

PART II

**HISTORICAL PERFORMANCE: THE IMPACT OF EC
MEMBERSHIP ON IRELAND**

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In this part of the report we study the effects of membership of the European Community on Ireland's economic structure and performance. Such an exercise is a necessary prelude to assessing the threats and opportunities which will emerge with completion of the internal market by 1992, and to our consideration of the policy issues which arise at the national and Community level.

In Chapter 3 we discuss various methods which exist for measuring the effects of economic integration and outline which methods we use in the subsequent chapters. Chapter 4 sets out the basic facts of Ireland's performance since 1973 — concentrating on those activities most influenced by integration into the Community, i.e. manufacturing, agriculture and trade. This performance is briefly compared with the expectations about the effects of membership which existed at the time of Ireland's accession. In Chapter 5 Ireland's performance in the Community relative to that of other countries is considered. Chapter 6 reports on some special measures of trade and industrial change commonly thought to be important indicators of the effects of economic integration. Finally, in Chapter 7 conclusions are drawn from all the factual material surveyed.

MEASURING THE EFFECTS OF EC MEMBERSHIP: METHODS OF INVESTIGATION

1. INTRODUCTION

How has membership of the European Community affected Ireland since 1973? In Chapter 2 we have outlined some of the effects which might be expected on the basis of various theories of integration and trade. But which of these effects has occurred in practice and which have been most significant? To answer these questions it is necessary to consider various indicators of performance since 1973. However, a study of the facts alone will not reveal what effects membership of the EC had on Ireland. The reason is that the facts of economic performance since 1973 were the result, not just of Ireland's integration into the European economy, but of a host of other forces also — such as trends in the world economy, technical change, and economic policies adopted by Irish governments. This problem arises in an attempt to identify the effects of integration; but it arises very acutely in the case in hand. The reason is that Ireland's accession to the EC in 1973 coincided with a major and prolonged change in the world economic climate resulting from international monetary instability and the oil crisis. Thus 1973 was a turning point for all countries, and this makes it especially difficult to identify the effects of Community membership on Ireland.

In international research a number of approaches to measuring the effects of integration have been developed. In this chapter we outline these approaches and indicate which ones we use in Chapters 4 to 7.

2. THE EFFECTS OF INTEGRATION ON TRADE AND THE STRUCTURE OF PRODUCTION

We have seen in Chapter 2 that economic theory predicts that economic integration will have a major impact on the pattern of trade between countries. It is not surprising, therefore, that the bulk of research on the effects of integration has concentrated on its effects on trade.

(i) Measuring the Effects of Integration on Trade

Attempts to measure the effect of integration on trade can be classified as *ex ante* and *ex post*. *Ex ante* studies attempt to predict the effect of prospective integration measures on trade using past trade data and some analytical model of how integration works. *Ex post* studies look back at several years of

integration and compare the actual economic performance with some estimate of what would have happened without integration.

When conducting either *ex ante*, or *ex post* studies three different approaches have been taken (Robson, 1987). The first, known as the *analytical* approach, involves the econometric estimation of a theoretical model designed to express the processes that are at work in economic integration. A second approach, known as *residual imputation*, attempts to assess the effects of economic integration in the following way. The development of the economy, including trade flows, is quantified and hopefully explained by reference to a variety of variables — excluding variables associated directly with economic integration. The effects of integration are then calculated by looking at how much of the actual economic performance can *not* be explained by the original list of variables. This approach attributes the whole of this unexplained residual to economic integration. The relationships through which integration exercises its impact are not directly specified in this approach. A third approach is the *survey* method. This involves surveying the views of entrepreneurs and others on how the particular sectors on which they have expert knowledge were affected by integration. Alternatively, or in addition, their behaviour and strategies in the face of integration can be surveyed.

A conceptual element in all these approaches is the need to form some view on what would have happened in the absence of integration. This view can vary from the very simplest — that nothing would have changed — through the simple idea that variables would have developed along pre-existing trends, to much more complicated specification of trade flows in the absence of integration. This view of how things would have developed in the absence of integration is known as the *anti-monde*.

By far the most popular approach to quantifying the effects of integration is to concentrate on trade flows, conduct an *ex post* study, and rely on some forms of residual imputation. For example, it is common to calculate changes in the shares of imports and exports of different commodity groups for partner countries and the non-partner countries in the years following formation of a customs union or common market. Since the changes in the shares of intra-EC trade in total trade is taken as a rough indication of the integration effect, this approach involves the implicit adoption of the *anti-monde* that shares would have remained constant in the absence of integration. Many of the submissions to the British parliamentary enquiries on the trade, financial, and economic consequences of UK membership of the EC were based on this methodology (House of Commons, 1984; House of Lords; 1983).

A somewhat more sophisticated version of the same methodology has been adopted by Mayes in his studies of the effects of membership on British trade (Mayes, 1983a; 1983b). He estimated the linear trend in Britain's trade shares

separately for each category of goods over the period 1962-1972 and compared the actual shares from 1972 to 1980 with a simple extrapolation of those trends. This research, and similar work by Daly, found a significant increase in both UK imports to and exports from the EC-Six after 1973 — with the increased imports outweighing exports and so worsening the trade balance (Daly, 1978).

This approach to estimating the trade effects of integration has a number of shortcomings (Robson, 1987). To assume that in the absence of integration market shares would have remained constant or, as in Mayes approach, would have changed only in line with previous trends, almost certainly attributes the wrong amount of impact to integration. If, over the period of integration, there were significant changes in technology or unprecedented changes in costs, competitiveness, or exchange rate policy then these would have caused changes in trade shares. But note that we cannot say that residual imputation necessarily involves attributing too *much* to the integration effect — it may involve attribution of too *little* impact to it. A second shortcoming of studies based on import and export shares alone is that the resulting calculations of changes in trade due to integration cannot be broken down into trade *creation* and trade *diversion*. This limits their usefulness particularly if it is intended to make judgements about the *welfare* effects of integration (Winters, 1987). The advantages of this approach, however, is the ability to look at trade in different types of commodities separately.

The first of these problems can be partly overcome by construction of a more complicated *anti-monde* — for example, by letting trade shares in the absence of integration be dependent not just on a time trend but also on total domestic expenditure, and relative unit labour costs (see Winters 1987; Robson 1987, and Mayes, 1978 for surveys). The second problem — of breaking the total trade change into trade creation and trade diversion — may be partly overcome by incorporating into the analysis some consideration of the demand for imports from different sources (partners in the EC and the rest of the world) or by considering not only change in trade but also changes in domestic production (Robson, 1987).

However, it is well known that even still the problems of measuring the effects of accession to the EC are formidable. These include the confounding effects of the oil price rise, the possibility that demand management and/or exchange rate policy were affected by accession and that enlargement of the EC may have affected world prices. Mayes has concluded from this that “available resources entail that it is not really practicable to estimate such structural models, although the Eurolink and other models are trying to move in this direction” (Mayes 1983, p.92). Indeed, he considers that sophisticated model-building is unlikely to yield sufficiently better results than simple extrapolation to warrant the substantial extra effort and resources it requires. This conclusion has been questioned by Winters (1987), who argues that academic research projects can

improve on extrapolation. However, it undoubtedly applies to the NESC which sees its role as providing a *general* report on Ireland's experience in the EC and identifying and commenting on policy issues arising from the Single European Act. Consequently, in Chapter 4 we conduct a relatively simple survey of the changes in the pattern of Ireland's foreign trade since accession to the EC.

This approach is further justified since trade *diversion*, and hence the distinction between trade *creation* and trade *diversion*, is unlikely to be of major significance in assessment of the effects of membership of the EC on Ireland. This is because prior to membership Ireland did not import extensively from non-EC-12 countries. This would be in marked contrast with the UK, for example, where considerable imports from the Commonwealth existed and could, theoretically, have been replaced by imports from EC countries after 1973. Indeed, in surveying the many studies of trade created and trade diverted Robson says that two important general conclusions can be derived. The first is that most estimates suggest that for manufactured products (to which most of the studies are limited) the value of trade created was considerable and far outweighed the value of trade diverted. Second, the only qualification to this is that this trade created has been offset by the trade which has certainly been diverted in *agricultural* products. But trade in agricultural products which, from a European perspective, is *diverted* from previous non-EC suppliers, is predominantly trade *created* from an Irish perspective.

(ii) Measuring Changes in the Structure of Production and Employment

If removal of tariffs and other barriers brings about new patterns of trade it is likely also to alter the structure of employment and output. Consequently, in Chapter 4 we also trace the changing pattern of output and employment in those sectors of the Irish economy most affected by EC membership — manufacturing and agriculture. This brings to light various patterns of response to the free trade environment which was developing since the mid-sixties.

(iii) Comparing Performance with Expectations at the Time of Accession

Given the difficulty of isolating the effects of EC membership from other factors influencing the development of the economy, various comparisons can be used to identify significant trends. Since the ultimate focus of this report is on the policy choices available to Ireland and the Community it is of interest to ask how the performance since 1973 compares with expectations about the effects of EC membership at the time of accession. Therefore, having documented the trends in production, trade, and employment since 1973 we finish Chapter 4 by briefly comparing these with the developments that were expected by officials and research workers.

(iv) Ireland's Relative Economic Performance in the Community

Many of the economic trends which make the effects of integration hard to distinguish are of the kind that affect all countries. Consequently, the effects

of integration and effects specific to Ireland can, to some extent, be identified by comparing Ireland's performance with that of other countries. Chapter 5 is devoted to such a comparison. In that chapter we present both a static comparison of Ireland with other Member States based on the most recently available data and a comparison of trends and changes since 1973. In making these comparisons we go beyond the data on the structure of trade, production, and employment, and consider a wider range of economic indicators.

(v) Measuring the Welfare Effects of Integration

In attempting to measure the welfare effects of the formation of or accession to the EC it is usual to start from the static theory of customs unions which has been outlined in our survey of the literature. In that theory the benefits and costs of integration are defined in a very specific way. *Trade creation* is beneficial because it causes specialisation in which high cost domestic supplies are displaced by cheap imports; in addition, consumption is probably expanded by the reduction in price. The welfare gain consists of the lower price to consumers and the benefits of using domestic resources in some more productive activity. *Trade diversion* is costly because it involves the substitution of higher cost products from partner countries for lower cost products from the rest of the world. The problem then is to calculate in money terms the welfare gain of the volume of *trade creation* and *trade diversion* which are estimated to have resulted from integration. This is done by estimating the subjective value of the extra consumption and of the resources released by *trade creation*, and the subjective cost of extra resources absorbed by *trade diversion*.*

The most striking feature of the many estimates of the welfare effects of European economic integration arrived at on this basis is the smallness of the net positive price efficiency effects. Most studies have produced estimates ranging from 0.15 per cent of GNP to, at most, 1 per cent of GNP, realised after the transition period had been completed (Pelkmans, 1984). In surveying these studies Pelkmans says:

Given the vigorous and sustained economic growth of EC countries at the time, one can hardly accept that improvements of price efficiency of such small magnitude have constituted important economic arguments for market integration. These arguments must be looked for outside the basic framework of customs union theory (Pelkmans, 1984, p.22).

Another reason why it is necessary to go beyond the basic framework of customs union theory is that these measures of the welfare gains from integration are not only crude in their method of calculation but they neglect the effect of scale economies. For these reasons we do not undertake such measures of the welfare effects of Ireland's membership of the EC in this study.

*The usual approach is to estimate or assume the relevant elasticities of demand and supply and apply them to these trade volumes, so yielding calculations of the change in what are known in economics as consumers' and producers' surplus.

In the face of these results one researcher has asked:

“What is the explanation for the fact that, on the one hand, policy makers and the European public at large regard the economic benefits of Community membership as worth working and making certain political sacrifices for, while on the other hand, the verdict of economic analysis is that these economic benefits are derisory? Has the public been deluded, or have economists been missing something important?” (Owen, 1983, p.165).

In order to answer these questions a number of researchers have indeed looked outside the framework of customs union theory and introduced factors which are excluded from that theory. We now consider measures of the effect of integration which derive from this alternative approach.

3. IMPROVING TECHNICAL EFFICIENCY

In the static theory of integration it is assumed that, even prior to free trade, all firms are technically efficient. Technical efficiency is here defined as input minimisation at any given output level, given the employment of the best techniques available. It can be seen that this assumption of technical efficiency is part of the reason why the gains from integration are so narrowly defined in the conventional theory. Those who have studied the process of European integration are in no doubt that the assumption of technical efficiency must be dropped; in other words, they feel certain that prior to trade liberalisation many firms in various European countries were not maximising the output they achieved from the inputs they used. To suggest that firms were technically inefficient implies that competition is not perfect — otherwise such firms would be put out of business by domestic rivals. But this poses no problem for these authors since one of the other assumptions of conventional integration theory which they reject is the assumption of perfect competition (see below).

(i) The ‘Cold Shower’ Effect

It follows from this line of thinking that European industrial market integration would have a ‘cold shower’ effect on the competitive behaviour of industrial firms. Their response to intensified competition upon the removal of protection would lead to a cost reduction per unit of production which would constitute a gain to society. Pelkmans argues that “the ‘welfare’ consequences of an improvement of technical efficiency after the reduction of protection seem likely to be many times larger than the rather trivial gains from improving price-efficiency” (Pelkmans, 1984, p.26).

Although this emphasis on the ‘cold shower’ effect of European market integration seems sensible, there are drawbacks with this idea. The first is that although a number of attempts have been made to develop a theoretical formulation, and to thereby transcend the intuition with which the ‘cold shower’ is usually put forward, none of these have been completely successful. Consequently, the idea tends to remain somewhat vague. Secondly, it is clearly

very difficult to *measure* this technical inefficiency and hence to quantify the beneficial effects of market integration.

(ii) Measuring the ‘Cold Shower’ Effect

Although it is impossible to quantify improvements in technical efficiency induced by the integration of the European market, that in itself is hardly an argument for brushing the cold shower idea aside. Pelkmans, who has undertaken extensive study of European market integration, relies on the fact that the persistence of technical inefficiency in the relatively insulated Western European economies was a cause of grave concern in the early 1950s. There is particularly strong evidence of this in the traditionally sheltered French and Italian economies. It has been argued that French manufacturing industry was strongly sheltered from foreign competition, while at the same time domestic firms colluded in maintaining a non competitive environment in which they could all take high profit margins. In addition, there was an almost complete lack of market research (Scitovsky, 1957). Others have noted the archaic distribution systems which prevailed in France, Italy, and Belgium and which almost certainly inhibited trade and thereby protected both high-margin but inefficient producers and traditional high-margin distributors (Owen, 1983; Balassa, 1987).

Pelkmans has no doubt that in the EC of the Six, and especially in France and Italy, the ‘cold shower’ of industrial market integration has been extremely effective:

It is conspicuous to say the least that, despite widespread expectations to the contrary, precisely Italy and France extracted by far the most from the transition period of the common market, in terms of trade increase and economic growth. Thus, intra-EC industrial exports of France and Italy over 1958-63 increased with an annual average of 23.2 per cent and 27.1 per cent (far higher than Germany or Benelux), and over 1963-73 still with 16.4 per cent and 17.1 per cent respectively (again higher than Germany). Given the relatively higher technical efficiency of the Germany economy in the 1950s, *the conclusion of a drastic increase in technical efficiency induced by the competitive threats and opportunities of the common market seems to be the only plausible explanation* (there are, of course, other indications pointing in the same direction).

However, it is of interest that he does not consider that the ‘cold shower’ has produced equivalent beneficial cost reductions in the case of the UK. His explanation of this provides an important elaboration of what the ‘cold shower’ effect really is: “It is good to remember that there is nothing automatic about the ‘cold shower’ induced by market integration. The inclination to pursue (or avoid) search for products, processes and lines of activity and the proficiency of conducting ‘search’ may sharply differ among firms, sectors, and even countries”. The beneficial cost reducing effect of international competition

depends on a number of cultural, economic, and policy variables. Among these are the prevalence of foreign direct investment, and the nature of exchange rate policy.

(iii) The Irish Case

Given that the Irish economic structure in 1973 was very much one that had developed behind high protective barriers it is likely that considerable inefficiencies existed. But there is no sure way of measuring this or the improvements in efficiency brought about by the 'cold shower' of international competition.

However, the official studies of Irish manufacturing industry conducted by the Committee on Industrial Organisation and the Committee on Industrial Progress and other bodies, should probably be seen in the same light as the evidence cited by Pelkmans and others. In other words they did not, and indeed could not, choose *between* different Irish industries on the basis of indentifying comparative advantage, but instead, *within*, each industry they could and did draw attention to the inefficiencies in production, management, and marketing which would render Irish firms vulnerable in a free trade environment. In addition, our study of the evolution of manufacturing and agriculture since 1973 in Chapters 4 to 6 will give some idea, however suggestive, of the impetus to increased efficiency provided by reductions in tariff barriers. Unfortunately, it is not possible to provide a more systematic investigation of the 'cold shower' effect than this.

(iv) Increased Efficiency and Social and Cultural Characteristics

The dependence of the beneficial increase in efficiency upon various cultural and institutional factors raises an issue which should be dealt with at this point. In discussion of comparative economic achievement it is common to hear various aspects of Ireland's performance ascribed to national, social, or cultural characteristics. In general, these national characteristics are so vaguely specified and so dependent on subjective anecdotal evidence that they are ignored by those undertaking economic analysis. While this course is inevitable in the absence of a more sophisticated formulation, it should be noted that some of the economists who pioneered technical analysis of European economic integration attributed considerable importance to those factors which may influence competitive behaviour. And it is under the heading of the efficiency effects of integration that they introduced these factors. Thus Scitovsky, for example, writing in 1957, said that "One of the greatest differences among Europeans . . . is the preference for leisure of the one against the other's willingness to work hard and long hours for the sake of material goods. Increased competition is bound to make the latter behaviour and preference pattern prevail over the former, and this would undoubtedly increase the social product; but in static welfare calculus the loss of leisure would also have to be weighed; and it may well outweigh the gain in material goods"

(Scitovsky, 1957, pp.22-24). While these issues cannot be analysed further in this study it should be noted that they are implicit whenever firms' behaviour in response to increased competition — which is the crux of the 'cold shower' concept — is discussed.

4. INTRODUCING INCREASING RETURNS TO SCALE

It has been noted in our survey of the literature that one of the major innovations in recent approaches to the analysis of economic integration is the inclusion of economies of scale. Perhaps the most significant implication of the presence of economies of scale is that the potential gains from integration are greatly increased, since a larger market allows substantial cost reductions and at the same time makes it possible for a wider variety of goods to be produced — both of which increase consumers' welfare. However, it has now been realised that allowing for technical economies of scale only provides some idea of the *maximum potential* gains from trade. The actual processes which are set in train by tariff reduction etc. may be complex and varied. The reason for this is that where economies of scale exist the industry in question cannot be perfectly competitive. In the limit one would expect an industry in which there are continuous increasing returns to scale to end up being monopolised by a single firm. In any case the presence of even moderate scale economies implies that a number of firms in an industry have some market power and this in turn implies that in analysing the effect of integration, or other policy measures, attention be given to the *industrial structure*. Furthermore, as explained in the survey of the literature, the presence of economies of scale and disparities in firm size introduces the possibility of *intra-industry trade* — a phenomenon ruled out by assumption in the traditional analysis of integration, in which trade arises purely as a result of inter-industry specialisation of each country. Economies of scale and intra-industry trade have in turn been linked to the phenomenon of *product differentiation* (see Greenaway and Milner, 1986).

The four phenomena, *economies of scale*, *industrial structures*, *intra-industry trade*, and *product differentiation* are linked in ways which allow for a very wide variety of outcomes from the integration process.

In research on European integration a number of trends and hypotheses concerning intra-industry trade and industrial structure have emerged. In order to illustrate the significance of this line of inquiry a number of those trends and hypotheses are briefly summarised here.

(i) Hypotheses on Intra-Industry Trade *Integration*

It is argued that intra-industry trade (IIT) will be higher the higher is the degree of economic integration. The prime reason for this would be the potential for reaping economies of scale when the market is expanded by economic integration. This hypothesis has been confirmed by many studies showing

sharply increased IIT in the EC-Six after 1958. Indeed, it was found that the formation of the Community increased intra-industry trade much more than inter-industry trade.

Size of Country

There are two competing hypotheses concerning the size of a country and the level of intra-industry trade. The first is known as the *Dreze standardisation hypothesis* and says that the share of IIT will be higher in large economies than in small ones. This proposition was formulated by Dreze after he studied the adaption of Belgian industry to the Common Market. The idea is that small industrial countries will enjoy a comparative advantage in sectors where the product is *standardised*. Standardised products are associated with inter-industry trade; while highly differentiated products are associated with intra-industry trade. The argument is that small countries will find it easier to achieve large scale production, thus reaping economies of scale, in standardised products — for example, intermediate goods and certain types of consumer goods — than in highly differentiated goods.

A contrary hypothesis has been proposed by other researchers. This hypothesis is also based on the attempt by producers in a small country to reap economies of scale once free trade has released them from the confines of the small home market. The hypothesis is that small countries will import intermediate products and achieve large scale production by specialising in highly *differentiated* versions of products for the world market (Jacquemin and de Jong, 1977).

It would clearly be of considerable interest to know which, if any, of these hypotheses applies in the Irish case.

Foreign Direct Investment and Multinational Corporations

It has been argued that IIT will be higher the greater is the role of multinational corporations in the economy — regardless of the size of the country. One obvious reason for this is that such firms would not be subject to the same barriers to entry in the export of differentiated goods.

The Costs of Adjusting to Free Trade

Another important proposition is that adjustment to free trade will be *easier* when the trade expansion takes the form of intra-industry rather than inter-industry trade (Balassa, 1966; Lundberg and Hanson, 1986). It is intuitively plausible that specialisation on a particular product range *within* an existing industry will involve less disruption than specialisation between different industries. In the extreme case of intra-industry specialisation, the whole adjustment might take place within the firm — the worker being simply transferred from one production line to another. By contrast, inter-industry specialisation effectively involves running down some whole industries and building up others.

This probable difference in the costs of adjusting to free trade is one reason to study the level of intra-industry trade. It has been argued that since most of the post-war increase in trade in the developed world, and especially in the EC, has been intra-industry trade then it has been relatively free of adjustment problems (Hufbauer and Chilas, 1974; Krugman, 1985; Adler 1970). Indeed, the predominance of intra-industry trade in European integration to date was cited in what has become known as the Cecchini Report as one reason to expect few reallocative and redistributive effects from completion of the internal market (*Emerson et al*, March, 1988, p.140).

It has also been argued that intra-industry adjustment to free trade will be *quicker* than inter-industry adjustment (Owen, 1983). This is an important consideration in examining the effects of Ireland's integration into the European economy. It will be of interest to examine the nature and timing of Ireland's adjustment to freer trade.

(ii) Hypotheses on Industrial Structure

Integration Increases Industrial Concentration

One very important proposition concerning industrial structure has arisen from research into integration which takes account of the reality of scale economies. It is argued that the reduction of barriers to trade should bring about an increase in the concentration of industry. The idea is that access to foreign markets increases the incentives for large scale producers in each country to drive out marginal producers by increasing capacity and thereby lowering cost (Owen, 1983).

Furthermore, firms which are threatened by the low cost of the dominant producers will presumably search for counterstrategies, such as product differentiation, product innovation, process innovation, and mergers or take overs. But most of these strategies also imply a slow but steady reorganisation of industry towards large scale production with weeding out of fringe producers. Pelkmans' conclusion therefore is that "there are solid reasons to expect a Customs Union to lead to a rise in domestic producer concentration over time, while the number of sellers may or may not remain the same" (Pelkmans, 1984).

Empirical research confirms the accuracy of this prediction for the Six after the formation of the Community (Jacquemin and de Jong, 1977; Locksley and Ward, 1979). More recent work shows that the growth of trade between 1963 and 1978 further increased the size of production units in Germany, Italy and the UK (Muller and Owen, 1985; Cecchini, 1988).

It is clearly of some significance whether the increase in trade created a similar process of concentration in Ireland.

THE IRISH ECONOMY IN THE EUROPEAN COMMUNITY

1. BACKGROUND TO EC ENTRY

It has been noted that EC membership was the logical outcome of the economic and political policies pursued by successive Irish governments since the 1950s (Matthews 1983; Blackwell and O'Malley, 1984). Official attitudes to the question of membership of the Community reflected fairly closely the strength of belief in Ireland's ability to trade and prosper in a competitive economic environment. In the late 1950s and early 1960s, politicians and government departments, who were later to strongly support membership, expressed considerable doubts about the ability of much of Irish industry to survive in a generalised free trade environment (Maher, 1986, p.97, p. 109, p.121, p.251). These fears about the possible effects of EC membership were not inconsistent with a general commitment to an outward looking economic strategy which was adopted and acted upon in those years. Likewise, the performance of the economy in the years from 1958 to 1972 — a period of progressive lowering of protection and the opening of the Irish economy was crucial in creating confidence in the ability of the Irish economy to maintain economic growth in a competitive European environment (Maher, 1986, p.251; McAleese 1975, p.133).

Economic performance during the period 1958 to 1972 was significantly better than in the period 1949 to 1957. This improvement can be summarised by reference to four aspects of economic activity. First, the rate of growth of real GNP increased from around 1 per cent per year on average during 1949-57 to over 4 per cent per year on average during 1958 to 1972. Second, this greatly improved overall growth rate was the result of significant and encouraging sectoral changes. For example, the share of agriculture in total employment fell from 42.9 per cent in 1949 to 29.4 per cent in 1968, while the share of industry rose from 21.5 per cent to 28.4 per cent. Thus, by 1968 industrial employment almost equalled employment in agriculture — whereas in 1949 it was only half as great.

Third, Ireland's orientation to the external economy was transformed during the period 1958 to 1972. The annual rate of growth in the volume of both exports and imports more than doubled from the earlier period. Of more significance even than the increased growth of Ireland's foreign trade was the rapid *diversification* of market outlets which accompanied the country's export growth. In 1958 almost 80 per cent of Ireland's manufactured exports were to

Domestic Market Size and Pattern of Plant Size

Some research suggests that smaller countries may have *larger* production units than countries with bigger domestic markets. It was observed that in the early 1960s the proportion of plants with less than twenty persons was lowest in the Benelux countries and highest in France and Italy, while the reverse was true of plants with more than 1,000 employees (Jacquemin and de Jong, 1977). The explanation suggested was that the small number of large plants reflected the specialisation of small countries on production for export. Indeed, Pelkmans stresses that "for smaller EC countries scale-driven exports (within and without the customs union) are the *conditio-sine-qua-non* for international competitiveness in many industries" (Pelkmans, 1984). Only in rare circumstances will the domestic market of a small economy be sufficient to achieve minimum efficient scale at home.

Extreme Concentration and Low Export Propensity

One of these rare circumstances is the case where domestic producer concentration is very high indeed. Research on the relationship between industrial market structure and export-competing performance in a small economy, using Belgian data, revealed some interesting results. One of the most significant findings was that larger firms were indeed more likely to export; but, *among firms that were exporting* those that dominated the domestic market (where the industry was highly concentrated) tended to export a lower proportion of their output. In other words, where there was a very high degree of domestic concentration it allows dominant firms to reap the possible economies of scale on the home market (Glejser, Jacquemin, and Petit, 1980). We would like to know whether any instances of this have occurred in Ireland.

(iii) Conclusion

The importance attached to economies of scale, and the related phenomena of intra-industry trade and industrial market structure, in studies of European economic integration suggests that some attempt be made to investigate these issues in the Irish case. Consequently, in Chapter 6 we provide calculations of intra-industry trade and some data on industrial market structure for the period of Ireland's integration into the Community. Although much more extensive research would be required to provide a conclusive test of the hypotheses outlined above, the data presented in Chapter 6 allow some preliminary evaluation of whether they apply in the Irish case. This is an important element in building up a picture of the effects of membership of the Community on Ireland, which will be broadly comparable to the most advanced research undertaken internationally. We finish this section of the report with an overview of trends in the Irish economy since 1973 and a discussion of the role of Community membership in shaping these developments (Chapter 7).

the UK; by 1972 this share had fallen to 58 per cent. This was achieved by rapid growth of manufactured exports to the EC-Six and the US.

Fourth, the period 1958-72, especially the later half of it, also saw considerable improvements in the agricultural sector. Exports, especially of livestock and livestock products, expanded considerably. Gross agricultural output increased after a long period of stagnation and towards the end of the 1960s and in the early 1970s the price of agricultural output rose strongly. The value of net output in agriculture trebled between 1960 and 1973, while consumer prices only doubled in the same period; since the numbers engaged in agriculture declined steadily, real incomes in farming improved substantially (Kennedy, Giblin, McHugh, 1988).

