the early twenty-first century (Bennett and McCoshan, 1993).

World system theories emphasise the international characteristics of the capitalist economy. In a single world wide capitalist system structural changes in any one nation are inter-related within the single world economy. The internal structure of each nation is only of secondary importance since one country is only a small part of the complete picture (Allen and Massey 1988).The greater integration of the world economy has encouraged the internationalisation of capital as part of a strategy designed to achieve medium and long term objectives.The growth of multinationals has taken place in order to tap reserves of relatively low-wage labour, to divide and sub-divide production processes (with each operation carried out with minimal skills), to take advantage of better transport and communications technology and generally to allow the planning of production on a world-wide footing. Some implications of this are the emergence of differentiated spatial structures of production and a consequent spatial division of labour (Massey1988). Within Europe, merger, acquisition and rationalisation activity across international boundaries represents an attempt to increase the scale of production whilst at the same time eliminating competing products and reducing surplus capacity (Amin et al, 1992). Industry is becoming less and less tied to any particular national or local business culture and, whilst economies have been 'international' in outlook for a number of years, it is a widely accepted notion that a global economy is emerging in the latter decades of the 20th century. Amin and Thrift (1994), for example, list a number of key aspects as drivers of this globalisation process. Some of these are listed below:

- global availability of investment finance
- the increasing importance of knowledge as a factor of production (which becomes applicable beyond the original context of its formation)
- transnationalisation of technology
- rise of global oligopolies (seeking to capitalise on the presence of easier communication networks and new methods of production)
- increasing familiarisation of global culture and territories
- the rise of new 'borderless' geographies (where the global economy can be seen as a whole space in which trade flows take place)

Regulationist theories seek to explain how capital is 'regulated' in terms of the controls placed on production and the growth of advanced capitalist economies via aspects such as the system of management, the labour process and the system of wage payments. The regulationist school contends that distinct changes in the nature of capitalist production are emerging, and that these changes are the result of an on-going restructuring of both the regime of capital accumulation and the

mode of capital regulation. Church and Reid (1995) see the new regime of accumulation as a re-intensified form of production and consumption based upon new technology, markets and business organisation. They see the mode of regulation as the wide range of political, social and legal structures which are required to maintain the new forms of accumulation. The literature has provided us with terms such as Fordism,Taylorism,Bloody Taylorism and Peripheral Fordism (Scott and Storper, 1986) and now the advent of information technology is said to be leading to a shift away from those fordist type mass production systems to relatively new information based production systems (Freeman, 1991). 'Fordism' is a term used to refer to a regime of capital accumulation which seeks to achieve a system of continuous mass production, whereas 'Taylorism' (after Taylor, 1947) is a precondition for fordism in that it refers to the scientific organisation of labour in order to achieve efficiency gains. 'Bloody Taylorism' refers to a system where labour, as a factor of production, is strongly exploited through the organisation of work practice which identifies labour specialisations and results in wide variations in wage rates and the duration and intensity of working hours. 'Peripheral Fordism' also refers to the practice of utilising labour specialisations but, this time, in order to identify 'core' activities within an organisation (highly skilled and situated in or near to head office) and peripheral activities (distribution or assembly, for example) requiring perhaps less of a skilled input and located in a different region where relatively low wages may be paid as the 'going rate'.

The increasing use of computer controlled intelligent machinery has enhanced flexible production ability (Hall and Preston, 1988) and this has had an impact on both product development and its organisation (Bennett and McCoshan, 1993). A new 'post-fordist' technological paradigm has emerged with the subsequent development of flexible specialisation. This represents a new technical trajectory in that the path of development is centred upon the principles of integration and flexibility and, as such, is more socially determined as, for instance, people take advantage of the existence of the information 'super-highway' (Roobeek, 1990; Coriat,1991). Flexible specialisation and its impact on the advent of production systems like the hollow corporation, network organisations and flat organisations (Kublinski, 1990) which, broadly speaking, seek to allow multinational enterprises to place more importance at the local level, is indicative of the use of technology as an attack on cost and other advantages of large scale production. More importance is placed at the local level in the network organisation, for instance, since this represents a system in which business can cooperate in a

flexible way. This flexibility is allowed because of the externalisation of functions and because of the technical opportunities afforded by the use of computer aided design and manufacturing systems. In a 'flat' method of organisation, corporations can simply not function efficiently without a well developed local enterprise culture which has the effect of ensuring that the business remains locally responsive. Flexible specialisation is a 'neo-fordist' regime of capital accumulation and socio-institutional infrastructure development and as such demands much more economic social and institutional flexibilty. It requires rapid reduction and elimination of uncompetitive industries, jobs and skills and a continual redirection of economic and human resources (Barnes and Hayter, 1992)with the associated power shift from labour to capital implying a prioritisation of economic efficiency above social equity (Martin, 1988).

An alternative view is that the observed new recruitment strategies and employment contracts etc are new strategies designed to preserve old modes of accumulation (Hudson, 1988 and 1989). Benko and Dunford (1991) cast doubt over the use of the word 'flexible' in that many different meanings can be attached to the word and it could be unclear which aspects of the regime of accumulation are actually flexible. Because of this ambiguity, the use of the term does not, on its own, imply the dissolution of mass production. Fielding and Halford (1990), in looking at economic change in an urban context, saw some substance to the notion of flexible specialisation but they concluded that fordist forms of mass-production have not been replaced by work practices of the flexible firm and they thought that they were not likely to happen in the near future.

The growth of the world market and the increasing scale of industry, banking and commercial enterprises has resulted in national markets becoming less regulated by nationally based corporations and the result is said to be 'disorganised' capitalism (Lash and Urry, 1987).The changes taking place have also been interpreted as a shift from organised capital to a new order of unregulated or 'disorganised' capitalism by Cooke (1988).The essence of this explanation is that it is far from certain that a new regime can be established (due, for instance, to the openness of the world trading environment,the global scope of multinationals and the reduction in state intervention) and, as such, is a disequilibrium approach since the dynamic and unpredictable nature of economic development constantly introduces shock waves to the system.

Allen and Massey (1988) used evidence derived from the UK to support their assertions that the relative decline of mass production and standardised markets, together with increasing flexiblity within the economy, is causing a fundamental restructuring to take place in the UK economy. Goddard (1992) suggested that this is the reassertion of the dominance of the global corporation, in the form of a 'global\local corporate nexus', as they develop flatter hierarchies and decentralised management structures in an attempt, firstly, to localise many of their activities in response to the increasingly global nature of competition and, secondly, to facilitate the adoption of rapidly emerging technologies.The 'global factory' (Kublinski,1990) has emerged for a number of reasons; but two in particular are the expansion of markets due to the globalisation of world markets and large firms entering into new markets and globalising their activities (Freeman et al, 1991). The local/global dynamic of urban economic restructuring has probably been hastened by the development of telematics networks (Dabinett and Graham, 1994). These networks seem to be increasingly underpinning the organisational restructuring of firms and institutions in both a centralising (for instance, of higher order functions) and decentralising (routinised, lower skill functions) manner. This is obviously highly significant in facilitating the development of multi-site production.

The theoretical interpretations outlined above represent attempts to explain the observed trends occurring in the business environment. Long-wave, world system and regulationist theories all serve to add credibility to the view that, as a result of the increasing and more widespread use of information technology, individual firms are being empowered to operate in larger and, perhaps, global markets; whilst retaining the ability to respond in a flexible manner to the particular requirements of customers wherever they may be located. Considerations of this sort are directly relevant to this thesis because the SEM is an economic integration initiative, within the membership of the European Union, which will both influence, and be influenced by, these trends.

b) The business environment in the UK

However, there is not an empirically based consensus as to the relevance of these theoretical explanations of observed changes either in terms of general applicability or in the more specific UK case. The relative instability of the domestic and international economic cycle over the period of the past 17 years or so, and especially the impact of the UK economic recession in the early 1990's, has, of course, taken its toll on the economy and, inevitably, added to pressure

for corporate change. This pressure has manifested itself, for instance, in companies seeking to 'downsize' in an attempt to maintain efficiency levels. More fundamental than these recessionary factors, though, are other pressures, at a macro and micro level, which have grown over the last decade in the UK economy and elsewhere and which, when taken together, imply a massive change in the process of economic development.

Martin and Townroe (1992) note the presence of a number of 'fundamental' processes having a 'profound' effect on economic development. The UK economy, over the 1980's and early 90's has seen the large scale restructuring of the manufacturing base together with the continuing growth in importance of the tertiary sector. There have been massive job losses in primary and secondary sector industries at the national level (table 2.01). There has also been an 18% rise in the number of tertiary sector jobs and this sector now, as a whole, represents 73% of all jobs in the UK.

Table 2.01 Number employed in UK by sector.

Sector	1979 (000,s)	1979 %	1993 (000,s)	1993 %	% Change
Primary	692	3	403	1.5	-42
Secondary	8911	38.5	5428	25.2	-39
Tertiary	13556	58.5	15737	73	+18
Total	23158	100	21554	100	-7

Source : CSO, National Income and Expenditures 1994.

The activity of the United Kingdom government with regard to, for instance, financial deregulation and the continuing privatisation of significant chunks of the productive fabric of the country is indicative of a change in the philosophy and policy of state intervention. This has had a profound impact on the supply side of the economy at primary, secondary and tertiary level. There is also the growing internationalisation of the private sector to consider in some services as well as in manufacturing as firms are increasingly operating in global markets (particularly in terms of European economic integration). Note in table 2.02 how exports and imports, in every case, have become equivalent to a greater proportion of GDP for these selected countries and groupings of countries over time.

Table 2.02 EU 12, UK, Japan, USA: Imports and Exports of goods and services as a % GDP, selected countries.

	1972	1991
UK	43.6	49.5
EU 12	42.5	57.3
USA	11.9	22
Japan	18.9	27.8

Source : European Economy. 46, 1991, Statistical Annexe.

Globalisation strategies are associated with restructuring and rationalisation in order to maintain efficiency levels and, more specifically, to take advantage of technological developments. These technological developments are, themselves, more and more transnational in character. The surge in technological innovation based on microelectronics and information processing should also be considered, together with the (allegedly) increasing 'flexibilisation' of many aspects of the productive process. Companies must operate more and more in the framework of a changing world order which, at the time of gathering research data in March 1994 had to accommodate to, on the one hand, the emergence of new and powerful exporting nations and, on the other, to the changing political and economic orientation of new and existing nations; particularly in Eastern Europe. In Eastern Europe, markets are opening up which were previously accessible in only a restricted sense. The relatively low costs of labour, land and capital are also attractive to producers seeking to extend or develop their manufacturing base. In addition to the impact of markets opening up in Eastern Europe, the extent of development and the impact of competition from newly industrialising countries in the Far-East has been profound (see, for example, the chapter on the emerging economic power of Korea in Porter, 1990). It is only when these influences are taken into account can an attempt be made to explain the impact on the corporate sector of the Single Market.

Table 2.03 Productivity trends in the business sector in selected OECD countries.

	OECD	USA	Japan	UK
Total factor productivity				
1980-1986	0.6	0.1	1.7	1
1987-1990	1.2	0.8	2.2	1.8
Labour productivity				
1980-1986	1.4	0.7	2.8	1.9
1987-1990	1.9	1.3	3.5	2.2
Capital productivity				
1980-1986	-1.3	-1.0	-2	-0.8
1987-1990	-0.6	-0.1	-2.2	0.9

Note: All figures show percentage change per annum.

Source : Matthews (1989) page 105.

Maynard (1989) and Matthews (1989) suggest that the 1980's and early 1990's was a period believed to herald a new economic dawn as a result of a so called productivity miracle. Table 2.03 shows a marked improvement in UK productivity over the two time periods shown when compared to the USA, Japan and the OECD in general. Rapidly increasing productivity, they allege, has served as a stimulus to profitability and, consequently, to output and employment growth.

Other commentators contend that there has been a much less exciting national economic performance in the United Kingdom. The economy has had, over the same time period, generally weak levels of industrial investment and RTD activity and there has been an emergence of a significant skills gap, pointing to a general lack of investment in skills and training (Godley, 1989). This resulted in both a widespread failure to exploit the advantages of specialisation and a low rate of process and product innovation (George and Joll, 1986). The consequence of this was that, when measuring absolute levels of productivity, the UK still lagged behind our major industrial partners. The Guardian newspaper's 'Agenda for Economic Recovery', published in 1993 (The Guardian Supplement, 1993), noted a relative decline in manufacturing competitiveness as a significant part of an underlying economic malaise. Struturally flawed policies, a sectorally and strategically imbalanced economy, the economic problems highlighted by the presence of deficits in both external and government accounts, and the problems

emerging as a result of the need to reduce these deficits to more managable proportions, have all taken their toll.

In plotting the movement of the economy over recent years Smith (1992) points to a general mis-management of the UK economy over the medium-term in that not enough attention was given to the danger signals, fiscal reforms were ill-conceived and ill-timed and a general lethargy in decision making pervaded. The tax cutting priorities in the 1988 budget, for instance, were, according to Smith:
'widely regarded as the most ill-timed tax change in the post-war period' (Smith, 1992, page 126)
Smith contends that, at the microeconomic level, there has been a serious lack of political consensus with regard to industrial policy matters and the potential for uncertainty this has caused has been disastrous. He also contends that the governments economic philosophy has changed over time and this process contributed to the missing of the growth of credit as a warning that inflation may get out of hand in the late 1980s:
'the root cause of the mistakes of the late 1980s was that, in abandoning monetarism, the Government also adopted a cavalier attitude to the growth of credit....There was no good reason for ignoring the rapid growth of credit, along with other danger signs. The baby was well and truly thrown out with the bath-water' (Smith,1992, page 229).

The UK economy has experienced and continues to face a significant period of turbulence in economic matters. This has brought with it great pressures on producers to adjust in order to accommodate to these changes and remain competitive in markets that are increasingly more challenging in which to operate.

c) The Corporate response to the implementation of the SEM.

The question as to how firms should be expected to respond to the implementation of the SEM legislation is central to this thesis. The single over-riding impact of the SEM programme will be to raise the degree of competition felt in the markets in which UK producers are operating and this will exert great pressure on them to take steps to develop or to enhance their competitive position (Millington and Bayliss,1995; Collins and Schmenner,1995; Birkinshaw et al,1995; Diller and Bukhari,1994; Egan and McKiernan,1994; Porter,1990). A knowledge of this response in all its potential forms is something which is currently lacking in the academic literature.

The literature on corporate behaviour is dominated by a competitive orthodoxy which has developed from the classical and neo-classical tradition first developed by, amongst others, Smith and then Marshall and Walras. Traditional industrial economics developed within the structure-conduct-performance paradigm (Hay and Morris 1987) but in the 1970's and 1980's there emerged a new approach to industrial economics centred upon empirically driven theoretical developments, which sought to emphasise the importance of competition (Baumol 1982, Shubik 1982 and Auerbach 1988). Set against this background, the trend towards increasing corporate competitiveness is seen as a long term and fundamental tendency intrinsically linked with the expansion of markets and technological diffusion (Auerbach 1989). This approach is less rooted in neo-classical theory, which traditionally seeks to focus on equilibrium solutions, comparative statics and the optimising role of the entrepreneur, but instead draws from the neo-Austrian and Schumpterian branches of the new industrial economics which have developed in the literature. The approach adopted in this literature is to place much more emphasis on the impact of change in the competitive environment and the pivotal role of the entrepreneur in taking advantage of any trading opportunity which may occur (Davies, Lyons, Dixon, Geroski 1988). The Single Market legislative programme may be expected to cause producers to respond to the challenge faced in operating in more open markets by becoming involved in a range of activities designed to result in a more efficient production and delivery of goods and services to the customer. According to the new industrial economics literature, the determination and creativity of the entrepreneur is clearly going to be influential in determining how each firm will take advantage (or otherwise) of the trading opportunities which may arise:

'the 1992 Single Market is largely shaped by corporate strategies. These exploit the opportunities offered by the dynamics of Schumpterian competition, and tend to create sustainable competitive advantage' (Jacquemin and Wright, 1993a, page 529).

Many aspects of corporate activity are likely to be influenced, such as the orientation towards particular market segments, the balance between ownership and control, existing costs/profitability, the technology and skills base and, very importantly, the balance of advantage to be eliminated or enhanced by '1992' (PACEC 1989). The impact on producers is likely to vary over time. In the short run it is estimated that profits will be squeezed,especially when they have been a result of monopoly or protected market position. In the long run, firms are likely to compete, broadly, by scaling up production, eliminating management

inefficiency, learning how to produce most efficiently and improving their capacity to innovate (Cecchini 1989 and PACEC 1989). Successful corporate strategies, according to Emerson (1988), will centre upon improvements to productivity, external/internal restructuring, flexible strategic investment and increased cooperation; although Kay (1991) estimated that the impact of '1992' is likely to diminish the degree of collaborative activity between community firms. Johnson (1988), on the other hand, emphasised the potential importance of cooperation and collaboration in his investigation of the structure of British industry when he noted that the typical competitive response to a (previously) fragmented European industry would be merger and other attempts to spread costs. De Jong (1988) found that the general trend towards cooperative agreements and mergers and acquisitions in the EU in the 1980's reflected heightened pressures of competitive intensity. Similarly, Jacquemin (1993) has found that the EU growth in cooperative agreements is strongly related to the introduction of the SEM, especially in industries characterised by important research activities, such as chemicals and electronics. He also found mergers/acquisitions to be important means of restructuring, especially in high volume industries (where economies of scale and capacity utilisation rates are seen to be important) and where previously fragmented markets have bred inefficiency, such as those supplying the public sector.

The Financial Times (1995) recently reported on a study conducted by the European Foundation for Entrepreneurial Research on 500 of Europe's fastest growing companies. This research suggests that firms primarily compete by differentiating their product and by ensuring that the quality of the product remains as high as possible. They also found that the ability to compete in terms of price, though important, was subordinate to these aims. Prior to this, Burke, Genn-Bash and Haines (1988) suggested that a successful competitive strategy would have four major strands:

- product development and differentiation
- the maintenance and enhancement of specific company competences
- development of a strong distribution system presence
- effective rivalrous behaviour.

There is clearly a bias towards marketing in these points and this is not surprising, in the light of the original research evidence presented in chapters five and six of the thesis, which suggests that a major group of actions in relation to preparation for the SEM is based upon marketing.

In a competitive market firms have a choice of strategies and which one is selected depends upon factors like the evolutionary state of the market and the number and relative sizes of other rivals. Corporate competitiveness is maintained by the search for competitive advantage through lower costs and differentiation which, in turn, is improved by innovation. This allows factor inputs and outputs to be constantly upgraded. Competition is enhanced when 'national diamond' conditions support and stimulate investment and innovation (Porter 1990). In examining what he called the determinants of national advantage, Porter argued that, in order for firms to innovate and improve faster and in a proper direction when compared to rivals, they should operate within a national trading system which has four (and, therefore, four angles in a 'diamond' shape) key aspects; namely, that firms should have good factors of production, healthy demand conditions, a sound structure and relevant strategy and, finally, be well served by related and supporting industries. There are important national differences in the constaints existing on the effective management of firms, but when these four key aspects are in existence, and interact and reinforce each other, then Porter believed that a powerful business environment is created which becomes difficult to replicate by other nations.

Foriegn direct investment (fdi) would be an obvious source of renewal and there is evidence to suggest that fdi into the EU has increased as a result of the Single Market. Balasubramanyan and Greenaway (1992) and Jacquemin and Wright (1993b) found that Japanese sourced fdi into Europe has increased as a response to the Single Market programme as non-EU firms attempt to get into the EU 'system'. Industrial re-organisation within the EU is one of the key dimensions of the '1992' programme and Shigehora (1991) considered this in the context of trading relations of the USA and Japan with the EU. This external dimension was regarded as being significant by Shigehora because of the impact of the potentially trade diversionary effects of the SEM on industrial reorganisation within the EU and the degree of protection in place for EU producers. He worried that this would result in the distortion of international flows of investment and a consequent world-wide misallocation of resources.

Although undoubtedly important, the corporate response to the Single Market programme is likely to be very complex indeed :

'...the way large organisations assess the changing economic, business and political environment around them, and formulate and implement strategic and operational change is an important input in the equation leading to the

maintenance and improvement of competitive performance. Furthermore these managerial processes of strategic asessment, choice and change are not just questions of the economic calculation of strategic opportunity....The process of perceiving and then assessing environmental change and its implications for new strategies, structures, technologies and cultures in the firm is an immensely complex human and organisational process in which differential perception, quests for efficiency and power, visionary leadership skills, the vagaries of chance, and subtle processes of additively building up a momentum of support for change and then vigorously implementing change, all play their part.' (Pettigrew,Whipp and Rosenfeld, 1989, p.111).

Despite this complexity, firms have been shown to be either aggressive or defensive, and either proactive or reactive in nature. Successful strategies will involve, it seems, a combination of attempts to improve some aspect of their corporate activity via processes related, for instance, to investment, collaboration and innovation. The empirical findings detailed in later chapters reveal the corporate activity carried out by a sample of manufacturing firms in South Yorkshire. The data on activity suggests that firms have considered their conduct in terms of product, process and organisation and embarked upon strategies related to marketing, product design and development, human capital investment, organisational restructuring and collaboration to improve the distribution network.

In this section the theoretical and practical explanations of causes of change in the business environment have been put forward and there appears to be much pressure on firms to adjust to changes in the world trading system and remain competitive. It should be borne in mind, though, that the SEM, although important, is just one source of competitive pressure. The measures embodied in the SEM are a significant globalising economic force, and any specific company action taken in response to this process of integration must be seen in the context of the theoretical hypothesising and the practical reality of trading in, what are becoming, increasingly world-wide markets.

2.4 Regional economic development.

The uneven spatial distribution of economic activity within the EU makes it reasonable to assume that convergence will continue to take place at the national level within the EU but that regional disparity will become more and more a cause for concern. It may be considered that any realistic notion of regional

economic development must be based on the recognition that the public sector has a vital role to play in the encouragement of the private sector in the wealth creating process. The fostering of economic development has, therefore, usually been a key objective of the public sector regardless of the level of government. A second key objective has been the need to develop economically balanced territorial communities, and it is interesting to see how the balance of emphasis has changed over time with respect to these two important objectives (Friedman and Weaver, 1979). External trade links with other regions have been important also, and this is increasingly the case as trade becomes more and more internationalised in nature. The ease with which external trade can be carried out, and the management of the development of external trade links have been key considerations in regional growth. The trade liberalising SEM initiative is, therefore, of great significance to the nature and direction of regional and sub-regional development (Begg,1995; Gonzalez and Montalvo,1992; Armstrong,1994; Bachtler and Michie,1995). The purpose of this section is, firstly, to survey the emergence of regional planning theory since this is the framework which guides the philosophy of intervention. Secondly it is to consider how regional economic policies have been shaped by the prevalent regional planning philosophy at any particular time. This approach is necessary in order to establish a framework within which the public sector can satisfactorily engage with the private sector in providing some form of assistance to deal with the impact of the SEM.

a) Regional Planning

The aim of this section is to highlight the change in regional planning doctrine in the sequence - *territorial to functional to territorial* as and because regional economic development models have evolved. The territorial emphasis in the minds of the early regional planners in the 20's, 30's and 40's led to a prominent, some would say dominant, concern with the provision of a largely self-contained economic environment.Territorially organised communities served a common social, economic and political cause where it was hoped that the population would lead stable and fulfilled lives. Planners would ensure the maintenance of a correct urban\rural balance, and a concern with the cultural and material aspects of everyday life would encourage a socially and economically prosperous existence. It was the age of territorial spatial planning (Friedman and Weaver 1979) where regional planning was inextricably linked with socially conscious development. This approach sought to encourage economic development with the needs of all sections of the community properly taken into account. More

specifically it was to manage and control the rapid growth of capitalism, which was taking place at the time, such as the need to limit the impact of rapid urbanisation (Weaver 1984).The emphasis was not on achieving economic growth per se, nor was it on encouraging urbanisation; but this was to change as the doctrine shifted towards a more functional approach which took as its central objective the need to foster economic development almost regardless of the territorial implications.

Originally in the USA and,eventually, in the UK and the rest of Western Europe, regional planning thinking in the 50's, 60's and 70's was much more functional in approach.There was much location theory work linked to the theory of economic growth and this was instrumental in the emergence of regional science and spatial systems planning. The functional approach dominated the post-World War Two period. This, in America, initially provided the spatial framework for tackling regional economic problems of unequal development. The aim was to promote industrialisation in specific localities and guide the process of economic growth in lagging areas. In the UK this doctrine provided the opportunity to tackle backward industrial regions in an otherwise advanced industrial economy. National economic management and the need for rapid and effective decision making placed the emphasis on industrial location and factor mobility - a functionally integrated approach (Stohr and Taylor, 1981; Isard, 1956).There was a 'narrow' exploitation of regional potential but strong emphasis on the development of a spatial structure to foster economic growth. The spatial systems planning aim of optimising the location of economic activity encouraged 'top down' development where territorial regions were covered by a functional network of structural economic relationships (Weaver, 1981).The goal was a functional integration of the space economy; people, resources, activity in an inter-dependent network of urban and rural economies (Weaver, 1984).Typical of the work published at the time was the export base model of North (1955) and the city dominated functional regions of Freidman (1955). Both sought to link location theory to the theory of economic growth and, in doing so, contributed to a switch in regional planning emphasis from regional resource development to one of economic growth in a spatial dimension. There was still interest in the territoriality of regions but this was subordinate to interest in the functional network of economic relations. Regional planners began to conceive of the regional problem in terms of depressed or lagging regions. Major theoretical developments were broadly along growth pole lines where industrialisation in specific localities were expected to guide the process of economic growth in

lagging areas.The emphasis was clearly on the impact of the capitalist process of economic growth on the spatial economy. Myrdal (1957) talked about the 'spread and backwash' effects of this process, and Hirschmann (1958) explained the process in terms of 'trickle down' and 'polarisation'.The basic concept was that growth centres would have a role in integrating export based activities into local activity and therefore transfer external impulses to regions and locations. The emphasis on the role of inter-regional trade as the key to local economic development was seen to be vitally important. Both Myrdal and Hirschmann expected that the successful development of trading centres would serve to attract further economic activity financed by the value of the on-going 'export' business. These are, in fact, typical dynamic accumulation effects which Baldwin (as mentioned earlier in this chapter) saw as being influential in a system of 'circular causality'; the benefit of which was presented as a justification for economic integration in the EU context.

However, the mid-70's global economic crisis together with a growing dissatisfaction with, and recognition of the limitations of, a functionally integrated approach (Weaver 1981, Freidman and Weaver 1981, Clark et al 1986) led to a rejection of the doctrine of functional development in the academic writing on regional development. This, at the same time, led to the reassertion of the principle of self-reliance. The functional approach advocated hitherto was increasingly seen as proceeding at the expense of not enough attention being paid to questions such as the utilisation of local natural resources, political implementation of strategies, administrative organisation and rural development. Regional planning in the 80's and early 90's was therefore back on a territorial footing with increasing interest in democratically accepted local self-determination.The joint theme of cooperation and partnership served to emphasise the contribution of local leadership which, according to Judd and Parkinson (1990), was a developmental phenomenon rather than a static one and which needed to be democratically legitimised. The city of Sheffield in recent years has been recognised as an interesting example in this respect in that local leadership has been the driving force behind attempts at local economic regeneration (Lawless, 1990; Townroe, 1995).In recognition of the global nature of economic structural change, strong leadership was seen as necessary by Fainstein (1990) in order to produce the most favourable local outcome.A 'selective closure' strategy was advocated by Stohr and Taylor (1981) which had, as its aim, the minimisation of any activity which may reduce the potential of a region for self-reliant development.This became a dynamic and thus a

disequilibrium approach (rather than a static, equilibrium one) since it was perceived as important to describe the 'local' situation in which economic adjustment was taking place (Clark et al 1986). The preference for applying locally conceived solutions to local problems, and the difficulties encountered in understanding and predicting these, meant that self-reliant development should be pragmatic and promptly responsive in nature.

As part of the concern with the dynamic adjustment process there was increasing interest in the development of structures designed to facilitate technological development and the introduction of new products and processes. Regional amenability towards technical change was seen as the key to development by Cappellin and Nijkamp (1990), for example, via an inter-firm network process. 'Innovation networks' were seen to be important in creating 'synergy' based upon the development of links, dynamism and creative opportunity as a consequence of partnership and cooperation (rather than competition) on a territorial basis (GREMI 1991)[1]. GREMI's concept of an 'innovative milieu' was, in fact, similar to Malecki's (1991) own emphasis on the link between entrepreneurial leadership and technical change as the generator of territorial self-development.Malecki contended that technical development is a cumulative process which takes place along known trajectories and serves to place emphasis on the accrual of 'learning by doing' advantages.

b) Regional economic policies

Regional economic policy makers have adapted policy prescriptions in line with the changes in the regional planning ideologies mentioned above. They have mirrored the regional planning theory framework for intervention which was prevalent at any particular time. Dissatisfaction with traditional regional policy (Armstrong and Taylor, 1986) has led to the search for new alternatives fundamentally based on the perceived benefit of enhancing local skills, developing technology transfer and innovation and improving the spatial distribution of economic activity.The functionally oriented regional development models of the 50's, 60's and 70's reflected the emphasis on spatial planning systems to be found in the regional planning theory literature (Armstrong and Taylor, 1986; Harris, 1989). Some models attempted to capitalise on the demand for a region's exports. The impact of the changing level of demand for these was

Footnote 1: GREMI is an EU research group with an interest in innovation - Groupe de Recherche Europeen sur les Milieux Innovateurs.

seen as important in determining income and employment levels as inter-regional spending power was multiplied or accelerated through the regional economy (Armstrong and Taylor, 1986). Some models adopted a different approach and emphasised, instead of regional exports, the relative difference in regional efficiency levels. These models were supply side in orientation and reflected, broadly, the importance of technology. They sought to promote regional policy prescription in favour of the technical benefits of cumulative causation and growth pole type models (Harris, 1989). But growing dissatisfaction with these models, in terms of an inability to remove regional imbalances when translated to policy instruments, prompted Albrechts (1989), for example, to advocate a territorial network approach which sought a more spontaneous and flexible utilisation of local resources.There has been an increasing trend across the industrialised nations of the world to shift responsibility for regional economic policy down to regional and sub-regional level. In the UK, local agents have begun to play a significant role as participants in networks principally dedicated to enhancing local economic development (for example, as described in Bennett and Krebs 1994).This is said to provide the chance to embrace the opportunities created by modern capitalism in a more dynamic and resourceful manner. Local decision makers are thought to better understand the complex economic, social and political relationships which exist at a regional and sub-regional level and bring a higher level of commitment to the implementation of solutions (Bennett, 1993; Bennett and McCoshan,1993; Regional Policy Commission,1996).

An important theme of recent thinking has been the need to counter the effects of modern capitalist development operating in an increasingly multinational context.The greatly increased mobility of capital, the closer integration of the capitalist world economy and, indeed, the adjustments brought about by the impact of removing barriers to world trade such as the recently concluded Uruguay round of the General Agreement on Tarrifs and Trade, may signal the need for a major overhaul of national regional economic policies. Regional economic health depends upon the establishment of the right mix of economic, social and political actions, with the emphasis on territory rather than physical location. This will allow decision makers to seek to maximise the benefits of modern economic development. The best way for future regional policy to take into account the creativity, reproduction and transformation of capitalism, it is argued, is via a territorial approach (Scott and Storper, 1986). Harris (1989) has suggested that, in the UK context, the development of self-reliant, balanced growth with much attention being paid to the manufacturing sector would be the

obvious way forward.This notion is particularly applicable in the South Yorkshire context. Territories should not be inward looking.The development of self-sustaining territorial economic growth should be fully linked to national economic development in order to ensure the most efficient use of the full range of economic resources (Lo and Salih, 1981; Minns and Tomaney,1995; Gittell and Kaufman,1996).

Finally, in terms of policy prescription, it may be the case that there needs to be a change of political climate so that questions of regional development and inequality are addressed forcefully at the same time - a reformation rather than restoration of traditional regional policy (Damesick and Wood, 1989).Their key demand is for a more decentralised approach to policy implementation with greater scope and support for devolved initiatives.

At the European level there is a well established regional policy and recent reform to this policy has enabled, amongst other things, a greater input into the regional policy decision making process from the less well developed regions themselves (CEC 1990). This is a reflection of the widening acceptance of the territorial based approach. With the commitment to the establishment of the SEM, as set out in the Single European Act (CEC 1986), the EU also undertook to increase economic and social cohesion in the community by promoting membership wide development and reducing the size of regional disparity within the EU. The European Regional Development Fund (ERDF) was stated as the principal instrument to be used in removing regional imbalance. This fund, together with the other structural funds, was consequently reformed in the late 1980's. Reforms were introduced for three reasons. Firstly, to increase the size of the resources being devoted to the problem of lagging regional development. Secondly, to enable the concentration of resources on a smaller number of clearly defined objectives (three of these being regional in character) and, thirdly, to change procedures so that the delivery of regional assistance could be better planned and coordinated.

The change of procedures referred to in the third reason has been achieved by a mechanism which, first of all, attempts to improve strategic planning by requiring the member states to submit regional plans. This represents an attempt to let the regions themselves set out the nature and causes of their own regional economic problems. The plans are to contain an outline of the problem, a suggested strategy and the sources of finance to be used (one of which being the structural funds of

the EU) in dealing with the problem. The second stage of the procedure involves the EU in giving its own response to the needs spelt out in the regional plans by publishing a Community Support Framework (CSF). This sets priorities in each particular region, outlines how these priorities are to be achieved and becomes the reference framework for any future requests for financial assistance. A third element in the procedure is the increasing use of multi-annual programming. This will have the twin benefits of improving coordination (by encouraging a closer partnership between all those involved in regional policy) and making sure that EU funds are given genuinely in addition to regional spending by member states.

These reforms have had the effect of targetting resources more towards the areas of greatest need in the EU and also more towards the modernisation of the goods producing sector. The funds devoted to this, though, are still small in macroeconomic terms (Hall and Van der Wee, 1992). A further consequence of the reforms is that the operation of the ERDF (and, indeed, the other structural funds) is now subject to a more careful appraisal. As part of the new programme approach, a monitoring committee was set up in each of the CSF or Operational Programme areas. Now structural operations are the subject of ex-ante and ex-poste assessment in order to highlight their impact with regard to priority objectives and also to analyse their effect on specific regional problems. Three levels of impact are considered. First, the overall impact of EU operations with regard to the strengthening of economic and social cohesion. Second, the impact of operations under each CSF and, third, the impact of individual operations. The consequence of this is that since each country now conducts a regular evaluation of EU regional policy, issues of selectivity and discretion in the application of regional incentives, and the efficiency and impact of policy instruments, are much more to the forefront (Bachtler and Michie, 1995).

The European Commission must also consider how regional economic policy should respond to the twin challenges of progress to European Monetary Union and the liberalisation of Central and East European economies. The loss of the nominal exchange rate instrument and the strict discipline imposed on national fiscal stances are very important considerations for all member countries, and especially those with a relatively larger proportion of lagging regions. In addition to this, the improvement in trade relations with these 'emerging' nations will increase competition for industry in the EU, with serious implications for regional economic prosperity. Essentially, EU regional policy must address the need to remove regional inequalities since the continuing existence of these serve

to put a brake on the economic development of the EU as a whole and, more specifically, prevents the full benefit of the SEM from being achieved. Gonzalez and Montalvo (1992), for instance, in offering recommendations of future guidelines for EU regional policy in the context of the SEM, advocate stronger regional policy instruments in order to speed up the process of convergence. Roberts (1993), likewise, emphasised the need for a revival of interest in regional and strategic planning in meeting and answering the challenge posed by the SEM. As Armstrong (1994) concludes, EU regional policy for the rest of the 1990's and beyond should be a 'live' policy rather than a 'dead' policy. This should allow depressed areas the chance to compete on a level footing with other regions in an open trading system. Policy should not just be concerned with merely propping up depressed areas.

In conclusion to this section, the accepted wisdom with regard to the best management of regions has come full circle. In terms of planning there has been a re-assertion of the principle of self-reliance with a focus on competitiveness in the new trading environment. The dynamic gains to be had from trade can be regarded as being considerable, and the pursuance of these has become a laudable policy objective. Recent literature has talked about 'local capacity building' (Bennett and McCoshan 1993) where partnerships are formed in order to best tap indigenous potential to tackle problems such as urban economic regeneration. There has been a move toward interactive systems planning between all elements involved in economic, political and social development rather than spatial systems planning. Changes in policy prescription have mirrored changes in doctrine.There has been a general thrust away from the use of static, equilibrium models (based upon a functional doctrine foundation) towards dynamic, disequilibrium models which seek to emphasise the diversity of local energy in seeking a position of long lasting economic growth. Albrechts (1989) called this a territorial network approach. Actual policy changes on the ground, formed as they are in a socio - politico - economic environment, have not always kept pace with the developments in thinking mentioned above but policy makers have started to consider these issues. See, for instance, the Trade and Industry Committee's report for the House of Commons (Trade and Industry Committee, 1995) which seeks to improve the role, cost and effectiveness of UK Regional Policy

The theoretical basis for the engagement of the public sector with the private sector, in an attempt to enhance and protect local economic development, perhaps

ought to be on a territorial footing which seeks to mobilise the resources and (greater) commitment of the local economy. It appears likely that the implementation of the SEM will provide a net boost to the economic development of the EU as a whole, but the impact at the individual regional or sub-regional level may well be disadvantageous. How these disadvantages are faced up to is of the utmost importance.

Public sector intervention in the process of economic development can, of course, take many forms. In the light of the knowledge of the potential for a spatially variable impact of the SEM, it becomes necessary to consider the rationale and practicality of this involvement. Earlier in this chapter some of the arguments in support of public sector involvement on a territorial, self-help basis were put forward. The theoretical justifications set out there are built upon in this next section. The public sector, it is argued, should engage itself with manufacturing industry on the basis of the themes of local capacity building; where technical development is at the forefront, and which is wholly motivated by a spirit of cooperation.

c) Themes of public sector involvement

i) Local capacity building

Capellin and Nijkamp (1990), concerned with the problems of regional economic restructuring and spatial imbalance in the adoption of new technologies, recognised that successful public policies in this respect are likely to be the ones which assist regions to help themselves.They believed that the focus of support should be to mobilise indigenous growth with the full integration of local,urban and regional needs. Bennett and McCoshan (1993) called this 'local capacity building' in that public policy should focus on enterprise, education and training as a process to enable a capable reponse to the economic challenges of the 1990's.They advocated a recovery strategy which is national in character but which was also firmly based upon the foundations of local experience.The success of the strategy would depend upon the recognition that the local environs have a large effect on enterprise. Local economic agents must achieve a 'critical mass' in terms of capacity to respond, and collaboration is important since no agent has enough resources to manage it alone.The system must be nationally common and be locally flexible with a sustained and coherent commitment from central government.There must be local community economic leadership with the development of partnerships to link education and training to economic need and bring agents together into effective local development organisations. Bennett and

McCoshan's premise is that national economic prosperity depends upon the properity of its businesses which, in turn, are heavily influenced by local conditions and attributes. Writing in the context of inner-city regeneration, Lewis (1992) saw the need for action to be taken by local democratically elected decision makers.He suggested the use of regional and sub-regional 'enterprise boards' working within the legitimate framework of active local government. His strategy would be one of local implementation within a national framework of priorities and guidelines to establish control - but with the emphasis on local implementation :

'the public sector must take a leading role in the development or regeneration policy, preferably through a reborn system of territorial politics in the regions' (Lewis, 1992, p.68)

Perhaps the public sector should pay attention to the concept of territoriality/ localism which is informing the debate. It is a global challenge (ie. the crisis created by global economic restructuring) in need of a local response (Stohr 1990). Stohr's hypothesis is that the traditional large scale development paradigm of industry has failed in that the traditional large firm, large scale, central government development type processes have weakened the capability of territorial communities to use their own innovative resources to restructure. There is a role for central government policy in this respect but only in terms of making information available to local users and promoting their capability to act upon this information. The emphasis, according to Stohr, should be on creating the right conditions for innovative capacity to develop at a local level and he listed pre-conditions which must be fulfilled before local development initiatives could take place. To improve the chances of restructuring in old industrial areas, his important pre-conditions are :

- a high local enterprise level
- the existence of intensive intra-regional linkages
- a physical proximity and close cooperation between research, training, planning, marketing and production organisations
- many local exchange networks to promote specific competences
- a local technical culture capable of embracing new technologies

The widespread and common place establishment of a variety of partnerships for economic development in the local economic community can perhaps be seen as a good example of the way that some of these issues have been addressed. Consider, for instance, the development of the Sheffield regional technopole as a

funder of innovation amongst the small and medium sized enterprise sector in South Yorkshire (Dabinett and Graham,1994).

Amin and Thift (1994) attempt to conceptualise the global/local economic nexus by emphasising the need for 'local integrity' within the increasingly global market place. Local integrity is maintained, they contend, within a globalised trading system because of the agglomerative nature of economic activity and the tendency of it to become 'embedded' (Dicken,1994; Asheim,1996) in the local economic, cultural and social environment.

In consequence it could be suggested that the public sector has a vital role therefore in encouraging local development. It should take steps to facilitate access to information, finance research and development, finance local infrastructure development, promote innovation potential at the local level, give local agencies scope and promote flexible institutional structures.

ii) Technological development

Another important theme is that of technological development; which, according to Malecki (1991), represents the core of economic growth. Together with the process of entrepreneurship, technical development can lead to the emergence of 'innovation complexes' which become a collective asset and foster the emergence of positive externalities in a given geographical area. Its own synergy can be created as a result and, via learning by doing economies, will build up a natural momentum which can push technical and economic development along. Looking at the complex process of regional economic change, Malecki believed that the focus of regional development policies should be on efficiency (ie.dealing with supply-side bottlenecks) at the territorial level. His view is that the development of indigenuous potential (together with technical capability) is of prime importance since this would make development independent of global economic processes.The market is the main driving force behind regional economic development but people learn, adapt and adopt knowledge and technology in order to take advantage of new opportunities.The role of the public sector in this respect would be to take a longer term perspective and, in behaving as a partner for industry, attempt to develop 'creative' regions. This would be done by investing in public infrastructure, training and education, and thinking in terms of economic diversity and competitiveness. Quevit (1991) called these 'innovation networks' and he suggested that they act as a link between dynamism and creative opportunity. This places emphasis on the capacity of the territorial environment

to create a comparative advantage through innovation; an 'innovative mileu'. Public policy in this respect would be one of helping firms of all sizes to more rapidly react to and adopt technical innovation.

Areas develop endogenous, innovation orientated strategies to tap local potential (Ewers and Allesch 1990) and mobilise indigenous growth (Capellin and Nijkamp 1990). Ewers and Allesch estimated that innovation in the 1980's, in both products and processes, was the most important factor for economic success and the public policy challenge, they say, is to raise innovation potential at the local level. What this means in practice is getting the right balance between central government decisions (with regard, for instance, to national research institutes and national economic incentives) and decisions in terms of local encouragement and the seizing of local initiative. One key technologically driven attribute would be the establishment of a wider distribution of innovation within local communities. The pre-conditions for this, according to Stohr (1990), would be:

- the existence of crisis conditions as the motivation
- the presence of societal incentives and rewards
- institutionalised transfer of information and entrepreneurial activity
- technological cooperation and exchange
- a limited rigid local democratic process
- limited local heirarchies (which only serve to limit incentives for innovation)

Stohr looked at the matter from a wider perspective and suggested that the challenge of the public sector is to encourage manufacturers to be as innovative as possible and encourage inter-company collaboration on a European basis. This collaboration, he hoped, would have a longer-term goal of the establishment of a European research space designed to harness research energies of the diverse range of companies, education institutions and governmental establishments towards precise scientific targets. Quevit (1991) estimated that the SEM impact on the harmonisation of standards and liberalisation of public procurement would provide a significant boost to activity along these lines since producers and public authorities would share more common ground and be encouraged to negotiate deals on an EU wide basis.

iii) Cooperation

Cooperation is a third important concept. Cooperation (or collaboration or coordination) as a broad concept is a voluntary and often temporary sharing of ideas, abilities and capabilities to achieve an economic goal. Cooperation can be

reconciled with the market place particularly in the field of technological development and this theme is constantly referred to in the literature. Innovation and technical advances are serving to place more importance on cooperation between local firms, institutions and training and research establishments and the continuation of this cooperation is very important for the success of the SEM. According to Quevit (op cit) there will be a net gain if territorial economies can cooperate to develop their capabilities of techno-economic progress. A spirit of cooperation is emerging (as evidenced by the growing number of private/public partnerships) which will partly replace the market logic and give territorial economies more effective control of their dynamic development. In outlining his theory of competitive advantage, Porter (1990) alludes to the importance of cooperation in, for instance, the establishment of close working relationships between related and supporting industries. He sees this as an essential requirement in the process of innovation and upgrading, which leads to the development and sustaining of competitive advantage. He supports this theory with empirical examples of national competitive advantage such as that achieved in the emerging industrial nation of South Korea for example. The Guardian newspaper's pamphlet on the rebuilding of Britain (1993) noted that, in terms of economic restructuring, the correct public sector response would be to forge a situation where competition is supplemented by institutions of coordination and collaboration. Hutton (1995) developed this point further in his exposition of the current UK national economic situation. Central to his argument about what should be done in order to raise the level of economic welfare in the country was the need for :

'institutions that foster cooperation and commitment' (Hutton, 1995, p17)

iv) Learning Regions

The use of the concept of 'learning regions' (Asheim,1996) is one way of drawing the strands of local capacity building, technological development and cooperation together to form a coherent public sector response to the impact of the SEM. The notion of a learning region is fundamentally based on innovation and innovation processes, where the production and the use of knowledge is seen as being at the core of value added activities (Archibugi and Michie, 1995). Innovation in this respect is seen not as a linear process narrowly defined as research and development but, instead, is an incremental process involving many related activities. This incremental process is one of learning by doing and learning by using and, as such, allows firms to learn from mistakes made, in a trial and error process (Asheim, 1994). Social and cultural influences are regarded as being very

important and this is because innovation can be seen as a localised learning process to be placed in the context of specific local industrial districts. Every district is different in terms of the many diverse economic, political, social and cultural influences and Asheim's work represents an attempt to recognise these.

The notion of learning regions is also relevant to a re-evaluation of the concept of territoriality since it may allow the potentially conflicting process of the functional economic development of globally orientated multi-national enterprises to be reconciled with the endogenous nature of territorial development. The functional integration of geographically dispersed activities is one observable feature of the global economy and, at an industrial district level, this is seen to generate agglomeration economies (Dicken, 1994). Asheim argues that these agglomeration economies then become embedded into the context of a particular industrial district and, in taking on certain peculiar characteristics, become relevant to the local processes of incremental innovation. It is these dynamic processes of incremental innovation which are crucial to the development of learning regions. Because of the related nature of many activities in the local context, this could be regarded as a more sociological view on the process of innovation.

This section of the chapter has set out the potential themes of public sector involvement in the local economy and the policy orientation which may well follow as a consequence of the adoption of these themes. In an ever changing world where trends and policies are constantly emanating from the EU and the rest of the world and where national economic and political priorities are reassessed, it is the responsibility of public authorities, at all levels, to try and ensure the best possible outcome for the particular economy under the authority's jurisdiction. In order to achieve the aims of regeneration, reconstruction, adoption and adjustment, the issues to address seem to be technological development via an increasingly cooperative and collaborative set of agents at a territorial\local level. As an example, the document 'South Yorkshire 2000 - Towards a brighter future' (SYCC 1990) favours an integrated, interactive development programme to cover business and industrial development, human resources and technical development and infrastructure and environmental development. It is hoped that the proposed programme will be dynamic and based upon the logic of partnership and inter-regional cooperation.This will have the effect of maximising the internal resources of the region, optimising external support and enhancing regional cooperation and linkage with European partners.

2.5 Conclusions.

In this chapter the case for international economic integration has been reviewed. The microeconomic and macroeconomic consequences of trade liberalisation measures in the form of economic integration have been shown to be significant, and the economic rationale for the implementation of the SEM has been put forward. Based on an analysis of the net benefits which are said to emerge over the short-run and long-run, the conclusion was drawn that economic development within the EU as a whole would be enhanced as a result of European companies being allowed to operate in less and less fragmented markets.

Companies are constantly seeking to upgrade and adjust in the search for economic advantage within markets. The possible impact of the SEM on the corporate sector, in addition to the impact of the change already underway in the manufacturing sector of the UK economy, has also been set out in this chapter. In particular, theoretical explanations of corporate change - which emphasise the importance of new technology in an increasingly global operating environment whilst retaining the facility to respond in a locally flexible manner - have been examined. The SEM has introduced greater competitive pressure into the market place, and the factors which are influential on companies in identifying, and also, in taking advantage of new trading opportunities as they emerge have been highlighted.

It is clear that local, national and international governments all have a vital role to play in working with the corporate and voluntary sectors to achieve the most favourable outcome in terms of economic development within the SEM. The effectiveness and commitment of the public sector, as it engages with the private sector, is going to be absolutely vital as the gradual implementation of the SEM legislation by member governments enhances the degree of competition in the market place. Producers will not be afforded the luxury of protection to the extent that they enjoyed prior to the implementation of the SEM and, in a trading system which is increasingly international and, indeed, global in outlook, those domestic companies which can most effectively develop will be able to gain a position of advantage vis-a-vis their main rivals. Those areas which will suffer because of the difficulties faced by local producers in adjusting to the new realities of trading in Europe will legitimately need assistance from the public sector.

Chapter 3: The Economics of the Single European Market

3.1 Introduction.

This chapter reviews the economic logic of the SEM programme of legislation and summarises some of the various assessments put forward of the estimated impact of the implementation. In particular the work of Emerson (1988) is drawn upon since this represents a detailed and authoritive micro and macroeconomic estimate of the impact on the EU of the measures proposed in the SEM programme. Evidence is also put forward to provide an assessment of the position of the UK in the light of the SEM; and it is shown by, amongst others, PACEC/RIDER (1990) that the impact is set to be significant in a relatively large number of important manufacturing sectors.

3.2 The Logic of '1992' and the SEM programme.

It became apparent that in the early 1980's, output and employment growth and the productivity gains over the previous twenty years trailed the leading industrial nations from other continents and that domestic protection policies actually served to inhibit intra-EU trade. This had the effect of denying to the member nations the benefits to be had from a larger market (Vickerman op cit; Chisholm 1995). Individual member states tended to be reliant upon nationalistic solutions and these were seen as being significant contributors to the poor overall community performance. The EU was increasingly seen as a large but fragmented market held back by a relatively under-developed high-technology sector, a lack of industrial competitiveness, and output and productivity gains which tended to lag behind those achieved by both the USA and Japan (Emerson 1988). Substantial consumer price differences between member countries suggested the presence, also, of much non-competitive market segmentation (Vickerman 1992). There was, it was felt by both political leaders and their economic and business advisers, a large potential opportunity to improve EU levels of competitiveness via productivity improvements and cost and price reductions. This in turn, together with a strong competition policy, would encourage quicker growth and significantly improve EU wide macroeconomic performance.

Jacques Delors, the new president of the Commission in 1985, with an interest in moving the EU towards a Single European Market, asked Lord Cockfield to produce a white paper on the removal of internal community barriers (CEC 1985).The white paper set a target of the 1st January 1993 for the completion of the introduction of the Single Market and identified some 280 plus policy

measures that would be required to achieve this. The paper restated the objective of creating a 'level playing field' as a common basis for competition between firms. The idea was to turn the EU into an area without frontiers, free of restrictions on the movement of goods, persons, services and capital. Because of the boldness of this objective, important changes in the method of achieving integration were introduced (Padoa-Schioppa 1991). It was hoped that a trading system could be established where, for instance, customs controls would be removed, where mutually agreed technical norms would prevail and where public procurement would be liberalised. It should be borne in mind, though, that the white paper was an educated estimate of the measures needed to bring about the Single Market rather than a finished 'blue-print' (Dinan,1994). The Heads of Government meeting in Milan in 1985 was followed closely by the Luxemburg Inter-Governmental Conference of the same year.This allowed the Single European Act (SEA) treaty to be signed in 1986 and this came into force in July of 1987. The SEA introduced new decision making and legislative processes, extended European Commission areas of responsibility and proposed new policy objectives ; particularly the completion of the internal market.

The aim of the SEA was essentially one of introducing a 'level playing field' into the European business environment and, as such, was part of a wider industrial strategy of the EU (Dinan,1994). This strategy sought to pursue competition policy as a way of opening up the European market place.

Although tariff and quantitative restrictions had largely been removed by member nations of the EU, there were still a number of remaining barriers to trade mainly in the spheres of customs, technical regulations, public procurement and legal\ fiscal disharmonisation (Pinder,1995; Dinan,1994). These 'hidden' or non-tariff barriers (NTB's) were seen to be either putting upward pressure on costs or restricting entry to particular markets, and their progressive removal was generally thought to be desirable.

The general burden of these NTB's has been dubbed as 'the costs of non-Europe'. It is these costs of non-Europe which the Commission has sought to eradicate. These 'extra' costs were assumed to arise from six principal sources :

- costs of crossing internal frontiers
- failure to harmonise technical standards and regulations
- failure to achieve fiscal harmonisation (especially VAT and excise duties)
- failure to exploit potential economies of scale

- the continuing potential for 'x'-inefficiency
- preferential public procurement policies

Consequently the aims of the introduction of the SEM measures were to address the cost of border controls, harmonise technical and other standards, improve competition and efficiency, achieve economies of scale and reduce the cost of public procurement policies. The SEM also aimed to harmonise the business operating environment via the simplification of customs\border controls, the establishment of technical norms, the liberalisation of public procurement, the encouragment of mobility of labour and capital, the introduction of Europe-wide corporate law and the harmonisation of taxation, state aids and subsidy programmes to companies. It was designed to be a short-term implementation programme, with a priority on removing checks on internal frontiers and which, for purposes of expediency, embraced a philosophy of approximation rather than 'absolute' harmonisation or standardisation.

The SEM programme, crucially, has been targetted on the intra-European business operating environment - especially the multi-dimensional and variable framework of corporate law, taxation and state aid which was in existence prior to the introduction of the SEM programme. Tax, subsidy and legal matters do have a big impact on the decisions of companies as to how and where to operate. The proposed 'harmonisation' of the operating environment was to be equally applicable to large and small companies and individuals attempting to gain acceptance of professional qualifications. This was essential in order to achieve the objective of removing the institutional restrictions on the movement of capital and labour within the EU and therefore create a truly open market. Most concern arose over the arrangements for VAT, in that although the regime was the same in every country, the applicable rates and payment banding arrangements were not; resulting in a large variation in the incidence of tax.

Physical barriers were seen to confront people and/or goods as they moved across frontiers. For goods the SEM legislation has sought to eliminate paperwork at community state borders and also introduce an accompanying statistical system for tracking trade among member states. Barriers to the movement of people have proved to be much harder to remove. Passport controls and visa requirements remain the exclusive province of member states and the EU has not been able to develop common rules. Border controls are costly both in direct terms (the costs of administration,checking delay and Government bureaucracy) and indirect

terms (the welfare implications of the lost trade which does not take place as a consequence of the direct costs of the controls) (Emerson, 1988). These barriers, prior to SEM, prevented firms operating in a cross-border capacity and, as a consequence, prevented them from exploiting substantial economies of scale. In short, they served to shelter inefficient domestic firms from competition. With regard to technical standards and regulations, different members adopted differing norms and, whether deliberate or not, these represented a major constraint across national frontiers. In fact the major part of the 1992 programme was concerned with the establishment of common standards. This was expected to be particularly influential in the sectors of food and drink, pharmaceuticals and financial services (Vickerman 1992).

The implementation of the SEM will allow EU producers to achieve the economies of scale (size of output) and scope (range of output) to the same extent that producers in the USA or Japan, in their large and dynamic markets, have enjoyed for some time. The fragmented nature of the European market has prevented the exploitation of a large single market, and firms in many sectors have not reached an output level representing the least possible cost situation - the minimum efficient technical scale (Pratten 1988). It is generally acknowledged that the realisation of economies of scale puts downward pressure on costs and prices and raises external competitiveness. The potential for improvement is therefore substantial, especially in those sectors where the minimum efficient technical scale level of output is large in relation to the domestic market (Lyons 1988). The possible achievement of lower unit costs via the realisation of scale economies has obvious structural implications for firms, often requiring substantial levels of investment, and a relatively quick way to achieve these gains is either along the acquisition route or the joint venture/industrial cooperation route. The EU is not a homogenous market, and these options tend to reduce the risk associated with trading across language and cultural differences.

The existence of price differentials for almost identical products in different EU markets suggests a degree of protection from competition and a lack of efficiency.Absolute price levels tend to be high in the EU, when compared to the rest of the developed world, and this, it was feared by Stopford (1993), led to the loss of competitive edge in world markets; especially in manufacturing. Chisholm (1995) showed, using GATT data over the period 1980 - 1990, that the EU 12 in total have lost two percentage points of their share of world exports and

gained three percentage points of their share of world imports. Price convergence on to the lowest EU price would produce an estimated aggregate gain of Ecu 250 billion (equivalent to 8.3% EU 12 GDP) (Emerson 1988) - with implications also for macroeconomic indicators due to the EU's improving aggregate trade position vis-a-vis the rest of the world. The liberalising of public procurement will introduce downward pressure on prices, as firms compete for supply contracts, and serve as a stimulus for sectoral restructuring as companies jockey for position at an intra-EC level. Community wide public purchasing is a hugely significant activity (representing approximately 15% of EU 12 GDP) yet the Community has estimated that only about 2% of supply contracts are awarded over national boundaries (Vickerman 1992). These factors represent the logic of the Single European Market programme of legislation.

The extent of the macroeconomic and welfare gains accruing as a result of the introduction of the Single Market legislation depends crucially upon the degree to which the 280 plus pieces of legislation can be agreed and introduced.The programme is almost complete (CEC 1995) although EU directives have not always been transformed into national law. With regular hold-ups and disagreements along the way the general rate of adoption amongst member nations has not been convincing (European Commission 1994 and Hill 1991). Much has been achieved in so much as consumer goods can move duty free, lorries can cross without customs checks, public contracts must now be advertised EU wide, licencend banks can operate anywhere within the membership and the controls on the movement of capital have largely gone (Borchardt,1995). There are, however, a lot of teething troubles which still persist fuelled, possibly, by a mutual lack of trust (The Economist 1994) and varying degrees of commitment towards implementation of the program from member nations (Lintner and Mazey 1991). Arguments over the principle of subsidiarity (which has been defined to mean that action at the EU level should be limited to areas where the EU is most effective, i.e. do not do at the EU level what can best be done at the individual member country level) may serve to work against the objective of a truly open market (Cox 1994), and philosophical positioning in terms of approach, for instance, to the debate over the use of regulatory competition (proposed as a way of placing more control of the integration process in the hands of the member nations) versus EU Council driven harmonisation serves to add further delay to the process (Sun and Pelkman 1995). According to Jacquemin and Wright (1993a) companies face a number of factors complicating the integration process, especially variations in the speed of

national compliance, the resistance of old barriers, the emergence of new (previously unforeseen) barriers and continuing uncertainty over the wider EU integration process. It is also worth noting that the main part of the SEM programme has been concentrated in sectors which experience relatively few market failures and that only when open competition is introduced into, for instance, the energy sector (and others in which national monopolies dominate) will a truly 'single' market exist. The firm study results revealed in this thesis in chapter 5 and analysed in chapter 6 reflect, in part, the extent to which a sample of manufacturing firms have been influenced by the continuing implementation of the SEM programme. Since some manufacturing sectors are more advanced than others in terms of the degree to which the SEM has been implemented, there is inevitably some variance in the data when any attempt to evaluate the impact of the SEM programme is made.

3.3 The impact of the SEM.

A number of estimates of the potential impact of the Single Market at both a macroeconomic and microeconomic level have been published (see, for instance, Emerson 1988, Baldwin 1989 and, Neven and Gouyette 1995). The basic proposition of the SEM is that the integration effects of the steps toward completion of the Single Market will promote efficiency and competitiveness because of the twin pressures of increased market size and extra competition. Different companies in different market structures in different sectors will, of course, react in their own way but it is expected that the two pressures of increased market size and extra competition will cause lower costs to be achieved, reduced price/cost margins and a significant non-price effect. Assessment of the individual components is obviously complicated since some are linked and serve to reinforce each other. The existence of increased markets resulting from foreign trade has been shown to lead to a significant increase in the size of the production unit (Scherer et al 1975).The increase in market size will, it is estimated, allow an expansion in the scale of corporate activity and, although the impact on costs per unit is likely to vary as technology improves, the reductions are likely to be beneficial in Europe's fragmented markets. This was tested empirically by Emerson (1988) who used a minimum efficient technical scale and cost-gradient analysis and concluded that, notwithstanding the fact that the more 'dynamic', longer term economies of scale advantages were empirically difficult to quantify, there was much potential for firms to achieve cost per unit reductions :

"Analysis of the potential for economies of scale, whether technical or other, static or dynamic, had identified prospects for considerable cost reductions" Emerson (1988)p.140.

The effects will be on the one hand direct/static in nature and on the other hand indirect/dynamic.The direct/static effects will be relatively short lived, limited in scope - a 'one-off' type of effect. In particular this will be the benefit to firms from the lowering of production costs due to the removal of barriers like standards specific to particular sectors, regulations and certification. The indirect/dynamic effects will be of much greater significance and exist over the medium to long term in-so-much as the bigger market and extra competition serve as a stimulus to improved efficiency and new product development. It is suggested that, principally, productivity improvements (technical innovation), non-technical economies of scale (larger volume and restructuring to form 'Euro-companies' better placed to compete in world markets) and economies of learning, the reduction of overheads and efficiency improvements (the reduction of 'X' inefficiency) will all exert strong downward pressure on costs. A squeeze on profitability (narrowing price/cost differential), the change in market share and improved industrial organisation (concentration) will impact in terms of price competitiveness.There will also be an increased desire to improve the qualitative characteristics of the (wider) product range together with a greater determination to provide a better sales service and introduce innovative production processes, such as partnership and cooperation activity, and innovative products.Increased competition will lead to impressive improvements in economic efficiency in all markets but especially in those which were previously defended by barriers to entry of some sort. Broadly speaking, the presence of imports and international trade in general have a disciplining effect on profit margins (de-Gehellink et al 1987) as firms seek to reduce production costs and distribution costs and remain as price competitive as possible.

The pressure of enhanced competition may also influence innovation as firms seek to establish, defend or enhance competitive advantage but the link between increased competition and the rate of innovation (the rate of diffusion of new techniques) is far from settled.There is a view that monopolists are better innovators but Ergas (1984) and, later, Geroski (1987) in a study of research and technical development and innovation in the United Kingdom, both suggested that the pressures of competition provide the greater innovative urge. The European Commission is hoping that the Single Market will lead to increased

innovation, especially in high-technology sectors, due to a set of inter-related pressures but basically revolving around a greater openness to international trade, increased competition, better growth potential and a resultant intensification of technological development.

The SEM will alter the balance of competitiveness as firms seek to restructure in order, on the one hand, to boost productivity, and on the other, to rationalise and reorganise production and distribution capacity. Owen (1983), and Muller and Owen (1985) have both found that, amongst EU partners, international trade has accelerated the rate of observed structural change as the more competitive firms usurpe the less competitive ones in both domestic and international markets. In the aggregate, industry will gain as new output and employment opportunities emerge as a result of the larger EU market and the increase in consumption stimulated by the estimated lower prices of imported consumer goods. The key benefit to the EU wide economy will be the resultant stimulus to consumption and investment (Emerson 1988). Investment flows between member countries have altered because of the presence of the SEM. Mayes (1994) cited evidence, produced by the European Commission, showing a marked increase in the rate of merger and acquisition in recent years in the EU in general, and a sharp increase in the proportion emanating within the EU but across the borders of member states. There has also been a considerable influence on the amount of inward investment and outward investment vis-a-vis the EU and the rest of the world as, in particular, producers have sought to establish a 'presence' within the EU (Lloyds Bank plc 1990). Perhaps the most often cited report of the costs and benefits of the Single Market is by Cecchini (1988) in which he estimates that in the medium term EU 12 GDP will increase by between 4.3%and 6.4%, prices will fall by 6% and that 2 to 5 million new jobs will be created.The improvement of the external position of the EU is foreseen as equivalent to 1% of EU 12 GDP. Emerson et al (1988) provide a detailed description of the Cecchini study (see below).

In addition to the macroeconomic and microeconomic impact the Single Market programme inevitably embodies a dimension likely to be significant at the regional level (Begg 1989). The EU economy as measured at the regional level, post-SEM, will not prosper at a uniform rate. The implementation of the SEM will have a varying impact depending upon, on the one hand, national and regional economic performance, and on the other, the sectoral performance of those industries predominant in each nation. Padoa-Schioppa (1987) recognised

the risk of aggravated regional imbalance as a result of the course of market liberalisation and the necessity for an increase in the rate of EU macroeconomic expansion in order to facilitate the accrual of the estimated benefits. One aspect of the regional dimension is the potential for a greater diversity of economic prosperity between the core and the periphery of the EU. Shepley and Wilmot (1995) noted that the SEM may make production in the periphery more attractive since trading costs will be reduced and the advantage of lower wages within the periphery could start to exert an influence. They concluded, though, that the core of the EU is likely to prosper relative to the periphery because of the extra benefits due to economies of scale of production in the core outweighing the advantages of locating in the periphery.