These positive economic trends were quickly ascertained, and Maher argues that the rapid economic growth in 1959 and 1960 played a significant part in the decision in 1961 to apply for membership of the EC (Maher, 1986, p.118). Indeed, as the 1960s progressed it became *necessary* for Irish officials to portray the economy as dynamic and capable of success in international competition. This arose because the six members of the EC had grave doubts about Ireland's economic suitability for membership (Maher, 1986, pp.139-141, pp.146-148). Irish officials and ministers went to considerable lengths to reassure other governments of the country's commitment to membership and economic suitability for it. The first they did by undertaking progressive reductions of tariffs (either unilaterally, as in 1963 and 1964, or under the Anglo-Irish Free Trade Area agreement after 1965); the second they were able to do by showing that, as protection was progressively reduced, the Irish economy sustained its rapid growth of output and, in particular, exports.

The need to highlight the economic successes in the 1960s did not blind officials and ministers to the difficulties which might be faced in free trade. Fears for the future of Irish industry had led to the early establishment of the Committee on Industrial Organisation, whose brief was to undertake a comprehensive survey of industrial sectors, and examine the difficulties that might arise for particular traditional industries. By mid-decade these surveys were completed; they revealed numerous deficiencies in production, marketing, management, and training. The Government responded with a package of measures designed to encourage adjustment to a competitive environment and it is important to note that, given the success of earlier industrial policy in establishing and attracting new firms, it was expected that these measures would also bear fruit.*

*On the recommendation of the Committee on Industrial Organisation a wide range of incentives were made available to firms. An Foras Tionscal was given power to award grants of up to 25 per cent of the cost of buildings and machinery for adaptation. Grants towards the cost of technical assistance to improve efficiency were also available. An Adaptation Council was established for

2. ECONOMIC PERFORMANCE DURING THE TRANSITION PERIOD

(i) Overall Economic Performance

Economic Growth

Ireland's entry to the EC in 1973 coincided with a major slowdown in economic growth in all OECD countries arising from the oil price increases and world monetary instability. However, Ireland's recovery from the recession of 1974-75 was very strong and as a result the annual average rate of growth of real Gross Domestic Product (GDP) was 4.1 per cent in the period 1973-79 — only slightly lower than the 4.4 per cent achieved in the period 1960-73.

However, it is widely agreed that the decline in the growth of GDP does not convey an adequate picture of the change in economic conditions and performance which occurred after 1973. The rate of growth of real product available for consumption or investment declined much more sharply. A number of factors account for this. First, Gross *National* Product (GNP) grew more slowly than Gross *Domestic* Product — because of greatly increased net factor outflows. Second, deterioration of the terms of trade, because of the oil price increase, reduced the purchasing power of Ireland's GNP. Third, Ireland received transfers from the EC.

These influences have been quantified by a number of researchers and can be used to present a thumbnail sketch of overall economic performance before and after Ireland's entry to the EC (see Table 4.1). We are concerned in this section

Table 4.1
Average Annual Growth Rates of Real Product, Various Periods, 1960-86

	1960-73	1973-79	1979-86
Gross Domestic Product (GDP)	4.4	4.1	1.5
Gross National Product (GNP)	4.3	3.4	-0.3
GNP adjusted for terms of trade	4.8	2.2	0.2
Gross National Disposable Income (GNDI)	4.9	2.8	0.3
Population	0.6	1.5	0.7
GNDI per head	4.2	1.2	-0.4

Sources: K. A. Kennedy, T. Giblin, D. McHugh *The Economic Development of Ireland in the Twentieth Century* (1988) and A. Punch, 'Real gross national disposable income adjusted for terms of trade 1970-84', *Quarterly Economic Commentary* (ESRI), April. The difference between GDP and GNP arises from the inclusion in the latter of the outflow of net *factor payments*, while GNDI includes *transfer payments* received from abroad as well as the terms of trade adjustment.

each industry (24 in all) whose role was to encourage co-operation rather than competition among firms in activities such as purchasing materials, marketing, selecting areas of specialisation and promoting the amalgamation of firms. Finally, assistance was given for export marketing. These measures were in addition to earlier support measures such as Export Profit Tax Relief (1957) and the establishment of bodies such as Coras Trachtala and the Institute for Industrial Research and Standards (See Brock (1968) and NESR Report No. 56).

with the contrast between the period 1960-73 and the period after accession, 1973-79. The average annual growth rate of real gross national disposable income (GNDI) — fell from 4.9 before 1973 to 2.8 after. The final rows of Table 4.1 relate the growth of real product to the rate of growth of population in order to reveal the growth of GNDI *per head*. Faster population growth after 1973 implied an even greater fall in growth rate of real product per head of population after 1973.

Employment and Unemployment

The rapid growth in the period 1960-73 had resulted in almost no increase in the total number of people at work in Ireland — increased employment in industry and services being offset by decline in the numbers engaged in agriculture. By contrast, during the transition period to EC membership (1973-78) total employment increased by 53,000 from 1,057,000 to 1,110,000. This resulted from an increase in employment in industry and services of 87,000 (from 797,000 to 884,000) and a decline in employment in agriculture of 34,000 (from 260,000 to 226,000).

However, due to strong labour force growth during the transition period, this increase in total employment was not sufficient to create a fall in unemployment. On the contrary, registered unemployment increased from 66,000 in 1973 to almost 100,000 in 1978 — having risen to over 107,000 in 1976.

Public Finances

The attempt to maintain growth in the face of the deflation of demand caused by the oil price increases inevitably involved increased exchequer borrowing. In particular, the current budget deficit increased from 0.4 per cent of GNP in 1973/74 to 6.8 per cent in 1975. When combined with increased borrowing for capital purposes this pushed the overall exchequer borrowing requirement (EBR) to almost 16 per cent of GNP. Although public borrowing was reduced in 1976 and 1977, by the end of the transition period it was increasing again — especially for current purposes — despite considerable buoyancy in both the domestic and international economies (see Table 4.2). Indeed, despite the turmoil of the transition period, real domestic demand grew by 4.3 per cent per year on average from 1973 to 1979.

Balance of Payments

These trends in growth and the public finances were, to a considerable extent, reflected in the balance of payments. Figure 4.1 shows the current account balance as a per cent of GNP from 1965 to 1987. The impact of the severe terms of trade deterioration can be seen in 1974, and the impact of the recession in 1975. But more important than this *volatility* is the clearly worsening *trend* in the current account in the second half of the seventies.

Table 4.2
Exchequer Borrowing Requirement 1970/71 to 1988
Per cent of GNP

	Exchequer Borrowing		Total EBR
	(i) For Current Purposes (i.e. Current Budget Deficit)	(ii) For Capital Purposes	
1970/71	0.5	6.4	7.0
1971/72	0.2	6.3	6.5
1972/73	0.3	6.1	6.4
1973/74	0.4	7.1	7.5
1974 (9 mths)	—	—	—
1975 (Jan-Dec)	6.8	9.0	15.8
1976	4.4	6.6	11.0
1977	3.6	6.1	9.7
1978	6.1	6.3	12.4
1979	6.8	6.4	13.2
1980	6.1	7.4	13.5
1981	7.4	8.5	15.9
1982	7.9	7.7	15.6
1983 ¹	7.1	5.9	12.9
1983 ¹	8.0	5.7	13.7
1984	7.0	5.3	12.3
1985	8.2	4.7	12.9
1986	8.4	4.5	12.9
1987	6.6	3.4	10.0
1988 ²	4.4	1.7	6.0

Notes: ¹There is a discontinuity in the series because of the transfer of responsibilities to An Post and Bord Telecom from 1 January 1984. The first line for 1983 gives the outturn on the old basis and the second line gives the data on the new basis.

²Exclusive of once-off receipt under the Tax Incentive Scheme.

Source: *Economic Statistics*, April 1989, Department of Finance.

(ii) Performance of Industry during the Transition Period

Overall Performance

The growth of manufactured output was somewhat slower after accession in 1973 than it had been from 1960 to 1973. Table 4.3 provides a summary of the overall performance by showing the growth rates of output, employment and productivity. The somewhat slower growth of output and the faster rate of productivity growth meant that employment in manufacturing increased very little indeed in the years after EC accession.

Figure 4.1
Balance of Payments — Current Account 1965-79
Per Cent of GNP

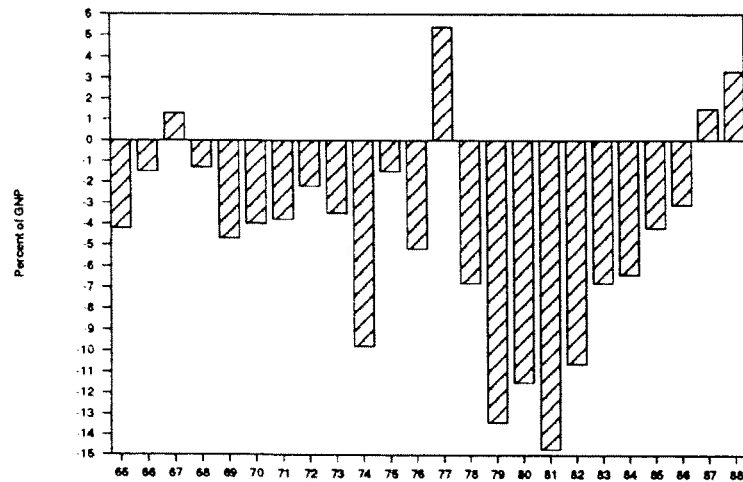


Table 4.3
Growth Rates of Manufacturing Output, Employment, and Output Per Head

	Output	Employment	Productivity
1950-1960	3.1	0.8	2.3
1960-1973	6.5	2.3	4.0
1973-1979	5.1	0.8	4.3
1979-1986	4.1	-2.7	7.0

Source: Adapted from K. A. Kennedy, T. Giblin, and D. McHugh *The Economic Development of Ireland in the Twentieth Century* (1988). Based on *Census of Industrial Production and Industrial Inquiries*.

Restructuring of the Manufacturing Sector

The slowing of output growth in manufacturing after 1973, and the very slow growth of employment in the sector, should not be read as evidence of stagnation in this part of the Irish economy. In fact, major changes in the sector were underway in the years after 1973. To see this it is useful to refer briefly to the data from the Industrial Development Authority's (IDA) annual employment survey rather than Central Statistics Office data. Such data have recently been published in Ruane (1984) and although it differs somewhat, in both scope and period, from the Central Statistics Office (CSO) data cited above it serves to illustrate important features of Ireland's experience in the early years of Community membership.

The restructuring of the manufacturing sector can be seen by considering the

changes in the distribution of employment *between* sub-sectors and *within* sub-sectors.

Table 4.4 shows total employment and share of total manufacturing employment in each sub-sector in the years 1973 and 1981. Changes in the distribution of employment *between* sub-sectors after EC membership were not substantial. There was a relative and absolute decline in textiles, clothing and footwear — traditional sectors which faced severe competition as tariff protection was reduced. The other noteworthy feature of these data is the increased share of metals and engineering; this sub-sector includes firms producing electronics and office equipment, both of which have increased enormously.

However, when the pattern of employment *within* sub-sectors is examined much more dramatic changes are revealed. Table 4.5 shows job gains and job losses in each sub-sector between the years 1973 and 1981. Although the net change in employment in all the firms surveyed was only 19,392 this figure was the result of 72,789 job losses and the generation of 92,181 jobs.* The

Table 4.4
Manufacturing Employment by Sector,¹ 1973 and 1981

Sub-sector	1973		1981	
	Aggregate employment	Share %	Aggregate employment	Share %
Food	46,856	21.3	47,318	19.8
Drink and Tobacco	10,790	4.9	10,860	4.5
Textiles	22,885	10.4	19,388	8.1
Clothing and Footwear	24,887	11.3	18,326	7.7
Wood and Furniture	10,788	4.9	11,699	4.9
Paper and Printing	14,498	6.6	16,965	7.1
Chemicals and Plastics	11,253	5.1	13,979	5.8
Glass and Cement	15,532	7.1	17,735	7.4
Metals and Engineering	42,504	19.3	57,702	24.1
Other Manufacturing	17,127	7.8	21,282	8.9
Grant-Aided Services	2,544	1.2	3,802	1.6
Total	219,664	100.0	239,056	100.0

Sources: IDA Employment Survey Files published in Ruane (1984)

¹Data in this table are those collected in the IDA employment surveys taken on January 1, 1973, and January 1, 1981. The total survey figures *differ from CSO total manufacturing figures*.

*Ruane reports that the IDA data show that approximately half of the job losses were in firms ceasing production, while the remainder were in firms contracting their labour forces; over 60 per cent of the job gains were in new enterprises, with the remainder in expansions of existing enterprises.

Table 4.5
Components of Manufacturing Employment Change by Sector, 1973-81

Sub-sector	Job gains	Job losses	Net change in employment
Food	11,610	11,148	+ 462
Drink and Tobacco	1,653	1,583	+ 70
Textiles	8,207	11,704	- 3,497
Clothing and Footwear	5,626	12,187	- 6,561
Wood and Furniture	5,052	4,141	+ 911
Paper and Printing	6,303	3,836	+ 2,467
Chemicals and Plastics	6,259	3,533	+ 2,726
Glass and Cement	5,164	2,961	+ 2,203
Metals and Engineering	30,956	15,758	+ 15,198
Other Manufacturing	9,518	5,363	+ 4,155
Grant-Aided Services	1,833	575	+ 1,258
Total	92,181	72,789	+ 19,392

Sources: as for Table 4.4

implication of this is that although the net change in manufacturing employment after 1973 was well below what was expected and hoped for, it should not be inferred from this that the manufacturing sector was stagnant. There was, in fact, a very substantial flow of capital into manufacturing in Ireland.

Three other features of these data deserve mention. First, even in 'declining' sectors such as textiles, clothing and footwear, a considerable number of new jobs were created. Likewise in a growth sector like metals and engineering there were considerable job losses. Second, there were considerable job losses in foreign-owned grant aided firms — consequently, as Ruane says, it would be a mistake to believe that job losses were due solely to older inefficient Irish firms failing to make sufficient adjustment to free trade conditions. The evidence of job losses in new foreign owned grant aided industry serves to remind us that the period 1973-81 was marked by enormous economic changes quite independent of integration into the EC. Our ultimate objective is to analyse the relative significance of the various forces at work in order to identify, as far as is possible, the effects of integration. This will be done when all the relevant evidence has been outlined. Third, of the total of 92,181 job gains between 1973 and 1981 more than half (49,417) were created in Irish-owned manufacturing firms. Ruane notes that the main difference between Irish and non-Irish firms was that non-Irish firms sustained much fewer job losses relative to job gains than Irish firms did.

Trends in Manufacturing Output and Employment

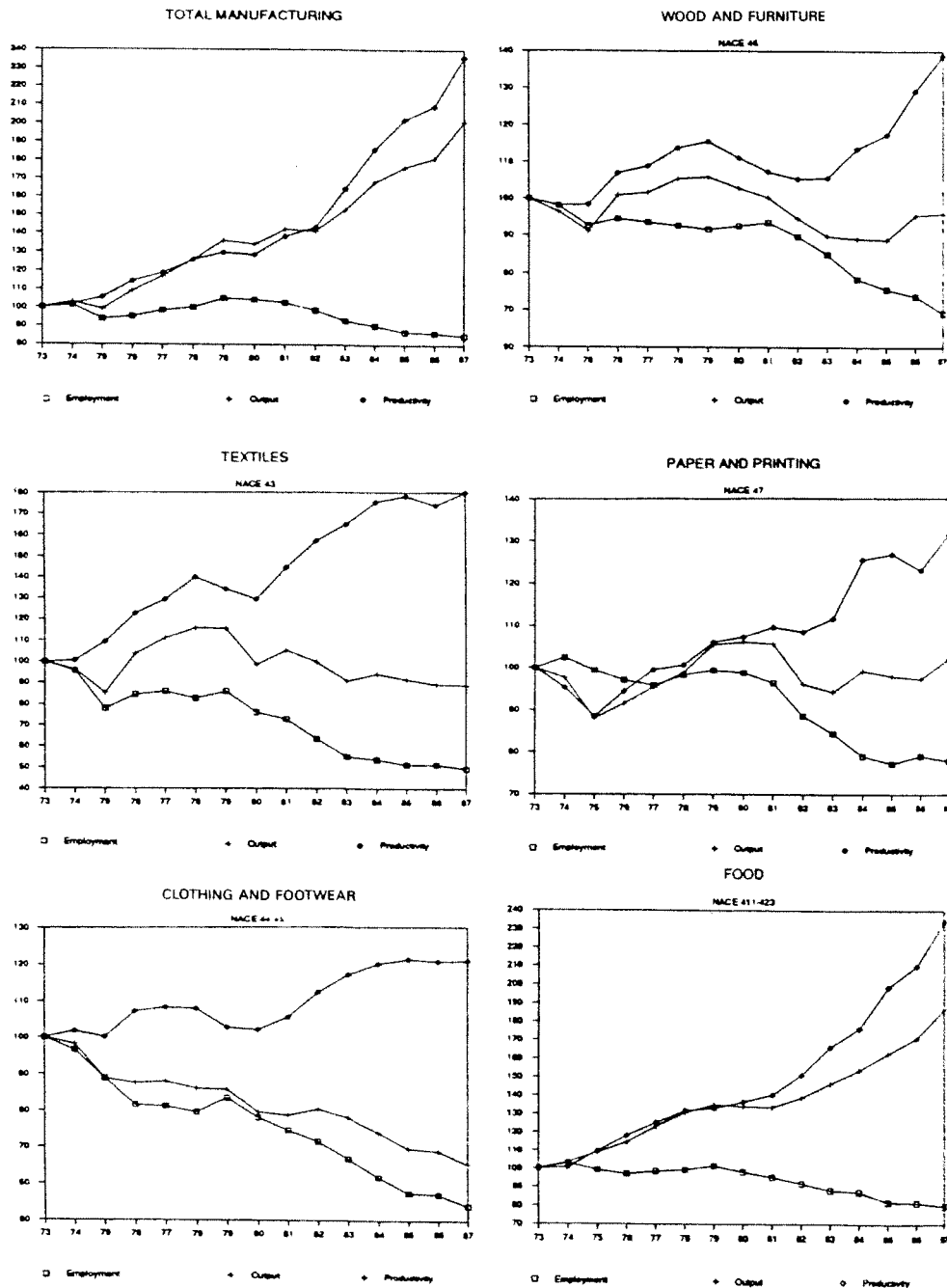
In the period after accession there was considerable variation in the output performance of different sectors of industry. Figures 4.2 and 4.3 show an index of the volume of production, employment and productivity in each sector in the years after 1973. Once again our immediate interest is in performance from accession to around the end of the seventies. It is possible to distinguish between sectors such as chemicals and metals and engineering, which grew considerably, and others like clothing, footwear, textiles, paper and printing, and wood and furniture which declined or grew very little indeed. These figures make clear that the output performance of industry in the period immediately after accession was dominated by the recession of 1974/75, when output of industry as a whole fell. But, it is also clear that the impact of recession, of integration, and of whatever other forces were at work, were very varied — falling much more heavily on those sectors suffering long run decline.

However, most sectors of manufacturing contain sub-sectors which vary considerably in capital or labour intensity, level of technological sophistication, international or domestic orientation, size of firm, etc. From what has been said in Chapters 2 and 3 we expect these characteristics to influence the way in which a sub-sector responds to economic integration. Consequently, in order to identify the impact of integration on Irish manufacturing industry, or at least its performance *during* integration, we need to look in more detail at output, employment and productivity trends since 1973. We will then use this examination to identify several patterns of response to integration, or — as we noted above — performance *during* integration.

Textiles

Production of textiles fell substantially in the recession of 1974/75 and recovered somewhat in the mid-seventies, such that by 1978 output of the industry as a whole was only 13 per cent higher than in 1973. It is not easy to compare the output trends of manufacturing industry prior to 1973 with those for the later period since the classification systems were revised in accord with EC practice. However, previous research by Blackwell, Danaher, and O'Malley (1983) for the NESC has shown that between 1965 and 1973, 78 per cent of the increased domestic demand for textiles was satisfied by competing imports, and this is evidence of considerable difficulty in the industry before accession. There can be little doubt that these difficulties continued between 1973 and 1978. Indeed, the extent of these problems is masked by the output and employment figures for the whole of textiles. These figures include the effect of new firms; in 1974 and 1975 a substantial proportion of IDA grant commitment was for investment in the textiles industry (Bacon, Durkan and O'Leary, 1982). We have seen, from Table 4.5, that there were considerable gross job gains in the textiles industry between 1973 and 1981. But productivity growth, when combined with slow output growth, has implied falling employment in the industry — especially in woollens and knitting.

Figure 4.2
Employment, Output and Productivity in
Irish Manufacturing Industry, 1980 = 100



Clothing and Footwear

Production in clothing and footwear declined in virtually every year since accession as Figure 4.2 shows. Furthermore, all sub-sectors of the industry produced substantially less in 1978 than they had in 1973 — with footwear showing the largest decline — almost 30 per cent. The production of footwear had remained virtually stagnant, at around 150 per cent of the 1953 level, from 1965 to 1972. The growth in domestic demand was met very heavily by competing imports (NESC Report No 67). The difficulties experienced in the 1970s can therefore be seen as an intensification of problems which existed earlier. This was not true to quite the same extent in clothing where the declining output since accession was a *reversal* of the earlier trend; in the sixties and early seventies some parts of the clothing industry had increased production. At the same time there is evidence that as much as 43 per cent of increased domestic demand for clothing was satisfied by competing imports in the period 1965-73. The extent of import penetration would seem to have increased considerably after accession, such that between 1977 and 1979 virtually the whole of increased domestic demand for clothing and footwear was met by competing imports (NESC, No 67).

Wood and Furniture

A different pattern of response to free trade and EC accession occurred in wood and furniture. We have seen from Table 4.4, using IDA data, that employment *increased* from 10,788 in 1973 to 11,699 in 1981 (CSO surveys, whose coverage is different, show a slight fall in employment). In Table 4.5 it was shown that there were considerable job losses in the industry — almost as many proportionately as in textiles, clothing and footwear — but these were slightly outweighed by job gains. However, this increased employment was associated with a very modest increase in output — implying slow productivity growth. The virtual stagnation of output of wood and furniture since accession marked a reversal of the trend up to 1972. During the 1960s production had grown slowly but steadily such that by 1972 it was at 195 per cent of its 1953 level in wood and 165 per cent of that level in furniture. We shall see that this pattern of response to the events of the seventies was repeated in a number of other sectors.

Paper and Printing

One example of this pattern of response was paper and printing. Here also employment increased between 1973 and 1981 (see Table 4.4 and Figure 4.2) — but the 'turnover' of jobs was less than in other industries (see Table 4.5). Output of the industry as a whole fell slightly during the transition period — only exceeding its 1973 level by the end of the decade. However, different sub-sectors showed somewhat diverse trends, with paper and paper products declining more rapidly and more permanently than printing. In a slow productivity growth industry this output pattern was reflected in employment. Output recovered somewhat in 1979 and 1980, and the second recession

affected the industry relatively late and relatively lightly, and consequently output in 1981 was 5.7 per cent higher than in 1973. This was in marked contrast with output trends before accession. Production of paper and paper products doubled between 1953 and 1963 and doubled again between 1964 and 1972; while output of printing, etc., doubled between 1953 and 1972.

Food

After accession the food industry experienced better than average output growth. During the transition period this output growth was entirely accounted for by productivity growth — employment in the sector as a whole being virtually constant throughout the seventies (see Figure 4.2).

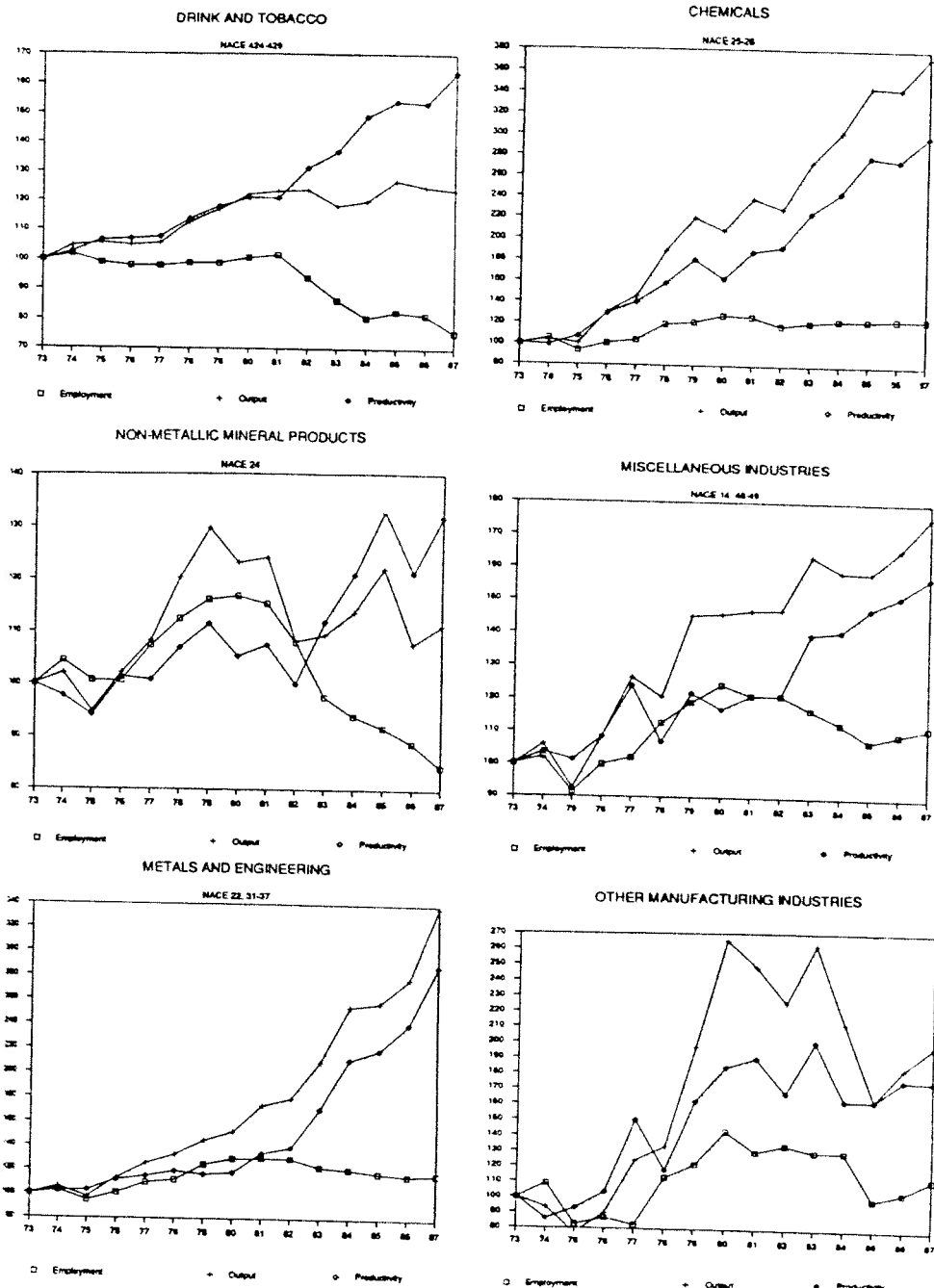
However, the performance during this period differed sharply between sub-sectors and these differences are crucial in attempting to identify what forces were at work. On the one hand sub-sectors like bread, biscuit and flour confectionery, manufacture of cocoa, chocolate, and sugar confectionery, fruit and vegetable processing, and margarines, etc., showed virtually no growth in output from 1973 to the end of the decade. This was generally accompanied by slow but steady employment contraction. A look at the output trends before accession shows that for the first two of these sub-sectors the pattern after 1973 was nothing new. In 1967, for example, output of bread, etc., and cocoa, etc., was no higher than it had been in 1953. In contrast, the other two sub-sectors, fruit and vegetable processing and margarines, etc., especially the former, had shown some output growth in the period before accession and consequently the period after 1973 saw a reversal of earlier trends. Other sub-sectors like grain milling and sugar refining had shown very slow output growth since at least the mid-sixties and this continued, slowing somewhat more, after 1973.

On the other hand a number of food sub-sectors with different industrial styles and traditions than those listed above achieved output growth in the period after accession. These were slaughtering and preserving of meat and meat products (NACE 412), milk and dairy products (NACE 413), and 'other foods' — which includes fish products (NACE 415) and food pastes (NACE 417) and cola concentrate. The output growth of these sectors was in general just sufficient to sustain employment — some sub-sectors gaining a little, others losing a little.

Drink and Tobacco

In drink and tobacco the maintenance of employment levels after accession was associated with modest output growth and slow productivity growth (see Figure 4.3). Because of heavy reliance on the home market, the industry recovered only very slowly from the recession of 1974/75. In particular, production in brewing and tobacco was virtually stagnant whereas output of distilling increased by 75 per cent between 1973 and 1978. Some of these events also reflect long-run trends. Thus, throughout the latter half of the 1960s and into

Figure 4.3
Employment, Output and Productivity in
Irish Manufacturing and Industry 1980 = 100



the early 1970s output of tobacco remained below its 1953 level. During the same period the other sub-sectors of this industry achieved slow output growth — with the exception of aerated and mineral waters which grew much more vigorously.