Neven and Gouyette (1995) assessed convergence of output per head across EU regions over the period 1975-1990 and concluded that strong and widening differences exist in the pattern of convergence. They put forward the view that Northern European countries have adjusted better to the implementation of the SEM programme than the Southern, Mediterranean members of the EU, and that trade liberalisation will further exacerbate these disparities. In fact, they found a North/South distinction to be a much more relevant explanation of disparity of economic prosperity within the EU than a centre/ periphery distinction despite the EU exhibiting a pronounced core/periphery pattern in regional GDP per capita disparity. They found that Northern EU countries were, on the whole, more successfully adapting to the competitive rigour of the SEM and that, partly in consequence, a more similar pattern of economic convergence was emerging. Producers in the Southern EU countries, on the other hand, were not as readily taking advantage of the trading opportunities and, therefore, strong differences in the pattern of convergence were noted. The net result of this being an emerging prosperity gap between Northern and Southern EU members. On the other hand, Barro and Salai (1991) found the regional inequality gap to be slowly disappearing within the EU at a rate of approximately 2% per annum. As Armstrong (1995) suggests :

"The debate on whether EU regional growth is convergent or divergent remains a finely balanced one. The best available evidence suggests that an extremely slow process of convergence is under way, but with wide disparities remaining" (Armstrong 1995 p.111)

Begg (1995) saw the SEM programme as part of a wider process of economic integration in the EU (alongside economic policy convergence and the transition

to economic and monetary union) and, as such, represented a clear threat to the prospect of economic cohesion within the EU. He foresaw a situation where the less favoured regions of the EU would, at best, keep pace with the growth of the EU economy as a whole, rather than converging in terms of income per head. He noted the need to improve the ability of producers to take effective part in the new open market. In an extension of Michael Porter's analysis of competitive advantage (see chapter 2), Begg established four categories of factors which, according to him, lead into regional competitiveness. One category was the group of sectoral and macroeconomic variables which serve to determine how a region's export base may be affected. The second category was the regional business environment which emphasises the quality and cost aspects of assorted factors of production. The third category was the attribute profile of the industrial and commercial companies located in a particular area; and the fourth was an ability to innovate and learn. He concluded that regions with favourable combinations of these factors were likely to be in a much stronger position to take advantage of the opportunities afforded by the SEM relative to those regions with less favourable combinations. From a policy prescription point of view, the potential for manipulation of these four factors has implications for the type of policy response, to the SEM, to be considered by the public authorities in each locality. This point will be developed further in chapter 8 where aspects of the public sector's possible response to the impact of the SEM will be discussed.

3.4 The Emerson findings.

Using estimates of cost and price changes to quantify economic gains, Emerson et al (op cit) valued the overall benefits of removing barriers in the medium term in the range 70 billion ECU (2.5% EU GDP) - 125/190 billion ECU (4.5/6.5% EU GDP); dependent upon the extent to which macroeconomic policies could be geared to ensure a successful outcome. Emerson also estimated that 2 million new jobs (2% of initial employment level) would be created and that improvements to EC budget and balance of payments position would take place:
"a significant improvement in the Community's macroeconomic performance could indeed be made possible as a result of the numerous microeconomic measures proposed in the internal market programme." (Emerson, 1988, p.6)

In his overall quantitative assessment he used both a macro and microeconomic methodology which sought to capture the impact of the SEM within individual selected sectors and then translated these to a macroeconomic impact for the collective members of the EU. The reference framework for Emerson's

microeconomic assessment was a partial equilibrium analysis which sought to estimate changes in consumer surplus, producer surplus and general welfare.These are said to broadly correspond to changes in net incomes of consumers, producers and the economy as a whole. When these micro gains were translated into aggregates, Emerson produced estimates based on a macroeconomic model simulation which allowed the introduction of shocks to the system and assesses the outcomes over the medium/long term under various macroeconomic constraints and the extent to which accompanying economic measures were introduced.

Table 3.01 Potential consequences of completion of the SEM for the EU in the medium/long term.

Micro approach	Welfare gains as a % of EU 12 GDP =4.25 - 6.5				
Macro approach	GDP (%)	Prices (%)	Employment (mill.)	Public balance as a % of GDP	External balance as a % of GDP
without accompanying macro policy measures	4.5	-6	1.8	2.2	1
with accompanying macro policy measures	7	-4.5	5	0.4	-0.2

Source : Emerson (1988) p 218.

Taking the microeconomic evaluation first, Emerson used a partial equilibrium analysis, as founded upon the principles applied to international theory, in originally attempting to quantify the effects of the abolition or reduction of tariffs. The analysis was partial in that it sought to measure the impact on different product markets and then incorporate the findings into the results of

more specialised micro analyses of the impact of concepts such as economies of scale and variations in corporate competitive behaviour. The resultant effects were also expressed using micro concepts of changes in consumer and producer surplus and general welfare (assumed broadly to correspond to changes in net incomes of consumers, producers and the economy as a whole). Evidence was gathered on the costs of barriers and the benefits of market intregration based upon four stages of progression. Stage 1 effects were those barrier removal effects on trade directly, such as the reduction in importing costs. This was a sectoral investigation (based on 1985 data) to estimate the trade and income effect of the direct cost reductions as measured by changes in trade flows between each member state and the rest of the EU and the rest of the world and the net welfare effects. The latter was an addition of calculated consumer gain in the importing country and producer gain in the EU exporting country minus the calculated producer loss due to reduced production in the importing country. For each category the potential overall welfare gain for the EU was calculated.

Stage 2 effects are the barrier removal effects which applied to all production, such as the removal of competition limiting barriers. These direct and indirect cost reductions were applied, in a horizontal investigation, across the whole of the EU. They arose from the reduction in EU costs of production, the reduction in imports from, and the increase in exports to, the rest of the world. These static effects noted in stages 1 and 2 were estimated to lead to an increase in real income of 65 - 80 bill. ECU which was equivalent to 2.2 - 2.7 % GDP (results based on EU 7 at 1985 prices, Eu 7 GDP = 88% of EU 12 GDP).

Stage 3 effects were the corporate restructuring benefits due to increased production and economies of scale brought about by greater market integration, whilst the stage 4 effects recorded the heightened competition impact on efficiency levels and profits accruing to monopoly rents. Partial equilibrium analysis was not used to quantify these dynamic effects. Instead, a magnification was used of the direct costs of barriers using a magnification coefficient which was allowed to vary as a function of the degree of concentration and the potential for economies of scale in the industrial sectors covered in stages 1 and 2. Different variants are proposed in order to take account of several scenarios and variations in evaluating these effects but Emerson estimated the total market integration effects to represent an increase in real income of 62 - 107 bill. ECU, which was equivalent to 2.1 - 3.7 % GDP (results based on EU 7 at 1985 prices, Eu 7 GDP = 88% of EU 12 GDP). When the barrier removal effects and

the market integration effects are added together, the total welfare gain is estimated to be in the order of 127 - 187 bill. ECU which is equivalent to 4.3 - 6.4 % GDP. When these same figures were scaled up to represent the same GDP share for the EU 12 at 1988 prices, the range became 173 - 257 bill. ECU. These results should be considered, however, in the light of a number of methodological cautions. Firstly, the EU 12 data was simply the outcome of a linear extrapolation of the EU 7 data. Secondly, estimates were based upon the consequences of the *completion* of the SEM programme and, thirdly, there was inevitably a great deal of dynamic behaviour not actually estimated due to problems with, for example, time constraints and the nature of the partial equilibrium methodology (Emerson op cit p201 -202); principally the lack of consideration of changes in relative prices as the integration process occurs.

The price and cost changes detailed in the previous section will have important macro consequences as changes in purchasing power and companies jockeying for competitive advantage, for instance, take their effect. The macro benefits will emerge only to the extent that the SEM is accompanied by sympathetic macroeconomic policy adjustment. Emerson did assume the effective implementation of the legislation and also that firms adopted a positive attitude in their strategic response to the new environment. The methodology and assessment was based upon the major fields of :

- the abolition of frontier controls,
- the opening up of public procurement,
- the liberalisation of financial services,
- the strategic 'supply effect' reaction of firms, and
- the potential created by the easing of macroeconomic constraints.

The assessment was based upon a two stage macroeconomic model. This sought, at the early stage, to evaluate the direct and indirect consequences of the removal of the delays at frontiers, technical regulations, public procurement and legal and fiscal disharmonisation. Then the second stage was to incorporate these effects to look at the impact on changes in behaviour or structures. This was to be done through the use of a model designed to simulate macro inter-relationships with regard to muliplier and accelerator effects, income distribution and price competition effects, inflation mechanisms, capital accumulation and growth potential. Emerson found the likely outcome to be positive over the medium term; with the effects becoming greater over time and dependent on the extent of

the competitive environment. When these gains were translated into aggregates, the outcomes in Table 3.01 were predicted.

It should be noted that these results are presented with a large margin for error. This is because of the difficulty in predicting when the gains will materialise and because of the extent to which the outcomes can be 'boosted' by accompanying macroeconomic policies. It should also be noted that a number of methodological weaknesses exist. Firstly, the table does not take account of all supply side behaviour. Secondly, estimates are based upon past observations which become of less and less value as the analysis time period extends and, thirdly, different parts of the macro evaluation are based on 4, 5, 6 and 7 countries at a time with the results being linearly extrapolated for the EU 12.

There is a view that the dynamic benefits of increased competition, motivated innovation and industrial reorganisation were not properly included in Emerson's analysis. Baldwin (1989) estimated this virtuous circle of benefits to represent an extra 1.7 - 2.6 % increase in EU 12 GDP over and above that estimated. Baldwin argued that Emerson made no allowance for the further dynamic gains from EU integration such as the rise in the rate of technological progress due to a permanent increase in the size of the market. Emerson estimated growth effects for a given capital stock whereas Baldwin based his estimates on an increasing capital stock. On the other hand the Emerson findings may have over-estimated the benefits as there may well be factors which serve to interfere with their full development. The studies of James (1991), Peck (1989), Smith and Venables (1990) and Boucher (1991) are all examples of the scepticism by which these estimates can be regarded. Adjustment costs such as short term unemployment and the impact of the closure of inefficient plants in the former East Germany, for instance, are recognised as significant but not actually measured by Emerson. These political developments could not, of course, have been foreseen by Emerson but the example does serve to illustrate how national and international influences can emerge and bring unplanned influence to bear. The impact of extra-EU imports was underestimated and the impact of the trade diversionary effects over-estimated (Winters 1992). 'Eurosclerosis' may prevent the development of benefits if member nations fail in some way to implement the directives or if there is not complimentarity of action in terms of other EU macro and microeconomic policies (Swann 1992).When products are differentiated and competition is imperfect, market integration will not necessarily lead to a reduction in market price. This is a challenge to the fundamentals of the approach

adopted by Emerson (Haaland and Wooton 1991). These notes of caution do not necessarily undermine the analysis but there are wider bands of uncertainty and more fundamental issues at stake than might have been supposed. According to El-Agraa :

"one should not put too much emphasis on estimates which can easily be frustrated by the realities of everyday EU economic life" (El-Agraa 1994 pp 168-169)

3.5 The position of the United Kingdom

Although in general economic terms relations between the UK and the EU are steadily improving, George (1994) suggests that the UK continues to be an awkward partner with the rest of the community. He recognises that the UK is likely to experience severe difficulty in adjusting to the new trading environment implied by the Single Market and therefore an assessment of the likely winners and losers within the UK is of vital importance. The likely impact on the UK was estimated by Foley (1989) who formed a list of industrial sectors estimated to be either probable or possible gainers. He suggested that UK manufacturing companies have a comparative advantage in those sectors where existing barriers to trade were highest (electrical engineering, pharmaceuticals, precision and medical equipment for instance). Buiges, Lebrun and Ilkowitz (1990), in an investigation of the probable structural adjustments in the industrial sectors most likely to be affected by the integration measures, identified 40 UK industrial sectors and formed a four group categorisation according to market and production characteristics with attendant Single Market consequences. As such, it was a comprehensive list of those manufacturing industries most likely to experience change as a consequence of the Single Market legislative programme. By examining the position of sensitive sectors for individual countries and allowing for cross-country comparison of the potential effects of '1992', they concluded that the mix of sectoral specialisations across the EU would not be altered and that 'massive' transfers of economic activity across geographical zones would not take place. But significantly, they did conclude that the impact on member nations would be more dependent on the internal and external strategies of companies. It seems that the benefits of the SEM will arise from improved corporate performance within existing patterns of industrial structure and specialisation. The reaction of companies to the SEM, therefore, is of crucial importance.

The report was produced to a request by the European Commission which asked each member nation to prepare their own national report.The British government amended the original list of 40 sectors in order to portray more realistically the industrial structure of the UK. Amongst others, aerospace was deleted (already organised on a Euro-wide basis) and equipment and optical instruments were added (previously protected by non-tariff barriers).These 39 sectors are of some value to the economy of the UK (51.5% of total manufacturing value-added, 50% total manufacturing employment) They were classified as either 'above average', 'average' or 'below average' performers according to an assessment based upon trade performance and the relative strength of the sector in Community wide manufacturing. It was expected that all of the 39 sectors would be influenced by the Single Market but changes would be proportionately greater amongst the 'above average' performers.

Table 3.02 Performance grouping of key industrial sectors in the UK economy, in 1988.

	No. Industrial Sectors	% Total Manufacturing Value Added	% Total Manufacturing Employment
Above Average Performers	15	21.2	21
Average Performers	8	10	6.8
Below Average Performers	16	20.3	22.2
Total	39	51.5	50

Source : Buiges, Lebrun and Ilkowitz (1990)

As can be seen from the above table, the UK has more 'Below Average' sectors by number (with a higher proportion of total manufacturing employment) but they are less significant in terms of manufacturing value-added. Furthermore the 'Below Average' performers tend to be the 'traditional' sectors (textiles, footwear) whilst the 'Above Average' performers tend to be high-tech., capital intensive sectors (chemicals, pharmaceuticals and telecommunications). On this evidence, therefore, the UK appears to be reasonably well positioned.

An analysis involving 117 UK industrial sectors split them into strong/average/ weak impact catogories (PACEC/RIDER 1990) according to their perceived

sensitivity to the removal of non-tariff barriers. This study, based largely on European data, UK unemployment data and the findings from a number of discussions with business leaders, identified a total of eighty-three UK sectors thought to be moderately or strongly affected by NTB's. This number considerably exceeds the forty industrial sectors noted by Buiges et al because different selection criteria were applied - especially the importance placed by Buiges et al on intra-European price dispersion as the deciding factor. Price dispersion is usually only satisfactorily calculated for identical finished products and was not used, therefore, on intermediate type goods in the Buiges study. PACEC sought to include in their study an estimate of the impact on the intermediate goods sector. Their conclusions overall were, that in the UK, the impact of the removal of the NTB's will be strong in twenty-eight industrial sectors, average in forty-one sectors and weak in fourteen sectors. These sectors are detailed in appendix number one. The distribution of employment across these sectors is vital in determining the impact of the SEM. In Chapter 4 the strength of the South Yorkshire sub-regional economy is reviewed and, as part of this, the proportion of manufacturing employment in these sector categories is assessed.

3.6 Conclusions.

The SEM programme has had a rather troubled 'birth' and progress towards a fully open market has been painfully slow. The Economist (1996), for instance, reports on the continuing disruption caused by member governments reacting to the instinct of national self-interest and delaying the translation of single market regulation into national law. Has it been a success ? Dinan (1994) recognises that, as it stands, the Single Market does compare well with the original aims of the white paper and, as the momentum for change has built up, the European Council has adopted proposals that would not otherwise have engendered much political support. Arguably the main achievement of the SEM has been psychological in that a climate has been created in which firms can see themselves as being European and have started to look for opportunities beyond their national boundaries. More of this later.

It is, however, beyond doubt that the existence of the SEM, with significant macroeconomic and microeconomic consequences, represents an absolutely fundamental change to the dynamic of the international trading environment in Europe. The logical interpretation of the reasoning behind the introduction of the SEM suggests that it is the need to improve the economic performance of

companies previously operating in fragmented European markets which has been the driving force. Emerson estimated that a significant improvement in EU wide economic performance would result, although spatial variation may well be quite considerable. In the UK, since it has a number of manufacturing sectors which are set to face a strong impact, the change may well be significant in nature.

This impact is likely to vary according, amongst other things, to industrial structure in each locality or sub-region. The district of South Yorkshire in the UK is an area with a well established manufacturing sector and, as such, is an interesting sub-region in which to investigate the impact of the SEM. The strength and relevance of the South Yorkshire sub-regional economy is considered in the next chapter.

Chapter 4: The South Yorkshire Sub-Regional Economy

4.1 Introduction.

Certain groups will be winners and losers from the implementation of the SEM programme, and one way of identifying these groups will be to look at the impact at the national level, regional level and, in the context of South Yorkshire (SY), the sub-regional level. The SY economy has provided the framework in which the empirical research findings are derived, tested and confirmed. This chapter, therefore, is concerned with describing the economic structure of SY and, in the light of this, assessing the potential impact of the SEM programme of legislation. SY is an interesting sub-region\county in which to base the investigation for it is said to be particularly vulnerable to the impact of the SEM. This is due to the fact that much of the production of the region is taking place within sectors in which the degree of competition is set to grow markedly as the Single Market develops (see, for instance, Ramsden, 1991; Quevit,1990). As such, SY represents an excellent example of a spatial distribution of economic activity potentially struggling to come to terms with new realities in world trading.

4.2 The economic structure of South Yorkshire.

SY is one of four administrative sub-regions of the standard statistical region of Yorkshire and Humberside (Y&H). It was abolished as a metropolitan county in 1986 and is now a sub-regional economy composed of the local authorities of Sheffield, Rotherham, Doncaster and Barnsley. The sub-region has a reasonably stable population at around the 1.3 million mark which is equivalent to 26% of the Y&H total and accounts for 25% of Y&H's labour force (Regional Intelligence Bulletin, 1993). Although there has been a 2% decline in population in SY over the period 1981 - 1991 (in comparison to a modest increase (0.7%) in Y&H as a whole), however, the population is expected to grow in SY by 2.2% from current levels by the year 2001 (OPCS, 1991). It was estimated that in 1993 SY had 26% of industrial land in Y&H, 24% of vacant industrial floorspace and 20% of vacant commercial premises (Trinnaman, 1995), and is an area reasonably well linked, in the transport sense, with the outside world via good road, rail and sea links and reasonable air travel links.

SY, identified as a RETI (a traditional industrial region of Europe which is undergoing massive economic change via de-industrialisation and restructuring) by the EU, is regarded as a region with serious economic difficulties and, in fact, qualifies, in part, for ERDF funding under the Objective 2 criteria. Structural

spending under the auspices of this objective seeks to encourage convergence in regions of industrial decline. In fact Gore and Vigar (1994) have suggested that 'the steady and inexorable relative decline in GDP in SY' should qualify the area to receive EU regional funding on the same scale as if it were an objective 1 region. This would qualify the sub-region to receive more financial assistance from the EU structural funds on the basis of SY being assessed as a structurally backward region.

Most full-time jobs are to be found in the tertiary sector (56.5%) but the secondary sector (37.6%) and especially, within this, the manufacturing industries (30.2%) remain very important (table 4.01). Employment figures and employment change in the county over the last decade reveal a picture however of declining jobs in traditional manufacturing sectors and an increasing number of jobs in the service sector in general but particularly in the distribution\hotel, banking\financial divisions. The service sector remains relatively under-represented in the sub-region, as a whole, athough Sheffield provides a relatively important centre for service activities. Despite SY experiencing a decline in industrial employment over recent years it still, in fact, has relatively more than the Yorkshire and Humberside and UK percentages. At the SIC Divisional level SY has an employment distribution weighted more towards manufacturing, reflecting the importance of metal manufacturing and engineering in the county. Table 4.02 shows that manufacturing employment is reasonably evenly spread throughout the county although Rotherham has the largest relative share.

Table 4.01 The number of full-time jobs in South Yorkshire in 1991.

Sector	1991	%
Primary	19161	5.8
Secondary	123466	37.6
(Manufacturing)	(99228)	(30.2)
Tertiary	185603	56.5
Total	328230	100

Source: Department of Employment, NOMIS

Table 4.02. Manufacturing employment as a % of total employment at Travel-to-work-area level in 1991

Travel-to-work-area	%
Sheffield	24
Doncaster	22
Rotherham	28
Barnsley	26

Source: Department of Employment, NOMIS

There has been a dramatic change in employment structure over the period 1981 to 1991. Table 4.03 shows that the county as a whole lost over 74,000 full-time jobs (an 18.5% reduction) and these job losses were mostly accounted for by the decline of the primary and secondary sectors as a whole. The tertiary sector, on the other hand, has continued to expand and a further 14,309 full-time jobs (an 8.4% increase) have been established in this sector. This growth, though, has not been sufficient to compensate for the loss of traditional manufacturing jobs.

Table 4.03 Employment change in South-Yorkshire, 1981 - 1991 (All full-time jobs).

Sector	1981	1991	Absolute change	% change
Primary	59419	19161	- 40258	- 67.8
Secondary	170123	123466	- 46657	- 27.4
(Manufacturing)	(147029)	(99228)	(- 47801)	(- 32.5)
Tertiary	171294	185603	+ 14309	+ 8.4
Total	402834	328230	- 74604	- 18.5

Source: Department of Employment, NOMIS.

Within these broad categories, the massive decline in primary sector jobs (divisions 0 and 1) is largely a result of the reduction of the local coal mining industry (reflected in division 1). It can be seen in table 4.04 that 69% of full-time jobs have been lost during the ten year period shown. The continuing shake-out occuring in manufacturing is reflected in the job losses recorded in the table. All three of the SIC manufacturing divisions (numbers 2, 3 and 4) have experienced decline and most losses have been concentrated in the metals and metal goods divisions. The 'other' manufacturing division (ie. number 4),

although experiencing a net job loss over the ten year period, has lost fewer jobs and is now the second largest manufacturing employment division in the sub-region. One segment of the secondary sector; that of construction (division 5), has actually experienced a 5% increase in jobs. The tertiary sector, as a whole, has experienced a massive increase in the number of full-time jobs but there is considerable variation within the tertiary divisions. Activities involving distribution and transport have actually lost jobs but there has been a massive increase of over 17,000 jobs in the financial services and 'other' services sectors (divisions 8 and 9).

Table 4.04 Employment change in South Yorkshire, 1981-1991 (All full-time jobs).

Division	1981	1991	Absolute change	% change
0	1876	1340	-536	-28.6
1	57543	17821	-39722	-69
2	49190	23709	-25481	-51.8
3	65550	45243	-20307	-31
4	32289	30276	-2013	-6.2
5	23094	24238	+1144	+5
6	48833	48637	-196	-0.4
7	24540	22039	-2501	-10.2
8	20756	29585	+8829	+42.5
9	77165	85342	+8177	+10.6
Total	402834	328230	-74604	-18.5

Source: Department of Employment, NOMIS.

These emerging trends seem set to continue. Stillwell and Leigh (1994) forecast a continuing relative deline in employment in manufacturing - with the share of manufacturing of total employment forecast to be approximately 20% by the year two thousand. This will in fact be just less than the equivalent value for Y&H but much bigger than the UK average. Steady growth in some service sector occupations is forecast (Stillwell and Leigh, 1994) - especially finance and business, government, distribution and hotel and catering, but it is expected that the growth rate experienced here will lag behind the Y&H equivalent. The possible consequence of this will be a share of services in total employment in SY by the year 2000 of approximately 34%, which will be less than the Y&H and UK equivalent shares. Forecasts of employment by SIC Division in SY (Sheffield

TEC 1995) show that manufacturing employment is expected to continue to decline, whilst most service occupations and the construction industry are expected to show an increase. The total employment forecast for the year two thousand shows an increase of employment in SY by nearly ten thousand jobs; a 2.4% increase over the period 1994 - 2000.

The decline and rationalisation of much of SY's traditional industry has caused unemployment rates in SY to be much higher than the national and, in some cases, the EU average. Table 4.05 shows the unemployment rates at travel-to-work-area level for January 1993. It is notable that these rates are higher than the regional and national averages throughout the table. The total level of unemployment is particularly high in Rotherham and Mexborough; nearly 46% worse than the national average and, in addition to this, there are particular problems of long-term and youth unemployment in Sheffield and Barnsley respectively.

Table 4.05 Unemployment rates for SY Travel to work areas in January 1993.

T.T.W.A.	Total %	Long-term %	Youth %
Rotherham and Mexborough	15.6*	37.6	33.7
Barnsley	14	35.7	34.1
Sheffield	12.7	39.1*	31.8
Doncaster	14.3	37.2	31.6
Y&H	10.9	33.9	31.5
GB	10.7	33	29

(* Highest rate in the Y&H region)

Source. Department of Employment. Employment Gazette.

When compared with the rest of Europe, unemployment rates for SY are quite high. This is especially the case for total unemployment, male unemployment and unemployment amongst all people older than 25 years of age. Female unemployment and unemployment amongst all people younger than 25 years of age is better than the EU average but worse than the national and regional equivalents (table 4.06).

Table 4.06 Unemployment in the EU in 1994

	Total in April 1994 (%)	Male (%)	Female (%)	Age less than 25 years (%)	Age greater than 25 years (%)
EU 15	11.3	10.2	12.8	21.3	9.6
EU 12	11.4	10.2	13.1	21.7	9.6
SY	11.7	14.3	7.8	20.1	9.9
Y&H	9.7	11.8	7	17.3	8.1
UK	9.7	11.5	7.3	16.6	8.3

Source. Eurostat. Statistics in focus - Regions 1995 - 2.

SY, as a county, has relatively low activity rates for men and women when compared with the rest of Y&H and the country (table 4.07). Evidence on activity rates for males and females combined (in table 4.08) confirm that SY, as a whole, has a relatively low level of activity. Within this total, though, there is considerable variation with Rotherham, for instance, having a level of economic activity well above the national average.

Table 4.07 Percentage economically active at county level in 1991

County area	Males %	Females %
South Yorkshire	83.3	64.6
Humberside	86.7	64.8
West Yorkshire	86.2	68.7
North Yorkshire	87.6	69.5

Source. OPCS (1992) County Monitor

Table 4.08 Comparisons of total economic activity rates, Spring 1993.

Admin area	% economically active (males and females combined)
UK	62.4
Y&H	62.1
South Yorkshire	59.1
Barnsley	58.1
Doncaster	59.7
Rotherham	64.8
Sheffield	56.5

Source: CSO, Regional Trends 29.

Table 4.09 Percentage of people (16 years +) in employment by occupational class status in 1991

Occupational class	SY %	GB %
Professional	5	6
Intermediate and Technical	21	27
Skilled non-manual	22	24
Skilled manual	28	22
Semi-skilled	18	15
Unskilled	6	6

Source. OPCS (1992) County Monitor

SY currently has a work force biased towards lesser skilled occupations although forecasts for occupation change over the period 1994 - 2000 in SY show that employment growth will be concentrated in the higher level occupations (Sheffield TEC 1995). The relative lack of senior management activity has manifested itself, in one respect, in less demand for producer services and, in another respect, a male and female weekly earnings level for non-manual workers which is less than the national equivalent (Unsworth and Northrop 1993), whilst being above the Y&H average for these categories. There is also a large variation in manual earnings. When compared with both the regional and national averages, male manual earnings in SY are greater in both cases whilst female manual earnings are smaller. In SY the size distribution of firms is similar to the

national average but the county has an above proportion of large firms; especially in Sheffield (although 18% of all indigenously owned companies in Y&H are to be found here). Two issues of a consequence of this may be a heightened vulnerability to restructuring and closure and, secondly, a good performing company giving a lead 'by example' to other businesses.

One key feature of the business establishment dynamic is the recent growth in external dominance, especially of large firms, making them vulnerable to contraction and closure. Y&H as a region has not really attracted high levels of inward investment during the 1980's and early 1990's, when compared to the rest of the UK, but 25% of that which has come (mainly in the form of expansions and acquisitions) has been located in SY (Leigh 1994). A second key feature of the business establishment dynamic is that the manufacturing sector in SY is a relatively poor performer. Average earnings in manufacturing tend to be lower than the Y&H and UK measures and, when measured in £'s per employee in manufacturing, investment and productivity levels tend to be lower also (CSO, Regional Trends 29). A third key feature is that Y&H regional GDP remains at broadly the 8% share of UK GDP but the contribution from SY is well below the national average. Based on 1990 GDP levels, it is estimated that SY GDP will grow by approximately 21% by the year 2001.This is less than the projected growth rate for Y&H and the UK which is expected to be 25% and 24% repectively (ReRo 1994). Table 4.10 shows GDP and per capita GDP figures for comparison with the rest of the EU and it is clear that per capita GDP in SY is some 21 % less than the average for the EU. This lags behind also the equivalent measure for Y&H and the UK.

Table 4.10 GDP and Per Capita GDP in the EU

	GDP in 1992 (ECU mill.)	GDP in 1992 (per cap.)	GDP in 1992 (per cap.) EU 15 = 100	GDP in 1992 (per cap.) EU 12 = 100
EU 15	5853853	15882	100	
EU 12	5436711	15669	100	100
UK	805591	13926	98	96
Y&H	63768	12781	90	88
SY	14544	11180	79	/

Source. Eurostat. Statistics in focus - Regions - 1.1995

A key feature of the economic potential of SY must be the perceived economic strengths and weaknesses of the sub-region. According to Roberts (1994), SY has a dynamic labour force with potential to contribute effectively to future productive effort but the sub-region as a whole suffers from a poor image. It enjoys a favourable cost of living and a sound strategic transport network but tends to have a lack of suitable sites for development, occupy a relatively peripheral geographical position (both within the United Kingdom and in terms of EU markets) and has a rather inadequate business infrastructure. SY has been hit by the twin problems of the decline of the coal industry and continuing steel industry restructuring as companies in this sector have sought to rationalise and modernise the production process. In a macroeconomic context the sub-region is slowly emerging from recession in the mid-1990's. Alongside the continued restructuring of the manufacturing sector has been the widening of the economic base toward the tertiary sector. Empirica (1990) found in SY an over-representation of declining industries, above average company size, above average growth in unemployment and below average growth in expanding industries. They also found, however, a relatively high level of local ownership (with some potential for the development of local strategies).

4.3 The potential sub-regional impact of the SEM.

The potential impact of implementation of the SEM legislation could be very profound, for the economy of SY is thought to be quite vulnerable (RIDER/IRES,1989; Quevit,1990; Ramsden,1991). An investigation into SY by a research team based in the Catholic University of Louvain (RIDER/IRES, 1989) found an over-representation of metallurgical industries (with average growth potential in the medium term), relatively little diversification of the production fabric and a large average size of enterprise. They concluded that SY has a medium\low growth potential in the medium term since it had higher than average employment in those sectors considered sensitive to the SEM (see below) and is relatively peripheral in relation to the major axes of the flows of trade within the EU. Their research pointed to an inadequate size of enterprise in most sectors, a low concentration of high technology and innovatory activity and an under-representation of producer services as evidence that the impact of the SEM will generally be negative. They also found that surveyed companies (especially small and medium sized enterprises) were inadequately informed of local, national and EU support initiatives. This is indicative of a need for a greater level of understanding of the threats and opportunities embodied in the SEM programme. Quevit (1990) concluded that SY had a weak RTD potential

although, in his study, he did detect an improving process of technical transition to neighbouring producers and in to new fields.

PACEC/RIDER (1990) looked at 117 UK industrial goods sectors in terms of the perceived sensitivity to the removal of the impediments to trade as proposed by the SEM legislation. Their assessment, based on an investigation of market and product characteristics including average company size, the importance of exports, the extent of import penetration and the existence of unexploited economies of scale, found a total of 83 sectors in the UK thought likely to be highly sensitive to the implementation of the SEM. Out of these 83 industrial sectors they suggested that 28 of them were likely to be strongly affected, 41 averagely affected and 14 weakly affected. In the South Yorkshire context, these 83 industrial sectors account for over 86,000 full-time manufacturing jobs and this is 86.8% of all full-time manufacturing jobs in the county. Table 4.11 shows how, in SY, these jobs are heavily concentrated in the strong or average impact sectors. It is notable that over one-third of all full-time manufacturing jobs in SY are to be found in those industrial sectors thought likely to be facing a strong impact.

Table 4.11 The impact of the SEM on industrial sectors in SY

	Strong impact	Average impact	Weak impact	Total
Number of sectors	28	41	14	83
Total manufacturing employment in sectors in SY in 1993	34152	44663	7320	86135
% of total manufacturing employment in SY in 1993	34.4	45	7.8	86.8

Note: 1. Sectors suggested by PACEC/RIDER (1990).

Source: Department of Employment, NOMIS.

Buiges et al (1990) produced an EU wide sectoral analysis which identified those industrial sectors thought most likely to be affected by the SEM. Looking at product and market characteristics, they concluded that a total of 40 industrial sectors were most likely to experience change as a result of the legislative programme. The UK government then ammended this list of 40 sectors to more realistically portray the UK's industrial structure and arrived at 39 sectors thought to be vulnerable in some way to the impact of the SEM. They then assessed

recent trade performance and the relative EU strength of each of these domestic sectors and, on the basis of this, produced an estimate of the probable relative performance of each of these sectors post-SEM. They concluded that 15 sectors were likely to be above average performers, 8 were likely to be average performers and 16 were likely to be below average performers. In the SY context these sectors are also significant; representing a total of 41.7% of all full-time jobs in the sub-region. It is worrying to note that, as shown in table 4.12, the majority of manufacturing jobs are in sectors which are estimated to experience significant change in their markets and perform less well as a result of the implementation of the SEM. On the basis if these analyses of the industrial sectors, it appears difficult to avoid the conclusion that the economy of SY is in a vulnerable position to the threat of competition and change implied by the implementation of the SEM programme of legislation.

Table 4.12 The impact of the SEM on industrial sectors

	Above average performers	Average performers	Below average performers	Total
Number of sectors	15	8	16	39
Total manufacturing employment in sectors in SY in 1993	15816	7143	18461	41420
% of total manufacturing employment in SY in 1993	15.9	7.2	18.6	41.7

Note: 1. Sectors suggested by Buiges et al (1990).

Source: Department of Employment, NOMIS.

4.4 Conclusions.

SY has been shown to be a traditionally industrial local economy which is seeking to look forwards and continues to undergo very profound change in terms of its economic structure. The primary and secondary sectors are on a downward trend in terms of employment levels and, although the tertiary sector is on an upward trend, the growth in this sector has not been enough to compensate for the decline in the primary and secondary sectors. The manufacturing sector in particular has undergone a profound period of restructuring over the past two decades as firms have seen the need to invest in new productive capacity in order to compete more effectively in world markets. This is one reason why South Yorkshire is a very interesting region to study. The employment distribution in

the sub-region is still weighted towards the manufacturing sector, and this reflects the relative importance of metal manufacturing and engineering. South Yorkshire can still be regarded as a manufacturing area in the traditional sense. Not only have companies addressed the need to rationalise and modernise the productive process; in the early 1990's they have had also to contend with the SEM and the consequently marked increase in competition in many sectors.

Research into the business environment of South Yorkshire suggests that because, for instance, of its relatively peripheral location and under-representation of producer services (RIDER/IRES, 1989; Roberts, 1994) the sub-region is not well placed to respond to the enhanced competition implied by the SEM. It can be contended that SY is, in fact, rather vulnerable to the impact of the SEM since it is estimated that there is, located in the area, a high proportion of manufacturing sectors which are thought likely to be strongly affected by the SEM. Based upon PACEC/RIDER (1990) analyses, it is estimated that more than 34 in every 100 full-time manufacturing jobs to be in such sectors. Their analysis also revealed that a total of 35 other industrial sectors will exhibit, what they called, an average or weak impact and, in South Yorkshire, these sectors account for over 52% of full-time manufacturing jobs. Similarly, Buiges et al identified 39 sectors in the UK as being likely to be affected by the SEM and, in South Yorkshire, these sectors account for approximately 42% of full-time manufacturing jobs.

In conclusion, it is the manufacturing sector which is of interest in this thesis and, since South Yorkshire is still to be regarded as a manufacturing sector dominated area, it appears to be sensible to base an investigation of the impact of the SEM on manufacturing industry in this sub-region. It is also a sub-region in which industry has recognised the need, after a period of relative decline, to rationalise and restructure. In this respect the local manufacturing economy can be regarded as being a rather dynamic environment where companies are not afraid to commit scarce economic resources towards the securing of competitive advantage.

Chapter 5: Company Research Framework and Results

5.1 Introduction

In section two of this chapter the empirical research methodology is described and explained. In the latter stages the results of this empirical research are revealed. The findings presented in this chapter are based on data derived from the reponses of 139 manufacturing companies in South Yorkshire in 1994 ie. shortly after the beginning of the introduction of the SEM. The data refers to general corporate characteristics, activity in preparation for trading in more open European markets in general, activity in preparation for trading in the SEM, recent company performance levels and the perceived information and advice needs of companies with regard to trading in the SEM.

Evidence is presented to show the corporate characteristics which active and inactive respondents had in common, and what were the most frequently reported forms of preparation activity for competing not only in the SEM, but also in more competitive European markets in general. The link between the existence of preparation activity and improved recent corporate performance is also investigated to see if, and to what extent, the act of engaging in preparation activity has resulted in a company performing more strongly in it's own market place.

The data on recent performance indicates a generally favourable and optimistic climate, whilst the data on the information and advice needs of companies indicates that nearly three-quarters of all respondents would like to know more about some aspect of the SEM. In the final section of the chapter, a simple count of company responses is undertaken to reveal that those companies which are perceived as 'active' (in terms of preparation activity) can typically exhibit characteristics which are markedly different from those of the 'standard' company featuring in the sample.

5.2 General design characteristics and considerations of the survey.

a) The sample.

The sample population was defined as manufacturing companies (from SIC Divisions 2, 3 and 4) located in South Yorkshire. When cases reported in their questionnaire any activities other than manufacturing, they were excluded from the sample. In fact some forty-three respondents were eliminated for one reason or another. The questionnaire was designed to allow completion within 10 - 15

minutes but was reasonably sizeable (7 A4 sides of printed paper). Information was disaggregated to the company (individual unit) level and each case was asked to respond in terms of a particular establishment address. When respondents indicated the existence of a legal link with some other establishment, they were asked to clarify the nature of the relationship. The method of data collection was a postal survey of 367 manufacturing companies, with postal follow-up to 194 initial non-respondents, in March to April 1994. From a data base of over 21,000 businesses in Yorkshire and Humberside (Rechar project, Sheffield Business School), firms in South Yorkshire were selected with SIC codes 2, 3 and 4 and with employee sizes of 20 and upwards. A population framework of 1638 companies was thus derived in the following employee size bands :

Table 5.01 The population framework

Band	Employee range	Number of companies in population
D	20 - 49	367
E	50 - 99	172
F	100 - 199	99
G	200 +	95
U	Unclassified	905
Total	All	1638

Source: Rechar project data, Sheffield Business School.

From the population of companies in categories D, E, F and G a '1 in 2' systematic sample was conducted to produce a sample population of 367 companies. For the pilot study, a sample of 'U' category companies was produced on the basis of a '1 in 18' systematic sample. This yielded a total of 50 companies to whom the questionnaire was sent as a pilot study. In the light of some 14 responses the questionnaire was modified in terms of instructions and wording, but the basic structure remained the same. The modified questionnaire was then mailed out to the selected addresses. Enclosed with each questionnaire was an introductory letter from the author, an outline of the research project and a supporting letter from the author's director of studies, Professor Peter M. Townroe. A postage-paid reply envelope was also included in order to boost the likelihood of response. The mailings were distributed in March 1994 and were subsequently returned at a workable questionnaire response rate of 23 % (87 cases). A written follow-up to 200 non-respondents, with a request to complete

and return the questionnaire, produced a further response; and a workable database of 139 cases was produced (38% of the sample population).

With respect to the two variables of company size (number of employees) and industrial sector (SIC Division codes at single digit level) the sample was representative of the sample frame as a whole. The original data for the sample frame was provided by Sheffield Business School under the auspices of the RECHAR project of the EU. The RECHAR project is part of the EU's structural funding arrangements and the aim is to provide assistance to help accelerate the economic adaption of coal mining areas - especially those most seriously affected by job losses amongst miners. The project tries to achieve this through assisting the upgrading of the local environment, promoting new economic activities and retraining former miners (CEC,1995). The Sheffield Business School data was a comprehensive data base containing details of all businesses in Yorkshire and Humberside - some 21,079 businesses in number - with SIC Division codes of 1, 2, 3, 4, 81 and 85 (ie. energy and water supply industries, manufacture of metals, metal goods and engineering industries, other manufacturing industries and financial services respectively). From this total, businesses in South Yorkshire with SIC codes 2, 3 and 4 and with at least twenty full-time equivalent employees were selected. This produced a sample frame of 1638 businesses on which to base the survey.

Table 5.02 Table to illustrate the size representativeness of the questionnaire respondents.

Conpany size	RECHAR database		Sample frame		Respondents	
	No.	% age	No.	% age	No.	% age
D 20 - 49	367	50	184	50	58	42
E 50 - 99	172	23	86	23	34	24
F 100 - 199	99	14	50	14	23	17
G 200 +	95	13	47	13	24	17
Unclassified	905	/	/	/	/	/
	1638	100	367	100	139	100

Source: Rechar project (Sheffield Business School) and 1994 Survey.

Notes:

1. Most of 'unclassified' companies employed 10 or fewer full-time equivalent employees.

2. Percentage columns may not sum to 100 due to rounding.

From the size categories of D, E, F and G, one company in every two was selected and this produced a sample which was half the size of the total number but still representative in terms of size structure. Firms in the unclassified category were not used in the actual survey but 50 of them (a one in eighteen selection) were used to test the potential performance of the questionnaire. Table 5.02 shows the size categories and distribution of the data-base, sample and respondents. It is clear from this table that firms responded in roughly equal proportions to the distribution in the data-base and sample. Size category D (the 20 - 49 group) was most common amongst the respondents and this number, shown as a percentage of the total number of respondents, was only eight percentage points different to the distribution of the sample frame. There was a very close match in the 50 - 99 employee category and a close match in the 100 - 199 and 200 plus employee categories. In consequence it can be concluded that the size distribution of the companies which responded to the questionnaire, and are hence included in the statistical analyses in this thesis, is representative of the sample frame which, in turn, is representative of the data-base.

A similar picture emerges when the distribution of companies in terms of industrial sector is considered. The original sample frame of 367 firms were distributed towards SIC Division 3 (metal goods and engineering) and the proportion of respondents in the various divisions presents a very close match to the sample frame not only in division number three but also in the other two divisions. Table 5.03 below presents the full details.

Table 5.03 Table to illustrate the sector representativeness of the questionnaire respondents.

SIC Division	Sample frame		Respondents	
	No.	% age	No.	% age
2	55	15	19	14
3	204	56	77	55
4	108	29	44	32
	367	100	139	100

Source: 1994 Survey.

Notes:

1. Division 2 - manufacture of metals

   Division 3 - metal goods and engineering industries

   Division 4 - other manufacturing industries

2. Percentage columns may not sum to 100 due to rounding.

In the light of this discussion it is reasonable to assume that the companies whose returns have provided the evidence for analysis in this thesis are representative of the sample frame in terms of both size (as measured by the number of full-time equivalent employees) and industrial sector (as measured by SIC Division single digit category).

A copy of the questionnaire can be found in appendix number two. The questionnaire was designed to prevent it from becoming intimidating in terms of the time taken to complete it and, to this end, a balance was achieved between brevity and breadth. It was split into five sections designed to elicit information on the following :

Corporate characteristics
General European trading activity
Specific Single Market activity
Corporate behaviour\performance
Information\advice needs of companies vis-a-vis the SEM

b) Corporate characteristics.

Information on company characteristics has been used in order to differentiate between cases in terms of business organisation (parent company, single site, branch/subsidiary of a larger company etc.); legal status (Ltd, plc etc.) ; age ; size (by £ annual turnover); the threat of international competition (the location of each case's main competitor) and SIC product classification (metal manufacturing, engineering or other manufacturing). On the basis of these categories a number of statistical analyses have been carried out in order to test the afore-mentioned hypotheses. It is demonstrated in chapter six how some of the variables work better than others as a way of discriminating between respondents.

c) General European trading activity and specific Single Market activity.

Firms were asked to provide information on their activity in preparation for trading in a more open and competitive European market in general. They were also asked to provide information on their specific preparation for trading in the EU as a result of the liberalising impact of the introduction of the SEM. In both cases firms were asked to indicate, from a list of suggested activities, which ones they had undertaken in the three years immediately prior to the completion of the

questionnaire. It was necessary to make the distinction because of the reality of the trading situation in which respondents found themselves. Many companies are trading in markets in European countries which do not directly come under the auspices of the EU; yet are influenced by the legislative arrangments which are extended to these countries. It is possible to consider those EFTA member countries which have yet to fully join the EU in this respect. The survey data was gathered in the Spring of 1994 and, at that time, recent EFTA members were only in the process of joining the EU. On a more specific point, many companies have competitors and customers and suppliers based within the EU and, because of this, it can be reasonably expected that they are taking or have taken steps to specifically prepare for the impact of the SEM. The aim in gathering this information was to identify the patterns of behaviour or strategies adopted by companies to enhance or protect their trading position current at the time of completing the questionnaire. Data was sought mainly on each company's market orientation; their specific marketing policies; and whether this affected general company structures in products, processes or organisation. The questions referred to a range of activities that companies could be expected to carry out according to their own trading situation and; according to the time period under consideration. European-wide publicity, product range and modification, packaging modification, capital investment, collaboration, recruitment, training and consultancy are just some of the activities mentioned in the questionnaire.

d) Corporate behaviour and performance.

It is to be expected that different companies will be carrying out different types and levels of activities. This will vary according to the firm's own corporate characteristics and the degree to which they are exposed to competition from European competitors, on the one hand, and the degree to which they sell into European markets, on the other. Companies exist in a very competitive environment and it is reasonable to assume that companies, making the effort to undertake different levels and types of activity, will enhance their own position in relation to competitors. It may well follow, therefore, that the 'active' companies report a level of corporate performance which is better in some way than the 'inactive' organisations. The scheme devised to assess performance in the questionnaire was to ask, across a range of indicators, what had happened in terms of a static/increased/decreased framework. The reference time period for this was the twelve month period immediately prior to the completion of the questionnaire. Indicators chosen were related to sales and marketing and also employment and output levels, floorspace usage, order books and, an overall self-

assessment of the company's ability to compete. In view of the fact that any variation in company performance may be due to the influence unique to the geographical markets in which they operate, respondents were also asked to assess separate performance levels in domestic, EU and also other international markets. Such information is valuable because it provides evidence of the trading climate in which respondents were operating. It also, in part, can be used as the basis of a cross-tabulation exercise which seeks to investigate the link between trading preparation activity and company performance. It is reasonable to expect that, ceteris paribus, those companies actually putting time and effort into defending or enhancing their competitive position vis-a-vis competitors from Europe should report a better level of performance than those which were not. There exist obvious limitations to this type of exercise; not the least of which being a question mark over the cause/effect relationship between performance and preparation activity, but some interesting points do emerge and this aspect of the analysis is investigated further in the cross-tabulation exercise which is featured in the following chapter.

e) Information and advice needs of companies.

Many companies have devised, tested and adopted a strategy to enable a successful continuation or development of trading within the SEM, or more open European markets, as more and more trade liberalisation legislation has been put in place by the EU. These would probably be the 'winners' of the 1992 programme (after Foley 1989). On the other hand many companies, for a number of reasons, have not developed a strategy suited to their own situation and, in order to avoid becoming a 1992 'loser', have a real demand for leadership and guidance on business matters related to the enhancement of their competitive position vis-a-vis competition in the SEM. Given that privately funded consultancy can be relatively expensive, it could be contended that the public sector, in some capacity, could be an effective agency for directly or indirectly delivering this advice. Each respondent was asked in the questionnaire to identify, out of a list of a possible fourteen, which ones would be more useful if understood in greater depth. The suggested topics covered a wide range of business activity such as administrative procedures, product and process development implications, sales and marketing, staffing improvements and government and EU financial asisstance.

5.3 Results of empirical research.

a) Basic corporate characteristics of respondents.

The majority of respondents were established as a company before 1969 (54%) and are thus at least 26 years old (table 5.04). A sizeable number of respondents were a branch/subsidiary of a larger company (34%) but the majority were single site, free standing organisations (48%) (table 5.05). The sample was overwhelmingly populated by private limited companies (78%) (table 5.06) and all companies were involved in manufacturing (their response to the questionnaire was not included in the analysis unless this was the case). 37% of the cases were involved in some way with the production or processing of metals, 19% with engineering and 45% with other forms of manufacturing (table 5.07).

Table 5.04 Number of firms (by age category) featuring in the sample (n = 139).

	No.	%
Before 1970	75	54
1970-1979	32	23
1980-1989	25	18
1990 onwards	7	5

Source: 1994 Survey.

Table 5.05 Number of firms (by structural status) featuring in the sample (n = 138).

	No.	%
a single site business	66	48
a multi site business	18	13
a parent company with subsidiaries in the UK	4	3
a parent company with subsidiaries abroad	3	2
a branch/subsidiary of a larger company	47	34
a franchise of a larger company	0	0

Source: 1994 Survey.

Note : 1 missing value

Table 5.06 Number of firms (by legal status) featuring in the sample (n = 139).

	No.	%
a Sole Trader / Partnership	5	4
a Private Limited Company	108	78
a Public Limited Company	21	15
other(s) (please specify)	5	4

Source: 1994 Survey.

Table 5.07 Number of firms (by categories of manufacturing) featuring in the sample (n = 139).

	No.	%
Production or processing of metals including steelmaking	51	37
Mechanical or electronic or electrical engineering	26	19
Other manufacturing	62	45

Source:1994 Survey.

Table 5.08 Number of firms (by SIC Class headings) featuring in the sample (n = 139).

SIC Class heading		
21	Extraction and preparation of metalliferous ores	1
22	Metal manufacturing	28
23	Extraction of minerals not elsewhere specified	0
24	Manufacture of non-metallic mineral products	4
25	Chemical industry	5
26	Production of man-made fibres	4
31	Manufacture of metal goods not elsewhere specified	46
32	Mechanical engineering	27
33	Manufacture of office machinery and data processing equipment	1
34	Electrical and electronic engineering	10
35	Manufacture of motor vehicles and parts thereof	5
36	Manufacture of other transport equipment	6
37	Instrument engineering	3
41/42	Food drink and tobacco manufacturing industries	4
43	Textile industry	4
44	Manufacture of leather and leather goods	1

45	Footwear and clothing industries	2
46	Timber and wooden furniture industries	6
47	Manufacture of paper and paper products ; printing and publishing	9
48	Processing of rubber and plastics	11
49	Other manufacturing industries	21
	None of the above (please state SIC Class heading)	

Source: 1994 Survey

Table 5.08 illustrates the distribution of cases in terms of the Census of Production's SIC Class headings. It is clear from the table that categories 31 (manufacture of goods not elsewhere specified), 22 (metal manufacturing), 32 (mechanical engineering) and 49 (other manufacturing industries) were the most frequently occuring. 96% of cases had a turnover during the year 1993-1994 of something greater than £100,000 but not greater than £5,000,000. Within this spread, most companies (46%) reported a turnover in the range £500,000 - £1,000,000 (table 5.09). Respondent's main competitors tended to be located in the UK (45%) and the presence of main competitors in the local area was broadly of equal importance to the presence of main competitors in the EU (20% and 19% respectively) (table 5.10).

Table 5.09 Number of firms (by category of annual turnover in £'s) featuring in the sample (n = 138).

	No.	%
under £100 000	0	0
£ 101 000 - 50 000	4	3
£ 501 000 - 1 000 000	27	19
£ 1 000 001 - 5 000 000	64	46
£ 5 000 001 (and above.)	43	31

Source: 1994 Survey.

Note : 1 missing value

Table 5.10 Number of firms (by location of main competitor) featuring in the sample (n = 133).

	No.	%
In South-Yorks. North-east Derbys. and North Notts.	28	20
In the UK	62	45
In the rest of the European Community	27	19
In the rest of the world	16	12

Source: 1994 Survey

Note : 6 missing values

It therefore appears that the typical company featuring in the investigation was a 25 year old, single site, private limited company engaged in manufacturing mainly non-metal goods, with a turnover of approximately £750,000 per annum and was competing principally at the national level.

b) Types of activity undertaken.

Companies were asked to report on activity undertaken in preparation for general trading in European markets over the preceeding three financial years. In terms of preparation for general European trading, it is clear from the results that the majority of companies were not, according to the forms of activity suggested, doing much ! There always exists the research problem of drawing erroneous conclusions on the basis of data given by companies which, in fact, could not be bothered with supplying a detailed answer but, in nearly every type of activity suggested in the questionnaire, the majority of companies indicated a negative response (ie. No or Not known); though very few companies indicated that they were not doing anything at all. There was, however, a wide variation amongst the respondents. Not one company in the sample had, over the preceeding three years, opened a branch/subsidiary in Europe in order to distribute its products there but seventy-three companies (53%) had started to provide or encourage training with regard to EU standards and technical and safety regulations. This may well be to do with the fact that companies have been forced to introduce modifications because of a change in the law, but the variation in involvement, in terms of the types of activity, is quite marked.

Other frequently reported activities were :

- started to send representatives to trade fairs in European cities and/or visit European customers or receive or host business visits from European customers - 51%

- modified its product design to take account of European customers or EC standards and technical and safety regulations - 44%
- internally reorganised or rationalised its activity - 43%
- broadened its product range available in Europe or diversified its output with a view to selling more in Europe - 42%
- taken any advice from a trade association/ professional body or chamber of trade or commerce with regard to any aspect of the Single Market or European business - 41%
- started to make its catalogues/price lists and other forms of publicity material avalilable in Europe or advertise in European journals/ newspapers and magazines - 41%
- expanded its output with a view to selling more in Europe - 35%
- modified its packaging to take account of European customers or EC standards and technical and safety regulations - 35%
- agreed any deals with new or existing distribution companies (agents/wholesalers/retailersetc) to sell your products in Europe - 34%

With regard to activity specifically for the SEM over the three financial years immediately preceeding completion of the questionnaire, more companies (54%) had done something than not done anything (42%) though, once again, the size of the differential was not particularly convincing. Some companies were also reporting a much higher level of activity than similar sized companies in similar industries. From the suggested list, the most frequently cited specific activity for the SEM was exhibition at international trade fairs (35% of cases). The other most frequently occuring were :

- Adapting to standards and technical regulations - 32%
- Staff training and development - 27%
- Investment in new plant and machinery - 27%
- Adjustment of Marketing strategy - 26%
- Product development and differentiation - 22%
- Strengthening of distribution channels - 19%
- Rationalisation/reorganisation or other internal restructuring - 14%

A sizeable proportion of the companies were not doing (or had not done) anything specifically for the SEM and the most frequently occuring reason for this was the insignificance of the threat of international competition to the core activity of the respondents (44% of the inactive companies). 12 % of the inactive respondents cited a lack of time and/or opportunity to consider what the

appropriate activity ought to be. It should be pointed out, however, that 27% of the same group were trading in international markets previous to the introduction of the SEM legislation and did not need, therefore, to specifically prepare.

c) Recent company performance.

The data on recent performance (the 12 months immediately prior to the completion of the questionnaire in March 1994), shown in table 5.11, reports a predominantly optimistic mood amongst the businesses surveyed. According to the thirteen variables and sub-variables listed in the questionnaire, aggregate business activity was either 'increasing' or 'static' (with 8 of the 13 actually 'increasing') over the twelve month period preceeding the date of completion of the questionnaire. A large majority of companies reported increases in :

- sales in domestic markets
- sales in international markets other than the EU
- company main product market share in domestic markets
- ability to compete in domestic markets
- ability to compete in EU markets
- ability to compete in international markets other than the EU
- order volume and output volume.

A small majority of companies reported increases in :

- main product market share in international markets other than the EU

A majority reported a static situation in terms of :

- sales in EU markets
- EU market share
- employment levels and amounts of operating floorspace.

There was not a majority of companies in any of the 'decreased' categories.

Table 5.11 Performance indicators and distribution of companies (%).

		Increased	Remained static	Decreased	no.
Company sales in :	domestic markets	52	30	18	137
	EU markets	43	44	13	100
	other international markets	59	34	7	101
Company main product	domestic markets	54	35	11	132
market share in :	EU markets	34	52	14	96
	other international markets	52	42	6	101
Your own assessment	domestic markets	71	25	4	136
of your company's overall	EU markets	59	36	5	103
ability to compete in :	other international markets	63	35	2	104

Volume of Orders	67	20	14	138
Volume of Output	67	20	12	138
Employment	32	38	30	138
Operating floospace	12	80	7	138

Source: 1994 Survey.

d) Information and advice needs of companies

In the final section of the questionnaire, respondents were asked about the types of advice or information they would like to have with regard to trading in the SEM. This information is useful in that it can be used as an indicator of each company's own self-confessed weaknesses. It can also be used to inform the discussion as to what the public sector and related agencies ought to be doing in support of the private trading sector. The manufacturing sector, through the usual course of business, is obviously engaged with the public sector on a range of issues and it could be contended that the public sector is in a very good position to give effective leadership and encouragement to companies.The data reveals the

existence of an important knowledge gap amongst manufacturers as they trade within the Single Market. 22% of respondents reported no interest in finding out more to do with any of the suggestions; but an overwhelming proportion (72%) reported a desire for more information in a range of areas. Most wanted to know more about government and EU financial assistance (45%) but strong interest was shown also in finding out more about:

1. appropriate sales and marketing strategies - 28%
2. European markets and sectors - 27%
3. EU technical standards and regulations - 26%
4. product design and development with regard to local customer preference - 21%

The reported interest in financial assistance probably reflects the desire to ascertain whether individual businesses qualify for support from the many sources of finance. The other common information interests can, though, be grouped quite distinctly into a 'marketing strategy interest' (points one and two above) and a 'product development strategy interest' (points three and four). There were other areas of interest which were indicated on a regular basis but at least one firm in five was keen to find out about these four listed aspects. In the chapter which follows, a principal components analysis is used to identify the major strategies adopted by respondents in preparing to trade in more competitive European markets. These strategies feature prominently activity to do with marketing and product development.

5.4 A simple count of company responses.

In terms of company characteristics (age, structure, status, size of annual turnover and location of main competitors), the data has been analysed to see which companies were doing most activities or were interested in more aspects of advice/information as shown by their responses to the relevant section of the questionnaire. Section two suggested twenty seven activities related to preparation for trading in more open European markets and section three point one suggested eleven activities as specific preparation for trading in the SEM. Section five suggested fourteen areas of interest and companies were asked to indicate which of these they would like to find out more. The limitation to this type of analysis is that it is quantity rather than quality based with the danger being that those companies doing a great deal of a few activities will not be ranked as highly as another company which may be doing more types of activity but in a less than satisfactory manner. Nevertheless, some interesting points emerge.

a) Active respondents.

The third column of table 5.12 shows the percentage distribution of cases across the whole sample in terms of the sub-categories of corporate characteristics. Columns 4 and 5 shows the percentage of companies doing most activities in the sample (as reported in the questionnaire responses) and column 6, the percentage of companies interested in most types of advice/information, again, in terms of the characteristic sub-categories. Each 'set' of percentages should sum to 100 but may not due to rounding. Table 5.12 shows the number of companies (%) reporting ten or more activities with respect to preparing to trade in a more open European market. (The use of an arbitrary cut-off point, such as this, results in the inclusion of a varying number of companies. In the next paragraph, a level of at least four SEM specific activities is used as the selection criteria and this results in thirty-six companies being involved in that particular analysis). Thirty-nine companies were included (28% of the full sample) with the highest scoring company doing nineteen different activities out of a possible total of twenty-seven. It can be seen that high ranking companies tend strongly to be branch/subsidiaries of larger companies (59%) even though the modal group for the full sample is a single site business. Companies are likely to be private limited companies but there is a higher probability of finding a PLC amongst the high ranking companies than when compared to the full sample. In terms of size of annual turnover, there is a strong bias towards large turnovers and away from small ones. Companies with an annual turnover of more than £5 million make up only 1% of the full sample but account for 2/3 of the high ranking ones. Companies whose main competitors are located beyond the UK but within the EU, not surprisingly, are the most occuring amongst the high scorers (46%) despite representing only 1/5 of the full sample.

In summary, the characteristics of the company profile emerging as an 'active' company seems to be markedly different from the typical company featuring in the whole sample. The typical company featuring in the investigation is a 25 year old, single site, private limited company, with a turnover of approximately £750,000 per annum and is competing principally at the national level. Those companies doing most types of general preparation for trading in Europe activity tend to be branch/subsidiaries of larger firms, make metal based products, have a very large annual turnover (£ 5 million plus per annum) and have their main competitors located in the EU (excluding the UK). This is exactly the same as the

profile of the companies scoring highly in the first three principal components identified in the principal components analysis in the following chapter.

Companies reporting involvement in four or more activities specifically in preparation for trading within the SEM are shown in column 5 of table 5.12. Thirty-six companies were included (28% of the total sample) with the highest individual score doing nine separate activities out of a total of eleven. The profile which emerges is rather similar but not identical to the above. Branch/subsidiaries of larger companies tend to occupy an even stronger position (61% of high scorers) and although they are private limited companies, there seems to be a higher probability of finding a PLC than when compared with the full sample. High ranking companies are, once again, very high turnover ones (50% and 64% repectively) but, in terms of the location of main competitors, the UK, just like in the full sample, is now the most common category. There is though, a higher probability of finding a company with its main competitors in the EU and the rest of the world amongst the high ranked companies than when compared to the full sample. One should always bear in mind the possibility of companies denying current involvement in these activities because of a previous but now concluded involvement, but the profile of these companies seems to be one of a branch/subsidiary of a larger firm with a very large turnover but with it's main competitors located within the UK. This is exactly the same as the profile of the companies scoring highly in the fourth principal component identified in the principal components analysis in the following chapter. The percentage of companies reporting an interest in receiving advice on four or more subjects (out of a maximum of fourteen)are included in column 6 of table 5.12. Forty-two companies have been analysed (30% of the total sample) and, for the record, the maximum score was nine subjects. The profile to emerge from the evidence is not as distinct as the two profiles mentioned above. Branch/subsidiaries of larger companies and single site firms are both equally well represented. Companies with the biggest demand for advice and information tend to have a relatively large turnover (43% in the £1 million to £5 million category) and seem to have their main competitors nationally based.

Table 5.12 Survey findings (%) on the highest levels of engagement.

1	2	3	4	5	6
Company characteristic	Sub-category of characteristic	Distribut-ion of firms in the full sample (%)	Distribut-ion of active firms (%)	Distribut-ion of active firms (%)	Distribut-ion of active firms (%)
Year in which	pre-1969	54	56	61	45
began trading	'70-'79	23	23	25	29
	'80-'89	18	13	8	19
	'90+	5	8	6	7
Firm structure	single site	47	23	19	38
	multi site	13	10	14	19
	parent with subsidiary in UK	3	3	3	2
	parent with subsidiary abroad	2	5	3	2
	branch/subsidiary of a larger firm	34	59	61	38
	franchise of a larger company	0	0	0	0
Firm legal	sole trader/partner.	4	0	3	5
organisation	private Ltd	78	67	61	71
	plc	15	26	25	19
	other	4	8	11	5
Annual turnover	< £100,000	0	0	0	0
	101k - 500k	3	3	3	5
	501k - 1 million	19	3	6	19
	1 million - 5 million	46	26	25	43
	5 million +	31	67	64	31
Location of main	local	21	0	0	10
competitor	in UK	47	26	39	52
	in EU	20	46	33	19

	in rest of world	12	26	25	14
		n = 139	n = 39	n = 36	n = 42

Source: 1994 Survey.

Notes :

1. Column 4 shows the distribution of firms engaged in most types of European trading preparatory activity.
2. Column 5 shows the distribution of firms engaged in most types of specific SEM preparatory activity.
3. Column 6 shows the distribution of firms interested in most types of advice for the SEM.

b) Inactive respondents

In the following section the results are presented for those companies which scored least highly in the rankings. The evidence on general European trading preparation activity is shown in column 4 of table 5.13 and represents those forty-five companies (32% of the full sample) who reported an involvement in two or less activities. The data on specific SEM preparation in column 5 is presented for sixty-three companies (45% of the full sample). These companies reported no specific activity whatsoever. The data on demand for SEM information and advice is presented in column 6 for thirty-eight companies (27% of the full sample) and represents all those with no reported interest whatsoever.

Table 5.13 Survey findings (%) on the lowest levels of engagement.

1	2	3	4	5	6
Company characteristic	Sub-category of characteristic	Distribut-ion of firms in the full sample (%)	Distribut-ion of inactive firms (%)	Distribut-ion of inactive firms (%)	Distribut-ion of inactive firms (%)
Year in which	pre-1969	54	51	54	63
began trading	'70-'79	23	27	27	21
	'80-'89	18	16	13	11
	'90+	5	7	6	1
Firm structure	single site	47	69	63	55
	multi site	13	13	16	11
	parent with subsidiary in UK	3	2	2	3
	parent with subsidiary abroad	2	0	0	0

	branch/subsidiary of a larger firm	34	13	17	26
	franchise of a larger company	0	0	0	0
Firm legal	sole trader/partner.	4	4	5	3
organisation	private Ltd	78	89	86	79
	plc	15	7	10	13
	other	4	0	0	1
Annual turnover	< £100,000	0	0	0	0
	101k - 500k	3	4	5	1
	501k - 1 million	19	36	19	16
	1 million - 5 million	46	49	43	47
	5 million +	31	11	31	32
Location of main	local	21	40	38	39
competitor	in UK	47	51	43	39
	in EU	20	4	6	11
	in rest of world	12	2	5	8
		n = 139	n = 45	n = 63	n = 38

Source: 1994 Survey.

Notes :

1. Column 4 shows the distribution of firms engaged in least types of European trading preparatory activity.
2. Column 5 shows the distribution of firms engaged in least types of specific SEM preparatory activity.
3. Column 3 shows the distribution of firms interested in least types of advice for the SEM.

The evidence on company structure shows that the bias towards branch/subsidiaries of larger firms has clearly gone and been replaced by a tendency, which is quite marked in columns 4 and 5, towards single site businesses. Those companies which score at a low level are also more likely to have their main competitors based in the UK and, significantly, in the local geographical area.