Non-Metallic Minerals

The post-accession performance of non-metallic mineral products (bricks, cement, ceramics, and glass, etc.) conforms to the pattern found in drink and tobacco, wood and furniture, and paper and printing and parts of food; that is, an increase in employment associated with slow output growth (see Figure 4.3). During the transition period, output of each of the sub-sectors of 'non-metallic minerals' increased such that in 1978 production was 20 per cent higher than in 1973. This represented a slight slowing of the rate of growth of the sector — which had grown through the sixties in conditions of strong domestic demand. However, Blackwell, Danaher and O'Malley calculated that in the sub-sector 'glass and glassware, pottery, china and earthenware' — the sub-sector which had least natural protection — as much as 86 per cent of the (substantially) increased domestic demand was met by competing imports during the period 1965-1973.

Metals and Engineering

We have seen from Table 4.4 that metals and engineering was the sector which showed the largest increase in employment in the period 1973 to 1981: an outcome which resulted from twice as many job gains as job losses. Figure 4.3 shows that this employment increase was associated with a growth in output of 60 per cent over the same period. However, the metals and engineering sector is made up of such different sub-sectors that this overall figure does not tell us a great deal.

Study of the detailed output data for the various sub-sectors of metals and engineering reveals that different parts of the sector had very different fortunes in the period after accession. There was (i) a decline in the output of motor assembly, shipbuilding, railway rolling stock, cycles and aerospace, foundries and treatment of metals; (ii) steady growth in the output of metal articles, and mechanical, electrical and instrument engineering; and (iii) phenomenal growth in office and data processing equipment.

Although these developments cannot easily be compared with those in the years before accession because of changes in the industrial classification system some idea of the trends should be reported if the forces at work after 1973 are to be identified.

Very broadly, the metals and engineering industries before 1973 can be broken into two groups. The first group consists of metals, non-electrical machinery and electrical machinery. Output of what was known as 'metal trades' had

reached almost five times its 1953 level by 1972 and had grown by 49 per cent in the five years from 1967 to 1972. 'Non-electrical machinery' production in 1972 was exactly four times its level in 1953 and had grown by 40 per cent in the years from 1967 to 1972. Production of 'electrical machinery' was almost eight times as large in 1972 as in 1953, but had grown by only 25 per cent in the five years before accession. This account reveals both an ominous slowing of output growth after the mid-sixties, and the slow productivity growth of an engineering sector built behind protective tariffs. In contrast with these sub-sectors, were those producing transport equipment in the broadest sense. These had experienced considerable difficulties before 1973. The output of shipbuilding and motor assembly in 1972 was just over twice as large as in 1953. Though shipbuilding had grown by 25 per cent between 1967 and 1972 output in 1972 was some 13 per cent lower than it had been in 1962. Likewise, motor assembly had grown by 25 per cent in the five years before accession, but by only 39 per cent, in the ten years before accession. Blackwell, Danaher and O'Malley calculated that in the period 1965-73, 85 per cent of the increased demand for shipbuilding and 60 per cent of the demand for motor assembly had been satisfied by competing imports. Finally, in 1972 production of railroad equipment was only 35 per cent of its 1953 level.

It would seem then that in some respects the period after accession to the EC saw an exacerbation of problems already being felt in the metals and engineering sector — though the trends of output and employment appear different before and after 1973. The sub-sectors producing transport equipment turned from slowing growth to definite decline. The more robust sectors, electrical and non-electrical machinery, had for a long period maintained output growth with slow productivity growth, and by the end of the sixties were experiencing competition from UK producers. There is, of course, no doubt that the growth of output of 'office and data processing machinery' quickened considerably after accession as this sector began to receive a rapidly increasing share of IDA grant aid in the years from 1975 onwards.

Chemicals

In chemicals the employment increase of 2,726 between 1973 and 1981 was associated with an increase in output of 125 per cent. Sub-sectors within chemicals varied greatly during this period. Although the industrial classifications used before 1973 were not exactly comparable to those used since then, we can contrast the period after accession to that before to some extent. In the five years from 1967 to 1972 the production of fertilizers increased by 21 per cent, whereas in the five years from 1973 to 1978 it increased by only 3 per cent (indeed output in 1972 was almost 5½ times as large as in 1953). Likewise, the production of soap, detergents and candles increased by almost 40 per cent in the five years before accession, but fell by 3 per cent between 1973 and 1978. In contrast to these sub-sectors the rate of output growth of pharmaceuticals and 'other chemical products', though rapid before 1973,

would seem to have been faster after 1973. This output growth was associated with very substantial grant-aided investment in this sector during the years 1974 to 1977.

Manufacturing Industry During the First Period of EC Membership: Summary and Interpretation

Earlier work by the NESI (NESI 1982) O'Malley (1987) and O'Malley and Blackwell (1984) has provided a convincing interpretation of the diverse output trends in the metals and engineering sector, which can in fact be applied to manufacturing in general. Three groups of industries can be identified — each showing a different response during the first period of integration into the EC.

(1) New, Export-Oriented, Mostly Foreign Owned

There was an increase in investment in these firms, strongly influenced by industrial policy measures adopted at the time. Firms in this category account for the increased employment and rapid growth of output and exports in sub-sectors such as office and data-processing machinery, instrument engineering, pharmaceuticals, and man-made fibres.

(2) Naturally Protected

There was a second group of industries in which employment was increased, or at least maintained, during the transition period. Output also increased in these industries — but much less dramatically than in the new industries. The industries in question are drink and tobacco, paper and printing, wood and furniture, non-metallic minerals, some sub-sectors of metals and engineering such as metal articles, mechanical engineering, and parts of electrical engineering, and some sub-sectors of food such as slaughtering, meat preparation and dairy products.

Although this is a very diverse group, a common characteristic can be identified. It has been argued that the relatively good performance of these industries in a very difficult period is explained by the fact that all benefitted from some measure of *natural protection* (Blackwell and O'Malley 1984; O'Malley, 1985). This differed from one sector to another. In food it arose from being located close to the source of the major material input — Irish agriculture — and from the nature of the processing undertaken. In others it arose from the fact that the product tends to be a non-traded good; this applies to clay, glass and cement. Highly fragmented activities such as simple metal fabrication, carpentry workshops, welding and pressing of steel, and paper and printing are protected from competition because it is necessary to be located close to the final purchaser and to respond to particular customer requirements. In drink and tobacco protection from international competition would seem to have arisen for a different sort of reason; here the industry, and the Irish market, had traditionally been dominated by a few firms who consequently have considerable market power. We may, therefore, subdivide this group of industries into two types (i) large scale and (ii) fragmented.

(i) *Large scale*

- Drink and tobacco
- Paper and printing
- Non-metallic minerals
- Food (parts of)

(ii) *Fragmented*

- Metal articles
- Mechanical engineering
- Electrical engineering (parts of)
- Wood and furniture.

Being heavily reliant on the home market, and somewhat naturally protected from foreign competition, all of these activities were relatively prosperous in the very buoyant domestic demand which characterised the transition period.

(3) *Internationally Traded Large Scale*

In contrast with the groups (1) and (2) production and employment fell after 1973 in industries where the product is internationally traded and where there are advantages to relatively large scale production. Thus, large scale Irish producers in activities such as motor assembly, shipbuilding, electrical engineering, chemicals, clothing and footwear, textiles, fruit and vegetable processing, and wood and furniture, were all in decline after 1973. This is a process which would seem to have begun as soon as the high levels of protection were reduced (O'Malley, 1987).

(iii) Performance Since Accession: Trade

The developments in manufacturing outlined above were strongly reflected in Ireland's external trading patterns. In this section we examine the changing geographical and commodity composition of foreign trade. For ease of presentation we take the story beyond the transition period into the eighties.

As would be expected, the removal of tariff barriers with EC states brought about changes in trading behaviour. Both exports and imports increased considerably as a per cent of GDP during the transition period to full membership — and, indeed, continued to increase until the early 1980s (see Table 4.6). The trend towards geographical diversification of Ireland's trade, evident in the 1960s, continued after EC accession. This diversification was more marked in exports than imports. Table 4.7 gives a summary of the geographical structure of Irish exports in selected years. Two features of these data are worthy of comment. First, dependence on the United Kingdom market as an outlet for Ireland's exports has decreased dramatically, especially since Ireland joined the EC. However, this percentage would now seem to have stabilised at around 35 per cent. Secondly, Irish exports to non-EC countries have increased considerably. This reflects much increased penetration of the North American markets and the opening of new export markets in the Middle East and in the less developed countries (see Matthews, 1980).

Table 4.6
Exports and Imports of Goods and Services
as % of GDP at current market prices

	Exports	Imports
1960	31.8	37.3
1961	34.6	39.8
1962	32.3	38.9
1963	33.6	40.8
1964	33.4	41.0
1965	34.8	43.9
1966	37.2	43.2
1967	37.8	40.9
1968	38.8	45.2
1969	37.3	46.3
1970	37.0	45.0
1961-70	35.7	42.5
1971	36.1	43.4
1972	34.6	39.9
1973	38.0	44.8
1974	42.6	57.2
1975	42.7	48.8
1976	46.3	54.2
1977	49.4	58.5
1978	49.9	59.8
1979	49.7	66.1
1980	49.6	63.0
1971-80	43.9	53.6
1981	48.5	62.7
1982	48.1	55.4
1983	52.8	55.6
1984	59.9	60.2
1985	62.0	59.8
1986	56.7	53.2
1987	60.5	52.9
1988	64.5	54.6
1989	67.4	56.2

Source: *European Economy* No. 38, European Commission.

Table 4.7
Geographical Structure of Irish Trade: Exports
(percentage shares)

	1955	1960	1972	1978	1981	1984	1988
UK	89	75	61	47	40	34	35
Other EC	5	6	17	30	31	34	39
Total EC	94	81	78	77	71	68	74
Other	7	19	22	23	29	32	26
	100	100	100	100	100	100	100

Source: *Trade Statistics of Ireland*, CSO.

Table 4.8
Geographical Structure of Irish Trade: Imports
(percentage shares)

	1955	1960	1972	1978	1981	1984	1988
UK	53	50	51	49	50	43	42
Other EC	12	14	18	21	21	22	24
Total EC	65	64	69	70	71	65	66
Other	35	36	31	30	29	35	34
	100	100	100	100	100	100	100

Source: *Trade Statistics of Ireland*, CSO.

The geographical structure of Irish imports shows less change (see Table 4.8). The United Kingdom never provided as large a share of Irish imports as it took of Irish exports. But neither has that share declined as rapidly as the export share. However, in surveying trade patterns since EC membership, McAleese argues that the aggregate import figures used in calculating the shares in Table 4.8 are somewhat misleading. He shows that if, instead of considering aggregate imports, *manufactured* goods are considered in isolation, then a considerable shift away from UK goods becomes apparent. Furthermore, this decline in the UK's share is not fully explained by the erosion of the UK's preferential position in the Irish market *vis-à-vis* other member countries, but must be considered a result also of the increase in Irish purchases of manufactured goods from areas outside the EC, notably Japan, the newly industrialising countries and the US (McAleese, 1984, p.160).

The *commodity* composition of Irish trade has also changed considerably. Table 4.9 shows that despite the buoyancy of Irish agricultural exports in the early years of EC membership the value of food, drink and tobacco exports was soon overtaken by the value of manufacturing exports. The table divides total

Table 4.9
Commodity Structure of Irish Exports
(percentage shares)

SITC	Food, Drink, Tobacco	Raw Materials Fuels	Manufactures		Total
			Chemicals, Machinery	Other	
	0+1	2+3+4	5+7	6+8	0-9
Year					
1955	68.0	8.1	3.0	9.3	100
1960	65.0	10.0	4.4	14.6	100
1972	45.6	7.0	15.1	25.7	100
1978	40.2	4.8	25.8	24.3	100
1984	25.5	7.0	42.6	20.6	100
1988	25.6	5.1	44.3	21.5	100

Source: *Statistical Abstract of Ireland and Trade Statistics of Ireland*, CSO.

manufacturing exports into two sub-sections in order to highlight the remarkable growth of exports by the chemicals and engineering industries (SITC Sections 5 and 7). Most of our analysis has concentrated on the period from 1970 to around 1980. Looking at that period, Table 4.9 shows a gradual decline in the share of food, drink and tobacco exports. But in 1978 exports of these sectors still accounted for 40 per cent of the value of all Irish exports. The period from 1979 to the present has seen a continuation of this pattern of change but at a much more dramatic rate. And although the share of food, drink and tobacco exports may have stabilised the share of chemicals and machinery has continued to rise, accounting for almost 45 per cent of all exports in 1988.

It has often been noted that Irish manufactured products have a high import content. Consequently, it is not surprising that the increased share of manufactures in Irish GDP and exports should be reflected in increased manufactured imports. Table 4.10 confirms that this has indeed occurred — although on the whole the changes in structure of imports are less pronounced. McAleese has drawn attention to the balance of payments implications of the greatly increased role of manufactures, and in particular of certain types of manufactures, in Irish exports. The concomitant increase in imports means that the balance of payments contribution of these manufactured exports is considerably less than that of agricultural or service sector exports (McAleese, 1984). The significance of the import content of Irish manufactures is further highlighted by looking at the distribution of imports according to main use. For example, in the nine years 1980 to 1988, materials for further production accounted for over 60 per cent of total imports, producers capital goods accounted for almost 14 per cent, while consumer goods accounted for the remaining 26 per cent (*Trade Statistics of Ireland*, December 1988). Indeed, in

Table 4.10
Commodity Structure of Irish Imports
(percentage shares)

SITC	Food, Drink, Tobacco	Raw Materials Fuels	Manufactures		Total
			Chemicals, Machinery	Other	
	0+1	2+3+4	5+7	6+8	0-9
Year					
1955	20.6	24.1	25.3	24.4	100
1960	16.8	21.8	28.6	24.7	100
1972	13.6	13.4	37.1	31.4	100
1978	11.7	14.1	41.8	29.7	100
1984	11.4	16.3	42.8	26.9	100
1988	11.7	8.9	47.1	29.2	100

Source: *Statistical Abstract of Ireland and Trade Statistics of Ireland*, CSO.

a recent study of the determinants of Irish imports, FitzGerald attributes a significant proportion of the increased imports of manufactured goods to the change in the composition of final demand, of which the growth in importance of *industrial exports* was a major component (FitzGerald, 1987). In commentary on the Irish economy it has become customary to draw attention to the percentage rate of growth of exports, especially manufactured exports. The rapid growth of exports is cited to draw a contrast with other less encouraging aspects of economic performance and to validate certain policy positions. This practice can be quite misleading and, in our view, more attention should be focussed on *net exports* — i.e., exports minus imports. Ideally, attention would be focussed on exports net of imports and profit repatriation.

There is evidence that during the transition period, 1973 to 1978, Irish exports increased their share of the UK market (McAleese, 1984). However, surveying the period 1980-85, the NESC noted that "Ireland's share of UK imports has receded across a wide range of product groups, particularly those characterised by heavy dependence on the UK market (NESC Report No. 83). Indeed, this trend was accompanied by a pronounced increase in import penetration of the Irish market in the late seventies and early eighties (McAleese, 1984; NESC Report No. 83). There are a number of possible explanations for these developments and as our survey of events since 1973 proceeds we will attempt to weigh the evidence in favour of each.

In his recent study of the determinants of Irish imports FitzGerald found no significant independent effect of EC membership on the evolution of total Irish imports. An important exception to this was the case of food imports. His

study suggested that EC entry substantially increased the volume of food imports into Ireland. In general, this increase was associated with a diversification of consumption patterns and specialisation by farmers on production for export. In FitzGerald's view the only negative aspect of the increased food imports may have been its impact on certain food processing industries. Despite the fact that FitzGerald found no significant impact of EC entry it should not be inferred from this that there was no such effect. It simply means that no EC effect, independent of the variables already used to explain imports, could be detected. The major determinants of the very large increase in manufactured imports, identified in FitzGerald's study, were changes in the composition of final demand, decreases in labour-cost competitiveness relative to import prices, and capacity utilisation and cyclical effects. It can certainly be argued that these forces were in turn influenced by EC entry. This is particularly so for the change in the composition of final demand — an important part of which was the increased orientation towards exporting. This in turn was largely created by foreign direct investment, which was almost certainly responsive to Ireland's membership of the EC.

3. PERFORMANCE SINCE THE TRANSITION PERIOD

(i) Overall Economic Performance

Economic Growth

The overall economic performance since the end of the transition period was markedly worse than in the years from 1973 to 1978. This contrast is summarised in Table 4.1 which shows first, that there was much slower growth of domestic product and, second, that this was reduced to virtual stagnation or even contraction of disposable income per head by increased factor payments abroad. The NESc has previously documented and analysed economic developments in the period 1980 to 1985 and consequently there is no need to undertake a detailed exposition here (NESc No. 83).

At many places in this report we identify two phases in Ireland's experience in the Community. One phase from accession in 1973 through the transition period to 1970 was a period of vigorous economic growth by international standards (see Chapter 5). A second phase from 1979 to 1986 which was characterised by very poor economic performance on almost all counts — as will be seen presently and again in Chapters 5 and 7. However, we should also identify a third phase — or at least the first signs of a distinctive phase of economic performance. That third phase has occurred in 1987 and 1988 and has been characterised by a resumption of economic growth and very positive evolution of many important determinants and indicators of economic performance.

In reviewing performance since the end of the transition period we will naturally concentrate on the performance from 1979 to 1986 — both because

this performance dominates the period as a whole and because comprehensive data are available for it. However, where possible we will contrast this second phase with the much more positive phase three of recent years. We may begin by contrasting overall economic growth in the years 1987 and 1988 with figures for the period 1979-86 reported in Table 4.1. That table shows that from 1979 to 1986 real GNP grew at an annual average rate of -0.3 per cent. In 1987 and 1988 the volume of GNP grew at an annual average rate of over 3 per cent (on an expenditure basis). Many important financial and nominal variables have also performed very differently in 1987 and 1988 than in the period 1979 to 1986. However, these have not yet had a large or sustained impact on consumption and employment — the ultimate real objectives of policy and of economic activity. Consequently, Ireland's real economic performance since the end of the transition period is still dominated by events in the years to 1986.

Balance of Payments

The period 1980 to 1988 was one of balance of payments adjustment from the very large deficits in 1980, '81 and '82 to small surpluses in 1987 and 1988 (see Figure 4.1). Most of this adjustment was achieved on the trade account by means of a huge decline in home demand aided by some improvement in the terms of trade.

Public Finances

This adjustment in the balance of payments was not initially the reflection of an equivalent adjustment in the overall public sector deficit (see Table 4.2). The major reason for this was the very large increase in debt servicing costs. However, when national debt interest is netted out of the budgetary arithmetic it emerges that the current account of the budget has been in surplus since 1981, and that surplus has increased significantly both in absolute terms and relative to GNP. Likewise, the non-interest exchequer borrowing requirement, though still in deficit in 1985, had declined sharply since 1981 (see NESc Report No. 83).

However, as can be seen from Table 4.2, considerable progress has been made in 1987 and 1988 in correcting the public finances. Some of the factors causing a surge in tax revenue in 1988 were exceptional and consequently the exchequer borrowing requirement of under 3.5 per cent of GNP should not be read as the new underlying rate — which is probably near 6 per cent of GNP.

(ii) Manufacturing Industry

The growth in output and employment which characterised Irish manufacturing during the transition period was brought to a halt by the recession of 1980/81. The gap between output and employment growth widened further as total manufacturing output decreased only very slightly in 1980 (and again in 1982) before resuming an upward trend, but employment began a steep fall which continued for several years and has not been reversed (see Table 4.3).

Changing Sectoral Composition

By and large the changes in the sectoral shares in total manufacturing employment which were identified for the period 1973 to 1981 continued into the eighties. In order to maintain comparability with our earlier tables we again use data from IDA employment surveys to illustrate the changing industrial composition of Irish manufacturing. The data in Table 4.11 show that the sectors clothing and footwear, and textiles continued to lose their share of employment. Likewise employment in the metals and engineering sector continued to increase as a proportion of total employment. Much more dramatic than these relatively small changes between sectors was the fact that *all* sectors lost employment during the later period. Thus many other sectors joined clothing and footwear, and textiles in experiencing *absolute* decline.

In analysing the performance of manufacturing during the transitional period, and during the earlier period of tariff reduction with the UK, we identified three patterns of employment and output response. It is of interest to trace how the sectors and sub-sectors in each of these three categories fared in the period since the onset of the 1980 recession.

Table 4.11
Manufacturing Employment by Sector, 1980 and 1986

Sub-sector	January 1980		January 1986	
	Aggregate employment	Share %	Aggregate employment	Share %
Food	51,842	20.5	41,477	19.8
Drink and Tobacco	11,776	4.5	9,292	4.4
Textiles	17,797	7.0	10,860	5.2
Clothing and Footwear	24,108	9.5	16,706	8.0
Wood and Furniture	11,507	4.6	10,914	5.2
Paper and Printing	17,351	6.9	13,911	6.7
Chemicals and Plastics	14,573	5.8	13,243	6.3
Glass and Cement	18,855	7.5	14,047	6.7
Metals and Engineering	68,294	27.0	62,053	29.7
Other Manufacturing	11,942	4.7	10,324	4.9
Grant-Aided Services	5,282	2.0	6,222	3.0
Total	252,827	100.0	209,049	100.0

Sources: IDA Employment Survey published in Ruane (1987).

Category 1: New, Export-Oriented, Mostly Foreign Owned

We start with those sectors which showed rapid growth during the transition period under the impetus of grant-aided, mostly foreign, investment. We find that they maintained their rapid rate of output growth into the 1980s — with

the sub-sector office and data processing equipment surpassing electrical and instrument engineering and chemicals (see Figure 4.3). The differential output trends within this group largely reflect a shift in emphasis in IDA grant approvals from chemicals, which was predominant in the mid-seventies, to metals and engineering, which took a large share from 1977 onwards. However, in contrast to the period from 1973 to 1980, this output growth was not associated with increased employment.

From Figure 4.3 it can be seen that both the chemicals and metals and engineering sectors lost jobs from 1980 to 1986. But, given the different characteristics of the firms and activities which constitute these sectors it is worthwhile to look at the employment changes in a little more detail.

In fact the net job losses in the chemicals industry were concentrated in basic chemicals (which includes fertilizers) and man-made fibres. The very high output growth sub-sector, pharmaceuticals, showed net job gains (though it should be noted that there were gross job losses of 18.9 per cent in this sub-sector). Nevertheless, a very large fall in employment in man-made fibres is clear evidence of job losses in relatively new grant-aided foreign owned firms. This is a feature of Irish industrial development over the long run and will be discussed in more detail presently.

A very similar pattern applies in metals and engineering after 1980. The fall in employment in the metals and engineering sector as a whole did not arise from a fall in employment in those sub-sectors in which there was considerable grant aided investment and a very high proportion of foreign owned firms, i.e., data processing machinery, instrument engineering and electrical engineering.

Category 2: Naturally Protected and Reliant on the Domestic Market

The second category identified above was that which had performed relatively well during the transition period by relying on, or retreating to, production for the domestic market. This pattern of response was one which left industries extremely vulnerable to the events which unfolded after 1980. The severe recession followed by prolonged depression of domestic demand caused contraction of both output and employment in most sectors in this category.

Table 4.12 shows production indices for some of the sectors and sub-sectors in this group. This reveals that much of the output increase between 1973 and 1978 was reversed between 1980 and 1986. Not surprisingly, this poor output performance involved contraction in employment. Table 4.13 shows employment in 1980 and in 1987, and the percentage change between these two dates. The very big percentage drop in some relatively large manufacturing sectors — all of which increased employment during the transition period — brings to light the radically different environment which prevailed in Ireland for most of the 1980s.

Table 4.12
Indices of Production for Industries Reliant on the Domestic Market
Base: 1980 = 100

	1973	1978	1980	1981	1982	1983	1984	1985	1986	1987	1988
Timber and wooden furniture	97.2	102.4	100	97.5	91.9	87.3	86.7	86.4	92.8	93.3	100.7
Paper and printing	94.2	93.1	100	99.6	90.6	88.8	93.5	92.3	91.7	96.4	111.6
Metal articles	62.2	85.5	100	91.1	83.2	78.3	80.4	78.4	72.3	71.4	72.2
Mechanical engineering	65.0	100.6	100	100.7	98.9	103.3	107.5	120.4	117.9	123.4	132.8
Non-metallic mineral products	81.0	97.6	100	100.8	87.8	88.8	92.3	99.0	87.4	90.3	92.0
Other manufacturing	37.7	50.3	100	93.7	85.3	98.9	80.3	61.5	69.5	75.0	82.2
Drink	79.2	90.6	100	101.6	103.1	97.1	102.7	109.8	110.3	110.3	114.8
Tobacco	91.5	96.5	100	98.5	94.0	94.9	82.4	84.0	75.8	72.8	71.1

Sources: *Census of Industrial Production*, revised using the Updated Retrospective Series of May 1988, and *Statistical Bulletin*, CSO.

Table 4.13
Employment in Industries Reliant on the Domestic Market
1980 and 1987

Industry Sector or Sub-Sector	NACE Code	Numbers employed in (000s) 1980	Numbers employed in (000s) 1987	Percentage change
Timbers and wooden furniture	46	9.9	7.4	-25.2
Paper and printing	47	16.5	13.0	-21.0
Drink and tobacco	424-429	10.4	7.8	-25.0
Non-metallic mineral products	24	15.8	11.4	-27.8
Metals	22	2.5	1.6	-36.0
Metal Articles	31	17.2	11.6	-32.6
Mechanical engineering	32	8.6	7.7	-10.5
Meat products	412	11.4	10.0	-12.3
Dairy products	413	10.1	7.6	-24.8

Source: CSO *Industrial Employment, Earnings and Hours Worked*.

However, there is evidence in Table 4.12 of the beginnings of recovery in indigenous manufacturing industry in 1987 and 1988 — see, for example, the production indices for paper and printing and mechanical engineering. This reflects the very strong growth of manufactured exports in both years and some recovery of domestic consumer spending in 1988.

Table 4.14
Indices of Production in Declining Sectors of Manufacturing
Base: 1980 = 100

	1973	1978	1980	1981	1982	1983	1984	1985	1986	1987	1988
Textiles	101	114	100	106.9	101.9	93.9	93.3	93.0	90.7	90.5	97.3
Clothing	111	101	100	100.7	106.2	99.7	99.8	97.1	100.5	95.3	88.5
Footwear	153	108	100	94.7	88.6	82.9	79.6	62.8	50.3	47.7	45.5
Leather	135	127									
Motor vehicles including parts	125	105.4	100	96.9	89.1	75.5	60.7	42.9	34.7	33.6	40.6
Other means of transport	112.9	98.2	100	107.7	100.5	109.4	107.1	92.6	89.3	92.2	99.4
Bread, biscuit and flour confectionery	104.2	104	100	103.4	104.6	97.9	92.2	91.0	89.8	86.2	83.8
Sugar, cocoa chocolate	104.2	110	100	96.2	102.4	105.9	109.1	108.6	110.6	107.9	138.4

Source: *Census of Industrial Production*, revised using the Updated Retrospective Series of May 1988.

Category 3: Internationally Traded Large Scale

Our third group consisted of those industries which would seem to have been in long-run decline during the transition period and, in the case of some, even before that. These sectors are textiles, clothing and footwear, tobacco and significant parts of both metals and engineering and food. Table 4.14 shows an index of production for some of these sectors from 1980 to 1987. Since the year 1980 was one of deep recession, comparison of later years with it may give too optimistic a view of subsequent developments. In order to allow this factor to be taken account of, Table 4.14 also shows output in 1978 — so that the size of contraction in the 1980/81 recession can be gauged — and in 1973 — so that the extent of long run decline can be seen.

It is clear from this output data that the long-run decline in these sectors generally continued — but at a more rapid rate in the 1980s than in the 1970s. This is confirmed by the employment figures in Table 4.15. This table shows the employment change in some relevant sub-sectors. These figures reveal that these sub-sectors, generally considered to be in danger as protection was reduced and finally eliminated, though they showed definite signs of decline in the 1970s, suffered an even more dramatic contraction during the 1980s. In these sub-sectors there are fewer signs of recovery in the generally improved economic conditions in 1987 and 1988.

Job Turnover in Manufacturing

One of the striking features of Irish industrial development since at least 1973 is the phenomenon of job losses in sectors which are being energetically promoted by state agencies. It was originally felt that this reflected the

Table 4.15
Employment in Declining Industries
1980 and 1987

Industry Sector or Sub-Sector	NACE Code	Numbers employed in 1980 (000s)	Numbers employed in 1987 (000s)	Percentage change
Motor vehicles, parts	35	6.6	2.7	-59.1
Other transport	36	5.7	4.1	-28.1
Bread, biscuit, flour confectionery	419	9.4	7.0	-25.5
Sugar, cocoa, choc. etc.	420, 421	6.6	5.0	-24.2
Woollen Industry	431	3.2	1.8	-43.8
Knitting Industry	436	5.1	4.0	-21.6
Other Textiles	432-434 437-439	8.1	4.8	-40.7
Leather and leather goods	44, 451	4.8	1.6	-66.6
Clothing	453-456	15.6	12.5	-19.9

Source: CSO *Industrial Employment, Earnings and Hours Worked*.

simultaneous presence within each sector of both traditional firms, producing traditional products for a declining home market, and grant-aided modern firms producing more sophisticated products, largely for the export market. However, evidence adduced in the NESC's *Review of Industrial Policy* (Report No. 64) and from the IDA's employment surveys suggests that this is not an adequate explanation.