To conclude this section, in contrast to the typical company representing the whole sample (which is a single site, private, mid-range annual turnover business with it's main competitors located within the UK), an interesting dichotomy between 'active' and 'inactive' companies can be suggested. There is not a direct split across all characteristic variables (for instance, the data on company age

does not behave as a good 'discriminator' at all) but active companies tend to be branch/subsidiaries of larger firms, have a very large annual turnover and tend to compete mainly against companies located beyond the UK in the EU and the rest of the world. Inactive companies tend to operate on a single site, have a medium to large turnover and compete against businesses based locally or certainly within the UK. Some inactive companies reported that their main competitor was located in international markets and, in the overwhelming majority of these cases, the reason for the inactivity was because of the fact that they were already trading in international markets and had not seen the need to specifically prepare. James Neill Tools Ltd (with 60 years experience of selling in Europe), Stanley Tools Ltd, DuPont Nylon Ltd and UES Holdings are just four notable examples of this. They are all large and effective manufacturers located in South Yorkshire. They had not started to do anything in preparation during the three years prior to completion of the questionnaire because they were already doing it! A surprising finding of the research has been the relatively large proportion of companies, with high or very high turnover, reportedly inactive vis-a-vis trading in the SEM (see column 5 of table 7.10). Out of the twenty-five least active large turnover companies (i.e. with an annual turnover greater than £1 million) about 1/3 were already trading in international markets and had not seen the need to specifically prepare for the SEM. Another 1/3 of the companies were not inclined to prepare because of the insignificance of the threat of international competition, whilst only two companies, at most, admitted to not having had the time or opportunity to carry out any preparation activity. Approximately 28% of the inactive, large turnover companies cited some 'other' reason for their lack of preparation activity. Most reasons put forward were related, in some way, to the protection of domestic markets, although some reported a capacity limitation and others reported the production of bulky, relatively low value products which were not economically viable to consider for export. Wybone Ltd, a manufacturer of litter bins and other street furniture, is a good example of the latter category.

5.5 Conclusions.

In this chapter the results of the empirical research have been set out to show that, of the 139 respondents, the majority had the characteristics of being single-site, private limited, with a medium sized turnover and with main rivals based within the UK. With regard to trading in more open European markets in general, the majority of firms were taking active steps to prepare, and the most common form of activity was in the provision of training to deal with EU standards and technical regulations. More than half of the enterprises in the sample reported

also an involvement in the sending of representatives to trade fairs in European cities and/or visiting European customers or receiving or hosting business visits from European customers. The most frequently cited specific preparation activity for the SEM was the exhibition of company products at international trade fairs. Nearly one in three firms were also involved in adapting to the standards and technical regulations as embodied in the SEM legislation.

With these activities in mind, the characteristic profile of the most active enterprises has been shown to be one with a larger annual turnover, that is a branch/subsidiary of a larger company, that is one which competes mainly against foreign rivals. The data on recent performance, as reported by respondents, appears to be encouraging. Thirteen variables and sub-variables were listed in the relevant section of the questionnaire, and the majority of firms reported an improving performance in these. This was especially the case in each company's self-assessed overall ability to compete, and order and output volume. Most firms revealed an interest in finding out more about the SEM, and this interest appeared to be particularly focused on the availability of and access to government and EU financial assistance.

In the next chapter the results of a number of statistical analyses of the company data are reported. The data is analysed to show the nature, strength and reliability of certain relationships which emerge. The objective behind this is to reveal the impact on manufacturing industry that the implementation of the SEM is having. The current chapter has shown, amongst other things, which enterprises are the ones most likely to be altering their competitive behaviour, and the types of preparation activity typically being undertaken. The next stage, then, is to assess the data to see what common strategies have emerged and whether any clear rules can be established for the purpose of identifying those types of companies most likely to be 'active'.

Chapter 6: Company Research Analysis.

6.1 Introduction.

In this chapter the empirical results are further analysed. A variable cross-tabulation exercise is used to identify some initial and interesting relationships between company characteristics and various forms of preparation activity for trading in Europe; and the impact that these types of activity/inactivity have had on corporate performance. It is shown that companies with certain characteristics are much more likely than others to be engaged in preparation activity. It is also shown that those firms in the sample, which do engage in preparation activity, have tended to be the better performers. In order to gauge the degree of engagement of companies with various forms of preparation activity for trading in more open European markets generally, and the SEM in particular, some twenty-four types of indicated activity have been condensed into seven meaningful forms or 'strategies' of activity through the use of a principal-components analysis (pca). The pca model is set out and discussed in the middle part of this chapter. This model derives a set of scores for each of the seven principal components (pc's) for each firm, and these scores are then used as the base data for a multiple-discriminant analysis. This procedure is adopted in order to discriminate between companies on the basis of certain corporate characteristics and their degrees of involvement with the seven 'strategies' of activity as suggested by the pca.

6.2 Relationships between company characteristics, various forms of preparation activity and the impact on corporate performance.

A number of cross-tabulations have been calculated in order to analyse the company data in terms of specific relationships. The statistic used to test the degree to which variables are related is the Pearson chi-square.When the associated significance level is low (ie. less than 5% or 1%) the hypothesis that two variables are independent can be rejected. Two relationships amongst the variables have been investigated :

(i) Company characteristics and European trading activity/ specific action for the SEM.

(ii) European trading activity/specific action for the SEM and corporate performance over the preceeding twelve months.

It should be borne in mind, though, that the Pearson chi-square is a test of independence and, as such, provides little information as to the strength and form of the association between two variables.

(a) Relationship (i): Company characteristics and European trading activity/ specific action for the SEM.

The data in appendix A.3(i) (parts a and b) and appendix A.3(ii) (parts a and b) shows those relationships found to be significant between certain corporate characteristics and preparation activity for trading in more open European markets in general, on the one hand, and specific action for the SEM on the other. Data is presented at the 5% and 1% significance levels. There is, in fact, a clear dichotomy in the data between the two most common forms of organisation in the sample; a single site business and a branch/subsidiary of a larger company. The overwhelming majority of single site businesses were not preparing for general European trading (as represented by the activities listed in the questionnaire) but the majority of branch/subsidiary companies were definitely active; especially in terms of:

- Europe targetted publicity
- foreign language publicity
- sending representatives to Europe
- broader product range
- staff language training
- foreign language personnel recruitment
- product and packaging modification
- internal reorganisation/rationalisation.

Branch/subsidiary organisations were also, more times than not, taking steps to specifically prepare for the Single Market whereas single site businesses were usually not. Only eleven (23%) of the Branch/subsidiary organisations admitted to doing nothing in specific preparation for the SEM. The active companies were particularly involved with :

- exhibition at international trade fairs
- Product development and differentiation
- Adapting to standards and technical regulations
- Adjustment of Marketing strategy
- Strengthening of distribution channels
- Staff training and development
- Investment in new plant and machinery

Some interesting points can be made about the ownership characteristics of companies and the impact that this has had on levels and type of preparedness. In

the first stage of this section of the chapter an initial comparison of firms which are single site, free standing ones is made with those which are branch/subsidiaries of larger ones. The purpose of this comparison is to show, firstly, the existence of different levels of preparedness in terms of the SEM and general trading in European markets. The second purpose is to identify the more common methods of preparation for both single site businesses and branch/subsidiaries of larger firms. In the second stage an attempt is made to separate out, amongst the firms which are branch/subsidiaries of larger companies, those which are owned by either domestic, non - UK EU and the rest of the world located parent companies. In doing this it becomes possible to pin-point any differences in levels and types of preparation activity which may exist between companies according to the location of the parent company.

In table 6.01 parts (a) and (b) the types of preparation activity are listed and, in each type of activity, the percentage of firms in each category reporting their involvement are shown. The column average totals are simply the average percentage mark in each column. This rather crude device allows a basic comparison between the two groups to be made; and it is clear from these figures that firms which are branch/subsidiaries of larger firms report a much higher level of involvement in the activities referred to in the questionnaire. This applies equally to activity in preparation for trading generally in European markets and to specific preparation for the SEM. General preparation activity for trading in European markets is shown in part (a) of the table. The figures show that, notwithstanding the fact that branch/subsidiaries report an absolutely higher level of involvement, the most common forms of preparation activity for both categories are related to marketing, staff recruitment and development, product and packaging development and internal restructuring. Within each category, branch/subsidiaries are most strongly involved in the activity of sending representatives to European market places, whilst single site businesses appear to be most strongly involved in the activity of providing training for their staff with regard to EU standards and technical and safety regulations. This distinction could perhaps be used as an example to illustrate the notion that branch/subsidiaries have taken on a pro-active and aggressive stance vis-a-vis the Single Market whereas the single site businesses have responded in a reactive and defensive manner. They report a high degree of involvement in the activity of adjusting to things like technical standards because they have no choice! This also applies to branch/subsidiary companies but in their case they have more

readily taken the opportunity to develop new markets and improve their competitive ability.

Table 6.01 parts (a) and (b) The involvement of branch/subsidiaries in various types of preparation activity.

Part (a) General preparation for trading in Europe.

Category of action	1. Branch/subsidiaries (% involved) n = 43	2. Single site (% involved) n = 65
1	67	31
2	58	12
3	81	34
4	65	28
5	53	28
6	7	-
7	4	-
8	14	-
9	4	-
10	26	-
11	9	-
12	4	-
13	2	-
14	16	9
15	33	14
16	18	5
17	69	32
18	56	14
19	58	20
20	63	45
21	26	11
22	24	3
23	65	31
24	61	22
25	52	25
26	12	12
27	56	31
Column average	37	15

Part (b) Specific preparation for the SEM.

Category of action	1. Branch/subsidiaries (% involved)	2. Single site (% involved)
1	33	14
2	49	23
3	51	14
4	58	20
5	40	5
6	33	9
7	9	31
8	30	23
9	26	2
10	23	8
Column average (rows 1-10)	35	15
11	28	57

Table 6.01parts (c) and (d) The involvement of branch/subsidiaries in various types of preparation activity.

Part (c) General preparation for trading in Europe.

Category of action	1. Branch/subsidiaries with UK based parent company (% involved) n = 34	2. Branch/subsidiaries with non-UK EU based parent company (% involved) n = 4	3. Branch/subsidiaries with rest of world based parent company (% involved) n = 5
01	65	25	80
02	77	25	60
03	77	75	80
04	56	75	80
05	41	75	100
06	6	25	20
07	6	0	0
08	9	25	40
09	3	25	0
10	29	25	0
11	9	0	0
12	6	0	0

13	3	0	0
14	12	50	20
15	29	50	0
16	12	50	20
17	65	50	80
18	47	50	80
19	56	50	60
20	65	0	20
21	26	0	0
22	26	0	0
23	65	50	40
24	47	75	100
25	47	25	20
26	15	0	20
27	50	75	60
Average	35	33	36

Part (d) Specific preparation for the SEM.

Category of action	1.	2.	3.
01	26	50	60
02	41	0	60
03	47	25	60
04	50	50	60
05	38	25	20
06	29	25	20
07	3	50	20
08	32	25	40
09	9	50	20
10	29	25	20
Average of above	30	33	38
11	21	25	20

Source: 1994 Survey.

Notes:

Categories of action:

Part (a) and (c):

1	started to make its catalogues/price lists and other forms of publicity material avalilable in Europe or advertise in European journals/ newspapers and magazines ?
2	started to publish catalogues/ price lists/ product information or any kind of publicity and promotional material in a European foreign language ?
3	started to send representatives to trade fairs in European cities and/or visit European customers or receive or host business visits from European customers ?
4	broadened its product range available in Europe or diversified its output with a view to selling more in Europe ?
5	expanded its output with a view to selling more in Europe ?
6	opened a branch/susidiary in Europe to manufacture there ?
7	invested in manufacturing in Europe via greenfield investment ?
8	invested in manufacturing in Europe via takeover ?
9	invested in manufacturing in Europe via merger ?
10	opened a branch/subsidiary in Europe to distribute there ?
11	invested in distribution in Europe via greenfield investment ?
12	invested in distribution in Europe via takeover ?
13	invested in distribution in Europe via merger ?
14	established a joint collaborative/partnership/cooperative agreement with another organisation to manufacture ?
15	established a joint collaborative/partnership/cooperative agreement with another organisation to distribute ?
16	established a joint collaborative/partnership/cooperative agreement with another organisation to conduct Research and Technical Development ?
17	internally reorganised or rationalised its activity ?
18	started to provide/encourage foreign language training for any staff ?
19	become more likely to recruit staff with foreign language qualifications ?
20	started to provide/encourage training with regard to EC standards and technical and safety regulations ?
21	started to provide/encourage training with regard to European business conventions and traditions ?
22	started to provide/encourage training with regard to European macroeconomic or sectoral market prospects ?
23	modified its product design to take account of European customers or EC standards and technical and safety regulations ?
24	modified its packaging to take account of European customers or EC standards and technical and safety regulations ?

25	agreed any deals with new or existing distribution companies (agents/wholesalers/retailersetc) to sell your products in Europe ?
26	paid for any advice on a consultancy basis with regard to any aspect of the Single Market or European business ?
27	taken any advice from a trade association/ professional body or chamber of trade or commerce with regard to any aspect of the Single Market or European business ?
Part (b) and (d):	
1	Product development and differentiation
2	Adapting to standards and technical regulations
3	Adjustment ofMarketing strategy
4	Exhibition at international trade fairs
5	Strengthening of distribution channels
6	Staff training and development
7	Cross-border inter-company collaboration
8	Investment in new plant and machinery
9	Merger/takeover or any other external restructuring
10	Rationalisation/reorganisation or other internal restructuring
11	Nothing specific for the Single Market

Part (b) of the table shows the percentage degree of involvement of the two categories in terms of specific preparation for the Single Market. Marketing aspects are again the most commonly reported for branch/subsidiaries together with the activity of adapting to standards and technical regulations. For single site businesses the most commonly reported feature was item number 11 - the 'nothing specific for the Single Market' item. On the positive side the activity of establishing cross-border inter-company collaboration was reported the most often by single-site companies, and this is a high figure in relation to the rest of the single site firm percentages and the equivalent percentage for branch/subsidiaries.

In stage two of this analysis the companies which reported themselves as being branch/subsidiaries of larger businesses have been investigated. There are 43 of them in total and in each case the name and location of the parent company has been established. The aim in proceeding in this manner is to examine the potential for different companies adopting differing strategies vis-a-vis the SEM and trading generally in more open European markets because of the unique influence of the location of the parent company. The notion that companies with a 'parent' based in the UK may be preparing in a different manner to a company

with a parent based in the EU beyond the UK or, wider still, in the rest of the world may be considered an interesting one to investigate. Having stated this it must be pointed out that, in what follows, only the broadest of conclusions can be drawn since the 43 companies which responded did not provide a very satisfactory sample. Of the 43 companies the vast majority of cases had parent companies located within the UK (34 in total) and only in 9 cases was a continental parent reported. Four were representative of the EU (beyond the UK) and five were representative of the rest of the world. Of the European ones two were based in Sweden, one in Luxembourg and one in Italy. The 'rest of the world' companies were composed of three from the USA, one from Australia and one from South Africa.

In terms of general preparation for trading in more open European markets it was difficult to distinguish the three categories from each other (table 6.01 part (c)). All were doing similar things related to marketing, internal restructuring, foreign language speaking staff recruitment and training, product and packaging modification and the taking of advice from sources such as the Chamber of Commerce. Some differences were noted, however, and these could be summarised as the tendency of the UK and rest of the world categories to be making publicity information available in Europe and in making it available in a foreign language; the tendency of the rest of the world and non-UK EU cases to seek to expand output with a view to selling more in Europe; the tendency of UK based branch/subsidiaries to be providing training with regard to standards, technical and safety regulations.

In the area of specific preparation for the SEM, the types of activity reported were rather varied and it proved difficult to spot a conclusive pattern (table 6.01 part (d)). The only exception to this was in terms of involvement in the adjustment of marketing strategy where firms in all three categories reported at least a 50% activity rate. It was, therefore, difficult to distinguish the three categories from each other.

Private limited companies (the modal category in terms of legal status) were not shown to be preparing significantly for general European trading but PLC's, more often than not, were sending representatives to Europe, arranging distribution deals and broadening the product range. It seems that large companies (as measured by turnover in the range £1 - 5 million) were much more likely to be taking steps to prepare than smaller ones. Companies with a turnover in the range

£500,000 to £1 million (the modal group in the sample in terms of size of annual turnover) were overwhelmingly not likely to bother. The large companies were particularly inclined towards foreign language publicity, sending representatives to Europe, broadening the product range, raising output levels, staff language training, foreign language personnel recruitment, product and packaging modifications, publicity targetted at Europe and internal reorganisation/ rationalisation. Large companies were also the only group more likely to be found specifically preparing for the SEM than not.

Two regression analyses have been carried out to assess the relationship between company size and the number of measures taken. The first analysis looks at measures taken in preparation for trading generally in more open European markets, and the second one looks at the number of measures taken in specific preparation for the SEM. The variable used in both analyses to represent company size was the reported size of annual turnover. In the questionnaire, companies were asked to show the category in which their company's annual turnover should be placed. The categories were : £0 - £100,000, £101,000 - £500,000, £501,000 - £1,000,000, £1,000,000 - £5,000,000 and £5,000,001 and above. No company reported an annual turnover of being less than £100,000 so, in both analyses, the cases were assigned mid-range turnover values of £250,000, £750,000, £2,500,000 or £7,000,000 respectively. Since the object of the exercise was to examine the extent to which company size had an influence on the number of measures taken, size was treated as an independent variable and the number of measures was treated as the dependent variable. In both analyses a simple two variable linear regression technique of the form:

$Y = b1(X) + b0$

was applied where:

Y = estimated value of Y (the independent variable)

b1 = regression coefficient

b0 = regression constant

X = the value of X (the dependent variable).

With regard to the regression of the number of measures taken in preparation for general trading in Europe to company annual turnover (model number 1), an equation was estimated in which the independent variable accounted for approximately 30% of the variance of the dependent variable. Even though the F ratio is highly significant and implies that the linear equation is extremely unlikely to have occured by chance, it is still a less than convincing outcome. It

appears that company size has only a relatively small impact on the number of measures taken, and the model is undoubtedly underspecified.

Regression model 1:

Y = 0.010981(X) + 2.173142
Multiple R = 0.55168
R square = 0.30435
Regression mean square = 996.69124
Residual mean square = 16.87501
F ratio = 59.06315
Significance of F= 0.00000
N = 137

The second analysis was even less convincing since it produced an equation which, though significant, estimated that company size explained just 18% of the variance of the independent variable; that is, the number of measures taken specifically for the SEM.

Regression model 2:

Y = 0.00393 (X) + 0.573474
Multiple R = 0.42716
R square = 0.18246
Regression mean square = 127.67520
Residual mean square = 4.23750
F ratio = 30.12987
Significance of F= 0.00000
N = 137

Again, the model appears to be underspecified. Size of company is just one of a probable number of variables which explain a company's tendency to be involved in preparation activity for both trading in more open European markets in general and, more specifically, the Single Market. One strong influence could be related to the extent to which a firm is exporting into European markets. A firm which is already exporting has a vested interest in maintaining it's competitive position and, since involvement in preparation activity requires a substantial investment in a range of resources, firms which are branch/subsidiaries of larger ones seem to

be better able to find the time and money necessary to prepare in anything like a comprehensive fashion.

Nevertheless, company size is an important factor. An additional analysis of 25 large companies which did not prepare specifically for the SEM revealed that the reason of there being too little time available was not a relevant factor. Only two of the sample used this as an excuse. The most common reason for no preparation was related to the insignificance of the threat of international competition to each company. Ten of the 25 could be fitted into this category. Six companies were already carrying out the activity before the relevant survey period, and seven companies reported a number of 'other' reasons which referred to issues of capacity limitations, bulky and low value products and a desire to maintain a localised operation without seeking out European markets. Only one small company had a high level of preparation activity involvement and this was a special case of a company which was a commercial venture of the University of Sheffield and was seeking to expand into Europe as a medical device engineering and testing company. This company reported a desire, in the near future, to begin testing and manufacturing to European and international standards.

Companies in the sample with competitors mainly located in the EU were, inevitably, more likely to be preparing for more competitive European trading. This willingness was particularly evident in the confirmation of involvement in Europe targetted publicity, business consultancy, foreign language publicity, sending representatives to Europe, broader output range, more output, internal reorganisation/rationalisation, staff language training, staff foreign language personnel recruitment, product and packaging modification and distribution deals. Companies with main competitors in the UK, the EU and the rest of the world were more likely than not to be preparing specifically for the SEM. This was hardly surprising since it was precisely these companies which were likely to be feeling the pressure brought about by more intense competition. Companies with main competitors situated in the local area tended to be inactive with regard to these types of preparation activity.

Of the inactive companies, 51% of these had an annual turnover of between £'s 1-5 million and nearly half of these (45%) were not inclined to prepare because of the perceived lack of threat from international competition. 20% of inactive companies were in the largest turnover category (£5 million plus) but the majority of these (62%) were more likely to have not done anything because they

were already doing it. The overwhelming majority of inactive respondents (87%) were competing mainly in local and national markets and, broadly speaking, it appears that the more local the competitor the less likely the company to be preparing for the SEM.

(b) Relationship (ii) European trading activity/specific action for the SEM and corporate performance over the preceeding twelve months.

A number of statistically significant relationships (at both the 1% and 5% level) were found to exist between the most commonly occuring forms of general European trading preparation activity and recent performance . The nine forms of activity listed in appendix A.3(iii) (parts a and b) were the most frequently reported. It is interesting to note how these eight items can be grouped into two strategies; one, to do with a marketing related strategy (publicity, sales representatives, distribution deals, packaging design) and, two, to do with a product development strategy (increased and diversified output, product modification, staff technical standards training). Those companies involved in preparing European wide publicity were also enjoying increasing sales in international markets other than the EU and an increasing ability to compete in both the EU market and international markets other than the EU. Those companies which had started to send representatives to Europe reported an increasing ability to compete in the EU market, increasing sales in EU markets and international markets other than the EU and increasing market share in international markets other than the EU. Business consultancy was seen to be linked with increasing sales and market share in international markets other than the EU and, the companies which had introduced a broader output range reported an increased ability to compete in EU markets and increased sales, market share and ability to compete in international markets other than the EU.

With regard to specific action for the SEM and corporate performance over the preceeding 12 months, appendix A.3(iv) contains information on the relationship between those companies actually taking steps to specifically prepare for the SEM (as indicated by a 'Yes' response to at least one of the activities suggested in the questionnaire) and recent performance. No relationship was found to exist at the 1% significance level but at the 5% level it was found that a strong majority of companies, who were specifically preparing, had experienced increasing sales and market share in international markets other than the EU and also had experienced either increasing or static market share in EU markets. In drawing conclusions from this, one should bear in mind the need for caution since it may

have been the case that any specific preparation activity had already been completed.

Of those companies reportedly inactive with regard to SEM preparation, there were some interesting findings in terms of company characteristics and recent company performance. Appendix A.3(v) details the relationships found to be significant at the 5% level. No relationships were found to be significant at the 1% level. Inactive companies tended to have a medium to large turnover (71% of inactive companies had a turnover larger than £1 million compared with 32% of firms in the full sample) and tended to be threatened only minimally by international competition. It is important to note, however, that, of those inactive companies in the largest turnover category (£5 million plus), 62% had already prepared and had not needed to carry out any specific preparation in the questionnaire period. 87% of inactive companies had their main competitor based locally or certainly within the UK (compared with 21% of the full sample and, once again, tended to be inactive because of the insignificance of the threat of international competition.

In terms of the link between inactive companies and reported recent performance, appendix A.3(vi) (parts a and b) details those relationships found to be significant. Inactive companies were seen to be underperforming in terms of sales, market share and ability to compete; this notwithstanding the fact that some 'inactive' companies had already carried out the activity. 37 % of inactive companies reported increasing sales in EU markets, compared with 43% of the full sample, and three quarters of these had not reported any activity because they were already doing it. Just over half of all the inactive companies reported static sales in EU markets (compared with 44% of the full sample) and 1 in 2 companies thought that it was not worth the effort to specifically prepare. This situation, remarkably, was almost exactly repeated with regard to sales in other international markets. Two thirds of inactive companies reported a static market share in EU markets (compared with 52% of the full sample) and other international markets (compared with 43% of the full sample) and 43 % of these thought it not worth the effort to specifically prepare. Those companies with increasing market shares in either of these markets were seen to be strongly linked to inactivity over the period in question because they were already doing it at the start. In terms of overall ability to compete in EU markets, about half reported an increasing ability (compared with 59% of the full sample) and half reported an unchanging ability to compete (compared with 36% of the full

sample). 61% of the former were already active prior to the period, and 39% of the latter thought it to be not worth the effort.

6.3 Towards the identification of company strategies.

A principal components analysis has been carried out in order to assess the response made by the surveyed companies to the implementation of the trade liberalising measures embodied in the SEM. Companies were asked to answer Yes/No/Not Known to a range of activities with regard to general preparation for European trading and, more specifically, the SEM. 'Yes' was taken as the response given to confirm that they had carried out a suggested type of preparation activity during the three financial years immediately preceeding the completion of the questionnaire. For the purpose of the following analysis 'No' and 'Not Known' were combined to represent the 'not present' response. Variables selected for inclusion were the most commonly occuring forms of activity in preparation for trading in both a generally more open European market and, more specifically, the SEM. These variables are listed in table 6.02 below.

Table 6.02 Final statistics. Variables with associated communalities (n = 139).

No.	Type of activity undertaken by firm during the three financial years previous to the completion of the questionnaire.	Comm-unality
1	Started to make its catalogues/price lists and other forms of publicity material available in Europe or advertise in European journals/ newspapers and magazines ?	.66090
2	Taken any advice from a trade association/ professional body or chamber of trade or commerce with regard to any aspect of the Single Market or European business ?	.71909
3	Started to publish catalogues/ price lists/ product information or any kind of publicity and promotional material in a European foreign language ?	.73227
4	Started to send representatives to trade fairs in European cities and/or visit European customers or receive or host business visits from European customers ?	.64965
5	Broadened its product range available in Europe or diversified its output with a view to selling more in Europe ?	.69100
6	Expanded its output with a view to selling more in Europe ?	.60747
7	Established a joint collaborative/partnership/cooperative agreement with another organisation to distribute ?	.76545
8	Internally reorganised or rationalised its activity ?	.56463

9	Started to provide/encourage foreign language training for any staff ?	.61718
10	Become more likely to recruit staff with foreign language qualifications ?	.68863
11	Started to provide/encourage training with regard to EC standards and technical and safety regulations ?	.69413
12	Started to provide/encourage training with regard to European business conventions and traditions ?	.66593
13	Modified its product design to take account of European customers or EC standards and technical and safety regulations ?	.68734
14	Modified its packaging to take account of European customers or EC standards and technical and safety regulations ?	.67837
15	Agreed any deals with new or existing distribution companies (agents/wholesalers/retailersetc) to sell your products in Europe ?	.70014
16	Paid for any advice on a consultancy basis with regard to any aspect of the Single Market or European business ?	.71383
17	Product development and differentiation	.66017
18	Rationalisation/reorganisation or other internal restructuring	.69874
19	Adapting to standards and technical regulations	.66541
20	Adjustment ofMarketing strategy	.67398
21	Exhibition at international trade fairs	.60102
22	Strengthening of distribution channels	.75015
23	Staff training and development	.50548
24	Investment in new plant and machinery	.72279

Source: 1994 Survey.

Note: 'Associated communality' is the proportion of the variance of each variable explained by the model.

The words 'factor analysis' are used to represent a set of techniques designed to account for the correlations among a set of variables in terms of relatively few

underlying dimensions which, themselves, are not actually observed. These underlying dimensions are known as factors and each variable included in the analysis is expressed as a linear combination of these factors. The aim of the analysis is to simplify the data into a number of meaningful factors which adequately represent the data variables. The basic proposition is that, when these variables share common factors, the observed correlations between the variables should be high. The group of statistical techniques known as cluster analysis was considered as an alternative approach to the use of principal components. This was essentially because the aim of cluster analysis, similarly to principal components, is to provide a parimonious summary of a large body of data. On balance, though, the principal components method was chosen because of worries about the method of combining clusters; in that different cluster methods applied to the same data set would lead to substantially different cluster structures. Secondly, in the case of it being impossible to identify any clusters at all, the resultant imposed clusters would be spurious.

(a) The principal component model.

The mathematical model for a pca is similar in form to a multiple regression equation except that the independent variables used are not single, independent ones but, instead, are labels for groups of variables which characterise a particular concept. The starting point is to examine the correlation matrix of the data. Variables must be reasonably well related to each other and, therefore, most of the correlation coefficients must be greater than about 0.3 (Kinnear and Gray 1992). The matrix also must not show properties of singularity (when variables are exact linear combinations of other variables in the analysis) and multi-collinearity (when some variables are highly, though not perfectly, correlated). The correlation matrix in the following analysis produced a determinant of correlation figure of 0.0000198, making it unlikely that the properties of singularity and multi-collinearity exist in the data. The inverse of the correlation matrix produced an encouraging Kaiser-Meyer-Olkin measure of sampling adequacy (Norusis 1988) of 0.86427. This is an index figure calculated to compare the magnitudes of the observed correlation coefficients with the partial correlation coefficients between all pairs of variables. A measure of one (maximum) is best and scores approaching this value are produced when the sum of the squared partial correlation coefficients between all pairs of variables is small when compared to the sum of the squared correlation coefficient. A small value of the Kaiser-Meyer-Olkin measure would indicate that it not sensible to use a principal components analysis since the correlations between pairs of

variables are not explained by other variables. Kaiser (1974) maintains that a Kaiser-Meyer-Olkin measure of less than 0.5 is unacceptable and characterises a measure of 0.86 as being 'meritorious'.

The Bartlett test of sphericity was calculated as 1258.1146 (significant at the 1% level) and, as such, indicated that the correlation matrix was unlikely to be an identity matrix (where, in the correlation matrix, all diagonal terms are equal to one, and all off-diagonal terms are equal to zero). This test statistic is based upon a chi-square transformation of the determinant of the correlation matrix and since the significance level (as reported here) is small, it appears that the hypothesis that the matrix is an identity matrix can be rejected.

At the factor extraction phase the aim is to produce factors which can explain variation in the data reasonably well. Some 'unique' variation will not be explained by these common factors but the broad aim is to achieve a model with fewer factors than variables and which can account for a large proportion of the variance. A principal components type of analysis has been used and this method seeks to produce factors (known as principal components, or PC's) which are linear combinations of the observed variables and which explain progressively smaller portions of the total sample variance (with each PC remaining uncorrelated with the others). Alternative methods of factor analysis were considered but the pca method was preferred. The main reason for this was that a pca analyses all of the variance of a particular variable and, as such, provides a more complete assessment of the data. Other methods of factor analysis exclude the 'unique' variance of a variable and, in consequence, assess only the 'common' variance attributable to all the variables in the data set.

The number of PC's needed is shown by the cumulative total variance explained by each PC (the standardised total variance explained by each PC is known as its eigenvalue). A model will represent the data adequately when relatively few PC's can be used to represent a large proportion of the variance.

The factor matrix is used to show the relative importance of the various PC's by presenting the factor loadings. Since the PC's are, in fact, orthogonal (ie. uncorrelated with each other) the factor loadings represent the correlation coefficients between the variables and the PC's - with the contribution made by a variable to a particular PC increasing with the magnitude of the loading. Each PC, therefore, may be represented by a series of coefficients showing the

contribution made by each variable. Close relationships exist between variables and PC's when the PC's have large coefficients. An assessment of how well the PC model fits the data can be made by examining the communalities (the proportion of the variance of each variable explained by the model). The reproduced correlation matrix is then examined to compare estimated correlations between variables (based on the relationship between factors and variables) with the observed ones. This allows a judgement of how well the model fits the sample. The differences between the estimated and observed correlations are known as residuals, and these become smaller the better the model fits the data.

Because of the routine difficulty in identifying meaningful PC's straight away, a further 'rotation' phase is often adopted. This becomes necessary because it is not always apparent that the variables and PC's are correlated in any realistically interpretable manner ; indeed, many of the PC's will have some degree of correlation with many of the variables. The first PC is calculated to maximise the total amount of variance it could explain and, as such, may have been distorted in order to accommodate some of the variance of the variables which may not really be part of this particular PC. Rotation is used, therefore, to transform the initial factor matrix into one which is easier to interpret and seeks to correct this distortion. The aim of rotation is to achieve a simple structure where the PC's have loadings only on *some* variables (making them easier to interpret), and variables have loadings on one or a few PC's (making these more easily differentiated from each other). From a range of rotational algorithms available for use (Hedderson,1991; Norusis,1988), the preferred method of rotation used below is the varimax method, and this serves to enhance the interpretability of PC's by minimising the number of variables which have high loadings on a particular PC. In fact in this method the calculations are done in order to maximise the tendency of each variable to load only on to one PC. Technically, the varimax method is an orthogonal rotation which leaves unaltered the communalities of the variables and the eigenvalues of the PC's and therefore each PC remains uncorrelated with the others. The correlation between PC's remains at 0.00; as it was before the rotation phase. There were other methods of rotation available. The quartimax method of orthogonal rotation, for instance, seeks to minimise the number of factors needed to explain a particular variable. However, one of the short-comings of this method is the general tendency for it produce a factor with high or moderate loadings on most variables. On balance, therefore, the varimax method was preferred since this seeks to simplify the factors rather than the variables

In the analysis detailed below, the final statistics show a seven PC solution with eigenvalues greater than one, and representing 67% of the total variance of the variables (table 6.03). The communalities are, on the whole, encouraging for a social science investigation of this type (Hair et al 1992) and range from a low of 0.50548 to a high of 0.75.

Table 6.03 Principal components and associated eigenvalues (n = 139)

Principal Component	Eigenvalue	Percentage of variance	Cumulative percentage
1	8.01418	33.4	33.4
2	1.85262	7.7	41.1
3	1.48213	6.2	47.3
4	1.35137	5.6	52.9
5	1.24651	5.2	58.1
6	1.15094	4.8	62.9
7	1.01610	4.2	67.1

Source: 1994 Survey.

The rotated factor matrix reveals a number of intuitively interesting PC's. In terms of corporate preparation for trading in the more liberalised European markets incorporating the SEM, respondent firms have, over the preceeding three years, broadly followed a seven strand strategy. These strands are detailed below table 6.04.

Table 6.04 Varimax rotated principal component loadings (> 0.5) (n = 139)

Type	PC 1	PC 2	PC 3	PC 4	PC 5	PC 6	PC 7
1	.75067						
2					.78390		
3	.78432						
4	.73187						
5	.56891						
6	.59413						
7							.81925
8						.65655	

9	.55763						
10			.59191				
11						.79491	
12			.68349				
13		.70484					
14		.75078					
15	.52118						
16					.82953		
17		.70023					
18				.64639			
19		.64991					
20			.63076				
21	.60092						
22			.66307				
23							
24				.75751			

Source: 1994 Survey.

Note: Type = Type of activity undertaken by the firm during the three financial years previous to the completion of the questionnaire. Refer to Table 6.02 for list of variables.

(b) The revealed principal components:

PC 1. A pro-active and aggressive marketing strategy.

Key features:

- started to make its catalogues/price lists and other forms of publicity material avalilable in Europe or advertise in European journals/ newspapers and magazines
- started to publish catalogues/ price lists/ product information or any kind of publicity and promotional material in a European foreign language
- started to send representatives to trade fairs in European cities and/or visit European customers or receive or host business visits from European customers
- broadened its product range available in Europe or diversified its output with a view to selling more in Europe
- expanded its output with a view to selling more in Europe
- started to provide/encourage foreign language training for any staff
- agreed any deals with new or existing distribution companies (agents/ wholesalers/ retailersetc) to sell your products in Europe

- exhibition at international trade fairs

PC 2. A re-active and enforced product development strategy.
Key features:
- modified its product design to take account of European customers or EC standards and technical and safety regulations
- modified its packaging to take account of European customers or EC standards and technical and safety regulations
- product development and differentiation
- adapting to standards and technical regulations

PC 3. A market position strengthening and staff recruitment/development strategy.
Key features:
- become more likely to recruit staff with foreign language qualifications
- started to provide/encourage training with regard to European business conventions and traditions
- strengthening of distribution channels
- adjustment of marketing strategy

PC 4. A long-term structural investment strategy.
Key features:
- investment in new plant and machinery
- rationalisation/reorganisation or other internal restructuring

PC 5. A knowledge acquisition strategy.
Key features:
- paid for advice on a consultancy basis with regard to any aspect of the Single Market or European business
- taken any advice from a trade association/ professional body or chamber of trade or commerce with regard to any aspect of the Single Market or European business

PC 6. A short-term structural investment and staff training strategy.
Key features:
- internally reorganised or rationalised its activity
- started to provide/encourage training with regard to EU standards and technical and safety regulations

PC 7. A collaborative distribution strategy.
Key feature:

- established a joint collaborative/partnership/cooperative agreement with another organisation to distribute

(c) Using the principal component scores - a simple ranking exercise.

The next step in the analysis is to examine the PC scores (which are calculated for each company) where the data is represented by PC scores, now, and not the variables. These scores are used to represent the value of the PC's. They are not the result of any test taken by the companies but the scores show the standing of each company on the latent variables which emerged as PC's. In the following section the PC scores for each case are analysed and these are ranked by magnitude of the score for each corporate characteristic of the sample. The single ranking criteria used was the size of the PC score attributable to each case for each of the seven PCs. Those cases whose scores for any particular PC were greater than one were analysed. This actually meant that the companies with the strongest association with a particular PC were investigated.

An average of twenty-four companies (maximum twenty-seven/minimum nineteen) were included in the investigation (17% of the full sample) and the data is presented in table 6.05. It can be seen that whereas the variables for company age and legal status did not produce any distinguishing characteristics, variables relating company structure, manufacturing product group, size of annual turnover and the location of main competitors did reveal, in part, some interesting facets of companies which had high PC scores and, as such, could be deemed as economically active vis-a-vis preparation for trading in a more open European market in general and the SEM in particular.

Table 6.05 Distribution of companies (percent) with high principal component scores.

Company characteristic	Sub-category of characteristic	No. %	PC 1	PC 2	PC 3	PC 4	PC 5	PC 6	PC 7
Year in which	pre-1969	54	50	59	52	48	47	46	48
began trading:	'70-'79	23	23	23	29	24	21	27	30
	'80-'89	18	19	15	19	24	26	19	11
	'90+	5	8	4	0	5	5	8	11
Firm structure:	single site	47	23	26	33	38	42	38	26
	multi site	13	12	26	5	10	16	15	22
	parent with subsidiary in UK	3	4	0	0	5	5	0	7
	parent with subsidiary abroad	2	4	0	5	5	5	4	4
	branch/subsidiary of a larger fin	34	58	48	57	43	32	42	41
	franchise of a larger company	0	0	0	0	0	0	0	0
Firm legal	sole trader/partner.	4	0	0	0	10	5	0	7
organisation:	private Ltd	78	77	70	71	62	68	88	66
	plc	15	15	26	19	24	21	4	15
	other	4	8	4	10	5	5	8	11
Annual turnover	< £100,000	0	0	0	0	0	0	0	0
(£'s):	101k - 500k	3	0	0	5	5	11	0	4
	501k - 1 million	19	8	11	5	19	16	15	15
	1 million - 5 million	46	31	33	29	29	32	54	44
	5 million +	31	62	56	62	43	42	27	37
Location of main	local	21	0	4	0	0	5	19	7
competitor:	in UK	47	35	30	33	62	53	42	44
	in EU	20	42	33	38	19	26	23	30
	in rest of world	12	15	22	29	19	16	12	11

Source: 1994 Survey.

Notes :

1. Principal component 1 (n = 26)

2. Principal component 2 (n = 27)

3. Principal component 3 (n = 21)

4. Principal component 4 (n = 21)

5. Principal component 5 (n = 19)

6. Principal component 6 (n = 26)

7. Principal component 7 (n = 27)

8. No. % = percentage distribution of companies in the full sample (n = 139).

The dominant company structure in almost every PC was a branch/subsidiary of a larger firm; the one exception being PC 5, in which a single site business is featured more strongly. This is in contrast to the full sample in which a single site business is the most frequently occuring (third column). The data on size of turnover reveals a strong bias towards very large turnover companies. In PCs 1,2,3,4 and 5 the companies involved are very large turnover ones (£ 5 million plus per annum), and in PCs 6 and 7 very large turnover companies are important but not as much as the relatively large turnover ones (£ 1 - 5 million per annum). In the full sample most companies have a mid-range turnover of between £0.5 - 1 million. Companies whose competitors are mainly located beyond the UK but within the rest of the EU feature prominantly in the high scorers of PCs 1, 2 and 3. The evidence for PCs 4 and 5 seems to emphasise companies with UK based competitors at the expense of companies with local ones. PC 7 is represented strongly by companies with main competitors in the UK and the rest of the EU and under-represented by companies whose main competitors remain within the local area.

In conclusion to this section, there seems to be three main distinguishing characteristics which serve to differentiate in terms of SEM response. These are: company structure, size of annual turnover and location of main competitors. The typical full sample company is one which is a single site, private, mid-range turnover, whose main competitors are nationally based. In contrast to this, high scoring companies appear likely to be branch/subsidiaries of a larger firm, high turnover businesses which compete mainly against European wide companies. There is, of course, a slight variation depending upon the particular principal component in question but figure 6.01 summarises these tendencies.

Figure 6.01 Scheme to illustrate some characteristics of the companies with high factor scores in each of seven principal components.

PC 1 PC 2 PC 3	high scoring companies are	branch/subsidiaries of a larger company very high turnover competing mainly against EU wide companies
PC 4	high scoring companies are	branch/subsidiaries of a larger company very high turnover
PC 5	high scoring companies are	very high turnover
PC 6	high scoring companies are	branch/subsidiaries of a larger company relatively high turnover
PC 7	high scoring companies are	branch/subsidiaries of a larger company relatively high turnover

It is interesting to note that the findings for PCs 1, 2 and 3 and PC 4 confirm the company profiles suggested by the earlier investigation of companies (reported in chapter 5) using an analysis based upon a ranking of cases by the number of different activities indicated in the research questionnaire. This earlier ranking exercise found also that those companies engaged in most types of activity tend to be branch/subsidiaries of a larger firm, high turnover businesses which compete mainly against European wide companies. The principal components analysis has, in fact, condensed the variables used at this earlier stage into seven 'categories' of variables but the findings still reveal the same characteristics of active companies.

6.4 The identification of corporate characteristics.

The next stage in this chapter is to build upon the use of PC scores detailed on previous pages. The aim in using a discriminant analysis technique is to use the PC scores as a basis for discriminating between companies on the basis of certain corporate characteristics. The purpose of this is to identify whether or not the companies in the sample, which were reportedly active in terms of preparation

for trading in more competitive European markets, have any common distinguishing characteristics.

(a) Multiple discriminant analysis model.

This is a multiple disciminant analysis (MDA) based on seven independent metric variables (the seven principal component analysis scores) and one non-metric dependent variable in the general form : Y (non-metric) = X1 + X2 + X3 + X4 + X5 + X6 + X7 (all metric)

where the 'Y' variables are previously defined membership groups and the 'X' variables are the metric scores generated for each company on each of the seven principal components. With data of this type a MDA is the suggested form of multivariate analysis since it performs well when categorical dependent variables exist with metric independent variables(Hair et al 1992). Analyses have been carried out on three separate dependent variables; all of which refer to a corporate characteristic. These are :

- organisational structure (single site business, branch\subsidiaries of larger firms etc)
- size of annual turnover
- location of main competitors

Information was acquired in the questionnaire on more characteristics than this but it has not been possible to discriminate between firms on the basis of these other variables. There are, therefore, three models to consider; which all use the seven principal component scores (for 139 companies) as the independent variables and a two-group dependent variable in each case. Model One uses data on organisational structure as the dependent variable, model Two uses data on the size of annual turnover as the dependent variable and, model Three uses data on the location of the main competitor as the dependent variable. Table 6.06 shows the category descriptions for each of these three models, the actual distribution of companies and their dependent variable codes.

Table 6.06 Category descriptions for the discriminant analysis models, the actual distribution of companies and their dependent variable codes.

Model 1.

Category description : Organisational Structure	Actual number of cases	Coded as :
a single site business	66	1
a multi site business	18	uncoded
a parent company with subsidiaries in the UK	4	uncoded
a parent company with subsidiaries abroad	3	uncoded
a branch/subsidiary of a larger company	47	2
a franchise of a larger company	0	uncoded

Note: n = 138 (without 1 missing variable).

Model 2.

Category description : Annual turnover	Actual number of cases	Coded as :
under £100 000	0	1
£ 101 000 - 50 000	4	1
£ 501 000 - 1 000 000	27	1
£ 1 000 001 - 5 000 000	64	1
£ 5 000 001 (and above.)	43	2

Note: n = 138 (without 1 missing variable).

Model 3.

Category description : Location of main competitors	Actual number of cases	Coded as :
In South-Yorks. North-east Derbys. and North Notts.	28	1
In the UK	62	1
In the rest of the European Union	27	2
In the rest of the world	16	2

Source: 1994 Survey.

Note: n = 133 (without 6 missing variables).

The methodology for MDA is based upon a three step progression of derivation, validation and interpretation. In the derivation stage an attempt is made to work up a statistically significant discrimination function which is then, in the second stage, evaluated in terms of its predictive accuracy. Finally, the function is interpreted to find which of the independent variables are most capable of discriminating between the two groups of the dependent variable.

(b) Derivation.

The principle behind the derivation stage is one of establishing a linear combination of the seven (or fewer) independent variables which will best discriminate between the previously defined groups. It was decided to use the step-wise method of independent variable selection since the objective of this MDA is to ascertain which of the principal components are most effective in discriminating between firms. The step-wise method selects the 'best' independent variable to be included in the discriminating function, one at a time, against a specific criteria; resulting in an optimal grouping of a subset of independent variables (Kinnear and Gray, 1990; Norusis, 1988).

The discriminant function is an equation which inserts the discriminant weight with the value of each independent variable and which takes the general form :

$D = W0 + W1X1 + W2X2 + ... + WnXn$

where :

D = Discriminant score

W = Discriminant weights

X = Independent variables

Once a discriminant score is achieved for each case, it becomes possible, on the basis of this score, to obtain a rule for classifying cases into one of two groups. An average of the scores for all firms in one group will produce a mean (group centroid) and this statistic is used to indicate the most typical location of an individual from that particular group. MDA tests the hypothesis that the two group means are equal - with a statistical significance test to decide whether to accept or reject the hypothesis. The aim is to achieve a function which is statistically significant and which reliably discriminates between the two categories of the dependent variable. For each of these categories there will be a distribution of discriminant scores and, although these distributions will inevitably overlap slightly, MDA seeks to find a function with values of the weights (W0,W1 etc) in the function such that the overlap among the distribution of the scores is minimised (ie. to separate the distribution of the scores to the greatest possible extent).

In fact, in each model only four PC's are selected for use as discriminators; although five PC's are used in total. The group means of the components for each model are shown in table 6.07. The principal components are:

PC 1. A pro-active and aggressive marketing strategy.

PC 2. A re-active and enforced product development strategy.

PC 3. A market position strengthening and staff recruitment/development strategy.

PC 6. A short-term structural investment and staff training strategy.

PC 7. A collaborative distribution strategy.

A full description of all seven of the PC's can be earlier in this chapter.

Table 6.07 Group Means for the three models.

Model	Group	Principal Components				
		1	2	3	6	7
1	1	-.33570	-.14198	-.16766	-.14096	
	2	.51603	.18425	.30074	.17055	
2	1	-.38305	-.15653	-.16335		.09679
	2	.60600	.33863	.38833		-.19436
3	1	-.32958	-.24615	-.07158	-.11124	
	2	.63007	.43669	.34138	.31190	

Source: 1994 Survey.

In model One, the four PC's used as discriminators are PC's 1,2,3 and 6. The means are bigger in group 2 for all these PC's and the positive figures (in group 2)/negative figures (in group 1) dichotomy suggests that branch/subsidiaries of larger companies are more likely to be behaving in the manner suggested by the PC's. Model Three utilises the same four PC's and, once again, the comparison of magnitudes and the positive\negative dichotomy indicates that those companies with main competitors located in the EU and beyond (group 2) are more likely to fit the PC profile as suggested above. In model Two, PC 7 rather than PC 6 is included and, although the magnitudes of all four PC's exhibit the now familiar pattern, the sign of the groups in PC 7 indicate a pattern which is the opposite to that shown throughout the table. This indicates that the very large turnover companies are less likely to be engaging in collaborative activity of this nature than the smaller turnover companies.

The use of MDA in this case is to identify those variables which do and do not make a significant contribution to the predictive process. The statistic used for analysing the inclusion or exclusion of a variable from a discriminant function is the Wilks Lambda (WL) statistic. When the independent variables are considered individually, the WL statistic is the complement of the correlation ratio

(measuring the strength of the effect that an independent variable exerts on the dependent variable) and is the ratio of the within-groups sum of squares variance to the total sum of squares variance. The smaller the WL, therefore, the greater the chance of having a significant one-way analysis of variance result since the relatively small dispersion of the individual discriminant scores around their group mean implies implies a relatively large dispersion between the mean of each of the two groups. A WL value of one will occur when the observed group means are equal. The significance of a change in WL which occurs when a variable is entered or removed is obtained from an F test. At each step of adding a variable, the one with the largest F (to enter) is included. The process continues until there are no further variables with an F value which is greater than the (prior stipulated) critical minimum threshold. A variable, once in, may become no longer a very good discriminator (if a combination of other variables has taken over its role) and will be removed from the function when its F value (to remove) drops below a critical maximum threshold value. Variables remaining in the analysis are those used in the discriminant function. For the purpose of this analysis an F to enter value of 2.84 and an F to remove value of 1.71 were used as the removal criteria. There is no direct statistical reasoning for these particular values except to use them as suitable threshold levels. One should bear in mind, however, the univarite F statistic is useful as a threshold one (a high value of F being evidence against the null-hypothesis of equality of the population means for the two groups) but it is only an omnibus test and as such does not say anything about the size or type of difference between the means (Gilbert, 1993). The results for the stepwise method summary table are presented in table 6.08 for the three models.

Table 6.08 The stepwise method summary table.

Model	Principal Component number	Wilks Lambda value
1	1	.82493
	3	.77271
	2	.74881
	6	.72961
2	1	.83204
	3	.76852
	2	.71659
	7	.69840
3	1	.80032
	2	.69055
	6	.65663
	3	.64096

Source: 1994 Survey.

Notes :

1. All above Wilks Lambda values have an associated significance level of 0.00000.
2. During the selection sequence, no variables were removed.

(c) Validation.

In this phase a classification matrix is produced and used to evaluate the predictive accuracy of the discriminant function. This becomes necessary because, as mentioned above, the variable selection criteria do not reveal anything about how well the function predicts group membership. The initial task is to decide to which of the two groups each case can be assigned. This is achieved via the use of a cutting score, which is the criteria against which each firm's discriminant score is judged. The optimal cutting score is the weighted average of the group centroids, with the weightings, in this case, reflecting the fact that the two groups are not of equal number. Each firm's discriminant score is then compared with the cutting score and the percentage classification accuracy is calculated and presented.

Tables 6.09 (a),(b),(c) and (d) show the output produced by the discrimination analysis. Statistics which reveal the 'power' of the discriminant function of the three models are shown in part (a). Canonical correlation statistics show the degree of association between discriminant scores for each company and the two groups in each particular model. The Wilks Lambda in these two group cases

represents the ratio of the within-groups sum of squares variance to the total sum of squares variance. It is the proportion of total variance in the discriminant scores not explained by differences among groups. The Wilks Lambda statistics are transformed to a chi-square value with an observed significance level. Since these figures are significant throughout this table it appears unlikely that the two groups in any of the dependent variables will share the same mean. The eigenvalue statistic shows the amount of variance in the dependent variable explained by the discriminant function. In conclusion, the discriminant functions appear not to be very powerful although a significant function is obtained for each model. The group centroids in part (b) are interesting in that the discriminant scores reflect a 'negative group 2 \ positive group 1' pattern. This is, perhaps, not surprising in the light of the trends exhibited in the group means in a previous table where the firms 'discriminated' into group two of each model appear more likely to be behaving in a manner suggested by the title of the particular principle component. The model classification results are encouraging (part (C)) and appear to discriminate much better than the chance probabilities would suggest (shown in part (d)).

Table 6.09 Multiple discriminant analysis output.

Part (a) Canonical discriminant function output.

Model	Eigenvalue	Canonical Correlations	Wilks Lambda	Chi-square	Degrees of freedom	Significance
1	.3706	.5200	.729605	34.362	4	.0000
2	.4319	.5493	.698396	48.102	4	.0000
3	.5601	.5992	.640965	57.377	4	.0000

Part (b) Group Centroids.

Model	Group 1	Group 2
1	-.50916	.71499
2	-.43890	.96967
3	-.51342	1.07460

Part (c) Classification results (%).

Model	Group 1	Group 2	Total
1	86.4	68.1	78.76
2	90.5	58.1	80.43

3	87.8	62.8	79.7

Part (d) Prior Probabilities (%).

Model	Group 1	Group 2
1	58.4	41.6
2	68.8	31.2
3	67.7	32.3

Source: 1994 Survey.

(d) Interpretation.

In the third and final phase it is possible to make substantive interpretations of the findings by looking at both the importance of each independent variable in the function in discriminating between the two groups and, examining the group means for each important variable in order to profile the differences in the groups. The standardised (to a mean of zero and a standard deviation of one) discriminant weights reflect the importance of each independent variable in the discriminant function (table 6.10); the bigger the weight, the greater the discriminating power contributed to the discriminant function. The structure matrix figures represent the correlations between each independent variable and the discriminant function. Technically, the loadings reflect the variance that these variables share with the discriminant function, and can also be interpreted to assess the relative contribution of each variable to the discriminant function. In all three models the first PC is, not surprisingly, a very influential component in the discrimination function. There is, though, some variability to consider since, in model One, PC 3 is the second most powerful discriminator followed, in sequence, by PC's Two and Six. In model Three it is PC Two which is the second most powerful element followed by PC's Six and Three. In model number Two the sequence, in ranked descending order, is PC One, Three, Two and Seven. It can be seen in the table that PC Seven is a negatively related variable and, although the signage is arbitrary, the implication is that the presence of PC Seven introduces a discriminating power which works in the opposite direction to the other three PC's in the model.

In conclusion to this section, it appears, therefore, that in respect of company organisation (model One) it is possible to develop a discrimination function which is based upon certain of the PC scores.This function will also be reasonably successful at separating those firms which tend to be active from those which are inactive in terms of preparation for trading in the more open

European environment. Branch\subsidiaries of larger companies are much more likely to be active than the other major category of single site, free-standing businesses. Key discriminators appear to be a pro-active and aggressive marketing strategy and a market position strengthening and staff recruitment/development strategy although a reactive and enforced product development strategy remains important. A discrimination function can be successfully developed on the basis of the data relating the location of company main competitors. Model Three uses the same PC's as independent variables as in the previous model although the order is partially different. A pro-active and aggressive marketing strategy and a reactive and enforced product development strategy seem to be the key discriminators here but a short term structural investment and staff training strategy and a market position strengthening and staff recruitment/development strategy remain important. This analysis confirms the notion that those companies whose main competitor is located beyond the boundaries of the UK and within the EU or, wider still, the rest of the world are more likely to be active in preparing to trade within the SEM. In consideration of the size of company annual turnover, large turnover companies are more likely to be active. Key discriminators appear to be a pro-active and aggressive marketing strategy and a market position strengthening and staff recruitment/development strategy, again, seem to be important as discriminators. The collaborative distribution strategy is important in an inverse capacity. One would interpret this by suggesting that those firms engaged in the other three activities in this model tend firmly to be inactive in this area. As a single discriminating variable, the degree of involvement in an aggressive and pro-active marketing strategy appears to work very well.

Table 6.10 Standardised weights and structure matrix output.

Model	PC	Standardised weights	PC	Structure matrix
1	1	.84917	1	.75673
	3	.47981	3	.38846
	2	.34657	2	.27149
	6	.30861	6	.24927
			7	-.12843
			5	.05336
			4	.03212
2	1	.81317	1	.68369
	3	.52772	3	.40123
	2	.48398	2	.35596
	7	-.29128	7	-.20610
			6	-.07949
			5	-.01610
			4	-.01430
3	1	.83762	1	.66740
	2	.62692	2	.45584
	6	.38121	6	.27388
	3	.25839	3	.19656
			7	-.06742
			4	-.05650
			5	-.05620

Source: 1994 Survey.

6.5 Conclusions.

In conclusion to this chapter then, analyses involving the use of statistical models based upon cross-tabulations, regression, principal-components and multiple-discrimination have been presented. These statistical procedures have been used to reveal that a basic group of seven strategies have been adopted by manufacturing companies in South Yorkshire in preparation for trading in more open markets in Europe generally; and the SEM specifically. These are strategies related to product marketing; product adaption; staff recruitment, training and development; reorganisation or rationalisation by means of structural investment;

acquisition of knowledge about the SEM; and, collaboration in order to more effectively distribute products. In the chapter which follows, some of the reasons why companies are adopting these suggested strategies are discussed.

The analyses have also revealed that those active companies have tended to report a better level of performance than inactive companies; and that, secondly, active companies exhibit certain common characteristics. These are tendencies to be: a branch/subsidiary of a parent company, competing mainly against foreign based rivals and, a larger company with a high annual turnover. One of the most effective ways of differentiating an active company from an inactive one is to look for involvement in some form of pro-active and aggressive marketing strategy in relation to trading in European markets. This was shown to be a key element of preparation activity.

Chapter 7: Causal Mechanisms- The Single European Market and Corporate Strategy.

7.1 Introduction.

The purpose of this chapter is to explain the rationale for firms embarking on the strategies which the research evidence presented in chapters five and six suggests are in existence. The fundamental aim of the SEM is to unite previously fragmented national markets into one unified European market including member countries via the European Economic Area agreement (DTI,1993). This has been achieved as a result of the progressive removal of impediments to inter-EU trade and flows of factors of production; especially capital and labour. It is as a result of this international economic integration initiative that an opportunity has been provided for firms to respond to the changing economics of European business.

The SEM has aided economic integration in three principal ways:

- the reduction and elimination of institutional and legal trade barriers
- the raising of competition in national markets
- the harmonising of company law, social legislation and taxation

Businesses have responded by seeking to develop not only specific business functions but also new internal and external corporate structures (Collins and Schmenner,1995; Diller and Bukhari,1994; Millington and Bayliss,1995; Buiges and Jaquemin,1985; Porter,1990). It appears that firms have seen the need to retain their position in domestic markets and, for some, this is all that is perceived as being necessary. For other firms a strategy of organising at least some aspects of their activity on a European-wide basis has been adopted. Some firms have taken the opportunity to conduct business across European markets as part of a wider international strategy and, in this respect, the EU market may be seen as being one regionalised aspect of internationalised markets (Egan and McKiernan,1994; Birkinshaw et al,1995). In this respect the SEM may have been used as a testing ground for strategies which have been tried, honed and modified by some companies prior to some sort of initiative to commence operations on a global scale. The aim of this chapter, then, is to consider the evidence on strategies adopted by companies featuring in the survey, and to suggest economic rationale which could explain their chosen course of action.

7.2 Company characteristics and corporate strategies.

It is inevitable that the strategies adopted by companies will depend upon a range of corporate factors. Emerson (1990) saw that each company's individual response would be dependent upon the structural characteristics of the industry within which each firm operates. In small fragmented markets many small and medium sized enterprises co-exist with each other and they manage to survive by catering for local or regional differences in consumer tastes. Emerson suggests that the introduction of the SEM will have only a limited impact in these markets since the barriers removed by the legislation have had only a minor restrictive impact on trade. In specialised markets where small and large firms share the market in many niches for quite specific products, the SEM, Emerson suggests, will have a substantial impact. This is because a bigger market will be available, and also because the removal of technical barriers will be significant in each market niche. In consequence, product and market development activity is expected to be important. In mass production markets where large firms dominate and a common aim is to secure a large market share, it is expected that the SEM will be a major influence since these firms will take steps to secure economies of scale and scope in driving to raise competitiveness levels. This will be done, Emerson suggests, via a process of strategic investment which should enable the firm to provide a flexible response in the exploitation of new opportunities as they emerge. Mergers and takeovers are expected to be a common source of external restructuring and such a strategy will be aimed at the achievement of economies of scale and scope, a wider geographical diversification of sales and a greater international organisation of activity. The coverage of cooperation agreements is also expected to increase in order to secure economic benefits related to the promotion of synergies, the dissemination of technical information, the minimisation of (costly) duplication, a reduction in product development lead time, and an enhanced ability to distribute effectively to bigger markets. In an internal capacity, rationalisation will take place to enable a concentration on the company's main product lines (Buiges and Jaquemin,1989).

Company size may also be a key determinant of strategy since it is probably the case that most preparation activity will be seen in large companies. Producers on this scale have the resources and motivation to organise their activity on a larger and more economically beneficial scale. The strategy of manufacturing on a European-wide basis is a rational one according to Collins and Schmenner (1995). They suggest that external restructuring, in the shape of merger and

acquisition activity, will lead to efficiency gains via the enabling of companies to compete in terms of keeping unit costs to a minimum and avoiding wasteful overcapacity. A pan-European manufacturing strategy is a product based strategy which typically involves a narrowing of the product range in a particular plant but with an increase in the markets that each product serves. This allows management to concentrate on a limited product line in any one factory. Production in various factories within the same business will require central coordination and so Collins and Schmenner expect a pan-European manufacturing strategy to be accompanied by a centralising tendency towards control and coordination. Planning aspects of marketing and sales, distribution and production would all be managed from a 'European' headquarters but the implementation of the various approaches would be the responsibility of the local and national management.

Millington and Bayliss (1995) take the view that corporate strategies of firms within the SEM will continue to be dominated by national rather than global or even European considerations. They expect that cultural and economic barriers to entry will continue to exist within the SEM (access to local knowledge and marketing and distribution network, and cultural resistance to imports for example) and that this will continue to segment the European market in most industries. They suggest, therefore, that corporate strategy will be best served by focusing on the underlying characteristics of the industry and national market rather than planning within the Single Market. However, Millington and Bayliss did recognise that potential efficiency gains in non-manufacturing functions such as marketing and distribution may be achieved if they were organised on a Europe-wide basis.

Focusing on the critical issue of pricing, Diller and Bukhari (1994) emphasised the need for a Europe-wide coordinated approach. They expect opportunities for price differentiation to still exist in the SEM since differences in what they called competitive structures and distribution structures, for instance, will continue to be found in national markets. Corporate decisions on prices, therefore, will be coordinated centrally within the wider context of the marketing strategy.

These three examples of research point to the notion that, in order to exploit the potential of the SEM, marketing and distribution will be key strategies to develop on a European-wide basis. An international business survey (reported

in Egan and McKiernan,1994) of 450 multinational enterprises, equally split between North America and Europe and conducted in the late 1980's, investigated the question of which corporate strategies were most likely to be adopted as a result of the implementation of the SEM legislation. Overall, most thought that the biggest impact will be on marketing and distribution since firms expected to conduct a strategy which would allow them to concentrate on market niches at the pan-European level. Distribution improvements were expected to reduce delivery times and improve the level of responsiveness to customers. For European manufacturers, product development and merger/acquisition strategies were seen as being equally most important. Product development was expected to produce differentiated outputs whilst acquisitions and mergers were cross-border rather than within national boundaries and envisaged to be of a horizontally integrative nature. Joint ventures and alliances were also a popular strategy for European manufacturers, though less popular than acquisitions/mergers, and with preference, again, for cross-border cooperation with European partners rather than domestic ones.

One important aspect to be considered is the extent to which any preparation work related to the SEM is being conducted as part of a wider strategy to organise corporate activity on a world-wide basis. Any developments in strategy to compete better in the EU may be used as a 'spring-board' for the adoption of a global strategy (Egan and Mckiernan,1994). Globalisation as a process emerges, in part, as a result of pressure from structural forces, and pressure arising because of the competitive dynamics of industry and because industry is becoming less and less tied to any paticular national or business culture (Birkinshaw et al,1995; Amin and Thrift,1994). Typical structural forces would be the potential exploitation of economies of scale, differences in comparative advantage across countries and the impact of standardised market demand across countries. Gains from the exploitation of economies of scale would accrue as firms rationalise production and seek to extend the size of markets covered by each product. Differences in relative efficiency levels would allow firms to maximise the benefits to be gained from specialisation, which would occur as producers try to make the most of any actual or perceived product differences in what are increasingly competitive markets. At the same time, consumers will become increasingly demanding in their choice between competing products as they become more aware of the range and depth of choices available. Competitive dynamics would have an influence

through the strategy determined in response to the actions of other companies, and any response would be independent of structural forces. This rivalrous behaviour will provide a boost to the process of globalisation since firms will constantly seek to respond to the potentially threatening moves made by other companies by taking advantage of new trading opportunities as and when they emerge.

7.3 Research evidence.

Research evidence presented in chapters five and six has shown that firms reported an involvement in a number of activities either in specific preparation for the SEM or in preparation for trading in more open European markets. The questionnaire was distributed to companies for completion in March, 1994 (with a postal follow-up to non-respondents in May of the same year). This was a time period which was relatively close to the EU's target completion date of the implementation of the legislation of the 1st January, 1993 and this should be borne in mind when considering the research findings. By the Spring of 1994 not all of the legislation by any means was in place although a significant proportion had been established (CEC,1995). Similarly, it could be expected that the companies themselves were at various stages of progression in their own preparation plans (if they existed at all!) vis-a-vis the SEM .

With regard to specific preparation for the SEM, the most commonly reported activities were exhibiting at trade fairs (35% of respondents)and adapting to standards and technical regulations (32% of respondents). Other relatively frequently reported activities were related to investment in new plant and machinery (27%), product development and differentiation (22%), marketing and, finally, the strengthening of distribution channels (26% and 19% respectively). The most frequently reported activities in preparation for trading in more open European markets were the training of personnel with regard to standards and technical regulations (53% of respondents) and the sending of company representatives to Europe (51%). Other relatively frequently reported activities were related to the modification of product design (44%), internal restructuring (43%), the availability of a broader product range (42%), the seeking of advice on matters related to the SEM (41%) and the publishing of price lists and catalogues in European media (41%).