Recent data from the IDA surveys, published by Ruane (1987), provide information on the number of jobs gained and lost in each year from 1973 to 1986. This shows that the relatively small net changes in employment were in general the outcome of very large job gains and job losses. These data also provide some indication of the survival rate of jobs in existence at different dates. The most disturbing feature revealed is that the survival rate of jobs created *since 1973* — with substantial support from industrial policy agencies — differs little from that of jobs which existed in 1973 (see also O'Malley, 1986).

It is clear, therefore, that simultaneous job loss and job creation in a given sector cannot be simply explained as a restructuring of the economy whereby the traditional is replaced by the modern. The strikingly low survival rate of new state-aided projects naturally draws our attention to the industrial policy pursued. The NESC has previously undertaken detailed study of this policy and recommended major changes (NESC Report No. 66). Its relevance in the present context is that in trying to understand economic performance since EC

accession one of the forces which must be taken into account is the industrial and development policy implemented.

4. PERFORMANCE SINCE ACCESSION: AGRICULTURE

(i) Trends in Output and Incomes

A major motivation for Ireland's membership of the EC was the desire to achieve access to a large and regulated market for agricultural output. As in manufacturing, prior to 1973 the UK market provided a market for a very large proportion of Irish output — especially in the cattle and dairy trades. But what growth was achieved in the sixties depended heavily on two things: protection of the domestic market and subsidisation of exports (Sheehy, 1984, p.79). Consequently, whereas in industry the opening of markets posed a certain threat, it was considered that access to the European market would relax the central constraint on Irish agriculture — the limited size of and price on the Irish and UK markets.

After a major crisis in the cattle sector in 1974 some of the main hopes and expectations of EC membership were realised. Agricultural output prices increased substantially faster than the rate of inflation from 1970 to 1978. However, input prices also increased faster than inflation in these years. There was a quite dramatic increase in the use of inputs in Irish agriculture after accession. As a result of these developments real farm incomes did not rise as much as was expected. However, given the continual decline in numbers engaged in the sector real incomes per head increased by 112 per cent between 1970 and 1978.

The increased income received in these years both encouraged and facilitated investment which in turn led to a considerable increase in production. Table 4.16 shows the evolution of some of the key indicators for the agricultural sector.

This reveals how value added (gross agricultural product) grew less than gross output during the seventies, because of increased use of inputs. A key determinant of farming profitability is the ratio of output to input prices. Because of the oil price increases and the glut in the cattle market this ratio was substantially lower in 1974 and 1975 than before EC entry. However, thereafter there was a rapid recovery in the relative output price and this yielded substantial income growth. Between 1971 and 1978, average farm real income per family worker in farming rose by 7.8 per cent per year, compared with an increase of 4.9 per cent per year in average real industrial earnings (NESC Report No. 53).

However, much of the prosperity outlined above came to an abrupt end. A number of factors conspired to reverse the trends since accession. In 1978 the

Table 4.16
Agricultural Output and Incomes
1980 = 100

	Gross Output ¹	% Change	Gross Product ²	% Change	Real Incomes ³	Ratio of output price index to input price index
1973	86.8	—	91.4	—	—	132.6
1974	87.2	0.5	99.1	8.4	—	96.4
1975	88.4	1.4	104.6	5.5	137.4	106.3
1976	87.9	-0.6	96.8	-7.4	131.1	115.5
1977	96.7	10.0	106.1	9.6	159.8	116.2
1978	101.4	4.9	104.4	-1.6	166.3	126.0
1979	101.3	-0.1	92.3	-11.6	132.9	117.5
1980	100.0	-1.3	100.0	8.3	100.0	100.0
1981	99.7	-0.3	95.0	-5.0	97.2	103.1
1982	106.0	6.3	106.6	12.2	103.6	101.9
1983	109.5	3.3	108.3	1.6	108.2	100.3
1984	118.7	8.4	125.3	15.7	118.6	95.8
1985	116.9	-1.5	120.7	-3.7	100.1	91.9
1986	111.4	-2.1	109.8	-9.0	90.9	95.1
1987	115.5	1.0	115.5	5.2	105.4	104.1
1988 ⁴	116.9	1.2	119.5	3.5	121.2	111.6

Sources: Central Statistics Office, and NES, *Farm Incomes: Analysis and Policy*.

¹Including value of changes in stocks.

²Gross output less input of materials and services.

³Nominal farm incomes deflated by the CPI.

⁴Estimate.

transition period to full membership of the Community ended. As a result there would be no further upward alignment of Irish prices. At the same time Common Agricultural Policy (CAP) price increases were moderated, as the Commission reacted to the budgetary problems created by agricultural surplus. In March 1979 the European Monetary System (EMS) was formed and Ireland joined the system. This curtailed the 'green' pound devaluations which up till this point had adjusted Irish farm prices in line with Irish inflation. After 1979 Irish farmers could, in general, achieve only the same price increase as farmers in other EMS countries. But Irish inflation, and consequently the rise in the price of agricultural inputs, continued to far exceed that of other countries in the EMS. The inevitable result was a severe price-cost squeeze as shown in the final column of Table 4.16.

The result of these adverse developments was a very severe drop in farm incomes for several years after 1978 (see Column 5 of Table 4.16). Not surprisingly this change was reflected in production. The volume of both gross

and net output did not rise above their 1978 level till 1982. There was a considerable revival during the first half of the 1980s — when gross product increased to 25 per cent above its 1980 level. But a combination of poor weather and an increasingly restrictive approach in the Common Agricultural Policy meant that output declined again in 1985 and 1986. As a result real farm incomes fell again in these years and were below what they had been a decade earlier.

Since 1986 there has been a very substantial recovery in the agricultural sector. The sharp drop in Irish inflation eased the pressure of input costs. The depreciation of the Irish pound in August 1986 yielded a green pound price increase. And, perhaps most important, output prices, especially in the dairy sector, strengthened as a result of the cutback imposed by the milk quota regime (Sheehy, 1988). The continuation of this improved situation into 1988 means that aggregate and per capita income levels have fully recovered from the low levels in 1985 and 1986 and are approximating those achieved in 1977 and 1978.

This pattern of considerable volatility in Irish agriculture can be seen when the real price changes experienced in Ireland are compared with those experienced in other Community countries since the early seventies (Sheehy, 1988).

From Table 4.17 it can be seen that due to special transitional price increases Irish farmers received the highest price increase in the years 1970 to 1978. But

Table 4.17
Real Prices¹ in EC Member States, 1970 to 1987

	1970-78	1978-80	1980-85	1985-87
Ireland	+19.4	-20.9	-16.5	+3.7
Germany	-7.4	-6.5	-12.2	-3.3
France	-3.2	-9.8	-8.4	-4.6
Italy	+12.4	-8.4	-11.7	-5.2
Netherlands	-15.6	-7.2	-4.1	-1.1
Belgium	-7.5	-7.2	-4.4	-5.0
Luxembourg	-10.6	-6.0	-0.2	+2.6
United Kingdom	-6.9	-9.9	-8.9	-1.8
Denmark	-2.8	8.0	-9.2	-6.8
EC-9 ²	-1.8	-8.8	-9.8	-3.8

¹Index of producers prices deflated by a weighted deflator comprising the index of currently consumed inputs, the index of investment inputs and the consumer price index in the proportions in final production, respectively, of intermediate consumption, depreciation and net value added.

²The average of the 9 member states weighted by their value of Final Agricultural Production in 1980.

Source: S. Sheehy, 'Irish Agriculture into the Nineties', *Irish Banking Review*, Autumn, 1988.

then the level of prices fell by 20.9 per cent in the two years 1979 and 1980 — much the highest in the Community. The factors discussed above meant that this differential downward pressure on Irish prices continued up to 1985. Finally, in recent years the developments in domestic inflation and agricultural markets have yielded Irish farmers the most favourable real price increases in the Community.

(ii) Support from the Common Agricultural Policy

An important aspect of Ireland's membership of the Community since 1973 is the support which the CAP provides to the country as a whole, as distinct from its impact on the level and pattern of agricultural production, income or employment. As Matthews stresses in his recent study of this subject the impact of the CAP on a member state of the Community can only be defined by reference to some alternative policy or arrangement (Matthews, 1988). Many possible alternatives are available and each can validly be compared with the CAP. However, it is important that in assessing the impact of the CAP a given alternative be clearly stated and used with consistency.

The most popular method of assessing the level of Ireland's support from the CAP is to assume that agricultural price policy continues exactly as at present but that it is funded nationally rather than by the Community. The value of CAP transfers to Ireland is then calculated as the amount which Ireland would have to pay to maintain the same level supplies, demand, and prices. The value of CAP transfers to Ireland consists of two elements. The first is the direct transfer of resources to Ireland from the FEOGA. These arise from export subsidies on sales to non-EC countries, other market support operations, net MCA payments and payments under the Guidance Section of FEOGA (for structural improvement and modernisation). Of course, from this amount Ireland's contribution to the cost of the CAP must be subtracted. The second element of CAP transfers to Ireland is what Matthews calls the 'net transfer trade effect' and arises because given the CAP market support Ireland can sell produce in the EC at prices which (usually) exceed those on world markets. To measure this less visible transfer it is necessary to identify the difference between EC and world prices and multiply it by the volume of Ireland's net exports to other Community countries. The sum of these two elements gives the value of CAP transfers to Ireland.

Receipts from EC Agricultural Budget

Ireland's receipts from the Guarantee and Guidance sections of the EC agricultural budget are shown in Table 4.18. In order to allow an easy assessment of their significance the sum of the two items is also expressed as a per cent of GNP. An example of how these receipts compare with Ireland's contribution to the Community agricultural funds can be ascertained from Table 4.19. This shows Ireland's total receipts (the sum of Guarantee and Guidance receipts shown in Table 4.18) and an estimate of Ireland's

Table 4.18
Ireland's Receipts by way of Grants and Subsidies from the EC Agricultural Budget (IR£ million)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	Total 1973-86
FEOGA Guarantee Section	37.1	63.8	102.2	102.0	245.1	365.6	397.9	381.1	304.6	344.3	441.7	644.6	836.6	884.0	5149.2
FEOGA Guidance Section	—	—	0.6	2.6	7.4	9.7	18.5	31.8	41.9	59.6	63.7	49.3	55.8	46.6	387.5
Per cent of GNP	1.4	2.1	2.7	2.3	4.5	5.7	5.4	4.6	3.2	3.2	3.7	4.7	5.8	5.7	

Source: Department of Finance.

Table 4.19
Estimated Irish Receipts from, and Payments to, the FEOGA 1979-86

	1979	1980	1981	1982	1983	1984	1985	1986
Total receipts	416.4	409.2	347.0	403.9	505.4	693.9	894.4	930.6
Estimated Contribution	47.1	66.5	70.3	89.6	127.6	148.8	158.8	161.0
Net FEOGA budget receipts	369.3	342.7	276.7	314.3	377.8	547.1	733.6	796.6

Sources: Department of Agriculture, and Matthews (1988).

contribution to the FEOGA. The difference between these two gives Ireland's net FEOGA budget receipts*.

Transfer Arising from the Trade Effect

To ascertain Ireland's total transfer from the CAP it is necessary to add to these visible transfers the trade gains mentioned above. Matthews has calculated the differences between the prices received by Irish producers and world prices for the years 1979 to 1986 and multiplied these by the volume of trade in each community. There are considerable difficulties in identifying the appropriate price differences (see Matthews 1988). Table 4.20 shows his calculation of these trade gains and of the visible transfers outlined above.

The sum of these two gives the net value of Ireland's total CAP transfers. It can be seen that this has fluctuated considerably, falling from 1979 to 1981 and rising sharply between 1981 and 1985. Expressed as a per cent of GNP these total CAP transfers also varied from year to year. The final row of Table 4.20 shows that total transfers fell sharply in real terms from 1979 to 1982.

The total transfers to Ireland set out in Table 4.20 must not be considered as all net benefit to Irish *farmers*, since a part of them replaced expenditure previously undertaken by the Irish state. Irish state expenditure in relation to agriculture declined sharply in real terms after Irish entry to the EC (see Cox and Kearney, 1983) — though it remains substantial in absolute terms.

An alternative approach to assessing what Ireland gains from the CAP is to compare the CAP, not with national funding of an identical support system,

*Matthews suggests that besides subtracting Irish payments to FEOGA a number of other adjustments should be made in order to accurately calculate the net FEOGA transfer to Ireland. For example, some Guarantee payments to Ireland are reimbursements for services provided in Ireland, such as storage, rather than transfers *per se*. If the resources used in storage have alternative uses then their use for storage does not have a zero opportunity cost. The value of FEOGA transfers should also be adjusted to exclude both MCAs and ACAs, in order to avoid double counting with the value of trade transfers. However, the 'net value of FEOGA budget receipts' reported in Table 4.19 have not been adjusted in these ways.

Table 4.20
Net Resource Transfer Effects of the CAP, 1979-86

	1979	1980	1981	1982	1983	1984	1985	1986
IR£ million								
Net value of FEOGA transfers ¹	289.6	306.4	253.3	290.1	337.9	490.5	636.2	629.7
Trade Transfers	400.6	346.3	250.8	252.0	275.2	420.4	467.1	473.8
Net value of CAP transfers	690.2	652.7	504.1	542.1	613.1	910.9	1103.3	1103.5
Net CAP transfers as % of GNP at factor cost	9.7	8.0	5.2	5.0	5.2	7.0	8.0	7.6
Real value of net CAP transfers								
1980 = 100	125	100	75	59	60	82	95	91

¹The 'net value of FEOGA transfers' in this table differs from the 'net FEOGA budget receipts' shown in Table 4.19 because the figures in this table include the additional adjustments suggested by Matthews (1988), see footnote 1 above.

Source: A. Matthews (1988).

but with a situation of no support for agriculture at all. Matthews has undertaken several exercises of this sort (Matthews, 1988). The essential feature of such an investigation is that Ireland's gains from the existence of the CAP, or losses if all agriculture support were abolished, are considerably smaller than the net transfers outlined above. The reason for this is that abolition of the CAP, or all agricultural support by industrialised countries, would increase world prices — especially of beef and dairy products. When calculating the benefit of CAP, versus no CAP, it is those higher world prices that must be used in assessing the no-CAP scenario (see Matthews, 1988).

Yet another way to measure Ireland's support from the CAP is to compare the support which Ireland receives to that received by other countries. However, we have seen above that calculation of one country's total support (direct transfers plus trade effect) is a complicated exercise. Similar calculations would have to be made for all member states. In this situation it is useful to refer instead to the distribution of direct FEOGA payments to land holders in each member state. In fact the distribution of FEOGA payments is extremely uneven — with holders in the Netherlands consistently receiving support several times the average for the whole Community. Irish holders generally receive support somewhat above the Community average but well below that of farmers in the UK, Denmark and Belgium (see *Strategy for Development*, NESC Report No. 83, pp. 283-284). A somewhat similar picture is observed when support per unit

of utilised agricultural land is considered. This highly uneven distribution of support from the FEOGA is a consequence of support being provided through the pricing mechanism.

(iii) Problems in the Agricultural Sector

As in the manufacturing sector a reversal of fortunes after 1978 brought to light structural and other problems which tend to slip from view when times are good. The incentives created by the CAP had, not surprisingly, altered the structure of Irish agricultural production. In particular, it stimulated milk production — which increased by 60 per cent between 1970 and 1979. However, it has been pointed out that this resulted more from higher yields per cow than increased cow numbers. Cattle numbers did not increase by anything like as much as was expected, whereas, it had been argued in the early seventies that a substantial increase in the cattle herd should and could be achieved.

Agriculture and the Food Processing Industry

Limitations on the quantity of agricultural output which will be absorbed by the CAP, and on the prices that will be paid for it, in combination with a new awareness of the need to develop indigenous manufacturing, brought to light the fact that in Ireland the agricultural sector must be viewed as in part the base for a food processing sector rather than a producer of raw agricultural produce. But attempts to foster a food industry revealed several ways in which the agricultural sector was not adequately positioned to play this role.

One example of this was the use of intervention as an outlet for agricultural produce. Table 4.21 shows the use of intervention as a per cent of total

Table 4.21
Intervention as a per cent of Production

	Beef %	Skimmed Milk Powder %	Butter %
1973	1	12	—
1974	28	0	—
1975	24	42	—
1976	2	35	—
1977	20	16	—
1978	18	17	—
1979	20	6	—
1980	19	—	3
1981	11	5	—
1982	14	52	10
1983	13	48	27
1984	13	9	24
1985	14	0	25

Source: Department of Agriculture.

production of beef, skimmed milk powder and butter from 1973 to 1985. This indicates that in some years a high proportion of output was sold into intervention. Noting that such sales require no marketing Arnold concludes that there “was thus a conflict between the short term interest of the processor and farmer in seeking the highest current price and the longer term interest of investing in products and marketing efforts designed to meet the needs of the market” (Arnold, 1986).

Another weakness of the agricultural sector which inhibited the development of a food processing sector, and which was not overcome in the years since accession, was insecurity and seasonality of supply (see NESC Reports No. 64 and 83). Finally, despite Ireland’s generally good animal health status there remains a serious problem of bovine tuberculosis.

Structural Problems

Undoubtedly the most significant problem in agriculture is the persistence of low and volatile incomes. It is particularly striking that this problem should remain even after a period of very strong growth in overall agricultural incomes. Indeed, the disparities in income in the agricultural sector would seem to have widened since 1973. The problem remains, of course, because of the structural characteristics of Irish agriculture and rural economy. There are several dimensions of this structural problem.

First, it seems to be the case that the increased output of Irish agriculture in the seventies and, indeed subsequently, was provided by a minority, perhaps 25 to 30 per cent, of farms (Boyle, 1982). The remainder, occupying a large proportion of agricultural land, were unable, for a variety of reasons, to respond to the strong incentives offered by the CAP. This dichotomy in the agricultural sector has been investigated and found to coincide closely with the age, educational and marital characteristics of farmers, as well as farm size and regional properties. The persistence of low incomes and the narrow base of the progressive sector reveals the existence of very severe structural and other problems in the Irish rural economy.

Second, it is widely accepted that in Ireland, as in many other countries, the achievement of adequate farm incomes requires the eventual reduction in the numbers employed in the sector. On top of this it can be argued that the minimum viable size of holding for grassland production is increasing over time (Matthews, 1984). This implies the need for even more adjustment. Throughout the seventies, as in earlier decades, there was indeed a steady reduction of the number at work in agriculture. However, the most striking feature is that despite this outflow the number of farms decreased very little. Thus in a period of output growth and price increases there was appreciable growth in income *per head*. But the underlying structure which was being preserved was one which sustained inadequate income levels in a period of

retrenchment (which is precisely what materialised) — quite apart from the constraints it may have placed on the development of an industrial economy based on agricultural raw materials.

Thus it seems that the combination of policies in place since 1973 — both Community and national — for a variety of reasons failed to induce significant change in the size structure of agricultural holdings. This in turn is related to another aspect of the structural problem — the land tenure system in Ireland. The Inter-Departmental Committee on Land Structure Reform identified three characteristics of the Irish land tenure system which are obstacles to improved land use: (i) the predominance of owner-occupancy; (ii) the strong sense of attachment to the family holding; and (iii) the prevalence of short-term (eleven months) leasing. These three features combine to create a very inflexible tenure system and the Committee was “convinced that they constitute the major barriers to the development of the country’s main industry — its agriculture” (Final Report, 1978, p.32). Over the long term there has been a “failure to tackle effectively the problems arising from the structure of land tenure and transfer” (Kennedy, *et al*, 1988) and it is clear from what has been said above that this remained true after Ireland’s accession to the Community.

Conclusion

In conclusion, the overall trends in agriculture since accession bear a certain similarity with those in industry and in the economy in general. That is, a much better experience in the first period of Community membership than in the early and mid-eighties, and some recovery in recent years. But, as in our study of industrial development, it is not necessarily the *contrast* between these two periods which is of most importance but the observation that, viewed over the long run, and viewed in the light of subsequent developments, the performance *in the better period* was not fundamentally as strong as it may seem to have been, and not sufficiently strong to allow the country to achieve its central aspirations.

5. PERFORMANCE RELATIVE TO EXPECTATIONS

We noted at the start of this chapter that the positive development in the economy during the sixties strongly influenced the decision to apply for membership of the EC. These developments plus the experiences in the early seventies created the environment in which concrete expectations about the effects of EC membership were formulated. Indeed, several of these trends were cited in the White Paper *Accession of Ireland to the European Communities* published in January 1972. In this section we briefly compare the performance from 1973 to 1978 with the projections set out in that White Paper.

(i) Expectations at the Time of Accession: Industry, Employment and Unemployment

One striking feature of the White Paper is the stress laid on the creation of *new* and particularly *foreign owned* industry. The reason for this emphasis would seem to lie in the evidence which emerged from the Committee on Industrial Progress and from academic research between 1968 and 1973. The 1972 White Paper said “The reports of the Committee on Industrial Progress (COIP) show that the main tasks which Irish industry has to tackle are essentially the same in kind, though not in degree, as those identified in the early 1960s” (pp. 33-34). The continuing presence of both export oriented firms — mostly IDA sponsored and foreign owned — and non-exporting firms in each industry led McAleese to say in 1971 “The evidence, therefore, points strongly to a *dualistic structure* of Irish industry, this dualism being based not on *inter-industry* difference but on the distinction at an *intra-industry* level between export oriented and home market oriented firms” (McAleese, 1971, p. 30)*

Given the poor response to the industrial policy measures of the mid-sixties the White Paper noted that expansion of output by domestic firms will not be “accompanied by an increase in employment opportunities; indeed the reverse may well be the case” (p. 34). In a best possible scenario — i.e. “if full advantage is taken by all those engaged in industry of the period of transition” — then “there should be no net redundancy in existing industry” (p. 36).

Consequently, the White Paper argued that additional employment depended on *new* industry and judged that the attractiveness of Ireland as an investment location would be enhanced after accession. In this regard the document made one other prediction which is of considerable interest in the light of subsequent research on industry in Ireland. It said “promoters from all countries will be encouraged to establish more integrated projects here than before — projects which do not remain as the single product or process first undertaken but which grow naturally from this initial base into a complex of linked

*The term dualism has subsequently been widely used to describe the industrial structure which has evolved in Ireland. In economic literature the term refers to a society divided between a traditional subsistence sector and a modern, capitalist sector. This is not the sense in which it is used in to describe the Irish industrial structure. It has been used to distinguish between indigenous Irish manufacturing industry, or at least industry which grew up under protection, and grant-aided, mostly foreign owned, manufacturing. However, used in this way the term still had a number of slightly different meanings — and this is important. McAleese, for example, was distinguishing between the two sectors because of their different orientation to exporting. This dualism seemed to call for further efforts to re-equip and re-orient indigenous industry and, in as much as this proved difficult, perhaps even greater emphasis on establishment of new grant-aided industry. It was only subsequently that another, and perhaps more disturbing, aspect of the dual structure became apparent: that the new grant-aided exporting firms had few linkages with the domestic economy, and so the dynamic consequences normally associated with manufacturing output growth were being lost (See NESC No. 56).

manufacturing activity” (p. 37)*. While the increased attractiveness of the country as a base for foreign direct investment was clear, it was not obvious, and was not explained, why these projects should become more integrated.

From these general considerations the White Paper made precise projections for the period from 1970 to 1978 — the transitional period of membership was to end in 1977. It expected that employment in manufacturing industry would be 50,000 more in 1978 than in 1970. This implied an annual average rate of net job creation of about 6,000, compared with about 4,500 over the whole of the 1960s. The annual growth rate in the output of manufacturing industry was estimated to average 8.5 per cent. This compared with a rate of about 6.5 per cent in the 1960s.

The outcome for employment in manufacturing industry was far below the expectations of the 1972 White Paper. Total employment in manufacturing increased by 20,000 between 1970 and 1978. There was indeed an increased flow of foreign direct investment and jobs in new industries. But in indigenous manufacturing “the combined effect of free trade and the upheavals caused by the oil crises was far more devastating than most people had imagined” (Kennedy *et al*, 1988). Total manufacturing output grew at an average annual rate of 5.2 per cent — somewhat below the expected rate of 8.5 per cent.

Total Employment

The White Paper expected an increase in service sector employment of 60,000 and a fall in agricultural employment of roughly the same magnitude over the transition period. When combined with the projected increase of 50,000 in industry this implies that total employment would be 50,000 higher in 1978 than in 1970. It commented that “Expansion of this order would lead to a progressive reduction in unemployment and involuntary emigration”.

We have seen that employment in manufacturing increased by much less than 50,000; employment in agriculture fell by approximately the amount predicted. Yet total employment in the economy increased by 57,000 from 1,053,000 to 1,110,000. But, contrary to what was expected in the White Paper, this, greater than expected, increase in employment did not lead to a decrease in unemployment. Unemployment increased from 65,000 in 1970 to 100,000 in 1978.

*In expressing concern that foreign firms establish more integrated projects here than had been the case, the White Paper was referring to the second aspect of the dualistic industrial structure referred to above. Although published research revealing the limited linkages of most foreign direct investment in Ireland dates from 1973, and after, clearly officials were aware of this phenomenon by the early seventies. It is possible that reports by the OECD and the National Science Council on science and technology published in the late sixties brought this feature of the fast growing export sector to light.

The difference between the expectation and the outturn can be explained as follows. There was greater than expected employment growth in both the service sector and non-manufacturing industry (building and construction). Against this, job losses in manufacturing were much larger and more persistent than expected. Finally, and most significantly, labour force growth was much stronger than was expected due to a number of factors which were not widely appreciated in the early seventies.

The changing patterns of manufacturing output and exports surveyed above confirm the accuracy of one of the major predictions made in the accession White Paper and academic studies of potential EC membership. It was indeed new, mostly foreign owned, firms which propelled the remarkable drive into export markets revealed by the output and export growth rates. Indeed, it may be said that the inflow of foreign direct investment in the 1970s almost certainly exceeded what was expected at the time of accession.

However, a succession of research reports on Irish industry has revealed that one important expectation in the accession White Paper was not realised. Foreign firms establishing in Ireland did not establish significantly more integrated projects than before and consequently the country did not acquire “a complex of linked manufacturing activity”. As a result, seventeen years after that White Paper, seventeen years of “continued success in attracting new industrial investment”, it is still necessary to say, as the White Paper did, that “the industrial sector has not yet reached the point where self-sustaining growth can realistically be expected”.

(ii) Expectations at the Time of Accession: Agriculture

There was considerable discussion among both officials and others of the prospects for Irish agriculture in the Community. Not surprisingly these focussed on the price increases which would be available to both beef and dairy production. In the accession White Paper access to the large EC beef market and progressive narrowing of the price differential were predicted to cause cattle output to rise by 500,000 by 1978. For milk production it was estimated that price increases, access to larger markets and the intervention system would sustain an increase in the national cow herd from 1.8 million in 1971 to around 2.25 million by 1978. It was expected that there would be some movement out of pig production into beef or milk. Combining these detailed expectations the White Paper predicted that real farm incomes would more than double between 1970 and 1978. When an expected decline in the farm work-force of 21 per cent (down by 60,000 from 285,000 to 225,000) was taken into account then it was expected that incomes per head would rise by over 150 per cent.

In discussing the likely effects of membership on the Irish economy McAleese made a more general projection which is clearly of some interest:

In the very long run, the CAP will have to be modified and the European

system of agricultural protection gradually rationalised. Before that time comes, however, Ireland will, it is hoped, have availed of the breathing space afforded by the CAP's protection to build up the cattle herd and to establish a strong selling position in the enlarged Community's market for agricultural produce (McAleese, 1972).

Outturn

These fairly detailed projections were, not surprisingly, subsequently compared with the experience of the Irish agricultural sector in the Community. Sheehy has shown that, after the major crisis in the cattle sector in 1974, some of the main expectations of the accession White Paper were indeed realised. Table 4.22, compiled by Sheehy, provides a useful summary of the agricultural performance relative to expectations.

Product prices increased somewhat more than expected. This is explained by green pound devaluations which were favourable to Irish farmers. The growth of both the volume and price of inputs had been under-estimated. There was a dramatic increase in input use and nobody could have predicted the increases in energy and phosphate prices in 1973-74. As a result of these developments real farm incomes did not in fact double as expected. However, real incomes per head did increase by 112 per cent. But, it is notable that neither cow numbers nor cattle output increased as much as was expected.

Table 4.22
Projected and Actual Percentage Outcomes, 1970-78

	Projected ¹	Actual
Agricultural product prices	+32	+35 ²
Volume of Gross Agricultural Output	+33	+35
Volume of inputs	+40	+49
Price of inputs	+6	+28 ^b
Real income ³	+100	+70
Workforce	-21	-20
Real income per capita	+153	+112
Cow numbers	+30	+22
Milk output	+52	+55
Cattle output	+35	+25
Cereal acreage	0	+3

¹ In the *Accession of Ireland to the European Communities*, Prt. 2064, The Stationery Office (Dublin, 1972). The White Paper did not provide explicit projections in all areas and several of the figures in this column are Sheehy's own estimates of what the White Paper predicted.

² Deflated by the Consumer Price Index.

³ Income from self-employment and other trading incomes.

Source: S. J. Sheehy 'The Common Agricultural Policy and Ireland' in *Ireland and the European Community* edited by P. J. Drudy and D. McAleese. Cambridge University Press, 1984.

In comparing Irish agricultural performance in the EC with expectation at the time of accession there can be little doubt that the most significant fact was the sharp reversal of prosperity in 1979 and the very slow recovery in the following years. Although it was known that rationalisation of the CAP was inevitable (see McAleese's statement cited above) it was not expected that the accompanying circumstances would be so unfavourable. Consequently, the sharp fall in agricultural incomes which occurred in 1979 and 1980 was a profound shock to everybody in the sector. Another important expectation of great but indirect relevance to the agricultural sector was not met. As noted above it was accepted that employment in agriculture would experience a substantial reduction over time. But it was expected that this would occur in a situation in which sufficient non-agricultural employment would be available. This was clearly not the case and this changes the significance which the decline of agricultural employment has in the rural economy.

IRELAND'S RELATIVE PERFORMANCE IN THE EUROPEAN COMMUNITY

We continue our study of Ireland's membership of the EC by comparing economic developments in Ireland with those in other member states and some non-EC countries. Such an approach allows us to distinguish trends which were common to all or some countries from those which were unique to Ireland. This helps in identifying the relative impact of the various forces at work since Ireland joined the Community.

We begin by presenting a picture of Ireland's relative position in the mid- to late 1980s — as revealed by the latest available data. This section effectively constitutes an updating of the NESC's 1981 report, *The Socio-Economic Position of Ireland within the European Economic Community*. In later sections we consider how this position evolved over recent years and identify trends since Ireland joined the Community.

1. THE CURRENT POSITION

(i) Population and Labour Force

Distribution and Growth of Population

The details of population distribution in the EC and population growth for the period 1979 to 1986 are presented in Table 5.1. Ireland has the second smallest population of the twelve EC countries. Its population density is much the lowest — though it is clear that Greece, Spain and Ireland all differ distinctly from the Community average.

Table 5.1 also shows that Ireland had the highest rate of population growth in the period 1979 to 1986. This was also the case in the years 1973 to 1979 (see NESC Report No 58). Again, it is clear that the demographic profile of Ireland, Greece, Spain and Portugal differs from that of other member states. This accords with the expectation that countries that have less developed economies tend to have higher natural population growth.

Components of Population Growth

Population increases or decreases result from:—

- (a) the natural movement which is the net result of births less deaths and
- (b) migration inflows and outflows.

The latest year for which these data are available at national level for the twelve EC countries is 1986.

Table 5.1
Population, Density of Population, 1985
Population Growth 1979-1986

	Population 1986	Population Density per Square Kilometre 1985	Population Growth 1976-1986
Ireland	3,541	50	+ 5.1%
Germany	61,080	245	- 0.4%
France	55,393	101	+ 3.3%
Italy	57,221	190	+ 1.6%
Netherlands	14,572	352	+ 3.8%
Belgium	9,851	323	+ 0.1%
Luxembourg	371	141	+ 1.6%
United Kingdom	56,763	232	+ 0.9%
Denmark	5,121	119	+ 0.1%
Greece	9,966	75	+ 4.3%
Spain	38,668	76	+ 4.2%
Portugal	10,230	111	+ 3.5%
EUR 12	322,776	143	+ 1.9%

Sources: Eurostat Review 1976-1985, European Commission.

Table 5.2 summarises the components of the population changes for the two years 1973 and 1986. This shows that Ireland had the highest birth rate in the Community in 1986 (data for Spain missing). Death rates are broadly similar throughout the EC. Consequently, Ireland had the highest rate of natural increase in the EC in that year. Thus far, the pattern in 1986 is very similar to the pattern in 1973 — when Ireland also had much the highest birth rate and rate of natural increase. The very large gap between the Irish birth rate in 1973 and the average for the EC-12 continued for much of the period since then, and this explains why Ireland had the highest rate of population growth in the Community (see Table 5.1) and is an important fact to be kept in mind when considering developments in income per head and unemployment.

However, the similarity of the *ranking* of countries (in birth rates and natural increase) in the years 1973 and 1986 should not be allowed to distract from a most remarkable transformation in demographic behaviour. There has been a dramatic fall in the birth rate in Italy, Portugal, Greece and, to a lesser extent, Ireland over the period 1973 to 1986, and this has led to a remarkable reduction in the rates of natural population increase. However, the net effect of these changes has been to make Ireland even *more* exceptional in 1986 than in 1973. In 1973 the rate of natural increase in Ireland was 2.7 times the (simple) average for the Community as a whole; in 1986 the Irish rate was 6.3 times the Community average.

Table 5.2
Components of Population Change per 1,000 of Population

	Births		Deaths		Natural Change		Migration		Net Change	
	1973	1986	1973	1986	1973	1986	1973	1986	1973	1986
Ireland	22.4	17.2	11.0	9.6	11.3	7.6	4.9	-7.1	16.2	0.6
Germany	10.3	10.2	11.8	11.5	-1.5	-1.2	6.2	3.2	4.7	2.0
France	16.4	14.1	10.7	9.9	5.7	4.2	2.1	-0.1	7.8	4.1
Italy	16.2	9.8	9.9	9.5	6.3	0.3	0.2	1.3	6.5	1.6
Netherlands	14.5	12.7	8.3	8.6	6.3	4.1	1.3	1.7	7.7	5.8
Belgium	13.2	11.9	12.1	11.4	1.1	0.5	1.7	-2.0	3.0	-1.5
Luxembourg	10.8	11.7	12.0	10.9	-1.1	0.8	14.0	5.4	12.8	6.2
United Kingdom	13.9	13.3	11.9	11.6	2.0	1.7	-0.7	0.7	1.2	2.4
Denmark	14.3	10.7	10.2	11.3	4.2	-0.6	2.4	2.3	5.6	1.8
Greece	15.5	11.3	8.7	9.2	6.7	2.1	4.7	1.1	2.0	3.2
Spain	19.1	—	8.5	—	10.6	—	-1.3	—	9.3	4.2
Portugal	19.2	12.4	10.6	9.4	8.6	3.0	-8.1	1.4	0.4	4.4

Sources: OECD Labour Force Statistics 1966-1986, Paris 1988.

A striking contrast between Ireland's position in 1973 and 1986 emerges when migration is considered. In 1973, Irish population growth was boosted by the inflow of migrants. It is now clear that the in-migration in the 1970s was an exceptional event and the historical pattern of emigration has reasserted itself. Thus, in 1986 emigration undid virtually the whole natural increase, leaving Ireland with one of the lowest rates of net population increase in the Community.

Age Structure and Age Dependency Rates

The dependency rate is an important demographic socio-economic indicator because it indicates the burden supported by the economically active age group. It is defined as the ratio of the population in the dependent age groups (under 15 years and 65 years and over) to those in the active age group, (15-64 years). Details of the dependency rates of the twelve member states for 1986 are presented in Table 5.3. The Irish dependency rate, 0.66, is much the highest in the EC. The Irish rate has fallen from 0.73 in 1977 — as the very large proportion of the population then under 14 years of age moved into 15-64 age group. However, the age dependency ratio of most other member states has fallen also.

Labour Force Dependency Rates

The labour force dependency rate is defined as the ratio of the population which is not part of the labour force to the numbers in the labour force. A ratio of 1.7 would indicate that 1.7 persons on average must be supported by each member of the labour force. The lower the ratio, the lower is the number of persons who are supported by each member of the labour force. Table 5.4 presents details of these rates for the twelve EC countries.

Table 5.3
Population by Age (% of Total) and Age Dependency Rates, 1986

	Under 15 %	15-64 %	65 + %	Age Dependency Rate
Ireland	28.9	60.2	10.8	0.66
Germany ¹	15.1	70.0	14.8	0.43
France	20.9	65.9	13.2	0.52
Italy	16.8	69.6	13.4	0.45
Netherlands	19.0	68.7	12.3	0.45
Belgium	18.5	67.4	14.1	0.48
Luxembourg	16.9	69.8	13.3	0.44
United Kingdom	19.0	65.7	15.3	0.52
Denmark	18.1	66.6	15.3	0.50
Greece ¹	20.9	65.7	13.4	0.52
Spain	22.6	65.2	12.2	0.53
Portugal	22.5	65.2	12.3	0.54
EUR 12	19.1	67.2	13.7	0.49

¹1985 Figures.

Sources: *Eurostat Review 1976-1985*, European Commission.

Table 5.4
Population by Age (% of Total) and Age Dependency Rates, 1986

	Labour Force Dependency Ratio
Ireland	1.71
Germany	1.18
France	1.31
Italy	1.37
Netherlands	1.49
Belgium	1.34
Luxembourg	1.21
United Kingdom	1.04
Denmark	0.82
Greece	1.56
Spain	1.73
Portugal	1.16
EUR 12	1.29

Source: *OECD Labour Force Statistics 1966-1986*, Paris 1988.

Ireland has the second highest labour force dependency rate — after Spain. Again Greece, Spain and Ireland are something of an exception in the Community. Average labour force dependency rates in the EC have fallen since the late seventies (see NESC Report No 58). This rate is an important determinant of income per head. Even if income per worker were equalised in the Community the existence of different labour force dependency rates will result in a lower income per inhabitant in countries with higher labour force dependency ratios.

Table 5.5
International Migration

	Total Migration 1979-1986	Average annual rate per year (per 1000 of population)
Ireland	- 95,000	- 3.4
Germany	662,000	1.3
France ⁽¹⁾	198,000	0.5
Italy	481,000	1.1
Netherlands	628,000	1.5
Belgium	- 4,100	- 0.5
Luxembourg	5,900	2.0
United Kingdom	21,000	0.05
Denmark	33,000	0.7
Greece	146,000	1.9
Spain ²	87,000	0.3
Portugal	- 2,000	0.05

¹1985 data missing.

²Column 1 1979-1985, Column 2 average 1979-1985.

Sources: *OECD Labour Force Statistics 1966-86*, Paris 1988

Migration

Among Community countries net international migration has fallen to very low levels. With the resumption of emigration in the 1980s, Ireland is a striking exception to this, as revealed in Table 5.5. However, given the demographic profile of Greece, Spain and Portugal, relative to that of other member states, and given the high unemployment rates in the periphery, it is likely that significant migration will re-emerge in the medium term.

Unemployment

The level of unemployment is an important indicator of socio-economic position. Table 5.6 gives unemployment as a percentage of the civilian labour force in 1988. Ireland has the second highest unemployment rate in the Community. This ranking is less significant than the very large gap which separates Ireland and Spain from other countries.

Table 5.6
Unemployment Rates 1988¹

Ireland	18.7
Germany	8.1
France	10.7
Italy	15.0
Netherlands	11.3
Belgium	11.5
Luxembourg	1.4
United Kingdom	8.5
Denmark	8.5
Greece	7.4
Spain	20.0
Portugal	6.5
EUR 12	11.3

¹Registered regional unemployed as per cent of civilian labour force.
Sources: *Annual Economic Report, 1988-89*, European Commission.

(ii) Income Levels and Standards of Living

Gross Domestic Product (GDP) per head

The most common measure of national economic welfare is GDP per inhabitant — i.e. the total product of the country divided by the total population. Figure 5.1 shows the Commission's estimate of real GDP per head in each member country in 1988 as a per cent of the Community average, using purchasing power parities. This shows that Ireland's GDP per head is 62.4 per cent of the EC average, while Denmark's is 109 per cent of the average. On this measure, Ireland is the third poorest country, with only Greece and Portugal poorer.

While GDP is the variable that is used in Commission publications it is well known that as a measure of what is available for consumption and investment it is now unsatisfactory in the Irish case. This is so because of the large difference between Gross Domestic Product (GDP) and Gross National Product (GNP) which has arisen due to factor payments to the rest of the world. While the value of GNP for each country is available in their national accounts, comparative tables of real GNP are not. But we can gain some idea of relative levels of real GNP by taking account of differences between GNP and GDP in each member state. The latest year for which these data are readily available is 1986. Thus Column 1 of Table 5.7 shows the Commission estimate of relative GDP per head in 1986, while the second column shows the difference between GNP and GDP in each country in that year — expressed as a percentage of GDP. (It should be noted that for most countries GDP and GNP differ only slightly.) These figures are used to adjust the levels of real GDP to yield a rough international comparison of real GNP. This is shown in Column

FIGURE 5.1

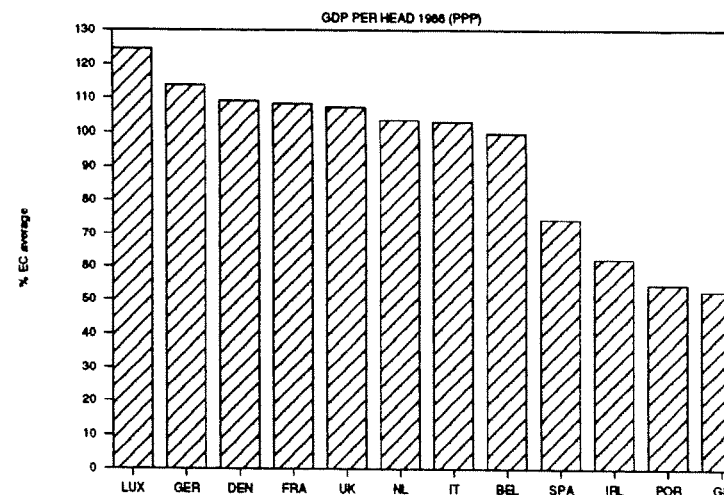


Table 5.7
Real GDP and GNP per capita in 1986, expressed in purchasing power parities

	Real GDP	Difference GDP-GNP 1986 as % of GDP	Real GNP	Average difference GDP-GNP as % of GDP 1977-1986
Ireland	62.6	- 11.0	55.7	- 6.6
Germany	115.1	+ 0.6	115.8	+ 0.4
France	110.3	- 0.3	110.0	0.0
Italy	102.9	- 0.6	102.3	- 0.4
Netherlands	106.6	- 0.0	106.6	- 0.2
Belgium	101.8	- 0.6	101.2	- 0.6
Luxembourg	126.6	+ 40.0	177.2	+ 31.0
United Kingdom	103.8	0.5	104.3	+ 0.3
Denmark	117.6	- 4.1	112.8	- 3.0
Greece	56.2	- 1.2	55.5	+ 1.6
Spain	72.5	- 0.9	71.8	- 1.0
Portugal	53.0	- 3.5	51.1	- 3.9
EUR 2	100.0	+ 1.6	100.0	0.0

Sources: European Commission, *Annual Economic Report 1988-89* and OECD *National Accounts, 1960-86*, Paris 1988.

3. Ireland remains the third poorest country in the Community, but is now seen to be only slightly ahead of Greece and Portugal. To confirm that this adjustment is not based on exceptional data, Column 4 shows the average difference between GDP and GNP for each country in the Community for the ten years from 1977 to 1986. Putting Luxembourg aside, it is clear that Ireland is exceptional — with only Portugal and Denmark having GNP lower than GDP by any appreciable amount.

Gross Domestic Product Per Head of Occupied Population

The income or product *per head of population* is strongly influenced by the labour force dependency ratio and this differs considerably across countries. To gain a measure of the *productivity* of each country we divide the total product by the number of people *in employment*. While calculations of this sort which would be comparable with those in Table 5.6 are not available at present (due to recent revision of purchasing power parities) some indication of relative productivity can be given.

Some calculations of Ireland's overall productivity have been made by Ferris (1989). These are reported in Table 5.8 which shows Ireland's total productivity (GDP per person at work) as a percentage, not of the EC average, but as a percentage of productivity in a number of individual EC countries.

The table reports Ferris's calculations using both official exchange rates and purchasing power standards — each of which yield different results.

Table 5.8
Comparisons of Overall Productivity 1971 and 1976

	Purchasing Power Parities		Official Exchange Rates	
	1971	1986	1971	1986
Britain	79%	105%	74%	89%
Northern Ireland	90%	113%	85%	95%
Belgium/Luxembourg	57%	73%	63%	75%
Denmark	53%	76%		
Netherlands	58%	67%		

Sources: T. Ferris 'Changes in Productivity and Living Standards: 1971-1986', *Irish Banking Review*, Spring 1989.

These figures suggest a considerable narrowing of the gap between Ireland's overall productivity and that of other EC countries — especially Britain and Northern Ireland. However, they also reveal the continuation of a considerable gap between Ireland and some of the high productivity European countries.

Indicators of Living Standards other than Income

We have noted the limitations of using income, as measured by Gross Domestic Product, as an indicator of relative standards of living. Consequently, in Table 5.9 we present some other indicators of standards of living.

Ireland has the third lowest number of cars per 100 inhabitants — after Portugal and Greece. The number of telephone subscribers per 100 inhabitants in Ireland is the second lowest in the EC, and is less than half the EC average. Ireland also has the second lowest number of televisions per 100 inhabitants — though here the gap between Ireland and the EC average is much less. It should be noted, of course, that Ireland has a high proportion of its population under 15 years of age and this influences the number of cars and telephones per head of population

Table 5.9
Indicators of Standards of Living Excluding Income

	Private Cars per 100 inhabitants 1984	Televisions per 100 inhabitants 1983	Telephone subscribers per 100 inhabitants 1983
Ireland	20.8	20.5	23.5
Germany	41.2	33.5	57.2
France	37.8	37.5	54.4
Italy	36.6	24.3	40.5
Netherlands	33.5	31.0	38.0
Belgium	33.5	30.3	41.7
Luxembourg	40.0	25.5	58.7
United Kingdom	30.5	32.8	52.0
Denmark	28.2	36.9	71.9
Greece	11.6	25.7	33.6
Spain	23.0	25.8	35.2
Portugal	15.9	15.1	16.9
EUR 12	32.7	29.4	46.6

Sources: *Eurostat Review 1976-1985*, European Commission.

(iii) Economic Structure

The structure of employment in Ireland is substantially different from that of the countries which constituted the EC up till 1981. Compared with these countries agriculture's share is higher and industry's share lower (see Table 5.10). However, this structure is similar to that of the countries which joined the Community since 1981. The importance of agriculture is sometimes taken as an indicator of stage of development — and on that count Ireland, Spain,

Table 5.10
Employment by Main Sector of Economic Activity, 1986

	Agriculture	Industry	Services
Ireland	15.7	28.7	55.5
Germany	5.3	40.9	53.7
France	7.3	31.3	61.3
Italy	10.9	33.1	56.0
Netherlands	4.9	25.5	69.6
Belgium	2.8	29.1	68.1
Luxembourg	4.0	33.0	63.1
United Kingdom	2.5	30.9	66.6
Denmark	5.9	28.2	65.9
Greece ¹	28.5	28.1	43.4
Spain	16.1	32.0	51.8
Portugal	23.9	33.9	42.2
EUR 12	8.2	33.2	58.6

¹1985 figure *Eurostat Review 1976-1985*.

Source: *OECD Labour Force Statistics, 1966-1986*, Paris 1988.

Greece and Portugal are certainly at a relatively early stage of development. However, it is widely recognised that one cannot infer the stage of development from these figures on their own.*

Ireland has the fourth lowest share of industrial employment in the EC. The countries closest to the Irish figure are Denmark (28.2 per cent), Greece (28.1 per cent) and the UK (30.9 per cent). This reveals that the industrial share of total employment is not as clear cut an indicator of stage of development as the agricultural share. Economic development tends to be characterised by a growing industrial share during the early stages, but at a high level of income per head the industrial share of employment often declines as the tertiary sector becomes more important.

Several EC countries are in just this position. Industry in the Netherlands accounted for almost 40 per cent of employment in 1967. Since then it has fallen to 30 per cent in 1980 and 25.5 per cent in 1986. A similar pattern

*It is necessary to consider the specific circumstances of particular countries. It is true that in the long term development process employment tends to shift from agriculture to industry and services. But from a given stage in the development process the share of industrial employment tends to fall as services become more significant. But overlaid on this pattern is the product specialisation of regions — different forms of agriculture have very different employment requirements. Furthermore, with the increased interdependence of countries it is most unlikely that late developing economies will conform to a pattern of development derived from the experience of the leading industrial nations. The literature on the new international division of labour provides hypotheses about these changes (see Chapter 11 below).

occurred in Belgium, Denmark and the UK. France, Italy and Germany have had different experiences. Both France and Italy were traditionally somewhat less industrialised, but industry's share has not fallen so dramatically. Germany is unique: the share of industry was almost 48 per cent in 1963 and this has fallen only to 41 per cent by 1986 — a figure which is far above the EC average.

Consequently, it is necessary to consider the industrial share in conjunction with the agricultural and service sector shares. Ireland has the fifth lowest tertiary sector share of employment in the EC. Denmark, Belgium and the Netherlands — whose industrial shares are similar to Ireland's — have the highest service sector shares.

(iv) Summary

Table 5.11 summarises the position of Ireland on the main indicators. Indicators 1 to 4 are demographic and Ireland is ranked 1, 1, 1, 1. Indicators 5 to 8 deal with employment and unemployment. A low ranking is desirable on 5, 7 and 8, but Irish rankings were 2, 8 and 2 respectively. Indicators 9 to 12 represent standards of living, so high rankings would be desirable. In fact, Ireland was third last or second last on these four.

Table 5.11
Summary of National Level Comparisons

	Maximum	Minimum	Ireland's Indicator	Ireland's Ranking
1. Population growth % (1979-86)	5.1	-0.4	5.1	1
2. Birth Rate (1986)	17.2	9.8	17.2	1
3. Migration rate (1979-86)	-3.4	0.05	-3.4	1
4. Age dependency (1986)	0.66	0.43	0.66	1
5. Labour force dependency (1986)	1.73	0.82	1.71	2
6. Agricultural share of total employment (1986)	28.5	2.5	15.7	4
7. Service sector share of total employment (1986)	69.6	42.2	55.5	8
8. Unemployment rate	21.5	2.5	18.7	2
9. GDP per head (1986)	127.5	53.2	62.3	10
10. Cars per 100 inhabitants	41.2	11.6	20.8	10
11. Telephones per 100 inhabitants	71.9	16.9	23.5	11
12. T.V.s per 100 inhabitants	37.5	15.1	20.5	11

2. TRENDS IN RELATIVE INCOME AND ECONOMIC GROWTH

The remainder of this chapter sets out a comparison of economic developments in Ireland with trends in the rest of the Community since 1973. One of the most important questions that must be asked is whether economic conditions in the twelve Community countries have converged or diverged.

In discussing convergence, the Commission makes a distinction between nominal and real convergence. Nominal convergence refers to convergence of inflation rates and other nominal magnitudes. Real convergence refers to convergence of living standards and unemployment rates. This distinction can be useful when presenting data on trends in the Community*.

However, a study of Community countries' relative positions and of the trends causing convergence or divergence is still a partial picture of a country's economic performance. It would seem that in some countries, economic performance, in some general sense, is not measured by reference to the contemporary behaviour of other countries, but against a yardstick provided by that country's own past economic condition and against that country's expressed economic goals — such as industrial development, full employment without emigration, or equity in income distribution. The relevance of this observation is reinforced when it is discovered that there has, in fact, been very little international convergence in the European Community; and yet societies would consider that they had experienced profound economic changes. This is not to argue that international comparisons should not continue to be undertaken but merely to suggest that perhaps such comparisons should be used less to *measure* countries' economic performance, as to *identify* features of their experience which might improve understanding of economic processes. At a number of points in the following analysis of trends in the EC specific limitations of the standard measures of convergence — as indicators of *performance* — will be mentioned.

(i) Changes in GDP Per Head of Population

The evolution of relative income levels, as measured by GDP per head as a percentage of the EC average is shown in Table 5.12. To facilitate identification of any changes in relative position, this table ranks member countries in descending order of real income per head in 1989. This table shows, first and foremost, that Ireland's 1989 position, an income per head of just over 63 per cent of the Community average, represents no appreciable convergence since joining the Community in 1973. Indeed, even since 1960, Irish income per head has not increased appreciably as a percentage of the Community average. Other countries have experienced much more dramatic changes in their relative income position. For example, from 1960 to 1975 Spain increased its

*However, the distinction between nominal and real convergence has, on occasion, been used to make some dubious inferences about the relationship between them. See *Third Periodic Report*, p. 57, European Commission.

Table 5.12
Real GDP Per Capita Calculated Using Purchasing Power Parities

	EC 12 = 100						
	1960	1965	1970	1975	1980	1985	1989
Luxembourg	137.0	127.5	123.1	120.1	117.2	126.5	124.9
Germany	117.9	116.1	113.3	109.5	114.0	114.9	113.5
France	101.6	103.4	106.3	110.8	112.0	111.0	108.4
United Kingdom	128.3	119.0	108.2	105.9	100.9	103.5	108.2
Denmark	119.6	122.3	116.5	111.2	109.4	116.5	107.1
Italy	91.3	93.0	100.3	97.6	101.9	102.7	102.7
Netherlands	118.6	115.1	115.8	115.0	111.2	107.2	102.6
Belgium	95.9	96.8	99.0	102.6	104.3	101.9	100.3
Spain	59.1	69.5	73.3	79.9	73.7	72.1	75.6
Ireland	61.9	60.5	61.2	63.0	64.7	64.2	63.1
Portugal	38.4	42.6	48.1	51.2	54.9	52.4	55.5
Greece	38.7	45.5	51.7	57.1	58.4	57.0	51.1
EUR 12	100,0	100,0	100,0	100,0	100,0	100,0	100,0

Source: European Commission services

income from 59.1 per cent of the average to 80 per cent — only to see this fall back to 72 per cent by 1985. The United Kingdom has seen its income per head as a percentage of the European average fall dramatically between 1960 and 1975 and fall slowly since 1975. Denmark too has experienced considerable volatility in its relative position — around a distinct downward trend. Greece had seen a steady rise in its relative position but has lost ground since 1985. Still, despite these more dramatic changes, the rank ordering of countries has changed little.

In studying these figures with an eye to convergence the Commission has identified two phases. Up until around 1973/74 there was an unmistakable process of convergence; since the mid-seventies there has been a reversal. The disparity between income levels of the twelve fell considerably till 1973-74. Much of this was the result of very strong growth in Spain, Portugal and Greece between 1960 and 1970 — though these countries were not members of the Community during that period.

From an Irish point of view, however, it is of interest that the Commission cites Ireland as an exception to this general trend. Specifically, it notes that "Ireland did not participate in the convergence process during the first period (1960-73). However, it managed to speed up its growth rate after the first oil shock and its accession to the community and, in so doing, to start catching up belatedly in a process that lasted until the 1980s before it came to a virtual halt" (*Third Periodic Report*).

For a number of reasons Table 5.12 does not convey a fully accurate picture of Ireland's relative position since 1960. Recall our reservations about using GDP as a measure of Ireland's income, given the large difference between it and GNP in recent years. In addition, the choice of years in Table 5.12 tends to conceal fluctuations and, therefore, conveys the impression that Ireland's relative position has changed very little. Table 5.13 shows Irish GDP per head as a percentage of the EC average in each year since 1975 (measured in both purchasing power parities and current exchange rates). This shows more clearly that measured in this way, Ireland did increase its relative income level during the mid to late seventies, and has indeed lost ground during the 'eighties.* This confirms that in studying Ireland's experience since joining the Community two different phases can be identified.

Table 5.13
GDP Per Head of Population 1976-1989
Per Cent of EC Average

	<i>Purchasing Power Parity</i>	<i>Current Exchange Rates</i>
1976	60.1	50.4
1977	62.9	52.4
1978	64.8	54.7
1979	64.0	55.5
1980	64.7	57.5
1981	66.2	61.5
1982	66.6	66.1
1983	64.9	65.3
1984	65.1	65.9
1985	64.2	66.0
1986	62.6	64.2
1987	62.9	61.9
1988	62.4	61.1
1989 ¹	63.1	61.7

¹Commission's economic forecast, September/October 1988.

Sources: European Commission, *Annual Economic Report, 1988-89*.

(ii) Relative Growth Performance: A Wider View

Background

As a prelude to studying the relative economic growth of the EC twelve since 1973 it may be useful to take note of the background against which Ireland's growth performance in the Community should be seen. It has recently been

*Another interesting feature of these data is that in 1982, for the first time, Ireland's relative position as evaluated at the current exchange rates converged with its income as measured by purchasing power parities. This implies that for the first time Irish nominal exchange rates no longer over-valued the level of prices in the country.

shown that in 1913 Ireland had a level of income per head about 60 per cent of that in the UK (Kennedy, Giblin and McHugh, 1988). However, since the UK had the highest level of income per head in Europe, the Irish income level was only slightly below the average for Western Europe.