It can be seen from this evidence that a broad involvement in some aspects of marketing appears to be an important strategy (representatives sent to Europe

and European publicity for instance); as does the process of adapting, in some way, to new standards and technical regulations. Other important strategies were broadly related to the development of human resources (the training of staff with regard to technical standards and regulations is one example) and the development of the company's physical environment via some process of internal rationalisation and/or investment in new plant and machinery.

It could not reasonably be expected that these strategies are mutually exclusive and it would be sensible to emphasise the link between them as firms seek to enhance their competitive position in some way. Nevertheless, the twin processes of marketing and product development appear to be important and this notion is supported by the evidence, derived from the survey, on the matter of the information and advice needs of companies with regard to the SEM. From a range of topics suggested, firms were most interested in information on the availability of EU and UK government financial assistance (45% of respondents) but the other most commonly revealed areas of interest could be categorised as a marketing strategy 'interest' and a product development strategy 'interest'. The marketing interest included, amongst other things, a desire to find out more about appropriate sales and marketing strategies (28% of respondents) and European markets and sectors (27%). An interest in EU technical standards and regulations (26%) and product design and development with regard to local customer preference (21%) can be collected together to form a product development strategy interest.

The results of the principal components analysis of the survey evidence reported in chapter six show that seven broad preparation strategies have been adopted by respondents. These are listed below:

PC 1. A pro-active and aggressive marketing strategy.
PC 2. A re-active and enforced product development strategy.
PC 3. A market position strengthening and staff recruitment/development strategy.
PC 4. A long-term structural investment strategy.
PC 5. A knowledge acquisition strategy.
PC 6. A short-term structural investment and staff training strategy.
PC 7. A collaborative distribution strategy.

One interesting contrast within the principal components is the distinction between strategies which appear to be pro-active and aggressive in nature and those which appear to be re-active and defensive. The evidence suggests that a clearly defined marketing strategy is the most important one and this gives the feeling of being motivated by a determination to seek out and to make the most of any opportunities which may present themselves. On the other hand, a product development strategy also appears to be very important but this one seems to be due to the necessity of accommodating to the technical standards and regulations emerging in the SEM legislation.

The principal components analysis shows that human resource improvement and the development of the physical business environment also appear to be key aspects of SEM oriented strategies and this could reflect the perceived desire to rationalise and reorganise production. In this way the minds of company personnel could be focused on the potential opportunities and threats embodied in the SEM legislation. Knowledge acquisition and distribution network development are also important strategies. This is not surprising, perhaps, given the complexity of the responsibilities and ramifications of the SEM legislation, and the sheer breadth of opportunity in the new European market place.

7.4 Theories and research evidence: a discussion.

In the section on the corporate sector's likely response to the implementation of the SEM in chapter two of this thesis, it was explained why strategic investment would be the cornerstone of efforts made to trade more effectively in what are becoming more competitive European markets. Productivity improvements and the development and differentiation of a company's product range were shown to be key aims, and it was suggested that this was to be achieved via the commitment of corporate resources to external restructuring, on the one hand, and internal rationalisation on the other. External restructuring would be carried out principally by means of merger/ acquisition (which was expected to be motivated by a desire to horizontally integrate with companies located across national boundaries and, therefore, involved in servicing other national markets) and by means of various collaborative agreements; especially in the field of research and development. Internal rationalisation would facilitate the development and differentiation of key products.

Similarly, research evidence in the studies quoted in this chapter suggests that strategic investment should reflect the presence of increasing competition in larger markets across national boundaries. A reasonable conclusion to draw from these studies would be that firms are seeking to manufacture at a scale which is both suitable to their corporate aspirations and which will satisfy the demands of increasingly competitive markets (through the economy of scale benefits thus derived). It could also be concluded that firms are seeking to focus on product development as a way of differentiating their output. In this respect it appears that a company's marketing and distribution effort is to be concentrated on the establishment and servicing of market niches in markets which extend beyond national boundaries.

Original research evidence presented earlier in the thesis and reviewed in part in this chapter shows that marketing and distribution activity is very significant. Product development activity is important to. Strategic investment, in part to facilitate the improvement of the marketing and distribution effort, and also to finance the rationalisation and reorganisation of production is also significant. This is a research outcome which was predicted widely in the literature. Investment in human capital appears to very important and this has not really emerged in the literature as part of any strategy related to the SEM. Training is being carried out not only with regard to the technical specifications and regulations of the SEM but also in terms of European languages, markets and cultural differences. In addition to this the acquisition of knowledge is a common strategy and this, again, is rather surprising given its lack of significance in the literature. Voluntary collaboration does appear to be taking place but only to distribute goods and not in terms of research and development or manufacturing. There appears to be little merger and acquisition activity across borders (or within borders for that matter!) to manufacture or distribute. The desire to integrate in this way, contrary to that predicted in the literature, has not proved to be present at all. This is rather surprising given the prominence attached in some studies to this form of external restructuring activity. One final point to be made is the extent to which preparation activities appear to be reactive or pro-active in nature. Some activities were defensive or reactive and represented a forced response to the implementation of the SEM legislation. Activities related to the adapting of products or packaging to precise technical specifications are good examples in this respect. A pro-active response, on the other hand, places emphasis on the aggressive taking of advantage of the opportunities afforded by the removal of the barriers to trading

in hitherto sheltered markets. Activities related to marketing and distribution would be good examples here. This distinction, again, has not really emerged in the literature.

7.5 Conclusions.

The research evidence presented in chapters five and six shows that the firms most likely to be active in terms of preparation for the SEM or for trading in more open European markets have certain specific corporate characteristics. These are related to company size, organisational structure and the location of each company's main competitors. Companies with a large annual turnover, which are organised as branch subsidiaries of larger companies and which compete mainly against companies located beyond the boundary of the UK but within the EU, have been shown to be involved in preparation activity to a much higher degree than 'inactive' companies. These latter companies have been shown typically to exhibit the characteristics of a smaller annual turnover, a single-site and to be free-standing organisations which compete against companies which are based locally or certainly within the UK. Company size appears to be important in terms of yielding the resources necessary to plan and execute a strategy to maintain or enhance competitive advantage. Of course, active companies may be big precisely because of their desire and ability to prepare competently for these market developments. The location of main competitors is significant because of the potential for deriving experience from competing with international rivals. Firms which operate in these markets could perhaps be expected to recognise the value of developing an ability to compete in order to protect their home markets and in order to win new ones abroad. Companies which are branch/subsidiaries of larger ones could be expected to be more active because of the influence of size (as they will more commonly have a larger annual turnover) and because of a tendency to be competing in markets against domestic and foreign rivals. All three of the distinguishing characteristics appear to be related in a mutually reinforcing manner.

Marketing is one function which appears to have received a lot of attention. The progressive elimination of barriers to trade, which the SEM legislation represents, presents, fundamentally, a marketing challenge; and active firms have not been slow to respond. They have also sought to develop human resources and implement some form of rationalisation and restructuring strategy which has, in part, been motivated by the need to adapt to new standards and technical regulations. Whether this is part of some global strategy

or not is unclear. It appears that some firms have taken the opportunity to develop an 'international' outlook which may serve to raise their profile in markets beyond the EU. Some firms in the survey, of course, were doing this already! Other companies appear to have little desire to expand into any overseas markets, but are active in terms of preparation for the SEM because of a perceived need to raise the ability to resist increased foreign competition in their domestic markets.

One important requirement that companies have is the need to keep abreast of commercial and technical developments vis-a-vis the SEM. In order to properly plan, decide on and implement any strategies, companies must have as clear an understanding as possible of things like changes in regulations and market and sectoral prospects. This information requirement is considered in the next chapter.

Chapter 8: The Need for Advice and Information- A Suggested Public Sector Response.

8.1 Introduction.

It was established in chapters five and six of this thesis that companies have revealed an on-going need for advice and information on the Single Market. This evidence shows that they would like to know about a range of topics in relation to the SEM programme and, essentially, the motivation for this is the perceived need to keep abreast of the commercial and technical changes which are occurring in relevant markets. This is important for firms since the acquisition of market intelligence is a significant and resource consuming task and can be influential in helping to plan for future growth (Keeble and Vaesson, 1995).

It could be argued that public authorities can assist private sector economic prosperity in this respect. Gittell and Kaufman (1996), for example, note the need for a public sector extension service to play a prominent role in, amongst other things, the provision of advice and information. Based on research into public sector support of small and medium sized enterprises in the manufacturing sector, they see that the capability of public sector support agencies is limited by the presence of an uneven spread of market based information together with a business and civic culture in the United Kingdom which is traditionally against the sharing of ideas and, in fact, cooperation in general. The provision of relevant advice and information is one of their recommendations for effective public sector involvement in private sector economic activity.

In this chapter the main deliverers of advice and information to the business community in South Yorkshire are surveyed. Evidence derived from the responses to the research questionnaire is analysed in order to establish the identity of the organisations felt by the respondents to be key providers of advice and information. Some issues arising are discussed and conclusions are drawn in terms of the future structure of providers. Central to this discussion will be the conclusion that local authorities, notwithstanding the emerging role of Business Link offices and Chambers of Commerce for instance, are uniquely well placed to develop as managers of the provision of advice and information.

It could be argued that local government and regionalised support service providers should be encouraged, due to the impact of the Single Market, to take a prominent role in supporting local economic activities. How they discharge this responsibility is going to be important in considering how well particular localities are dealing with the increased pressures brought about by the SEM. This is because the effect of the Single Market has been to remove much of the potential for 'national protection' in that it has limited the scope for national action and economic intervention - particularly in the field of industrial policy. Bennett (1993) foresees a situation where the provision of advice and information will be an important aspect of a vital service delivered by local government:

> 'economic success will increasingly depend on local economic actions. With less scope for public intervention and subsidy, and with a freer market for public procurement, the main factors in success are expected to be in the strength of local institutions. These effect the availability of capital, land and premises, but, above all, skills and innovation. Local and regional government, as well as other local institutions, have profound effects through the supply of the local business climate, land management policy, information service and support and, schools and vocational training colleges'. (Bennett,1993, pp 18).

Regions and localities, and industries within them, will be exposed directly to competition from similar industries, localities and regions elsewhere and the notion of regional competitiveness will take on more emphasis in the emerging Europe of the regions (Begg,1995). Roberts (1993) expects a revival of interest in strategic planning at the regional level. This will, he contends, allow localities to properly play an active role in their own economic development. It could be the case that, at some point in the future, regions will take on more responsibility for managing their own affairs whilst existing not under a national 'umbrella' of economic regulation but rather under an EU type supra-national tier of government. Current EU progress toward economic and monetary union at the same time as a determination to respect the principle of subsidiarity could be taken as evidence of this emerging process. If regions and localities do become more autonomous in this sense then it would be sensible for issues of local competitiveness and local resource management to be considered.

8.2 Key information providers.

There exist many providers of information to the private sector. Firms pick up informally on developments via word of mouth contact with other businesses or personal/professional relationships at an individual level. They also learn from other firms via purchase and supply linkages. Government offices at local and national level are also important providers and they have a vested interest in assisting the private sector to function as efficiently as possible. At an international level the EU remains a key advice and information provider via, for instance, the costly and wide ranging information dissemination campaign in relation to the SEM. In addition to this the EU responds to the need to keep the business community up to date with regard to access and availability of EU structural funding. Finally, there is a large group of small, semi-official or arms-length support agencies which exist, often in a spatially de-lineated capacity, to assist economic development in a general sense. But there is no set pattern to the method of organisation or funding of these agencies, nor to the geographical level at which they operate. Some are likely to be very local in outlook whilst others may operate in a regional capacity.

In the section which follows, this wide and varied group of information providers is classified into an EU level, a central government level, a local government level and an independent body type categorisation. The reasoning behind this simplification is not to deny the existence of the many different providers but rather to facilitate the identification of the key actors involved in the provision of business advice on commercial or technical developments and the sign-posting of enquiries towards the most appropriate source of information in each individual case.

At the EU level a great deal of documentation has been produced to explain how the SEM legislation will take effect. The EU also provides publicity information setting out the necessary procedure to be followed in making a claim against EU funding from various sources. Much funding is made available via the Community Support Framework which decides upon support 'objectives' which seek to categorise different economic situations in need of assistance. Funding is also provided to tackle specific problems such as the RECHAR and RESIDER initiatives which exist to provide finance to aid the conversion of coal producing areas and steel producing areas (respectively) to some other form of economic activity. The information published in this respect is not, strictly speaking, about the SEM but it is the gateway to a source

of funding which may be crucial, for instance, to the financing of any planned restructuring activity.

Firms who responded to the questionnaire thought the EU to be a reasonably important source of information. Table 8.01 shows that 52% of firms believed advice and information from the EU to be either important or very important and this, perhaps, reflects the perceived necessity to master the complexity of the EU legislation. It may also reflect, to some extent, the high level of interest in trying to secure the maximum financial assistance possible from the various sources within the EU.

Table 8.01 The number of respondents indicating each organisation to be either an important or very important source of advice and information with regard to the SEM.

Organisation	Percentage (%)
Department of Trade and Industry	86
Chamber of Commerce	75
Training and Enterprise Council	62
European Union	52
H.M. Customs and Excise	48
Financial sector	46
Department of Environment	30
Sheffield Development Corporation	30
Sectoral Employers Associations	30
Confederation of British Industry	27
Department of Employment	27
University sector	27
Local council	25

Source: 1994 Survey.

Note N = 103

The United Kingdom central government has adopted a variety of approaches in making advice and information available with regard to the Single Market. It operates in a direct capacity via the control of regional and urban economic development policies and initiatives and also through a number of appointed

institutions, such as urban development corporations, which exist in some parts of the country. Central government also funds local authority activities by way of the provision of incentives to carry out various functions and also by way of support for partnerships between actors at the local level. In this way central government influences activity in an indirect manner as well. Whatever the mechanism for involvement, however, the provision of information about the SEM has been of major importance.

The Department of Trade and Industry (DTI) is one department which has been at the forefront of the provision of advice and information. In addition to an involvement in the operation of UK Regional Policy (in controlling the disbursement of Regional Selective Assistance funding, for example) the DTI has a key function in seeking to promote UK industrial competitiveness in overseas markets. Much of its effort, consequently, has been geared towards trading in Europe. The DTI's 'Business in Europe' service advises, in collaboration with the British Overseas Trade Board's European Trade Committee, on European markets, and various 'country desks' offer advice and information on specific markets. In addition to this the DTI organises export promotional campaigns and will establish trade missions in key overseas locations. Very importantly, it will manage the network of information services available via Business Link (BL).

The role of BL is to offer business support to companies - especially small and medium sized enterprises, and an information service to all existing companies within a given locality. BL provides a full range of support services to an approved standard via a single point of access. This helps to minimise the duplication of support services and replaces, in part, the plethora of confusing agencies all involved in the same type of activity. Each BL is slightly different in legal organisation but essentially they are partnerships between chambers of commerce, local authorities, enterprise agencies and other interested parties such as the university sector. Representatives of the partner organisations become members of the board of directors and collectively take responsibility for developing an appropriate strategy and overseeing operational matters. The principal funding for BL comes from the DTI but via the local Training and Enterprise Council (TEC) which will sub-contract work to it. BL is actually the conduit for all DTI business support services for small and medium sized enterprises and a prominent provider of information to the private sector; they have expert advisers on hand to respond to a request for assistance, and the

importance of this facility should not be underestimated. Firms who responded to the questionnaire thought the DTI to be the most significant source of advice and information. Table 8.01 shows that 86% of firms perceived the DTI to be either an important or very important source, and this is probably a reflection of the range of support services provided by the DTI to industry.

The Department of Environment (DE) also carries out a key role in the area of regeneration and economic development. The word 'regeneration' in this context is a policy term which groups together land and property based economic renewal and conversion policies and is mostly relevant, though not exclusively, to highly urbanised regions in England. The DE's Single Regeneration Budget has been in operation since 1994 and was essentially a collection of some twenty existing regeneration programmes involving, at the time, five different central government departments. The principal reasoning behind the introduction of the initiative was to assist in the rationalisation of the existing system and to make it more responsive to local priorities. The Single Regeneration Budget funds regeneration activity via the Challenge Fund which provides the incentive for a process of competitive bidding. How it works is that local authorities and TECs are encouraged to form partnerships and bid for regeneration funds for their particular area against a set of guidelines provided by the DE. In order to better manage the bidding process, the DE has established a series of government offices for the regions which represent an attempt to improve the coordination, cooperation and administration of the economic development activity, at the regional level, of the various government departments. They were established by the DE but are staffed, in addition, by civil servants from the DTI and the Departments of Transport and for Employement and Education. One important role of the series of government offices for the regions is to manage the funding arrangements of the TECs and this is significant because TECs can be perceived as being key sources of advice and information with regard to the SEM.

The nationwide development of TEC's is a DE initiative to lend assistance to the process of the upgrading of human resources. They operate as private limited companies and are led by a board of directors composed of representatives from the local business community. They seek to run training courses and promote economic development in each area by way of the formation of contracts (known as 'operating agreements') with central

government. Most of the funding for TECs is provided by the DTI and DE, who agree these contracts, and also by the EU from structural funds. The primary concerns of TEC's are youth training, the training of people in employment (via the Investors in People programme) and enterprise development - some of which is channelled through BL. In consequence, TECs have been a valuable source of information with regard to the SEM as companies have recognised the necessity to train and generally upgrade their human resources. They also have experts on hand to discuss, especially with representatives of small and medium sized enterprises, general business development issues. Firms who responded to the questionnaire (table 8.01) thought the TEC to be a valuable source of advice and information. Some 62% of firms thought them to be either an important or very important source, and this probably reflects the perceived need to carry out human capital investment. Only 30% of companies assessed the DE as being an important source of advice and information however, but this may be explained by the presence of TEC's and government offices for the regions which pursue economic objectives laid down, at least in part, by the DE.

Local authorities are very active in promoting economic development. They operate their own direct initiatives of business support and also they involve themselves in enterprising business activities in an indirect capacity via, for instance, joint ventures with other partners and community work programmes. The term 'community work programme' is a generic one which refers to a range of activities operated within and as part of the local economy. One example of the initiative to form local alliances for cooperation in economic development has been the establishment of various regional development organisations. These have been established as public/private partnerships in many regions of the UK and, although size and scope vary considerably, their objectives are mainly related to inward investment and economic development. They are funded essentially by the DTI (via the Invest in Britain Bureau which funds inward investment related promotional activities) and by subscriptions from local authorities and the TEC's.

One recurring theme of involvement of local authorities is with regard to the provision of advice to business. Firms which responded to the questionnaire did not, however, regard local authorities as being a key source of advice and information. Only 25% of firms found them to be either an important or very important source and this is quite possibly a reflection of the many advice

providers to be found; some of which are seen as being of more relevance than others. It could also be a reflection of the long standing distrust that is allegedly felt between parts of the business community and some local councils in South Yorkshire (Lawless,1990; Hamilton-Fazey,1993).

Independent bodies supply a mix of functions and prominent amongst these is the network of chambers of commerce (and the smaller chambers of trade). Together these two groups represent something like 90,000 businesses and maintain an effective representation of business interests. Membership is voluntary and advice and information assistance is provided on a self-help, mutual support basis. In fact, chambers of commerce are seeking to widen and deepen their service provision via the process of collaboration with other agents. More specifically, they are seeking to take over the functions currently undertaken by the TECs and BL and some of those undertaken by local authorities. The reasoning behind such a strategy would be related to the need to reduce business support agency confusion and the need to avoid duplication of service provision. Such a strategy would also allow the Chamber to speak with a single, more authoritative voice. Firms who responded to the questionnaire (table 8.01) regarded the Chamber of Commerce as being the second most significant source of advice and information. Some 75% of respondents perceived the Chamber to be either an important or very important source and this reflects the Chamber's well established position as provider of relevant independent advice and information to the business community.

The financial sector was seen as a reasonably important source of advice, and so was H.M. Customs and Excise. This is probably due to the complexity of the SEM legislation regarding tax harmonisation, and also due to the financial requirements in making the structural changes thought to be necessary in order to compete effectively in the Single Market. Other prominent organisations such as sectoral employers associations, the Confederation of British Industry and various enterprise boards are all involved in some specific capacity in the provision of advice and information on commercial affairs but although they appear to be seeking to develop their own activity with regard to service provision to members, they were not perceived as being significant sources of advice and information with regard to the Single Market. This is rather surprising given the well established and influential position that some of these organisations occupy in sectoral and/or macroeconomic affairs.

These then are the main providers of advice and information with regard to the SEM. The DTI, TEC and Chamber of Commerce ranked very highly amongst the respondents and this reflects the well established and authoritative position that they occupy with regard to business affairs. However, the local council was not perceived as being a useful source and this probably reflects, in part, a recent history of less than cordial relationships between local government and the private sector and, secondly, a relatively tight funding situation which has prevented local councils from being as generally supportive as they would perhaps have liked. Despite this it is possible to argue that local authorities should be in the vanguard of information provision services to the business community. This argument is developed further in the next section.

8.3 Limitations of the main existing providers.

The DTI remains in a very influential position given the resources at it's disposal and the strategic place it occupies with regard to the promotion of economic development. The BL concept is a significant part of it's approach to the delivery of support services but problems have been identified with the general mode of operation and rationale for existence of these organisations (Hutchinson et al,1994). It was envisaged, for example, that each BL would become self-financing over a shorter time period than is proving possible. They are also finding it difficult to establish strong and enduring partnerships to deliver the full range of its services. The boundaries of the partnership are not clearly defined and it has an on-going problem of competition with its partners which often, themselves, have their own business support services to offer. The potential for conflict between BL and the Chamber of Commerce is a clear example in this respect. It is perhaps the case that the confusing mixture of existing support providers has been somewhat simplified but there is still some way to go before an efficient and coordinated support service exists as a whole.

Jones (1995) takes the view that TECs are increasingly coming to be regarded as a policy failure as problems emerge with the funding regime and lack of accountability. Facing a squeeze on funding, TECs have been forced to cut the cost of provision in order to generate their own 'trading surpluses'. In consequence, the quality of training provision is falling and, instead of a long-term strategic training plan being implemented, the emphasis is now more on the provision of 'quick-fix' type training solutions. These tend to be of lower quality and represent less good value for money. TEC reliance on central funding renders them under the control of central government and this may

prevent them from establishing a locally accountable role in dealing with the business and training requirements unique to their own locality. They have the potential to be more effective in the local labour market but a centralist tendency is said to belie the localist rhetoric and, as such, TECs have been criticised for being merely an exercise in public relations (Hart et al,1996). Whilst, on balance, Hart et al's view may be perceived as being rather harsh, the emerging criticisms of TECs do raise doubts about their ability to cater for local training needs over the medium and longer term.

Chambers of Commerce tend to be highly thought of but low levels of resources, small numbers of personnel and a partial geographical coverage mean that they are not best placed to effectively deliver the advice and information necessary. In fact the problems emerging due to the uneven and equivocal representation of local business may mean that the potential for the development of new style chambers may be undermined. In fact the British chambers are very different in form and capability to those in other EU member states (Bennett,1993). France and Germany in particular have well established chambers which offer a wider coverage of support and to a greater depth than their British counterparts, and British chambers would be well advised to take steps to develop along similar lines (Jones,1996). At present, though, there does appear to be a tension which is developing between chambers, Business Links and TECs as they 'compete' with one another, and this serves only to add to the confusion felt by the private sector.

The EU was another source perceived to be important but the value of this will, in part, recede once the SEM legislation is fully in place. The structural funding arrangements of the EU will continue to be an important source of finance but this tends to be made available via nationally based government departments or agencies. The business sector tends to be only indirect recipients of this finance. This, together with the relative geographical remoteness of the decision making centres of the EU, seems to suggest that it will not become a more prominent source of SEM advice and information in the future.

8.4 Local authorities and local capacity building.

There has been a massive rate of growth, in recent years, of locally based support services for businesses - especially for small and medium sized enterprises (Haughton et al,1993; Regional Policy Commission,1996). Many providers now exist but it appears to be vital that the local diversity of the

business sector is understood. Sectoral prospects, labour market conditions, relations with other firms, ownership patterns, desires and potential for growth, market characteristics and the availability of expansion capital must all be taken into consideration. There is also the requirement to avoid the duplication of services and confusion amongst the customers of this service provision.

Local authorities appear to be in an excellent position to be pivotal in the effective dissemination of information. They are democratically and locally accountable and have the power to not only provide excellent support themselves but also to ensure that other providers adhere to an agreed standard. In terms of economic development, local authorities may already be seen as multi-purpose agencies which seek to continually develop their role via the formulation and enforcement of strategies and, as part of this, the provision of advice and information is already an accepted tenet of any local authority economic development policy. They offer a wide scope of support involving the provision of advice and information on business start-up, technological transfer, international markets and the availability of and access to finance.

Local authority involvement in a wide range of activities, increasingly with different partners, would enable a better coordination of provision. For instance, BL would continue in their role as support service deliverers but local authorities would retain their core strategic and coordinating task. TECs would continue their involvement in the development of human resources but local authorities would strengthen their role as the coordinating institution and, in consequence, ensure a higher level of accountability. Central government would have a key role to play but mainly in the augmentation of local institutional capacity (Minns and Tomaney,1995). They would provide the framework and incentives for action at the local level, but measures to be adopted in each area would be at the discretion of the local authority. In fact, in this fast changing business environment, it may be appropriate for local authorities to behave as process steerers and concentrate on taking strategic decisions rather than involving themselves in the day-to-day activity of business support service provision (Esher,1996). In this way local authorities could manage the effective delivery of this service in a way which would remain appropriate to local need.

8.5 Conclusions.

Effective public sector involvement in economic management encompasses the provision of relevant advice and information to the private sector. For companies the acquisition of advice and information is costly and the market place is not very good at delivering what is required to a high standard nor at a satisfactory level of geographical coverage. In this sense the need for public sector provision is a response to market failure. Local economic policy makers are uniquely well placed to develop as managers of this provision, and the potential importance of this role may well be enhanced if EU integration places less emphasis at the national level and more at the supra-national and local level.

Original research evidence presented in chapters five and six of this thesis, and reviewed in part in this chapter, has revealed an on-going need for advice and information. The acquisition of knowledge, as a strategy to deal more effectively in the SEM, has been found to exist. It is vital that this need is addressed, and it is in this respect that it could be suggested that an appropriate public sector response to the SEM is to try and provide the relevant advice and information. The evidence suggests that firms are seeking to improve their marketing and distribution effort as well as seeking to invest in human capital. They are also seeking to invest in new plant and machinery in an effort to rationalise production and position themselves to be able to compete effectively. Even companies which are not seeking to take advantage of the opportunities emerging in the Single Market must know about the technical specifications and regulations embodied in the legislation. In short, companies need to know a lot of information in a relatively short period of time and local authorities can provide an effective response to this need.

In conclusion then, the SEM is a trading initiative which currently has serious implications for the private sector and it is proper for local authorities to take a prominent role in assisting firms to prosper as much as possible in the new trading environment. In keeping with the increasing tendency to recognise the need to develop local capacity (Bennett and McCoshan,1993; Bennett,1993) it can be contended that local authorities are well placed to take responsibility for the provision of important advice and information to the business community. They remain locally accountable organisations and are well situated within the existing network of legitimate institutions.

Chapter 9: Conclusions.

9.1 Introduction.

The introduction of the SEM by the European Union represents a fundamental change to the dynamic of the international trading environment. As a form of international economic integration, the EU is currently a common market attempting to move towards a more complete economic union and the implementation of the SEM represents one of the final initiatives to complete the common market. Subsequently, this represents a system of managed liberalisation of trade since the legislation, designed to encourage intra-European trade and improve the relative performance of EU-wide producers, has been implemented on a gradual basis by the member states.

As we have seen, the logic behind the introduction of the SEM is based upon the notion that important micro and macroeconomic net benefits will accrue to the EU as a whole, making the entity more prosperous in economic terms. The reasoning is to help keep European producers at the forefront of world economic activity via the the encouragment of the adoption of EU wide measures to improve commercial competitiveness. It should be recognised, though, that much of the success of the eventual outcome of the SEM initiative depends heavily on the extent to which the various pieces of legislation are implemented by the member national legislatures in each of their states and also the extent to which micro and macroeconomic policies can be adjusted to accommodate to the increasingly internationalised nature of trade.

Where does this leave the district of South Yorkshire? This sub-region is potentially very vulnerable to the impact of the SEM since a high proportion exists of full-time employment in manufacturing sectors likely to be significantly effected as a result of the implementation of the legislation. Research carried out in the early 1990's, just prior to the commencement of the implementation of the Single Market, suggested that as many as 42% of manufacturing employees were potentially at risk; and so the challenge for the public sector, at all levels, is to encourage the adjustment to the new realities of this trading environment. The conclusion to be drawn here is that the public sector should adopt a policy orientation geared towards maximising the internal resources of a region or sub-region, and optimising its external support.

Local authorities should be central to the drive to lend support to the private sector. There is, for instance, a clear and immediate need to educate and inform the manufacturing sector in terms of the threats and opportunities embodied in the SEM legislation. In the context of the dynamics underway in the corporate sector, the task of not only the local authority but of all the relevant public sector agencies is to encourage the development of internal resources in an on-going learning process via the adoption of a positive attitude towards local capacity building and technical development, together with fostering a spirit of cooperation. In this way, firms, encouraged to position themselves at the forefront of technological development in their respective sectors, will be supported by a network of locally commited decision makers who are prepared to share and spread the risk associated with the levels of investment that are increasingly required in the manufacturing sector. Local authorities are well positioned to develop as managers of the provision of advice and information with regard to the Single Market. In the fast changing manufacturing environment they should take the initiative to develop and implement a strategy of provision unique to their locality, free of the responsibility for day-to-day delivery. This can be left to other organisations and agencies. The ensuing 'strategic plan' would then be most compatable with the 'integrity' of the locality (Amin and Thrift,1994) and would serve to both coordinate the activities of other institutions (reducing service duplication in the process) and ensure that advice and information is provided throughout to an agreed minimum standard.

In addition to the change in behaviour and performance brought about by the introduction of the SEM legislation, the corporate sector continues to undergo a constant process of adjustment in response to many factors, some long-term and some short-term in impact, which influence and shape the corporate trading environment. In the UK the recent recessionary phase of the economic cycle of the early nineties has had to be reckoned with; together with longer term issues related, for instance, to: the changing balance between tertiary and secondary activity, the on-going privatisation programme, the increasingly international scale of trade and impact of competition and the increasing ability of the private sector to take advantage of relative cost differences in important factors of production wherever in the world they may be located. The impact of these pressures on the private sector has been theoreticised in terms of: a phase of a long-term cycle of development, a part of a world system of 'global' trade and, a response to changing societal controls on capitalist development. All of these explanations or forces for change must be considered, alongside the impact of the

SEM on the corporate trading environment. The SEM represents, in fact, a globalising economic force that has encouraged a response by the private sector which is as complex as the practical reality of trading in increasingly world-wide markets.

This study has concentrated on investigating the impact of the SEM on the manufacturing sector (ie. SIC Divisions 2, 3 and 4). A sample of companies located within the borders of South Yorkshire has been surveyed as an indicative industrial sub-region of the UK. The key findings are presented now and, as a result, a number of original contributions to knowledge can be made. The data primarily reveals the involvement of the South Yorkshire based manufacturing sector with activity in preparation for trading in the SEM in particular and, more generally, trading in more open European markets. The extent of involvement in preparation activity and the types of activity undertaken are also shown. Five key strategies and two lesser but nevertheless important strategies are shown to be common forms of preparation activity. Conclusions are also drawn about the advice and information preferences of manufacturing firms in their desire to find out more about the SEM, and certain characteristics of companies typically involved or not involved in preparation activity. It is also possible to assess the influence of company involvement with aspects of preparation activity and certain performance indicators.

9.2 The extent of preparation activity.

As gauged by the degree of reponse to the preparation activity suggested in the questionnaire, manufacturing firms as a group have not taken the introduction of the SEM in a very serious manner. Most firms revealed an involvement in some activity but usually not to a great extent. From a list of preparation activities specifically for the implementation of the SEM, only 54% of companies admitted their involvement in at least one activity over the three financial years immediately preceeding completion of the questionnaire in the Spring of 1994. From the list of suggested activities in preparation for trading in more open European markets over the same time scale, firms as a whole revealed their involvement in all but one of the twenty-seven activities but it was usually the case that the vast majority were not engaged in any particular form of action. A majority of firms were only actually involved in two activities. 42% of firms had not done anything in specific preparation for the SEM over the time period in question. For most of the respondents this was because of the perceived insignificance of the threat of enhanced foreign competition and a lack of time or

opportunity to do anything. It should be noted, though, that approximately one quarter of these companies were already trading in international markets prior to the introduction of the SEM and had not felt the need to do anything specifically.

9.3 Types of preparation activity and company characteristics.

Estimates of the typical preparatory behaviour to be found were examined in chapters 2 and 3 and there it was shown that firms were broadly expected to pursue, in some way, economies of scale and also reappraise their manufacturing, marketing and distribution policies. In response to the twin pressures of increased market size and heightened competition, firms were generally likely, it was thought, to focus on the need to improve productivity, externally and/or internally restructure, increase investment and increase cooperation with other companies with regard to some aspect of their operation. More specifically for the SEM, it was suggested that an effective strategy would emphasise product development and differentiation, rationalisation in favour of specific corporate competences, the development of a strong distribution system and effective rivalrous behaviour. This investigation has revealed that, in terms of the forms of preparation activity, the provision of training with regard to EU technical standards and regulations was seen to be very important; as was, to a lesser extent, the recruitment and development of staff with foreign language qualifications. Marketing related activities, especially the exhibition at international trade fairs, the sending of representatives to Europe, the publication of catalogues and price lists in a European foreign language and the establishment of distribution deals to sell products in Europe, were also very important. Product related preparation activity was also revealed on a regular basis and this was primarily related to product and packaging modification and differentiation. A structural adjustment form of activity was also commonly reported, reflecting the tendency of firms to be undertaking re-organisation and rationalisation activity in conjunction with investment in new plant and machinery. This structural adjustment activity was either short-term or long-term in nature. A long-term strategy would typically entail the combination of rationalisation and reorganisation with investment in new plant and machinery, whereas the short-term strategy would typically involve internal reorganisation or rationalisation activity in combination with staff training. This latter aspect would principally be to cope with the emerging EU standards and technical and safety regulations. The evidence derived from the workings of the principal components analysis described in chapter six can be used to elaborate these findings. The principal components analysis served to condense the suggested preparation activity into seven principal components

based upon: marketing, product development, staffing, longer-term restructuring, knowledge acquisition, shorter-term restructuring and collaborative distribution. Some were defensive in character and represented a forced response to the implementation of the legislation. Some, on the other hand, were aggresive in nature and represented a pro-active effort to take advantage of the opportunities afforded by the establishment of the SEM.

As a reflection of these activities, those companies which reported an interest in finding out more about trading in the SEM tended to be interested in information and advice on marketing aspects (sales and marketing strategies, European markets and sectors) and product development aspects (EU standards and regulations, product differentiation with regard to local customer preference). In fact, 72% of respondents reported a desire for more information and advice on the SEM; especially with regard to the availability and accessibility of financial assistance.

An interesting difference was found between the typical company engaged in various forms of preparation activity (ie. 'active' ones) and the typical company not engaged (ie. 'inactive'). It was initially seen that an active company would typically be: a branch\subsidiary of a larger company, experiencing a very large annual turnover and competing against predominantly foreign based rivals. An inactive company would typically be: a single site, free-standing business, experiencing a relatively smaller annual turnover and, competing against mainly locally based rivals. A multiple discriminant analysis (mda) was used to investigate further the link between certain corporate characteristics and the seven categories of activity as suggested by the results of the principal components analysis mentioned above. Scores for the seven principal components were used as independent variables and certain corporate characteristics, coded dichotomously, were used as the dependent variables. It was found that, on the basis of principal component scores achieved by each firm, they could be reliably allocated to one of two groups for each of the following characteristics: organisational structure (single site establishment or a branch\subsidiary of a larger company), the size of annual turnover (greater than or less than £5 million) and the location of the company's main competitors (within the UK or beyond the UK). The results revealed two important points. Firstly, they confirmed the characteristic profile of an active company as one which tended to be a branch\subsidiary of a larger one, a company with a very high turnover and, a company which competes mainly against rivals located

beyond the UK. The second important point revealed by the mda analysis was that there were five key forms of preparation activity and these were based primarily upon marketing, staff development and recruitment, product development and, to a lesser extent, shorter-term restructuring and collaborative distribution. Below are the five key forms of activity:

1.The marketing strategy involved the following types of acivity and appeared to be pro-active and aggressive in nature.

Key features:

- started to make its catalogues/price lists and other forms of publicity material avalilable in Europe or advertise in European journals/ newspapers and magazines
- started to publish catalogues/ price lists/ product information or any kind of publicity and promotional material in a European foreign language
- started to send representatives to trade fairs in European cities and/or visit European customers or receive or host business visits from European customers
- broadened its product range available in Europe or diversified its output with a view to selling more in Europe
- expanded its output with a view to selling more in Europe
- started to provide/encourage foreign language training for any staff
- agreed any deals with new or existing distribution companies (agents/wholesalers/retailersetc) to sell your products in Europe
- exhibition at international trade fairs

2.The product development strategy involved the following types of activity and appeared to be reactive in nature.

Key features:

- modified its product design to take account of European customers or EC standards and technical and safety regulations
- modified its packaging to take account of European customers or EC standards and technical and safety regulations
- product development and differentiation
- adapting to standards and technical regulations

3.The market position strengthening and staff recruitment/development strategy linked attempts to improve specific qualities of personnel with marketing strategy improvements and involved the following types of activity.

Key features:

- become more likely to recruit staff with foreign language qualifications

- started to provide/encourage training with regard to European business conventions and traditions
- strengthening of distribution channels
- adjustment of Marketing strategy

[The three strategies mentioned above were usually carried out by all of the typically active firms. Any one organisation, provided that it was a branch\subsidiary of a larger company or producing a very large annual turnover or competing against rivals located beyond the UK, would tend to be involved in these three strategies. The marketing strategy appeared to discriminate most effectively. This was ranked highest in all three MDA models investigated.]

4.The short-term structural investment and staff training strategy linked attempts to improve products and processes with the need to acquaint staff with the emerging technical specifications.

Key features:

- internally reorganised or rationalised its activity
- started to provide/encourage training with regard to EUstandards and technical and safety regulations

[Firms with the combination of the characteristics of being a branch\subsidiary of a larger company and competing against rivals located beyond the UK would tend to be involved in this strategy regardless of the size of annual turnover.]

5.The collaborative distribution strategy centred upon attempts to establish a joint collaborative /partnership /cooperative agreement with another organisation in order to distribute the company's main products in Europe.

[Firms with a large annual turnover would be likely to be involved in this strategy regardless of their organisational structure and location of main rival characteristics.]

Using a self-reported 'Increased\Static\Decreased' framework, active companies were seen to be better performers than inactive ones. A statistical link (at both 1% and 5% levels of significance) was established to show that companies carrying out certain of the more common forms of preparation activity were also more likely to report an improving performance in terms of sales, market share and overall ability to compete. Active companies were more likely to report increasing sales, market share and overall ability to compete in domestic, EU and world markets. More of the inactive companies reported static performance levels in terms of sales and market share in EU markets and market share in

international markets beyond the EU. Fewer of the inactive ones reported increasing sales and ability to compete in EU markets.

9.4 A review of the hypotheses

This is how the assertions made in the hypotheses stated in chapter one can be accepted or rejected.

1. *the introduction and implementation of the SEM programme of the EU has caused the manufacturing sector to react in a significant manner in preparation for trading in more liberalised European markets.*

The assertion made here has not stood up to further analysis. Firms have not reacted in a significant manner to the SEM and the reason for this can only be partially explained by the fact that they were already operating in an 'international' market place and had not, therefore, seen the need to respond. Most firms had done something in terms of preparation but rarely did a respondent report anything like a high level of activity. Firms seem to have prepared more for more open European markets in general than for the implementation of the SEM. This may be because firms have been confident in the knowledge that a general level of preparedness will include with it a sufficient level of preparation for the SEM

2. *the main form of preparation will be one of adopting to EU standards and technical regulations as embodied in the SEM harmonisation legislation.*

This was an important form of preparation but not the most important form and so, strictly speaking, this assertion is false. Nevertheless, the need to adapt to the emerging technical specifications and safety standards was reflected in activity connected with product and packaging modifications and personnel training.

3. *an important area of preparation for the SEM for companies will be to review and develop their sales and marketing function or functions in order to trade in a more competitive home and overseas market place.*

This hypothesis can be accepted since the marketing form of strategy was found to be the most commonly occuring. There was a widely perceived need to raise the quality and the coverage of the marketing effort and this was reflected in a wide spread of activity.

4. *a common form of preparation will be for companies to put into practice a strategy of restructuring and rationalisation based upon a programme of capital investment and/or the entering into of a collaborative agreement of some kind with another company.*

Although these activities were not as popular as the ones mentioned in hypotheses 2 and 3, this assertion must be accepted as true since these were commonly reported actions. It appears that firms were investing in order to rationalise and restructure their products and\or processes. Active companies were usually competing against rivals based in the rest of Europe and beyond, and this may well have provided the incentive to introduce efficiency improvments wherever possible. A large proportion of firms were seeking to enter into, or had entered into, a collaborative agreement but this was overwhelmingly to do with distribution. Firms appeared to be interested in collaboration as a way of entering into new European markets but not in order to manufacture or conduct RTD. External restructuring via merger or acquisition has not really occurred as a strategy at all and this is a rather surprising outcome since this was a widely predicted action in the literature.

5. *those companies active in terms of preparation for the SEM have distinct characteristics and that a knowledge of these characteristics can be used as a source for predicting the existence and type of preparation activity undertaken.*

Manufacturing firms have some common characteristics which have been shown to reliably discriminate between active and inactive companies. This assertion must, therefore, be accepted as true. The discriminating characteristics have been found to be: organisational structure, size of annual turnover, location of main competitor. Some characteristics (such as age, legal status) did not work well as discriminators; and the category of 'manufacturing product type' appeared to perform well at first but was dropped as a reliable indicator in the light of subsequent analysis. An active company is one which tends to be:

a branch\subsidiary of a larger one,

a company with a very high turnover and,

a company which competes mainly against rivals located beyond the UK.

A knowledge of these characteristics can certainly be used to predict the likelihood of firms being involved in preparation activity. To a lesser extent they can be used to predict the type of activity. Branch/subsidiaries of larger firms are much more likely to be active than the other major sample category of single site, free-standing businesses and are especially involved in preparation activity

related to marketing, staff development, product development and short term structural investment. Companies with main competitors located beyond the boundaries of the UK are much more likely to be active than companies with main competitiors located within the UK and are especially involved in preparation activity related to marketing, staff development, product development and short term structural investment. The larger the turnover, the more active a company is likely to be, especially in preparation activity related to marketing, staff development, product development and collaborative activity to distribute products in Europe.

6. *companies motivated by a desire to compete more effectively in the SEM will have a definite interest in learning more about a range of relevant topics.*

This must be accepted since firms have been shown to be, first and foremost, interested in finding out about financial assistance. The process of learning about, qualifying for and receiving financial assistance from domestic authorities and the EU can be very complex and this, it appears, is reflected here. Firms had an interest in other matters as well, and this may well reflect their activity in the areas of marketing and product development. Overall, just under three-quarters of survey respondents reported a desire for more information on a range of SEM related topics.

7. *those companies actually taking steps to prepare for the SEM are likely to perform better than those not taking any steps.*

Active companies have certainly been shown to be performing in a way which is superior and statistically different to inactive ones. Active companies occupied more of the good performing places and fewer of the less well performing places. The enhancement of competitive advantage, derived through taking part in preparation activity for trading in Europe, has certainly seemed to have a positive effect.

9.5 Concluding summary.

It therefore appears that, with reference to these hypotheses, manufacturing firms are not taking the SEM very seriously although most have been alerted to the need for some form of preparation activity. This activity has centred, principally, upon marketing strategy improvements although other strategies, based upon adapting to new standards and regulations, staff recruitment and development and, implementing a programme of restructuring and rationalisation, are also important. Firms have considered their conduct in terms of product, process and

organisation and have adopted strategies related to marketing, product design and development, human capital investment, organisation restructuring and collaboration to improve the distribution network. Industrial sectors have been influenced by the SEM according to the structural characteristics of each industry and the extent to which markets were protected by barriers prior to their removal as part of the SEM programme. Specific business functions have been developed and new internal and external corporate structures have been implemented. With regard to business functions, companies have shown a tendency to organise at least some aspects of their activity on a European wide or even global scale. This is especially the case with marketing and distribution. Restructuring has taken place to facilitate a flexible response to the exploitation of new opportunities as they emerge. In particular this has allowed a process of rationalisation so that main products may be developed and differentiated in readiness for distribution to wider geographical markets.

A majority of companies would like more advice and information about the SEM; especially in the field of EU financial assistance, although strong interest was shown in others aspects such as appropriate marketing strategies and EU technical standards and regulations. Companies taking steps to prepare are much more likely to be branch\subsidiaries of larger companies with very large annual turnovers and competing mainly against rivals based beyond the borders of the UK. Those that have taken steps to prepare are more likely to be reporting increasing sales, market share and ability to compete in not only EU and world markets but in domestic ones as well. Company size was seen to be an important influence but only as one part of the explanation. Large companies are more likely to have the resources available and also more likely to be operating in existing overseas markets and/or competing against foreign firms. Ownership characteristics were important in terms of levels of preparation and types of preparation activity. Branch/subsidiaries were more highly involved and tended to adopt an aggressive and pro-active strategy in attempting to 'raise their game'. Single site companies, on the other hand, reported much lower levels of involvement and a tendency to be concerned with defensive and reactive strategies in response, typically, to the need to keep abreast of technical and safety regulations.

The SEM is a hugely important trading initiative with ramifications to be considered at both the macroeconomic and microeconomic level. This thesis has examined some aspects of the Single Market by investigating the impact on UK

manufacturing industry located in the context of the South Yorkshire sub-regional economy. Conclusions have been drawn with regard to the characteristics of those companies thought most likely to be taking steps to prepare; and the common types of activity undertaken. Attempts have been made to explain this preparation activity in terms of underlying economic rationale. Suggestions have been made with regard to a possible public sector response to some aspects of the private sector difficulties caused by the SEM.

The end.

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Appendices:

Appendix A.1 The Impact on UK Industry of Suppressing NTB's

SIC	Sector	Strong impact	Average impact	Weak impact
221	Iron and steel		*	
222	Steel tubes		*	
223	Drawing and rolling steel		*	
231	Stone and clay			*
239	Other minerals			*
241	Clay products		*	
242	Cement		*	
243	Concrete		*	
245	Asbestos			*
245	Stone			*
246	Abrasive products			*
247	Glass			*
248	Ceramics		*	
251	Basic chemicals		*	
255	Paints			*
256	Chemical products		*	
257	Pharmaceuticals	*		
258	Soap			*
259	Chemical products			*
311	Foundries	*		
312	Forging	*		
313	Bolts	*		
314	Metal doors	*		
316	Hand tools	*		
320	Plant and steelwork	*		
321	Agricultural plant			*
322	Machine tools	*		
323	Textile machinery		*	
324	Food machinery		*	
325	Mining machinery		*	
326	Transmission		*	
327	Printing		*	
328	Other machinery		*	
330	Office processing	*		
341	Insulated wires	*		
342	Basic electrical	*		
343	Electrical use materials			*
344	Telecomm	*		
345	Other electrical equipment		*	
346	Domestic appliances		*	
347	Lamps		*	
348	Electrical installation	*		
351	Motor vehicles engines		*	
352	Motor vehicle bodies			*
353	Motor vehicle parts		*	
361	Shipbuilding		*	
362	Railway	*		
363	Cycles			*

364	Aerospace		*	
371	Measuring	*		
372	Medical	*		
411	Organic oils and fats		*	
412	Meat production	*		
413	Milk products	*		
414	Fruit and veg. processing	*		
415	Fish processing	*		
416	Grain milling		*	
419	Bread		*	
420	Sugar		*	
421	Ice cream	*		
422	Animal feed			*
423	Misc. foods	*		
426	Wines	*		
427	Brewing	*		
428	Soft drinks	*		
431	Woolen		*	
432	Cottons		*	
433	Texturing		*	
437	Textile finishing		*	
438	Carpets		*	
439	Misc. textiles	*		
451	Footwear		*	
453	Clothing		*	
462	Semi-finished wood products		*	
463	Joinery		*	
467	Wooden furniture and fittings		*	
Number		28	41	14

Source: PACEC/RIDER (1990)

Appendix A.2 European Trading Survey of South Yorkshire Manufacturing Questionnaire

This appendix consists of a print of the research questionnaire which was distributed to companies for completion in the Spring of 1994.

European Trading Survey of South Yorkshire Manufacturing Companies.

General introduction.
The questions in this survey have been designed to enable swift but accurate completion by the respondent. Please be as methodical as possible and try to ensure that all questions are answered fully.If you wish to add any extra comments to your answers please feel free to do so.

Section 1.
The purpose of this section is to help establish relevant characteristics of companies featuring in the survey. Please follow the instructions and, when asked to comment, be as concise as possible.

(company name)

1.01

Name of respondent	
Position in company	

1.02

Name of manager of this plant (M.D./ Branch Manager etc) if different from above.	

1.03 In which year did your company begin trading ?

Before 1969		01
1970-1979		02
1980-1989		03
1990 onwards		04

1.04 Is your company **(more than one box can be ticked)**

a single site business		01
a multi site business		02
a parent company with subsidiaries in the UK		03
a parent company with subsidiaries abroad		04
a branch/subsidiary of a larger company		05
a franchise of a larger company		06

If your company in South-Yorkshire is a branch/subsidiary or franchise of a larger company please give the name and location of the parent company.

Name of parent company	
Location	

ALL OTHER QUESTIONS RELATE TO THE LOCAL COMPANY

1.05 Is your company registered as :

a Sole Trader / Partnership		01
a Private Limited Company		02
a Public Limited Company		03
other(s) (please specify)		04
		05

1.06 Which activities does your company carry out at this establishment **(more than one box can be ticked)**

Production or processing of metals including steelmaking		01
Mechanical or electronic or electrical engineering		02
Other manufacturing		03
Research and development		04
Warehousing and Distribution		05
Other(s) (please specify)		06
		07

1.07 In terms of the Census of Production's SIC Class headings, what are the products produced by your company ? **(more than one box can be ticked)**

SIC Class heading			
21	Extraction and preparation of metalliferous ores		01
22	Metal manufacturing		02
23	Extraction of minerals not elsewhere specified		03
24	Manufacture of non-metallic mineral products		04
25	Chemical industry		05
26	Production of man-made fibres		06
31	Manufacture of metal goods not elsewhere specified		07
32	Mechanical engineering		08
33	Manufacture of office machinery and data processing equipment		09
34	Electrical and electronic engineering		10
35	Manufacture of motor vehicles and parts thereof		11
36	Manufacture of other transport equipment		12
37	Instrument engineering		13
41/42	Food drink and tobacco manufacturing industries		14
43	Textile industry		15
44	Manufacture of leather and leather goods		16
45	Footwear and clothing industries		17
46	Timber and wooden furniture industries		18
47	Manufacture of paper and paper products ; printing and publishing		19
48	Processing of rubber and plastics		20
49	Other manufacturing industries		21
	None of the above (please state SIC Class heading)		22

1.08 Approximately how many current employees fall into the following categories in your company?

	full time	part time	casual	seasonal	YTS (or equiv. trainees)	
	(a)	(b)	(c)	(d)	(e)	
male						01
female						02
total						03

(full time = 30+ hrs pr wk, part time = 8 hrs- 30 hrs per wk , casual = less than 8 hrs per wk)

1.09 What was the approximate turnover of your company in the last full financial year ? (year 1993- 1994)

under £100 000		01
£ 101 000 - 50 000		02
£ 501 000 - 1 00000		03
£ 1 000 001 - 5 000 000		04
£ 5 000 001 (and above.)		05

1.10 a) Approximately what percentage of your products went to the following markets in the last financial year (93-94) ?

In South-Yorks. North-eastDerbys.andNorth Notts.		01
In the rest of theUK		02
In the rest of the European Community		03
In the rest of the world		04

b) Approximately what percentage of your products do you expect to go to the following markets in the current financial year (93-94) ?

In South-Yorks. North-eastDerbys.andNorth Notts.		01
In the rest of the UK		02
In the rest of European Community		03
In the rest of the world		04

1.11 Are your main competitors (tick one box only)

In South-Yorks. North-eastDerbys. andNorth Notts.		01
In the UK		02
In the rest of the European Community		03
In the rest of the world		04

Section 2.

The purpose of this section is to help gauge what activity your company has undertaken over recent years with regard to trading in markets in continental Europe and/or competing with other European companies.

Please answer by ticking the relevant box and respond in terms of the last three financial years (91-92, 92-93, 93-94) .

2. During the last three financial years has your company :

		Yes	No	Not known
		(a)	(b)	(c)
01	started to make its catalogues/price lists and other forms of publicity material avalilable in Europe or advertise in European journals/ newspapers and magazines ?			

02	started to publish catalogues/ price lists/ product information or any kind of publicity and promotional material in a European foreign language ?			
03	started to send representatives to trade fairs in European cities and/or visit European customers or receive or host business visits from European customers ?			
04	broadened its product range available in Europe or diversified its output with a view to selling more in Europe ?			
05	expanded its output with a view to selling more in Europe ?			
06	opened a branch/susidiary in Europe to manufacture there ?			
		Yes	No	Not Known
07	invested in manufacturing in Europe via greenfield investment ?			
08	invested in manufacturing in Europe via takeover ?			
09	invested in manufacturing in Europe via merger ?			
10	opened a branch/subsidiary in Europe to distribute there ?			
11	invested in distribution in Europe via greenfield investment ?			
12	invested in distribution in Europe via takeover ?			
13	invested in distribution in Europe via merger ?			
14	established a joint collaborative/partnership/cooperative agreement with another organisation to manufacture ?			
15	established a joint collaborative/partnership/cooperative agreement with another organisation to distribute ?			
16	established a joint collaborative/partnership/cooperative agreement with another organisation to conduct Research and Technical Development ?			
17	internally reorganised or rationalised its activity ?			
18	started to provide/encourage foreign language training for any staff ?			
19	become more likely to recruit staff with foreign language qualifications ?			
20	started to provide/encourage training with regard to EC standards and technical and safety regulations ?			
21	started to provide/encourage training with regard to European business conventions and traditions ?			
22	started to provide/encourage training with regard to European macroeconomic or sectoral market prospects ?			
23	modified its product design to take account of European customers or EC standards and technical and safety regulations ?			
24	modified its packaging to take account of European customers or EC standards and technical and safety regulations ?			
25	agreed any deals with new or existing distribution companies (agents/wholesalers/retailersetc) to sell your products in Europe ?			
26	paid for any advice on a consultancy basis with regard to any aspect of the Single Market or European business ?			
27	taken any advice from a trade association/ professional body or chamber of trade or commerce with regard to any aspect of the Single Market or European business ?			

Use the space below if you want to give a brief explanation of your company's activity.

Section 3.

The purpose of this section is to establish more specifically what action, if any, your company has taken with regard to the Single Market.

3.1 During the last three financial years (91-92, 92-93, 93-94) what main activities, if any, has your company undertaken with a view to preparing for the Single Market ? **(More than one box can be ticked)**

	Product development and differentiation		01
	Adapting to standards and technical regulations		02
	Adjustment ofMarketing strategy		03
	Exhibition at international trade fairs		04
	Strengthening of distribution channels		05
	Staff training and development		06
	Cross-border inter-company collaboration		07
	Investment in new plant and machinery		08
	Merger/takeover or any other external restructuring		09
	Rationalisation/reorganisation or other internal restructuring		10
	Nothing specific for the Single Market		11
	Other(s) (please specify)		12
			13

Use the space below if you want to give a brief explanation of your company's activity.

If you ticked the 'Nothing specific for the Single Market' box please continue with Section 3. If you did NOT tick this box please go onto Section 4.

3.2 Did you tick the 'Nothing specific' box because (more than one box can be ticked)

You were trading in international markets previous to the introduction of the SEM legislation and have not seen the need to specifically prepare.		01
International competition represents such an insignificant threat to your business that it is not worth it.		02
You have not had the time or opportunity to consider what the appropiate activity ought to be.		03
Other (please specify)		04

Section 4. The purpose of this section is to gauge your company's recent behaviour/performance in terms of an 'Increased','Remained static', 'Decreased' framework.

4.1 What has happened over the last 12 months with regard to the following ?(Please place one tick per row.)

			Increased	Remained static	Decreased	
			(a)	(b)	(c)	
Company sales in :	a)	domestic markets				01
	b)	EC markets				02
	c)	other international markets				03
Company main product market share in :	a)	domestic markets				04
	b)	EC markets				05
	c)	other international markets				06
Your own assessment of your company's overall ability to compete in :	a)	domestic markets				07
	b)	EC markets				08
	c)	other international markets				09

4.2 a) Over the last 12 months what happened to your company's : (1 tick per row)

	Increased	Remained static	Decreased	
	(a)	(b)	(c)	
Volume of Orders				01
Volume of Output				02
Employment				03
Operating floospace				04

b) What do you expect to happen in the next 12 months in relation to your company's : (1 tick per row)

	Increase	Remain static	Decrease	
	(a)	(b)	(c)	
Volume of Orders				01
Volume of Output				02
Employment				03
Operating floorspace				04

Section 5.

The purpose of this final section is to help gauge from the South-Yorkshire manufacturing community what information, if any, is most needed over the forthcoming short to medium term and from whom.

5.1 In order to better compete in the Single Market what advice/information, if any, would you most like to have ? Please tick beside any category which you feel your company could particularly benefit from knowing more about.

EC customs and frontier formalities		01
EC technical standards and regulation information		02
EC fiscal and legal developments		03
European macroeconomic developments		04
European markets and sectors		05
Appropriate sales and marketing strategies		06
Relevant staff training and development		07
Financial planning for international trading		08
Government and EC financial assistance		09
Logistics/distribution		10
Product design and development with regard to quality		11
Product design and development with regard to local customer preference		12
Export documentation requirements		13
None of the above		14
Other(s) (please specify)		15
		16

5.2 How important are the following organisations likely to be to your company over the short to medium term in providing the advice/information required ? Please place one tick per row.

	Very important	Important	Not important	
	(a)	(b)	(c)	
Local Council				01
Dept. of Trade and Industry				02
Dept. of Employment				03
Dept. of Environment				04
Dept. of Transport				05
Sheffield Development Corporation				06
Chamber of Commerce				07
Training and Enterprise Council				08
CBI				09
TUC				10
University sector				11
Sectoral Employers Associations				12
Financial sector				13
European Communiy				14
H.M. Customs and Excise				15
other(s) (please specify)				16
				17

Many thanks for taking the trouble to complete this questionnaire.
Please return this questionnaire in the stamped addressed envelope provided to :
Mr R. Luker
c/o School of Urban and Regional Studies, Sheffield Hallam University, Sheffield S1 1WB.

Appendix A.3 Relationship Information

A.3(i) The relationship between company characteristics and general European trading activity

(n = 139)

Part (a) At the 1 % sig.level :		Chi-square	Degrees of freedom	Significance level
Company organisation	Euro. publicity	14.80	4	0.00518
and :	for. lang. publishing	24.90	4	0.00005
	reps. to Europe	19.70	4	0.00057
	wider product range	16.90	4	0.00202
	more output	14.40	4	0.0062
	takeover (manufacturing)	28.40	4	0.00001
	merger (man.)	15.60	4	0.00351
	branch/subsiduary (distribution)	17.60	4	0.0015
	takeover (dist.)	22.90	4	0.00014
	language training	24.40	4	0.00007
	language recruitment	19.00	4	0.0008
	Euro. macroeconomics	14.00	4	0.00733
	product modification	13.40	4	0.00928
	packaging modification	15.40	4	0.00391
Company legal status	reps. to Europe	16.40	3	0.00733
and :	takeover (man.)	14.00	3	0.00928
	distribution deals	14.70	3	0.00214
Company activity and :	Euro. publicity	10.90	2	0.00422
Company turnover and :	for. lang. publishing	27.10	3	0.00001
	reps. to Europe	26.90	3	0.00001
	wider product range	21.00	3	0.00011
	more output	11.60	3	0.00886
	takeover (man.)	16.80	3	0.00077
	branch/subsid. (dist.)	18.20	3	0.00041
	cooperation (R&D)	12.60	3	0.00568
	language training	30.40	3	0
	language recruitment	31.60	3	0
	Euro. bus. practice	13.30	3	0.00404
	Euro. macroeconomics	20.50	3	0.00014
	packaging modification	20.30	3	0.00015
Location of competition	Euro. publicity	22.40	3	0.00005
and :	bus. consultancy	15.90	3	0.00118
	for. lang. publishing	30.80	3	0
	reps. to Europe	40.90	3	0
	wider product range	26.70	3	0.00001
	more output	20.50	3	0.00013
	branch/subsid. (man)	13.00	3	0.00459
	branch/subsid.(dist.)	19.00	3	0.00027
	internal reorg./rational.	18.50	3	0.00034
	lang. training	24.10	3	0.00002
	lang. recruitment	36.70	3	0
	Euro. bus. practice	25.70	3	0.00001

	product modification	24.10	3	0.00002
	packaging modification	26.60	3	0.00001
	distribution deals	17.90	3	0.00046

Part (b) At the 5 % sig. level :				
Company organisation	branch/subsid. (man.)	10.70	4	0.0307
and :	internal reorg./rational.	9.80	4	0.04389
Company legal status	for. lang. publishing	11.30	3	0.01015
and :	wider product range	9.80	3	0.02061
	greenfield inv. (dist.)	9.60	3	0.02208
	cooperation (R&D)	8.00	3	0.04572
Company activity and :	wider product range	6.10	2	0.0436
Company turnover and :	Euro. publicity	9.40	3	0.02456
	internal reorg./rational.	9.90	3	0.01939
	product modification	10.60	3	0.01398
Location of competition	cooperation (man.)	10.30	3	0.01606
and :	cooperation (dist.)	10.60	3	0.0144
	standards training	8.00	3	0.04657
	Euro. macroeconomics	8.20	3	0.0415

Appendix A.3(ii) The relationship between company characteristics and involvement in any specific SEM preparatory activity (n = 139)

Part (a) At the 1 % sig. level :		Chi-square	Degrees of freedom	Significance level
Company organisation and :	SEM activity	17.40	4	0.00163
Location of competition and :	SEM activity	31.00	3	0

Part (b) At the 5 % sig. level :				
Company turnover and :	SEM activity	10.70	3	0.01327

Appendix A.3(iii) The relationship between involvement in general European trading activity (selected aspects) and recent company performance (n = 139).

Part (a) At the 1 % sig.level :		Chi-square	Degrees of freedom	Significance level
European publicity	sales-domestic mkts	10.60	2	0.005
and :	sales-EU mkts	12.90	2	0.0015
	sales-other mkts	20.10	2	0
	mkt share-other mkts	20.60	2	0
	ability to compete-other mkts	10.90	2	0.0042
Business consultancy	sales-other mkts	16.10	2	0.0003
and :	mkt share-other mkts	11.80	2	0.0026
Reps. in Europe and :	sales-EU mkt	11.20	2	0.0036
	sales-other mkts	11.40	2	0.0033
	mkt share-other mkts	9.50	2	0.0086
Wider range output	sales-EU mkt	15.00	2	0.0005
and :	sales-other mkts	13.30	2	0.0013
	mkt share-EU mkt	10.80	2	0.0045
	mkt share-other mkts	10.60	2	0.0048
Product modification and :	sales-domestic mkt	9.80	2	0.0074
Distribution deals	sales-EU mkt	14.50	2	0.0007
and :				

Part (b) At the 5 % sig. level:				
Euro. publicity and :	ability to compete-EU mkt	7.90	2	0.0189
Reps. in Europe and :	mkt share-EU mkt	9.10	2	0.0106
	ability to compete-EU mkt	7.50	2	0.0236
Wider output range and :	ability to compete-EU mkt	6.70	2	0.0347
	ability to compete-other mkts	6.00	2	0.0489
More output and :	sales-other mkts	8.90	2	0.0116
Eu standards training and :	mkt share-other mkts	8.70	2	0.0129
Product modification and :	mkt share-EU mkt	8.30	2	0.0157
Packaging modification and :	sales-domestic mkt	7.40	2	0.0248

	sales-EU mkt	6.90	2	0.0313
	mkt share-other mkts	6.60	2	0.0376
	ability to compete-other mkts	6.00	2	0.0494
Distribution deals and :	sales-other mkts	8.20	2	0.0167

Notes:
1. The twelve months immediately prior to the completion of the questionnaire in March 1994.
2. The nine most frequently occuring aspects of activity.

Appendix A.3(iv) The relationship between involvement in any specific preparatory activity for the SEM and recent company performance (n = 139).

At the 5 % sig.level :		Chi-square	Degrees of freedom	Significance level
SEM activity and :	sales in other internat. mkts	9.00	2	0.0111
	mkt share in EU mkts	7.20	2	0.0278
	mkt share in other mkts	7.30	2	0.0265

1. The twelve months immediately prior to the completion of the questionnaire in March 1994.

Appendix A.3(v) The relationship between company characteristics and no specific preparatory activity for the SEM (n = 139).

At the 5 % sig.level :		Chi-square	Degrees of freedom	Significance level
Turnover and :	Inactivity	17.06	9	0.0478
Location of competition and :	Inactivty	20.69	9	0.01410

Appendix A.3(vi) The relationship between recent company performance and no specific preparatory activity for the SEM (n = 139).

Part (a) At the 1 % sig.level :		Chi-square	Degrees of freedom	Significance level
EU markets sales and :	Inactivity	23.16	6	0.00074

Part (b) At the 5 % sig.level :				
Other internat. sales and :	Inactivity	15.94	6	0.0141
EU market share and :	Inactivity	13.88	6	0.0310
Other international market share and :	Inactivity	14.29	6	0.0265
EU ability to compete and :	Inactivity	13.74	6	0.03260

1. The twelve months immediately prior to the completion of the questionnaire in March 1994.