In the period from 1920 to 1960 as a whole, Ireland's growth of GNP and GDP per capita was remarkably similar to that of the UK. But the British growth record was poor by European standards and this implies that Ireland's rate of growth was lower than the European average.

Ireland's Long Run Growth in the OECD Context

To confirm that Ireland's performance relative to other EC countries is a phenomenon worthy of investigation it may be useful to make some brief comparisons of Ireland's long run growth performance with various groups of countries. Comparisons of countries' annual growth rates over long periods is made difficult by the extreme variability of growth rates; consequently in what follows we use three-year moving averages in order to smooth out fluctuations. We use the growth rate of GNP for Ireland and the growth rate for GDP for other countries.*

In Figure 5.2 we compare the growth rate of Ireland with that of the whole OECD (both three year moving averages) from 1962 to 1985. The figure shows clearly a marked downward trend in OECD growth. Broadly speaking, Ireland has followed this trend downward. The growth of the whole OECD is strongly influenced by the US and Japan. In order to remove this effect, in Figure 5.3 we compare Irish GNP growth with that of the European economies in OECD. In general, Irish growth was somewhat closer to that of OECD-Europe than of the complete OECD. One exception to this is the recovery of the late seventies, when both OECD and Ireland achieved higher growth than the European economy.

In analysing relative growth performance with a view to identifying the causes of particular developments two distinct types of comparison arise. We seek to compare the evolution of the Irish economy with those economies or economic blocks which are likely to have directly *influenced* the Irish economy. The performance of the UK or the complete European economy will certainly have

*Use of GNP as a measure of *output* performance of the Irish economy is not entirely satisfactory. In an analysis of the growth of welfare, or what was available for consumption and investment, the use of GNP would definitely be warranted. But its use in an analysis of *output* growth implies that the recorded excess of GDP over GNP is in some way illusory. This would, indeed, be the case if the repatriation of profits by multinational corporations was the balance of payments counterpart of transfer pricing. But other parts of the recorded difference between GDP and GNP, such as interest on foreign debt, genuinely belong in the measure of national product and, to this extent, focussing on the growth of GNP could underestimate the growth of the economy. Data on the growth of GNP for OECD countries over long periods are not readily available. However, as noted in Chapter 5, the difference between GDP and GNP is very small for most countries.

Figure 5.2
Growth Rate of Gross Domestic Product
 (three year moving average)

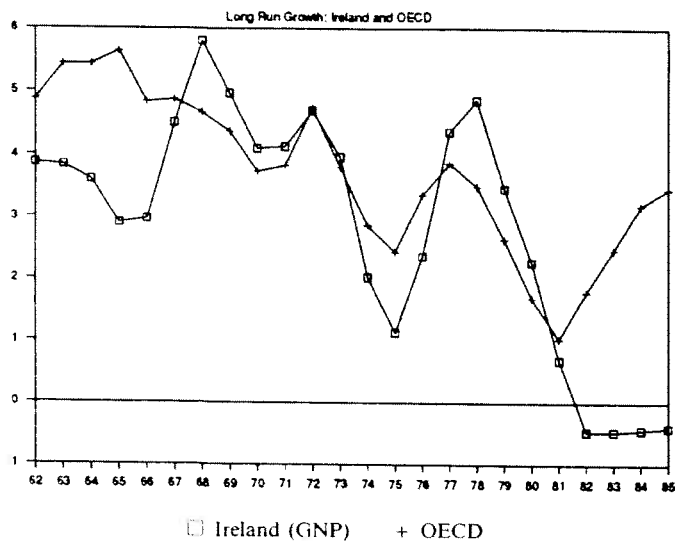
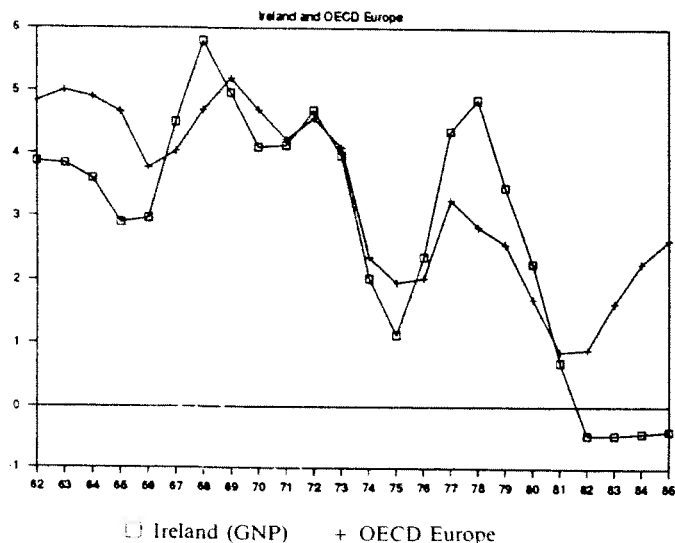


Figure 5.3
Growth Rate of Gross Domestic Product
 (three year moving average)



strongly conditioned Irish economic development. But we also make comparisons with countries which are only weakly *connected to* the Irish economy, but which are *similar* to it; in doing this we are essentially seeking to identify third forces which are likely to have influenced *both* Ireland and other countries in the *same* way because of their similarity.

Two dimensions of similarity with Ireland suggest themselves. First, there are a number of European countries which are small, open and have a mixed economy; these are Austria, Belgium, Denmark, Finland, the Netherlands, Norway, Sweden, and Switzerland. Second, there are those which are on the periphery of Europe and have several other features in common with Ireland; these are Greece, Spain, Portugal, and Turkey. Figure 5.4 separates out these two groups from OECD-Europe and shows the average rate of growth for each. Small European Economies (SEE) Group 1 is the three year moving average of the growth of the first group; SEE-Group 2 is that of the four peripheral less developed economies. The differences between the long run growth of these two groups of small European economies is striking. Until the recession of the late seventies. Greece, Spain, Portugal and Turkey grew much faster than the first group of small economies. Figure 5.5 adds Ireland to this comparison. It is apparent that the long run growth of the Irish economy is much closer to that of the slower-growing richer Group-1 countries. The only exception to this was the boom of the late seventies when Ireland grew faster than even Greece, Spain, Portugal and Turkey. It should be said that the very rapid growth achieved by those countries from 1962 to 1973 was from a very low base and consequently caution should be exercised in comparing their income growth rate with those of much richer countries.

It is clear that viewed over the long run, Ireland's growth rates were closer to that of the first group of small European economies than to that of the second group. Consequently, the first group of small European economies is compared with Ireland in Figure 5.6. It can be seen that the pattern of growth in Ireland became closer to that of these countries in the mid to late sixties and remained very similar for roughly a decade, until around 1976. It is clear also that the late seventies and eighties constitute substantial departures from this path.

Given these patterns we could begin our attempt to explain developments since accession with the hypothesis that Ireland would grow at the same rate as the other small European economies of Group 1 — though we would expect the similarity to be greater as integration into the European economy proceeded. Figure 5.7 shows the gap between the Irish growth rate and that of SEE-Group 1. In a sense, it is this gap which has to be explained. A look at the gaps between Ireland's growth and that of SEE-Group 1 confirms that a more detailed comparison of Ireland with other EC countries has considerable relevance. That comparison will show that Ireland's experience since 1973 consisted of two very different phases.

Figure 5.4
Growth Rate of Gross Domestic Product
(three year moving average)

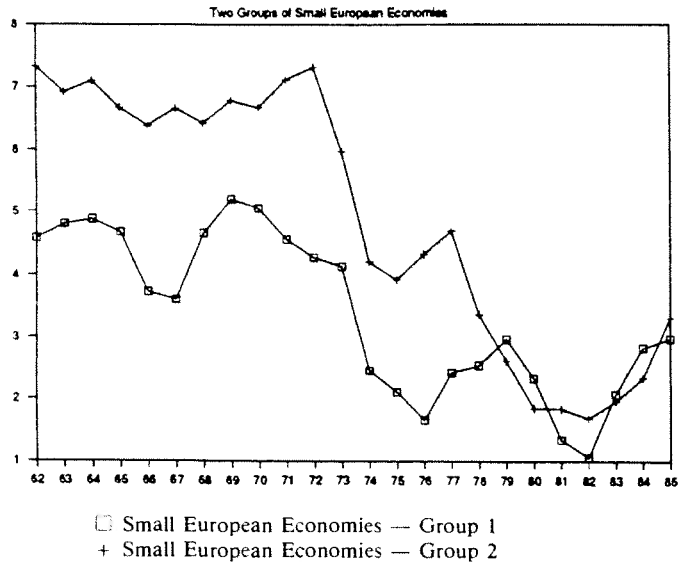


Figure 5.5
Growth Rate of Gross Domestic Product
(three year moving average)

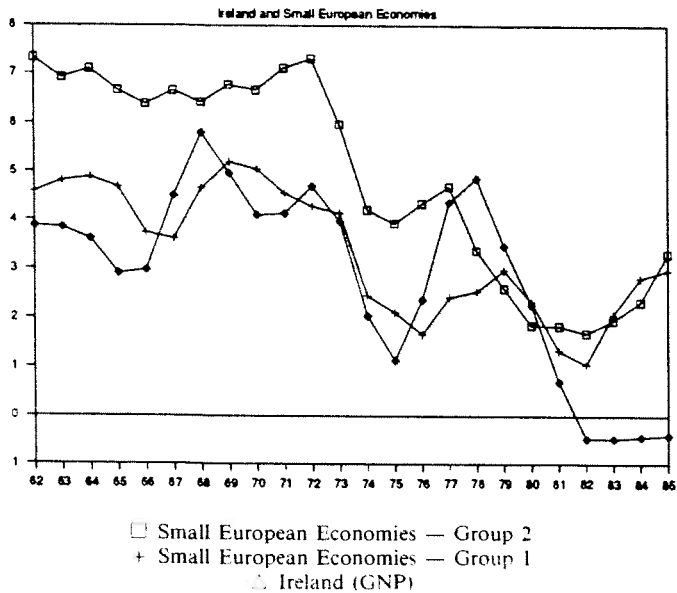


Figure 5.6
Growth Rate of Gross Domestic Product
(three year moving average)

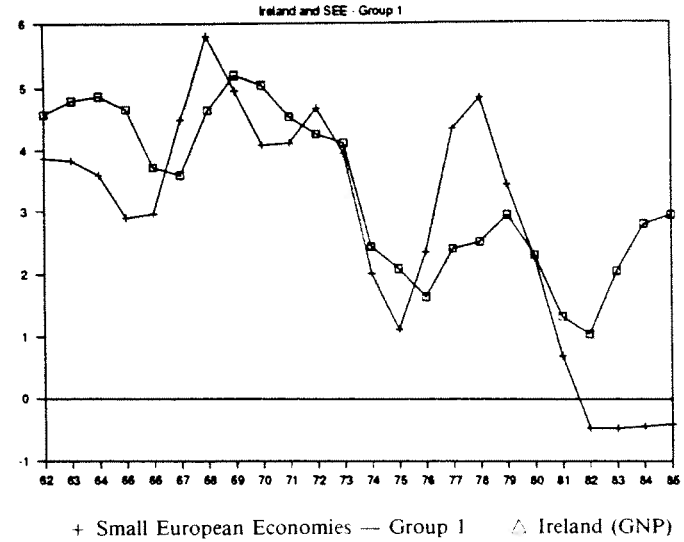
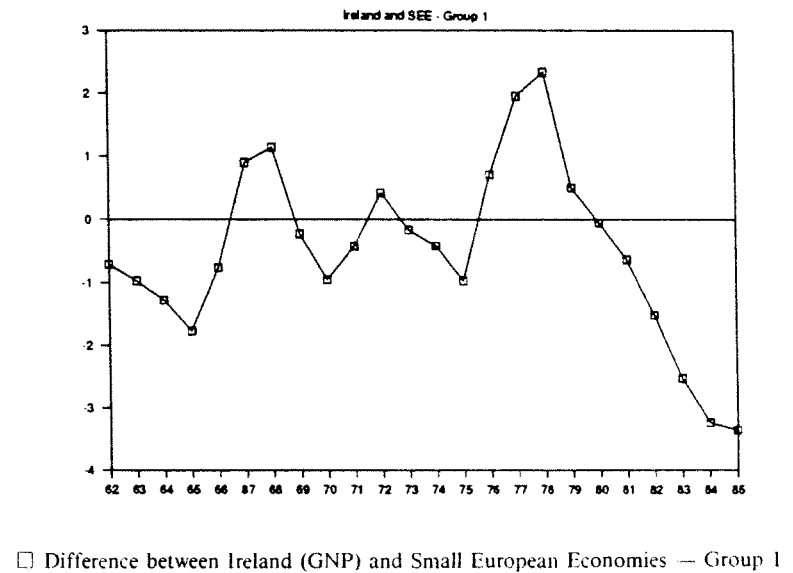


Figure 5.7
Growth Rate of Gross Domestic Product
(three year moving average)



The UK Factor

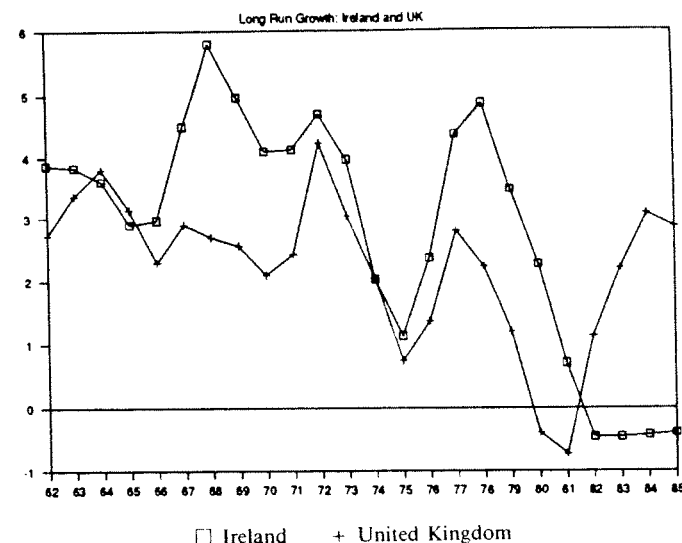
As a prelude to our discussion in Chapter 7 of the roles of various forces (integration, domestic policies, EMS, etc) in determining Ireland's performance relative to that of other European economies we may consider one important external factor — the performance of the UK economy. Figure 5.8 shows the growth of GNP in Ireland and GDP in the UK over the long run. The most striking feature of this comparison is that the (three year moving average) rate of growth in Ireland never went below that in the UK between 1966 and 1981. It is clear also, that despite the much lower average rate of growth in the UK the two economies generally moved in tandem. The only exceptions to this would seem to be the late sixties, a very brief period after 1977, and the years after 1982. Figure 5.9 confirms that the rate of growth in the UK was generally below that of the first group of small European economies. In particular, the downturns of 1965-67, 1974-75, and 1980-81 were much more marked in Britain than among this group. Furthermore, Britain occasionally experienced downturns in growth against the trend of other countries; for example, around 1970 and 1978-80. (To some extent, this may arise from the timing of the economic cycle — in each of the recessions shown in Figure 5.9, Britain's growth rate fell earlier and recovered earlier than that of the small European economies.)

(iii) Economic Growth and Performance in the Community

Economic Growth 1973 to 1986

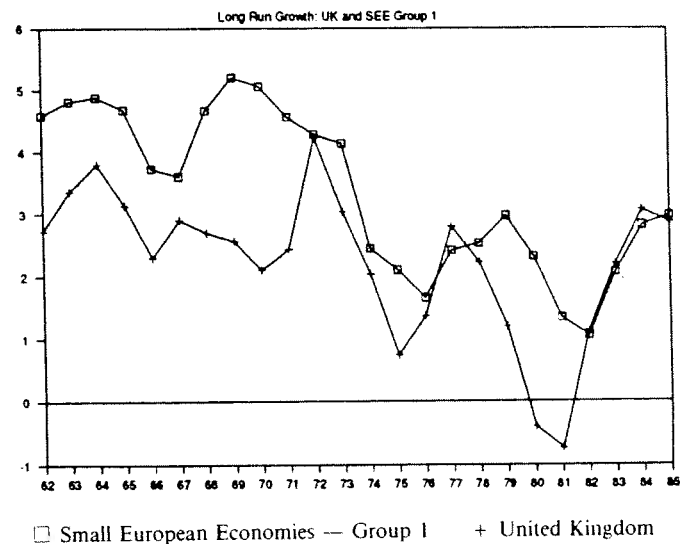
We begin our detailed study of Ireland's experience in the Community by surveying relative growth rates over the whole period since 1973. Column 1 of Table 5.14 shows the average annual growth rate of GDP in each member state from 1973 to 1986. Ireland's average growth rate was the highest in the EC. Although the absolute differences in these growth rates are small, it should be noted that, since they are average *annual* rates over a number of years, small differences in rates will generate large differences in levels. Two important qualifications must be applied to these figures. First, when we consider growth of GDP *per head* (Column 2) the Irish rate (1.9 per cent), though still high, is much nearer the EC average. Second, we know that GDP is a poor measure of income in the Irish case and consequently its increase is a poor measure of growth performance. One way around this is to consider the growth of the things upon which income is spent: personal consumption, capital formation, and government services. Columns 3 and 4 show the growth in volume of private final consumption expenditure and consumption expenditure per head in each country over the period 1973 to 1986. Ireland had the lowest growth of both these variables. This slow growth of consumption tends to confirm that the high GDP growth rate is deceptive. However, this is not the only consideration. Slow consumption growth was counterbalanced to some extent by the relatively high growth rate of investment and government final consumption expenditure. Overall, the figures in Table 5.14 indicate that Ireland's growth performance since 1973 was poor by comparison with other member states. A

Figure 5.8
Growth Rate of Gross Domestic Product
(three year moving average)



□ Ireland + United Kingdom

Figure 5.9
Growth Rate of Gross Domestic Product
(three year moving average)



□ Small European Economies — Group 1 + United Kingdom

number of factors strongly suggest that the period 1973 to 1986 was not homogeneous and as a result we now consider economic growth in the periods 1973-80 and 1981-86.

Economic Growth 1973 to 1980

Table 5.15 presents the same variables as Table 5.14 but for the period 1973 to 1980. This shows that Ireland had the highest rate of growth of GDP and GNP per head in the EC. In this period, the gap between GDP and GNP was much less than in the 'eighties, so this growth performance is genuinely impressive. This is confirmed by the very high relative rates of growth of personal consumption, capital formation and government consumption. The only qualifying factor apparent in these figures is the effect of population growth in transforming a 3.1 per cent growth of total personal consumption into a 1.7 per cent growth of consumption per head.

Three features of Ireland's economic performance during this period are noteworthy — only two of them directly evident in Table 5.15. First, the very high growth rates of investment in the years 1973-80, though it coincided with growth of income during these years, yielded little if any growth of income in subsequent years. This raises questions about the investments undertaken and

Table 5.14
Growth of GDP, Consumption, Investment and Government Consumption
1973-1986

Average Annual Percentage Change						
	GDP volume	GDP per head volume	Private Final Consumption volume	Private Final Consumption per head volume	Gross Fixed Capital Formation volume	Government Final Consumption Expenditure volume
Ireland	3.0	1.9	1.4	0.3	0.9	3.5
Germany	1.9	2.0	2.1	2.2	0.2	2.2
France	2.3	1.8	2.8	2.3	0.2	3.1
Italy	2.3	2.0	2.3	2.0	0.4	2.6
Netherlands	1.8	1.2	2.1	1.4	0.2	2.1
Belgium	1.8	1.7	1.9	1.8	-0.1	2.0
Luxembourg	2.1	1.7	2.5	2.2	-0.9	2.3
United Kingdom	1.4	1.4	1.8	1.7	0.5	1.4
Denmark	2.0	1.9	1.7	1.5	0.2	2.7
Greece	2.4	1.6	2.6	1.8	-1.9	4.8
Spain	2.1	1.3	1.8	1.0	-0.2	4.6
Portugal	2.5	1.3	1.7	0.5	-0.6	5.7
EUR 12	2.0	1.7	2.2	1.8	0.2	2.5

Source: *OECD National Accounts 1960-86*, Paris 1988.

Table 5.15
Growth of GDP, Consumption, Investment and Government Consumption
1973-1980

Average Annual Percentage Change						
	GDP volume	GDP per head volume	Private Final Consumption volume	Private Final Consumption per head volume	Gross Fixed Capital Formation volume	Government Final Consumption Expenditure volume
Ireland	4.4	2.9	3.1	1.7	3.9	5.5
Germany	2.2	2.3	2.9	3.0	0.8	2.9
France	2.8	2.3	3.3	2.8	1.2	3.4
Italy	2.8	2.4	2.6	2.2	0.9	2.4
Netherlands	2.4	1.7	3.4	2.7	-0.2	3.0
Belgium	2.5	2.4	2.8	2.6	1.9	3.4
Luxembourg	1.4	0.8	3.4	2.9	-0.3	2.8
United Kingdom	0.9	0.9	1.0	1.0	-0.6	1.9
Denmark	1.6	1.3	1.1	0.8	-3.1	4.1
Greece	3.4	2.3	3.4	2.2	-1.1	6.4
Spain	2.4	1.3	2.6	1.6	-0.8	5.3
Portugal	3.3	1.8	2.0	0.5	0.8	8.7
EUR 12	2.3	1.9	2.5	2.1	0.4	3.0

Source: *OECD National Accounts 1960-86*, Paris 1988.

hence about the developmental policies pursued in these years. Second, the rapid growth of GDP, consumption and investment was achieved only at the cost of heavy government borrowing, enormously increased public debt, and very large balance of payments deficits (these will be examined below).

Third, while Ireland's growth rates, as reported in Table 5.15, were high in comparison with the EC average during this period, they were in very stark contrast indeed with those of the UK. The relative performance of Ireland and the UK is an important consideration in an attempt to identify the forces which influenced the Irish economy.

Economic Growth 1981-1986

Having achieved sustained growth from 1960-73, the European economy slowed after 1973, but slowed even further in the 1980s. Table 5.16 summarises the growth performance for the years 1981-86. This shows that Ireland had the lowest rate of growth of GDP, GDP per head, private consumption, private consumption per head, and capital investment. The contraction of consumption reflects the large difference between GDP and GNP in these years. The negative growth in fixed capital formation is striking in its

Table 5.16
Growth of GDP, Consumption, Investment and Government Consumption
1981-1986

	Average Annual Percentage Change					
	GDP volume	GDP per head volume	Private Final Consumption volume	Private Final Consumption per head volume	Gross Fixed Capital Formation volume	Government Final Consumption Expenditure volume
Ireland	1.1	0.5	-1.0	-1.6	-4.6	1.3
Germany	1.7	1.9	1.6	1.8	-0.6	1.3
France	1.7	1.2	2.2	1.8	-0.7	2.6
Italy	1.9	1.7	2.0	1.8	0.3	2.7
Netherlands	1.6	1.1	1.1	0.7	3.1	0.9
Belgium	1.5	1.5	1.2	1.2	0.7	0.3
Luxembourg	3.5	3.4	1.5	1.4	-0.5	1.6
United Kingdom	2.6	2.5	3.3	3.1	4.4	0.9
Denmark	3.3	3.3	3.2	3.3	9.5	0.7
Greece	1.6	1.1	2.0	1.5	-1.8	2.2
Spain	2.1	1.6	1.2	0.7	1.4	4.1
Portugal	1.6	0.8	1.2	0.4	-3.7	2.1
EUR 12	1.7	1.7	2.0	1.8	0.9	1.8

Source: *OECD National Accounts 1960-86*, Paris 1988.

magnitude and is an altogether remarkable contrast with the 3.9 per cent annual growth in the years 1973 to 1980.

The performance of a number of countries should be noted. First, the traditionally high growth countries, Spain, Greece and Portugal, all slowed down to, or even dropped below, the new low EC average. Despite the slowdown in the overall growth a number of countries fared better in this period than in the years 1973-80. This applies to the UK and Denmark. Both grew much slower than the Community average during 1973-80 but much faster than average during 1980-86. This contrasts with Ireland and Greece where the reverse occurred.

3. EMPLOYMENT AND UNEMPLOYMENT

(i) Total Employment

How has the growth performance outlined above affected employment in Community countries? Table 5.17 shows the changes in total civilian employment in each member country from 1973 to 1980, from 1980 to 1986, and in the whole period since 1973. When measured against other countries Ireland's employment performance appears somewhat better than its growth

Table 5.17
Changes in Total Employment

	Percentage Change	Percentage Change	Percentage Change
	1973-80	1980-86	1973-86
Ireland	+7.9	-6.4	+1.5
Germany	-2.3	-2.1	-4.4
France	+2.3	-1.7	+0.6
Italy	+6.9	+1.5	+8.4
Netherlands	+6.5	+3.3	+9.8
Belgium	+0.1	-2.6	-2.5
Luxembourg	+4.0	+4.4	+8.4
United Kingdom	+1.2	-3.1	-1.9
Denmark	+3.1	+6.9	+10.0
Greece	+5.2	+7.3	+12.5
Spain	-8.8	-5.9	-14.7
Portugal	+19.9	+2.6	+22.5
EUR 12	+1.3	-1.2	+0.1

Source: *OECD Labour Force Statistics 1966-86*, Paris 1988.

performance. Again, Ireland's experience was distinctly different in the two sub-periods. It also differed from that of other countries — performing relatively very well from 1973 to 1980, and relatively poorly from 1980 to 1986.

It should be noted that these figures do not reveal a uniform peripheral experience. Both Greece and Portugal increased total employment considerably, while Spain suffered severe loss, and Ireland ended the period back where it began.

(ii) Agricultural Employment

It is widely agreed that the achievement of satisfactory incomes in agriculture requires the ultimate reduction in numbers engaged. Table 5.18 shows the changes in agricultural employment since 1973. This shows that the reduction in agricultural employment in Ireland was about average for the Community. However, it is arguable that given the higher proportion of agricultural employment in Ireland, and given the severity of the low income problem, a greater than average adjustment was necessary in the Irish case.

(iii) Employment in Industry

Table 5.19 presents the changes in employment in industry in the broad sense i.e. mining and quarrying, manufacturing, electricity, gas, water and construction (ISIC major divisions 2, 3, 4 and 5). Once again, Ireland's relative employment performance appears significantly better than its relative

Table 5.18
Employment in Agriculture

	Percentage Change 1973-80	Percentage Change 1980-86	Percentage Change 1973-86
Ireland	- 22.0	- 19.6	- 41.6
Germany	- 33.9	- 6.5	- 40.4
France	- 26.5	- 17.2	- 43.7
Italy	- 20.1	- 22.7	- 42.8
Netherlands	- 10.6	+ 1.6	- 9.0
Belgium	- 28.6	- 8.0	- 36.6
Luxembourg	- 40.0	- 23.5	- 63.5
United Kingdom	- 12.5	- 7.8	- 20.3
Denmark	- 29.7	- 12.0	- 41.7
Greece	- 15.6	+ 1.0	- 14.6
Spain	- 39.1	- 21.0	- 60.1
Portugal	n.a.	n.a.	n.a.
EUR 12	- 22.2	- 15.5	- 37.7

Source: *OECD Labour Force Statistics, 1966-86*, Paris 1988.

Table 5.19
Employment in Industry

	1973-80	1980-86	1973-86
Ireland	+ 9.7	- 17.3	- 7.6
Germany	- 10.4	- 9.0	- 19.4
France	- 7.5	- 14.3	- 21.8
Italy	+ 3.2	- 11.4	- 8.2
Netherlands	- 9.2	- 16.1	- 25.3
Belgium	- 18.4	- 17.1	- 35.5
Luxembourg	- 11.5	- 9.7	- 21.2
United Kingdom	- 11.1	- 20.5	- 31.6
Denmark	- 7.6	- 0.9	- 8.5
Greece	+ 13.2	- 0.3	+ 12.9
Spain	- 11.4	- 16.6	- 28.0
Portugal	n.a.	n.a.	n.a.
EUR 12	- 6.4	- 13.3	- 19.77

Source: *OECD Labour Force Statistics, 1966-86*, Paris 1988.

economic performance — whether measured by growth in income or consumption. Ireland increased employment by almost 10 per cent between 1973 and 1980 — in a period when the Community as a whole lost 6.4 per cent of its industrial employment. From 1980 to 1986 Ireland lost somewhat more industrial employment than the Community average. But for the period since accession as a whole Ireland did significantly better than the Community average.

Three factors should be noted in interpreting these figures. First, the large contraction of industrial employment in Belgium, the Netherlands, France, the UK and even Germany reveals the effect on the traditional centres of industrial production of the two major recessions, technical change and the industrialisation of several Asian countries. Being much less industrialised, Ireland had much less to lose in the sectors most affected by these developments. Second, some of the contraction in industrial employment represents the contracting out of functions — such as accounting, design, engineering and marketing — traditionally undertaken within industrial firms. More industrialised countries are bound to exhibit a greater adjustment from industrial to service sector employment. Third, the 7.6 per cent contraction of industrial employment in Ireland between 1973 and 1986 compares unfavourably with the almost 13 per cent increase achieved in Greece during the same period. The comparison with Greece may be more relevant and, therefore, more telling than that with the advanced industrial economies.

(iv) Employment in Services

Trends in industrial employment must be considered in conjunction with trends in service sector employment. Table 5.20 shows that all EC countries increased employment in services — defined in the widest sense to include distribution, catering, transport, finance, business services, and community, social and personal services (ISIC major divisions 6, 7, 8 and 9). Ireland was about average for the period since accession — again differing sharply between the two sub-periods.

(v) Unemployment

We have seen in Table 5.17 that total employment in Ireland was roughly the same in 1986 as in 1973 and that this was marginally better than EC average. But to assess this as an economic performance we have to consider the task which the economic system in Ireland was faced with. One way of doing this is to consider not only employment but unemployment.

Unemployment

Examination of the current position in the Community showed that Ireland has the second highest unemployment rate. To see how this situation has emerged Table 5.21 provides a breakdown of the change in national

Table 5.20
Employment in Services

	Percentage Change 1973-80	Percentage Change 1980-86	Percentage Change 1973-86
Ireland	+ 16.8	+ 5.7	+ 22.5
Germany	+ 8.1	+ 4.5	+ 12.6
France	+ 13.0	+ 8.9	+ 21.9
Italy	+ 16.9	+ 18.9	+ 35.8
Netherlands	+ 14.9	+ 12.9	+ 27.8
Belgium	+ 11.6	+ 5.5	+ 17.1
Luxembourg	+ 19.2	+ 16.5	+ 35.7
United Kingdom	+ 9.5	+ 8.0	+ 17.5
Denmark	+ 12.0	+ 12.9	+ 24.9
Greece	+ 14.3	+ 18.0	+ 32.3
Spain	+ 4.4	+ 9.2	+ 13.6
Portugal	n.a.	n.a.	n.a.
EUR 12	+ 11.2	+ 10.0	+ 21.2

Source: *OECD Labour Force Statistics 1966-86*, Paris 1988.

unemployment rates from 1973 to 1985. It shows the increase in the unemployment rate in the two seven year periods 1973-79 and 1979-85. The 1973 figures provide an important benchmark, since different countries entered the recessionary periods of the 1970s and 1980s with very different unemployment levels and this component of unemployment must be kept in mind when considering the recent figures.* In 1973, Ireland had the highest rate of unemployment at 5.5 per cent — the only rate remotely near the Irish being that of Italy at 4.9 per cent.

In the volatile period from 1973-79, Ireland's unemployment rate increased by 1.9 per cent of the labour force — considerably less than the average of the European nine or the European eleven (see note 2 to the table). The increases in unemployment in this period do not yield any clear pattern. Italy, a high unemployment country, performed relatively well, while Belgium, France and Denmark experienced very large increases in unemployment as a percentage of the labour force, and enormous increases in unemployment relative to the rates prevailing in 1973. The turnaround in Spain's economic fortunes in the mid-1970s was quite dramatic.

Looking at the second period, 1979-85, which also turned out to be deeply

*Indeed, even by 1973 unemployment rates in most of Europe had increased considerably from the very low levels of the mid-1960s. Ideally, we might use the figures for 1964 as an indication of each country's pre-recessionary rate.

Table 5.21
Changes¹ in Registered Unemployment Rates by Member State: 1973-1985

	1973	1973-79	1979-85	1973-85
Ireland	5.5	+ 1.9	+ 10.3	+ 12.2
Germany	1.1	+ 2.2	+ 5.3	+ 7.5
France	1.8	+ 4.2	+ 4.3	+ 8.5
Italy	4.9	+ 1.8	+ 5.3	+ 7.1
Netherlands	3.1	+ 2.4	+ 7.9	+ 10.8
Belgium	2.8	+ 5.6	+ 5.1	+ 10.7
Luxembourg	0.0	+ 0.7	+ 0.9	+ 1.5
United Kingdom	2.2	+ 2.5	+ 7.6	+ 10.1
Denmark	0.8	+ 5.0	+ 2.9	+ 7.9
EUR 9 ²		+ 2.8	+ 5.7	+ 8.5
Spain	2.6	+ 6.0	+ 11.9	+ 18.8
Portugal	—	+ 6.2 ³	+ 0.5	+ 6.7
EUR 11 ²		+ 3.0 ³	+ 6.2	+ 9.2

Notes:

¹Expressed as differences between unemployment rates at the beginning and at the end of the period considered.

²Greece is excluded from the analysis because the registered unemployment rate is not suitable for measuring changes in its labour market position.

³1974-79.

Changes in the methods of calculating registered unemployment have been introduced in many member states over the period since 1979. These tend to reduce the reliability of inter-country comparisons of the trend in unemployment rates.

Sources: *Third Periodic Report*, 1988 and European Commission, 1988, *Annual Economic Report 1988-89*.

recessionary, a number of features are apparent. First, the increases in unemployment were much larger in this second recessionary period. Second, the increases in unemployment were much more uniform across countries. The exceptions to this were Ireland and Spain — which had twice the average increase. The only countries where unemployment increased less in this period than in the period 1973-79 were Denmark and Portugal.* Third, the effect of the increases in the two sub-periods was to increase the absolute disparity between unemployment rates in different countries. This confirms the trend identified when considering the divergence of income levels: up to the mid-1970s there was a degree of real convergence between European countries, since then there has been a divergence.

Ireland's better than average performance between 1973 and 1979 was more than undone by its worse than average performance in the period 1979-85. In

*There was a large migration to Portugal from its former African colonies in the period 1973-79.

studying these figures it should be borne in mind that the unemployment rate is determined by employment creation and job loss, demographic factors, migration, participation rates, and the definition of unemployment. The total increase in unemployment between 1973 and 1985, which for Ireland was 12.2 per cent of the workforce — the second highest of the Community — does not reflect job losses alone. However, a more detailed analysis of the components of unemployment growth in various countries is beyond the scope of this study (see the European Commission's *Annual Economic Report 1988-89*).

4. INDUSTRIAL PRODUCTION

In Chapter 4 we studied the evolution of manufacturing industry in Ireland since 1973 in considerable detail. When we compare these trends with those in other member countries we find that the three groups identified in Chapter 4 tend to emerge again. Consequently, we will categorise manufacturing industries into the same three groups in making a short report of trends in manufacturing production in the Community.

(i) Sectors with Export Orientation and High Foreign-Ownership in Ireland
Production of chemicals (NACE 25 and 26) increased in the Community in both the seventies and the eighties — but in both periods the growth of Irish output was significantly faster than in all other EC countries. The same is true of office and data processing equipment (NACE 33). Output of electrical engineering (NACE 34) grew more rapidly than in all other EC countries except Portugal.

(ii) Sectors with Some Degree of Natural Protection in Ireland
Large Scale

Output of food, drink and tobacco (NACE 41 and 42) grew slightly more rapidly in Ireland than in the EC at large between 1973 and 1980. In the eighties, Irish output, especially of food, grew more than the EC average but less than that of some member countries. In non-metallic minerals (NACE 24) Irish production grew faster than the EC average from 1973 to 1980, and contracted substantially less than the average in the eighties. Finally, in the paper industry (NACE 471 and 472) Irish output increased less than in the Community average up to 1980. Since then, output has increased in most member countries except Ireland and the UK — with Ireland recording much the larger decline. This output growth was slow after 1980 with the exceptions of Denmark (up to 25 per cent by 1985) and the Netherlands (up to 43 per cent by 1985).

Fragmented

The relative pattern of production of metal articles (NACE 31) neatly summarises the trends in those fragmented sectors which rely on local markets. Up to around 1980 the growth of output in Ireland outstripped that in the EC.

Since 1980, output in many countries has fallen — but in none by so much as it has in Ireland. The exceptions to this general trend are Denmark (up to 23 per cent) Greece (up to 3 per cent) and the Netherlands (up to 1 per cent).

(iii) Internationally Traded, Large Scale

The third group consists of those industries like clothing, footwear, textiles, transport equipment, and parts of food which were subject to international competition and showed signs of long run decline in Ireland in the seventies. We have seen in Chapter 4 that this decline was much more rapid in the eighties.

The European textile industry has experienced major disruption since the mid-seventies. The industry fared marginally better in Ireland than in the Community at large up to 1980. Since then, the decline of output has been greater in Ireland than in most member countries. Indeed, Portugal, Belgium and Denmark have *increased* output in the eighties. The production of footwear in the EC fell in both the seventies and the eighties but the decline was much sharper in Ireland than elsewhere. Since 1980, output has *increased* in Denmark, France and Spain. A similar pattern of relatively large decline in Ireland is found in transport equipment (NACE 35 and 36). In clothing, Ireland has fared somewhat better. In both the seventies and eighties output declined slightly less in Ireland than in the EC overall. However, since 1980, output of clothing has increased in both Denmark (up 26 per cent 1980-85) and the UK (up 8 per cent in the same period).

5. FINANCIAL AND TRADE BALANCES

(i) Inflation

Ireland's relative inflation record is summarised in Table 5.22. This shows that, historically, Ireland is a relatively high inflation country. Accession to the Community coincided with a sharp increase in inflation generally but both the UK and Ireland had higher inflation than other EC countries. However, in the

Table 5.22
Inflation (Deflator of Private Consumption)
Annual Percentage Change

	1961- 1973	1974- 1981	1982	1984	1986	1988 ²
Ireland	6.0	16.6	15.3	9.4	3.6	2.1
UK	4.3	15.1	8.6	4.8	3.6	4.5
EUR 12	—	10.6	10.4	7.1	3.6	3.5
EMS ¹	—	—	9.8	6.5	2.4	2.7

¹Countries participating in the exchange rate mechanism of the EMS.

²September/October forecasts of the Commission services.

Source: *Annual Economic Report 1988-89*, European Commission.

early eighties an even more significant inflation difference emerged: when higher European inflation after 1979 was quickly reversed in the deep recession of the early eighties, UK inflation slowed also — indeed it came down more rapidly. But Irish inflation *continued to rise* through 1980 and 1981 and was consequently far higher than the EC average or the UK rate in 1982. In 1983, the Irish rate of inflation began to drop rapidly and, although the average EC rate also continued downward, the gap was quickly narrowed. The inflation rates of a number of other countries have evolved in a broadly similar fashion (e.g., Italy, Spain) but the precise timing of their divergence and convergence from the Community rate differs — suggesting that domestic policy has some role in the process.

These developments in inflation were, to a large extent, reflected in nominal interest rates over the period 1973 to the present. However, during the period of relatively high Irish inflation, nominal rates did not rise proportionately, so that real rates in Ireland were more strongly negative in the mid to late seventies than in other countries. Conversely, when Irish inflation dropped sharply in the eighties nominal rates did not fall proportionately — with the result that real rates increased very considerably. This reflected the influence of domestic fiscal and monetary policy, and reactions to it of the foreign exchange markets, on domestic interest rates.

However, in recent years, nominal interest rates have moved downward and this has coincided with a major financial change which must be recorded. Despite the continuation of some interest rate differential Irish rates have eventually started to track those in Germany — the dominant member of the European Monetary System to which the Irish pound is pegged. This constitutes a major change in financial arrangements and behaviour — as is made evident by the emergence of a substantial positive margin between Irish pound and sterling rates.

(ii) Balance of Payments

Table 5.23 shows the balance of payments on current account as a percentage of GDP for each member country in selected years. Ever since the mid-sixties, Ireland has had current account deficits which were high by European standards. Furthermore, Ireland's deficits increased more than those of other countries after the oil price rise of 1973; this is clear from the average annual current account deficit of 6.4 per cent between 1971 and 1980. In the four years 1978-82 Ireland had a current account deficit averaging 12.5 per cent of GNP. Since 1983 the current account deficit has fallen very rapidly indeed.

It can be seen from the data in Table 5.23 that Ireland has undergone a most remarkable balance of payments *adjustment* since 1981. The final column of this table shows the difference between the current account balance of payments deficit, as a percent of GDP, in 1981 and 1988. A similar but less

Table 5.23
Current Account of Balance of Payments as a Percentage of GDP

	1961-70	1971-80	1982	1984	1986	1988 ²	Difference 1981-1988
Ireland	-2.3	-6.4	-10.7	-5.7	-1.3	2.6	17.4
Germany	0.7	0.6	0.5	1.0	4.2	4.0	3.3
France	0.2	-0.4	-3.0	-0.9	0.1	0.1	1.5
Italy	1.8	-0.2	-1.6	-0.8	1.2	-0.4	1.9
Netherlands	0.0	1.2	2.8	4.1	3.9	1.6	0.5
Belgium	0.9	0.6	-2.0	1.1	3.5	1.8	5.0
United Kingdom	0.0	-0.6	1.5	0.3	-0.1	-3.1	-5.5
Denmark	-2.2	-2.9	-4.2	-3.2	-4.1	-2.5	0.5
Greece	-3.1	-2.2	-3.8	-4.1	-5.8	-2.8	-2.6
Spain	—	-0.9	-2.3	1.3	3.5	-0.8	1.6
Portugal	-1.0	-3.3	-13.5	-3.0	5.4	-0.1	12.2
EUR 12	0.4 ¹	-0.1	-0.6	0.1	1.2	0.5	2.9

¹EUR 10

²Forecasts September/October 1988.

Source: Commission services.

severe pattern of adjustment has occurred in Portugal and Spain and, indeed, in many less developed countries. Again, the precise timing of this adjustment differs between countries and this suggests that the timing of domestic policy measures differed between countries.

In the Irish case, the reduction in the current deficit has occurred mainly in the trade component of the current account — i.e. through turning a balance of trade deficit into a balance of trade surplus — rather than through a reduction of profit and interest outflows. The crucial question for the long run is: what are the sources of Ireland's trade balance improvement since 1983?

(iii) Public Finance

Examination of the evolution of the public finances of Community countries shows that for a number of countries (Ireland, Greece, Italy, Portugal, Spain and Belgium) the achievement of growth in the 1970s involved substantial deficit spending. This, in turn, led to the build-up of government debt outstanding in these countries. However, a common feature of all these countries is that government debt increased most rapidly during the 1980s — under the influence of interest and exchange rate movements. Consequently, a third common feature in Ireland, Belgium, Italy, Greece, Portugal and, indeed, Denmark is high levels of interest payments on public debt in the 1980s.

In 1988, Ireland had the second highest ratio of public debt to GNP (118 per cent) after Belgium (127.4 per cent). The next highest level was that of Italy (96.6 per cent) and the Community average was 60 per cent (*Annual Economic Report 1988-89*, European Commission).

(iv) Trade Dependence

The balance of payments should not be considered in isolation from the openness of the economy in question. Because of the small scale of the home market, the importance of agriculture, and the lack of other natural resources, Ireland has, for a very long time, been a trading country. Tables 5.24 and 5.25 show exports and imports as a per cent of GDP in each Community country in 1960, 1973, and 1988. These tables show that even in 1960 Ireland was a very open economy by comparison with most European countries. Secondly, these tables show the remarkable increase in the openness of the Irish economy since that date. Imports as a per cent of GDP reached a high level earlier and have not increased as rapidly as exports. It should be noted that, just like the balance of payments, imports and exports fluctuate considerably from year to year and so the figures in these tables are merely representative.

The highly open nature of the Irish and a number of other economies should be kept in mind when considering balance of payments data. In the very open economies like Ireland, the Netherlands and Belgium, a given difference between imports and exports, say exports equal to 90 per cent of imports, will, other things being equal, imply a much larger balance of payments deficit as

Table 5.24
Exports of Goods and Services
Per cent of GDP

	1960	1973	1988
Ireland	32	38	65
Germany	19	22	29
France	15	18	22
Italy	14	19	20
Netherlands	48	47	54
Belgium	38	56	69
Luxembourg	87	88	103
United Kingdom	21	24	25
Denmark	32	29	29
Greece	9	14	23
Spain	10	14	20
Portugal	18	27	35
EUR 12	20	23	27

Source: *Annual Economic Report 1988-89*, European Commission.

Table 5.25
Imports of Goods and Services
Per cent of GDP

	1960	1973	1988
Ireland	37	45	55
Germany	16	19	24
France	13	18	22
Italy	14	21	19
Netherlands	46	44	51
Belgium	39	53	66
Luxembourg	74	77	96
United Kingdom	22	26	28
Denmark	33	30	29
Greece	17	25	31
Spain	8	16	20
Portugal	24	34	42
EUR 12	19	23	27

Source: *Annual Economic Report 1988-89*, European Commission.

a per cent of GDP than a similar trade deficit would in Germany, the UK, France, Italy or Denmark. The same, of course, applies to a balance of trade surplus. It is, therefore, of limited relevance to draw simplistic policy conclusions from the contrast between the small balance of payments deficits/surpluses of Germany, France, the UK and Denmark and the relatively large deficits/surpluses of Ireland, Belgium, Portugal and the Netherlands.

The contrast between the extremely trade dependent economies of Ireland, Belgium, and the Netherlands and the rest of the Community is even more apparent if one examines *intra-Community trade* as a per cent of GDP (see Tables 5.26 and 5.27). The truly remarkable and little appreciated feature revealed by these and the earlier data is the small share of its domestic product which even a small country such as Denmark exports to other community countries. Furthermore, this share, and that of imports, increased only very slightly after Denmark joined the Community in 1973. While this is partly explained by its strong trading links with other Nordic countries it also reveals an important general feature of the Danish path of economic development.

(v) Earnings and Exchange Rate Movements

We have seen above that for much of the period under review, Ireland had substantially higher inflation than most Community countries, and slightly higher inflation than the UK. Not surprisingly, these inflation differences coincided with higher rates of earnings increase than in other member states. Labour costs are commonly cited as an indicator of international competitive-

Table 5.26
Intra-Community Exports of Goods and Services
Per Cent of GDP at Current Market Prices

	1961-70	1971-80	1986
Ireland	22	30	37
Germany	8	11	14
France	6	9	10
Italy	5	8	9
Netherlands	24	29	36
Belgium/Lux	27	35	43
United Kingdom	5	8	9
Denmark	12	11	12
Greece	3	5	9
Spain	3	4	7
Portugal	7	8	17
EUR 12	8	11	13

Table 5.27
Intra-Community Imports of Goods and Services
Per Cent of GDP at Current Market Prices

	1961-70	1971-80	1986
Ireland	28	36	35
Germany	7	10	12
France	6	9	11
Italy	5	8	9
Netherlands	25	24	28
Belgium/Lux.	25	34	41
United Kingdom	5	8	12
Denmark	15	14	15
Greece	10	11	17
Spain	5	5	7
Portugal	13	15	19
EUR 12	8	11	13

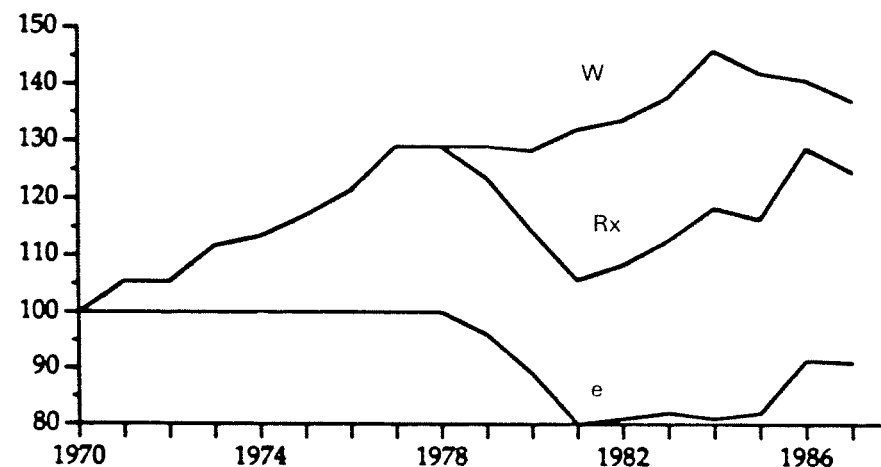
ness and their rate of change as an indicator of changes in competitiveness. Here we report the trends in Ireland's competitiveness as measured by hourly earnings in manufacturing.

The cost competitiveness of a country depends not only on movements in its labour costs but also on movements in its exchange rate. If an earnings increase of 10 per cent was accompanied by a devaluation of the nominal exchange rate

of the same magnitude, then cost competitiveness of the country would be unchanged. Consequently, we are interested not only in relative labour costs, but also in movements in the nominal exchange rate. From these two together we can calculate the *real exchange rate* — the nominal exchange rate adjusted for the rates of change in earnings in manufacturing.

Figure 5.10 shows the trends in relative earnings, the nominal exchange rate of the Irish pound with sterling, and the real exchange rate with sterling — all to base 1970 = 100. In this figure W is manufacturing earnings in Ireland relative to those in the UK. It shows that Irish earnings rose relative to those in the UK through most of the seventies. To calculate movements in the real exchange rate, and hence in cost competitiveness, we need to combine these earnings data with data on the movements of the nominal exchange rate (shown by e).

Figure 5.10
Relative Earnings, Real Exchange Rate, Nominal Exchange Rate
Versus Sterling
1970 = 100



Source: P. Massey 'Exchange Rates and Competitiveness' *Quarterly Economic Commentary* October 1988, ESRI.

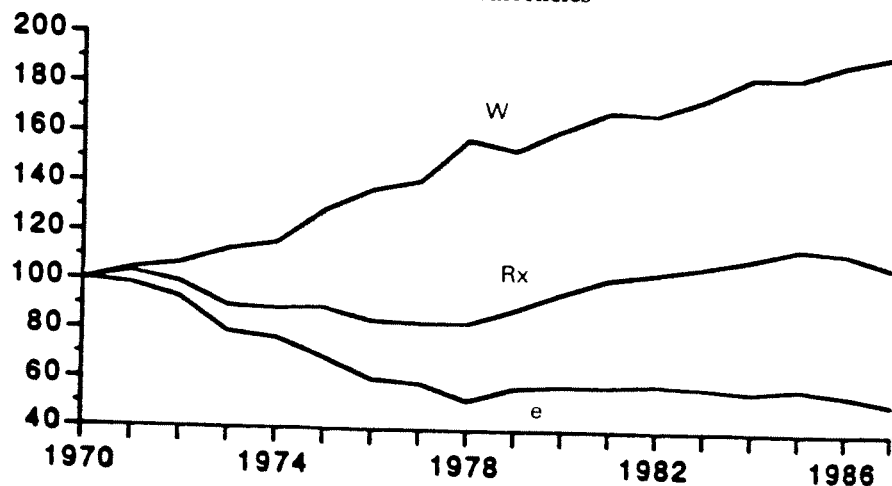
There were no changes in the Irish pound sterling exchange rate until 1978 and consequently all the increase in Irish earnings relative to those in the UK was reflected in the real exchange (Rx). Thus, the figure shows a steady appreciation of the real exchange rate versus sterling from 1970 to 1978. After 1978, the Irish pound depreciated against sterling, and did so to an extent sufficient to offset the faster rate of earnings growth in Ireland. Consequently, the figure shows the real exchange rate falling from 1978 to 1982. Such a fall increased Ireland's international cost competitiveness. However, subsequent weakening of sterling

on the foreign exchanges has wiped out this competitive gain to Ireland — as shown by the rising real exchange rate (see Rx) in the mid-eighties.

Since 1979, Ireland has participated in the exchange rate mechanism of the European Monetary System. This system involves setting central rates against the six other currencies in the system and acting with the other member states to ensure that the Irish pound does not rise or fall more than 2.25 per cent around these rates. This system has ensured that the Irish pound's exchange rate with these currencies has been very stable. In Figure 5.11, this is reflected in the very small changes in the nominal exchange rate (e) after 1979. It will be noted that before 1979 the nominal exchange rate declined considerably. This reflects the devaluations of sterling against other European currencies and, because the Irish pound was linked to sterling during this, it shows devaluation of the Irish pound also. It can be seen from this figure that this sizeable depreciation versus the six EMS currencies was not reflected in an equally large fall in the real exchange rate. This was because manufacturing earnings in Ireland increased more rapidly than in the other countries (see W.)

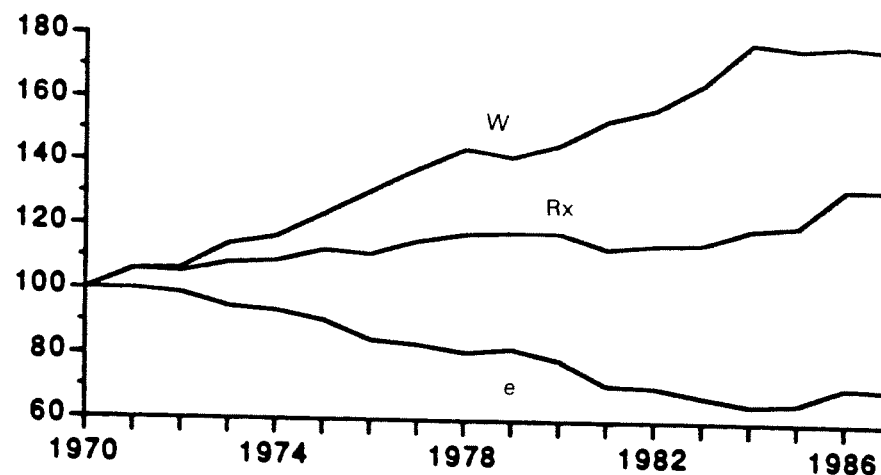
Indeed, it can be seen that this relatively fast earnings growth continued after 1979. However, it was no longer accompanied by depreciation of the exchange rate (e) and consequently the real exchange rate rose (see Rx). Since 1979, this loss of cost competitiveness relative to EMS currencies has been about 40 per cent.

Figure 5.11
Relative Earnings, Real Exchange Rate, Nominal Exchange Rate
Versus EMS currencies



Source: P. Massey 'Exchange Rates and Competitiveness' *Quarterly Economic Commentary* October 1988, ESRI.

Figure 5.12
Relative Earnings, Real Exchange Rate, Nominal Exchange Rate
Versus all main trading partners
1970 = 100



Source: P. Massey 'Exchange Rates and Competitiveness' *Quarterly Economic Commentary* October 1988, ESRI.

Finally, Figure 5.12 shows similar calculations with respect to all Ireland's main trading partners. This shows that the increase in relative labour costs has been somewhat offset by declines in the nominal exchange rate so that the real exchange rate, though it has definitely risen, has done so more slowly.

The calculations reported in Figures 5.10 to 5.12 make no allowance for relative productivity growth. More rapid growth of earnings in one country may reflect higher productivity growth and consequently would not, in fact, reduce the cost competitiveness of its manufacturing sector. The usual way to allow for this is to adjust the nominal exchange rate for unit labour costs rather than hourly earnings. However, there are several problems associated with measuring productivity growth by reference to changes in unit labour costs. First, changes in the *composition* of industrial output will affect productivity growth as measured in this way. Second, recorded productivity increases may be the result of employment reductions and, consequently, reflect industrial weakness rather than industrial strength. Despite these drawbacks, it should be reported that use of unit labour costs rather than earnings in calculations such as those above indicates smaller appreciation of the Irish real exchange rate in the 1980s — and hence smaller losses of cost competitiveness — versus most of Ireland's trading partners (see Massey, 1988).

The data reported in Tables 5.10 to 5.12 are intended to present a broad picture of developments since accession. As such, they do not fully convey the trend in competitiveness in very recent years. Movements in the nominal exchange rate against sterling, earnings growth and the continued slowing of domestic inflation have altogether resulted in a distinct improvement in competitiveness versus the UK and Ireland's EMS trading partners in recent years. Only the start of this improvement in competitiveness, or decline in the real exchange rate, can be seen in Figures 5.10 and 5.11.

6. GENERAL CONCLUSION

Overall, Ireland's economic performance in the Community has not been strong relative to that of other member countries. While trends in employment compare well with those elsewhere in the Community the experience on incomes, unemployment and emigration has been relatively weak. In addition, the maintenance of Ireland's relative income position in the Community, and the deterioration in unemployment and emigration, has coincided with the build-up of very large public debt and a heavy burden of debt servicing charges. In some respects, but not in all, Ireland's experience in the Community can be divided into two phases. In the first, from 1973 to 1979, the Irish economy performed better than those of most other member countries on many criteria. In the second phase, from 1979 to 1986, Ireland's economic performance was distinctly worse than in the Community at large. To these can be added a third phase — or at least the first signs of one — in which the Irish economy is again moving in line with developments in the Community economy generally. In Chapter 7 we will discuss the causes of the relative performance of the Irish economy in each of these phases and identify several important factors which were, in fact, common to both the major phases since accession.

INTRA-INDUSTRY TRADE AND INDUSTRIAL STRUCTURE

We have seen in Chapter 2 that modern approaches to the study of international trade have highlighted some important new characteristics of trade. Two of these are *intra-industry trade* and the effect of trade on the structure of firms and industries. In Chapter 3 we outlined some hypotheses concerning the trends in intra-industry trade and industrial structure as economic integration proceeds. In this chapter we examine the level of intra-industry trade and the evolution of the industrial structure in Ireland in order to evaluate these hypotheses. It will not be possible to formally test these hypotheses but some idea of their validity in the Irish case can be gained and this certainly adds to our knowledge of the effects of EC membership on Ireland.

In Section 1 we report calculations on intra-industry trade (IIT) and discuss their interpretation. Because of the nature of this material this section contains considerable technical detail. The general reader may prefer to skip to Section 2, on the changing size structure of Irish manufacturing industry, or to Section 3, where an interpretation of the data of intra-industry trade and industrial structure is presented. In Section 2 we look briefly at the changing size structure of Irish manufacturing industry. A discussion of what these data tell us about the integration process in the Irish case can be found in Section 3 of this chapter and in Chapter 7 — which summarises Part II of the report.

1. INTRA-INDUSTRY TRADE IN IRELAND

(i) Measuring Intra-Industry Trade

It is widely agreed that international trade depends on, and implies each country specialising in the production of particular products. For many years the dominant view among economists was that countries specialise on the basis of their natural endowments or resources. Thus it was expected that countries with abundant land relative to capital would export agricultural products and countries with abundant steel, coal and capital would specialise in the production and export of manufactured goods. The international exchange of goods of this sort was known as *inter-industry* trade, based on inter-industry *specialisation* in each country — that is, specialisation *between* industries. While trade of this sort certainly occurs it has been observed that much of the enormous growth in international trade since the Second World War did not conform to this pattern. Instead, countries exchange products which are in fact

very similar to each other, and it seems impossible to explain the exports of countries such as Germany, France or Sweden by reference to their natural endowments (Lindbeck, 1981). The international exchange of similar products is known as *intra-industry* trade — that is, trade of goods *within* a particular industry. It has been explained by the fact that firms, and therefore countries, specialise in slightly differentiated versions or types of product *within* a given industry (see Chapter 2). So long as there is a demand in each country for all the different varieties of each good then they will be traded between countries. This pattern of specialisation is known as *intra-industry* specialisation. Where it exists it is common to find each country both exporting and importing a particular product — for example, radios or motor cars. We have seen in Chapters 2 and 3 that the level of intra-industry trade features in several important hypotheses concerning the effects of trade and integration. To advance our understanding of the effects of integration on Ireland it is necessary to examine the level of inter and intra-industry trade (IIT) since accession to the EC.

Intra-industry trade and specialisation essentially implies simultaneous exchange by countries of identical or differentiated products of the same industry. All measures of intra-industry trade involve an examination of the relative size of the imports and exports of a particular industry. Clearly, a lot will depend on what is considered to constitute an 'industry'. If a particular industry is defined very broadly then there is bound to be both imports and exports within that category and a high level of intra-industry trade will be recorded. If each industry is defined extremely narrowly then it is less likely that the country will both export and import the commodity and low levels of IIT will be measured. There has emerged a professional consensus that the third-digit SITC level of aggregation is a reasonable approximation to an industry and a great deal of research has been conducted on this basis (Greenaway and Milner, 1986).

The standard measure of the degree of intra-industry trade is that proposed by Grubel and Lloyd in 1975. They propose that the level of intra-industry trade in a given 3-digit SITC group be measured by calculating the amount of exports in the commodity group which is offset by imports in the same grouping, and expressing this intra-industry trade as a proportion of the total trade in the commodity group*

The Grubel-Lloyd (GL) index so defined lies between 0 and 1. When either exports or imports are 0, and consequently there is no intra-industry trade,

*The Grubel-Lloyd index of intra-industry in the commodity group j is defined as follows.

$$B_j = \frac{(X_j + M_j) - |X_j - M_j|}{(X_j + M_j)} = 1 - \frac{|X_j - M_j|}{(X_j + M_j)}$$

Where X_j and M_j are respectively the value of exports and imports of commodity j .

Table 6.1
Illustrative Calculation of the Index of Intra-Industry Trade

X	M	X - M	(X + M)	B
100	0	100	100	0
100	30	70	130	0.46
100	50	50	150	0.67
100	80	20	180	0.88
100	100	0	100	1

then B is 0. Table 6.1 shows some illustrative values of the Grubel-Lloyd (GL) index B and how it is determined by the relative size of exports (X_j) and (M_j) imports. Although intra-industry trade should be measured at the 3-digit SITC level of disaggregation it will frequently be impractical to present and discuss results for the 233 commodity groups which exist at this level. If results are presented instead for the 63 Divisions at the 2-digit level, or the 10 sections at the 1-digit level, or indeed for the whole of manufacturing trade together (Sections 5-8), then the measures of IIT at these levels are calculated as *weighted averages* of the relevant 3-digit measures. An adjustment to these average measures of IIT is sometimes made to counteract the impact of overall trade imbalance (the excess of imports over exports or vice versa) on the measurement of IIT. When adjusted in this way the index is known as the Aquino-adjusted index of intra-industry trade (see Greenaway and Milner, 1986).

(ii) Calculations for Ireland

McAleese calculated the level of IIT for Ireland and found a pronounced increase over the period 1964 to 1977. The index for total merchandise trade rose from 0.36 in 1964 to 0.42 in 1971 and further to 0.56 in 1977.* The level of IIT rose in 33 of the 43 separate 2-digit commodity Divisions for which he calculated the index. Like many researchers in other countries he found that manufactured goods trade (SITC Sections 5-8) showed an even more rapid increase in intra-industry trade (from 0.34 in 1964 to 0.64 in 1977 or, when adjusted for trade imbalance, from 0.52 to 0.66).

Table 6.2 presents McAleese results for 1964, 1971 and 1977 and our results for 1980 and 1986. There was a very large trade deficit in 1980 and this would tend to lower the calculated levels of IIT. Consequently, our figures for 1980 and 1986 incorporate an adjustment for the overall imbalance in trade in these years. This makes little difference to the calculations for 1986, because of the relatively small trade deficit in that year, and consequently our figures for that year can be directly compared with McAleese's for 1977 and earlier years. The

*When adjusted for overall trade imbalance the Aquino-adjusted GL Index for merchandise trade rose from 0.48 in 1965 to 0.63 in 1977.

Table 6.2
Intra-Industry Trade Ratios for 1964, 1971, 1977, 1980 and 1986

Division	1964	1971	1977	1980 ¹	1986 ¹	Direction of change 1977-86 ²
SECTION 0: FOOD AND LIVE ANIMALS						
00 Live animals	0.37	0.33	0.33	0.25	0.29	-
01 Meat and meat preparations	0.41	0.36	0.41	0.39	0.44	+
02 Dairy produce and eggs	0.02	0.01	0.04	0.06	0.18	+
03 Fish and fish preparations	0.02	0.02	0.11	0.08	0.11	Same
04 Cereals and cereal preparations	0.69	0.49	0.52	0.22	0.27	-
05 Vegetables and fruit	0.22	0.33	0.35	0.36	0.36	+
06 Sugar, sugar preparations and honey	0.43	0.56	0.61	0.49	0.36	-
07 Coffee, tea, cocoa and manufactures	0.76	0.72	0.97	0.86	0.86	-
08 Feeding stuffs for animals	0.99	0.97	0.84	0.47	0.49	-
09 Misc. edible products and preparations	0.44	0.95	0.63	0.68	0.30	-
	0.98	0.86	0.41	0.28	0.24	-
SECTION 1: DRINK AND TOBACCO						
11 Beverages	0.44	0.87	0.82	0.52	0.54	-
12 Tobacco and products thereof	0.60	0.59	0.81	0.53	0.51	-
	0.07	0.69	0.82	0.49	0.64	-
SECTION 2: RAW MATERIALS (except fuels)						
21 Hides, skins, fur — raw	0.41	0.28	0.41	0.33	0.41	Same
22 Oilseeds	0.65	0.38	0.39	0.20	0.06	-
23 Crude rubber	0.01	0.01	0.05	0.28	0.74	+
24 Cork and wood				0.04	0.06	+
25 Pulp and waste paper	0.03	0.03	0.13	0.17	0.33	+
26 Textile fibres and wastes	0.09	0.21	0.57	0.70	0.31	-
27 Crude fertilisers and minerals	0.68	0.52	0.56	0.43	0.35	-
28 Metal ores and scrap	0.19	0.50	0.84	0.74	0.37	-
29 Crude animal and vegetable materials	0.18	0.02	0.12	0.07	0.47	+
	0.74	0.92	0.98	0.77	0.86	-
SECTION 3: MINERALS, FUELS LUBRICANTS, AND RELATED MATERIALS						
32 Coal, coke, briquettes	0.16	0.17	0.08	0.08	0.17	+
33 Petroleum, and products thereof	0.15	0.32	0.43	0.27	0.19	-
34 Gas, natural and manufactured	0.15	0.14	0.05	0.07	0.16	+
	0.99	0.42	0.01	0.05	0.21	+
SECTION 4: ANIMALS AND VEGETABLE OILS, FATS AND WAXES						
41 Animals oils and fats	0.58	0.74	0.72	0.26	0.20	-
42 Fixed vegetable oils and fats				0.40	0.63	+
43 Processed vegetable oils, fats, waxes				0.09	0.04	-
				0.42	0.12	-

¹Aquino-adjusted Index of Intra-Industry trade — adjusted for total trade imbalance.

²Where McAleese does not present a figure for 1977 this column gives the direction of change between 1980 and 1986.

Sources: D. McAleese, 'Intra-Industry trade, level of development and market size' In H. Giersch (ed.) *On the Economics of Intra-Industry Trade*. Symposium 1979, and NESC Secretariat.

Table 6.2
Intra-Industry Trade Ratios for 1964, 1971, 1977, 1980 and 1986—contd.

Division	1964	1971	1977	1980 ¹	1986 ¹	Direction of change 1977-86 ²
SECTION 5: CHEMICALS						
51 Organic chemicals	0.13	0.45	0.62	0.53	0.53	-
52 Inorganic chemicals	0.05	0.34	0.64	0.34	0.39	-
53 Dyeing, tanning and colouring materials	0.13	0.17	0.30	0.71	0.52	+
54 Medical and pharmaceutical products				0.51	0.47	+
55 Oils, perfume materials, cleansing preparations	0.36	0.89	0.89	0.83	0.96	+
56 Fertilisers, manufactured	0.31	0.45	0.50	0.66	0.67	+
57 Explosives				0.29	0.19	-
58 Resins, plastic materials, cellulose	0.05	0.29	0.50	0.69	0.77	-
59 Chemical materials				0.63	0.41	-
				0.54	0.61	-
SECTION 6: MANUFACTURED GOODS, CLASSIFIED BY MATERIALS						
61 Leather, leather manufactures	0.45	0.52	0.68	0.65	0.67	Same
62 Rubber manufactures	0.59	0.73	0.63	0.67	0.79	+
63 Wood and cork manufactures (except furniture)	0.29	0.95	0.84	0.75	0.85	+
64 Paper, paperboard, and articles thereof	0.71	0.76	0.60	0.37	0.38	-
65 Textiles, yarn, fabrics etc.	0.44	0.43	0.43	0.41	0.40	-
66 Non-metallic mineral manufactures	0.54	0.62	0.94	0.80	0.84	-
67 Iron and steel	0.59	0.59	0.68	0.70	0.78	+
68 Non-ferrous metals	0.25	0.16	0.27	0.27	0.43	+
69 Manufactures of steel				0.46	0.28	+
	0.33	0.42	0.69	0.72	0.79	+
SECTION 7: MACHINERY AND TRANSPORT EQUIPMENT						
71 Power generating machinery	0.23	0.28	0.55	0.66	0.59	+
72 Machinery specialised for particular industries	0.24	0.19	0.58	0.82	0.69	+
73 Metal working machinery				0.50	0.38	-
74 General industrial machinery, and parts				0.48	0.60	+
75 Office and data processing machinery				0.73	0.78	+
76 Telecom and sound recording equipment etc.				0.67	0.55	-
77 Electrical machinery, appliances, parts				0.81	0.72	-
78 Road vehicles, and parts	0.36	0.54	0.75	0.80	0.80	+
79 Other transport equipment	0.14	0.20	0.27	0.49	0.19	-
				0.59	0.36	-

¹Aquino-adjusted Index of Intra-Industry trade — adjusted for total trade imbalance.

²Where McAleese does not present a figure for 1977 this column gives the direction of change between 1980 and 1986.

Sources: D. McAleese, 'Intra-Industry trade, level of development and market size' In H. Giersch (ed.) *On the Economics of Intra-Industry Trade*. Symposium 1979, and NESC Secretariat.

Table 6.2
Intra-Industry Trade Ratios for 1964, 1971, 1977, 1980 and 1986—contd.

Division	1964	1971	1977	1980 ¹	1986 ¹	Direction of change 1977-86 ²
SECTION 8: MISCELLANEOUS MANUFACTURED ARTICLES						
81 Sanitary, plumbing, heating, lighting	0.54	0.74	0.77	0.75	0.64	-
82 Furniture, and parts thereof	0.36	0.41	0.73	0.87	0.91	+
83 Travel goods, handbags, etc.				0.69	0.63	-
84 Clothing	0.59	0.82	0.87	0.49	0.74	-
85 Footwear				0.76	0.65	-
87 Profession, scientific apparatus	0.17	0.82	0.56	0.65	0.23	-
88 Photographic, optical, watches, clocks				0.54	0.63	+
89 Other manufactured articles	0.63	0.69	0.82	0.73	0.53	-
Total Sections 5-8						
(i) Grubel-Lloyd Index	0.34	0.47	0.64	0.60	0.61	-
(ii) Aquino-adjusted GL Index	0.52	0.54	0.66	0.65	0.60	-
Total Sections 0-8						
(i) Grubel-Lloyd Index	0.36	0.42	0.56	0.47	0.52	-
(ii) Aquino-adjusted GL Index	0.48	0.52	0.63	0.50	0.52	-

¹ Aquino-adjusted Index of Intra-Industry trade — adjusted for total trade imbalance.

² Where McAleese does not present a figure for 1977 this column gives the direction of change between 1980 and 1986.

Sources: D. McAleese, 'Intra-Industry trade, level of development and market size' In H. Giersch (ed.) *On the Economics of Intra-Industry Trade*. Symposium 1979, and NESc Secretariat.

most striking feature of the later results is the fact that the steady upward trend in IIT has been reversed. The GL index for total merchandise trade has fallen from 0.56 in 1977 to 0.52 in 1986 — having gone as low as 0.47 in 1980. The Aquino-adjusted index for total merchandise trade has fallen from 0.63 in 1977 to 0.52 in 1986.

Indeed, even the level of intra-industry trade in *manufactured* goods has fallen. As can be seen from the table the Grubel-Lloyd index of IIT in manufactured goods (SITC Sections 5-8) has fallen from 0.64 in 1977 to 0.61 in 1986. Adjustments for overall trade imbalance do not alter this trend. The Aquino-adjusted index for manufactured trade fell from 0.66 in 1977 to 0.60 in 1986. Since the measure of *intra*-industry trade is the inverse of the level of *inter*-industry trade these results imply that inter-industry trade has increased.

In order to interpret this development it is necessary to look at the disaggregated calculations of the index. In Table 6.3 we present a summary of the results for the 10 SITC industrial sections. This table shows McAleese's calculations for 1977, our calculations for 1980 and 1986, and the direction of change between 1977 and 1986. This table shows that the reduction in intra-

Table 6.3
Intra-Industry Trade Ratios for 1977, 1980, and 1986

	1977	1980*	1986*	Direction of change 1977-1986
SICT 0 Food and live animals	0.33	0.25	0.29	-
SITC 1 Drink and Tobacco	0.82	0.52	0.54	-
SITC 2 Raw Materials	0.41	0.33	0.41	Same
SITC 3 Mineral fuels	0.08	0.08	0.17	+
SITC 4 Animals and vegetable oils	0.72	0.26	0.20	-
SITC 5 Chemicals	0.62	0.53	0.53	-
SITC 6 Manufactures, classified by material	0.68	0.65	0.67	-
SITC 7 Machinery and transport equipment	0.55	0.66	0.59	+
SITC 8 Miscellaneous manufactures articles	0.77	0.75	0.64	-
Total Sections 0-8				
(i) Grubel-Lloyd index	0.56	0.47	0.52	-
(ii) Aquino-adjusted index	0.63	0.50	0.52	-
Total Sections 5-8				
(i) Grubel-Lloyd index	0.64	0.60	0.61	-
(ii) Aquino-adjusted index	0.66	0.65	0.61	-

*Aquino-adjusted ratios, adjusted for overall trade imbalance.

Sources: as for Table 6.2.

industry trade was fairly consistent in the 5 SITC sections 0-4 — the only one of these sections showing an increase in IIT was Section 4, Mineral Fuels. Some categories of manufacturers (5, Chemicals and 8, Manufactured Articles) also showed an overall decrease in intra-industry trade, while only Section 7 — Machinery showed an increase. This pattern is confirmed if we move down to the 2-digit Commodity Division. Column 5 of Table 6.2 shows the direction of change between 1977 and 1986 for each of these groups. In Food (Section 0), Drink and Tobacco (Section 1), Raw Materials (Section 2) and Animal and Vegetable Oils and Fats (Section 4) most of the 2-digit Commodity Divisions showed a decrease in the index of IIT. Among manufactures the negative signs are found mainly in Sections 6 (Division 64, paper and Division 65, textiles) and Section 8 (for example, 85, travel goods, Division 84, clothing, and Division 85, footwear).

(iii) Interpreting the Falling Level of IIT

The recent fall in, or levelling off of, the proportion of Irish trade which is intra-industry certainly indicates increased importance of inter-industry trade. Our task is to interpret this trend in terms of the effects of integration. While considerable further research would be required to reach a definitive analysis

and interpretation of this trend, its identification provides important new information on the Irish economy and below we tentatively suggest an interpretation.

Trade in Differentiated Goods

If the indices calculated at the 3-digit level are good measures of the value of trade in *differentiated* goods, as they are assumed to be in much of the literature on the subject, then these results would indicate some reduction in the proportion of Irish trade which is in differentiated goods. This may be cause for concern as highly differentiated goods have several properties which, other things being equal, are desirable. They tend to have a relatively high value added content, which means their production and trade supports high incomes. They tend to have a high income elasticity of demand, which means that they will be expanding rather than declining industries. Of course, a concomitant of these properties tends to be high capital intensities and high rates of productivity growth so that production of highly differentiated goods will employ relatively little labour.

Two Types of Inter-Industry Specialisation

However, indices of IIT should not be taken on their own as evidence that the goods produced and traded are on average less differentiated. The reduction in the index is certainly evidence of more inter-industry trade. But inter-industry trade and inter-industry specialisation are not a problem in and of themselves. It all depends on whether the country is specialising *in* or being specialised *out* of a particular industry. (And it depends in turn on whether it is considered desirable to specialise in or out of the industry.) To see this, consider as an example the case of the Irish drink and tobacco industry. The GL index of intra-industry trade fell from 0.82 in 1977 to 0.51 in 1986 (a similar fall is recorded in the Aquino-adjusted index — see Table 6.4). Table 6.4 shows the adjusted and unadjusted index for each of the 3-digit groups which make up

Table 6.4

Intra-Industry Trade and the Value of Imports and Exports in SITC Section 1

SITC		1964	1971	1977	1986 ¹	1986 ²	Imports	Exports
							1986	1986
							£m	£m
1	Drink and Tobacco	0.44	0.87	0.82	0.51	0.54	96.8	228.2
111	Soft Drinks	0.60	0.59	0.81	0.61	0.65	6.8	15.1
112	Alcohol							
121	Tobacco	0.07	0.69	0.82	0.17	0.16	14.3	1.4
122	Cigarettes							
					0.75	0.78	20.8	34.5

¹Grubel-Lloyd index.

²Aquino-adjusted index.

the industry, but also the total value of imports and exports from which these were calculated. This shows that although the level of IIT trade fell substantially the country had a substantial *trade surplus* in this sector. Furthermore, the sector's exports grew by 44 per cent between 1980 and 1985 and it increased its exports from 11 per cent to 18 per cent of total turnover. It has been calculated that competing imports rose from 8.2 per cent of the domestic market to 10.6 per cent. Finally, despite this export expansion and retention of the (sharply contracted) home market, employment in drink and tobacco manufacture fell by almost 18 per cent between 1980 and 1985. Consequently, the fall in intra-industry trade, and therefore rise in inter-industry trade, in this case shows that Ireland has been specialising further *into* this industry (one in which it has traditionally specialised). A certain parallel can be found in the case of the clothing and footwear industry in Italy in the years 1959 to 1967. In these years there was a *fall* in the level of IIT in SITC Section 8 for the Netherlands, France, Germany and Italy. Pelkmans interpreted this finding by pointing to the increasingly strong export position of Italy in these relatively labour intensive sectors. This fall in IIT probably signified difficult adjustment problems (those normally associated with inter-industry adjustment) for several countries but hardly for Italy since it was, at that time, specialising *into* that sector.

The question is, can a similar, positive, interpretation be given to the increase in inter-industry trade in many other branches of production? We briefly survey some important sectors in order to identify what kind of inter-industry adjustment might be associated with the recorded increases in inter-industry trade.

Chemicals

The index of IIT for chemicals (SITC Section 5) fell from 0.62 in 1977 to 0.53 in 1986. A look at the levels of IIT and the trade balance for sub-divisions within chemicals (not reported here) reveals that the falling level of IIT in chemicals as a whole arose largely because of a fall in the level of IIT in organic chemicals (SITC 51). This in turn can be explained by the increasingly large *surplus* of exports over imports in this commodity division. Ireland has clearly specialised so heavily *into* this division that mainly inter-industry trade is observed. Other parts of chemicals present a mixed picture of intra and inter industry adjustment. In pharmaceuticals (SITC 54) and cosmetic products (SITC 55) the level of IIT is high and rising — presumably reflecting the differentiated nature of such products. Against these successful sectors there are those like fertilisers (SITC 562) and plastics, etc (SITC 58) where there are low levels of IIT and this reflects large and, it would seem, growing *trade deficits*. This would indicate that Ireland is being specialised *out* of these particular lines.

Machinery and Transport Equipment (SITC Section 7)

A study of the level of IIT and the value of exports and imports in each of the 2-digit Divisions that make up this section reveals first and foremost, the extent to which office machines and data processing machinery (Division 75), dominates the section. Such is the imbalance (surplus) of recorded exports over recorded imports in office machinery that this Division (75) has a relatively low level of intra-industry trade. Secondly, our detailed study shows that in contrast to the enormous trade surplus of office and data processing machinery *all* the other divisions of this industry had trade *deficits* in 1986 — though some of these were relatively slight. Consequently, among these other divisions of SITC Section 7 the pattern of intra-industry trade lends itself to relatively easy interpretation. The low and falling level of intra-industry trade mainly reflects the fact that Ireland has totally lost its position in motor assembly and is a heavy net importer in all nine commodity groups. At the same time certain niches have been retained or created in the motor industry (Groups 784 and 786) and in the aircraft (792) and boat building (793) industries.

Other Manufacturing Sub-Sectors

The fall in the level of intra-industry trade in miscellaneous manufactured articles (SITC 8), also lends itself to easy interpretation. The developments in clothing (Div 84) and footwear (Div 85), travel goods (Div 83) in particular bear some of the hallmarks of an *adverse inter-industry adjustment* — that is, Ireland has been specialised *out* of these industries. We have seen in Chapter 4 the severe contraction of the clothing and footwear industries. In contrast, we have seen, in the case of the drink and tobacco sector and some parts of engineering, that employment contraction, and indeed a fall in the index of intra-industry trade, is not inconsistent with a successful export performance and a strengthening of a sector's long-term competitive position. However, those sectors were in substantial and growing trade *surplus*. The trade balance of clothing and footwear is negative and, more importantly, disimproved over time. In such industries, if the job losses were due to technological change in response to international competition, then we would strongly expect to see the level of intra-industry trade *increase*, as such restructuring would presumably be based on perceived product opportunities and, in industries facing severe competition, these would almost certainly involve intra-industry specialisation.

Trade with Developed and Less Developed Countries

Since the textiles, clothing and footwear industries were potentially vulnerable to competition from newly industrialising countries it was considered worthwhile to explore the nature of trade with these less developed countries a little. To do this exports and imports were disaggregated into 3 groups: trade with developed industrial economies (all OECD, except Turkey, plus Israel), trade with members of OPEC, and trade with the remaining countries (newly industrialising and less developed). The index of intra-industry trade was calculated for trade with developed industrial economies and less developed

Table 6.5
Intra-Industry Trade Indices for Ireland 1986*

	Total	Developed Industrial	Less Developed
Section 0	0.28	0.33	0.04
Section 1	0.51	0.48	0.18
Section 2	0.40	0.31	0.10
Section 3	0.18	0.18	0.08
Section 4	0.20	0.21	0.01
Section 5	0.52	0.54	0.16
Section 6	0.68	0.67	0.21
Section 7	0.60	0.59	0.45
Section 8	0.65	0.66	0.17
Sec 0-8	0.52	0.53	0.17
Sec 5-8	0.61	0.61	0.28

*Grubel-Lloyd indices, not adjusted for trade imbalance.

economies. The weighted averages for industrial SITC Sections 0 to 8 are shown in Table 6.5. These conform to what is expected, and what has been found in other countries — namely that trade with developed industrial economies shows a far higher index of IIT than trade with less developed countries.

In general this would tend to imply that trade with less developed countries could potentially cause *greater adjustment problems* than trade with developed countries. However, it is not easy to ascribe the increased inter-industry trade in textiles, clothing and footwear, and the effective specialisation of Ireland *out* of these industries, to competition from less developed economies that are specialising into these industries. Imports from such countries still constitute a small percentage of total Irish imports of these products — though a considerably higher percentage than for imports in general.

	Import from LDCs as % of total imports 1986
Section 26 Textiles Fibres and Waste	15.9
Section 65 Textiles, Fabrics	9.2
Section 831 Travel Goods	48.0
Section 84 Clothing	11.6
Section 851 Footwear	12.5

Indeed, looking at the detailed statistics for imports of, say, clothing, the predominance of the United Kingdom, Germany, and to a lesser extent Italy, is quite striking. While it can be presumed that a *smaller* amount of *inter-industry* trade could have *more painful* adjustment implications than a *larger*

amount of *intra*-industry trade, the relative magnitudes in this case seem too different for imports from less developed countries to explain much of the job losses in these sectors of Irish manufacturing (a similar view was taken by Matthews, 1980, and O'Malley, 1985, when they considered this question). However, it is possible that detailed knowledge of these industrial sectors would indicate that particular parts of these industries were substantially more vulnerable to competition from newly industrialising countries than the sectors as a whole would seem to have been. In any event, there would seem to be evidence that the level of *intra*-industry trade *with developed countries*, though still much higher than with the poorer countries, fell somewhat between the late seventies and the mid-eighties. This increased inter-industry trade is likely to explain more of the adjustment problems experienced.

In the cases of clothing, footwear, textiles and several other sectors, data on the way in which the industrial structure changed as integration proceeded will be helpful in interpreting the information on *intra*-industry trade. In Section 3 we combine these two sources of data and interpret what they tell us about Ireland's integration into the international economy.

2. THE SIZE STRUCTURE OF MANUFACTURING INDUSTRY IN IRELAND

(i) Introduction

Our reason for considering industrial structure is the possibility of economies of scale. We have seen in Chapters 2 and 3 that the presence of economies of scale has important implications for the effects of integration and trade on the economy. One of the most prominent of these is the prediction that integration will bring about concentration within each industry.

In order to investigate whether this has occurred as a result of Ireland's integration into the European economy we must examine the changing size structure of manufacturing in Ireland. Ideally, we would wish to investigate the size structure of both *establishments* and of *firms*. This would allow us to consider both economies of scale in *production* (which would encourage the formation of large *establishments*) and economies of scale in *other activities* such as marketing, finance, R + D, etc. (which would encourage the formation of large *firms*). Unfortunately the data which are available refer to establishments only.

Information on the size structure of Irish manufacturing industry is available from the *Census of Industrial Production* (CIP) and the IDA's Employment Surveys. The CIP data go back to 1929 but contain a certain discontinuity in 1979 due to a change of coverage. The IDA data go back only as far as 1973, but distinguish between indigenous and foreign firms. In the following discussion we draw on both sources.

When considering the size structure of industry several possible denominators of scale are available and all have certain drawbacks. In principle the *value* of the output would seem a good denominator of size. But problems arise in trying to identify the relevant measure of value of output. Employment is by far the most widely used size denominator in official statistics and in economic research on industrial structure. We follow that practice here.

(ii) Industrial Structure in Irish Manufacturing

In their recent study of small scale manufacturing industry Kennedy and Healy (1985) summarised the development of the size structure of Irish manufacturing as follows: From the late twenties to the late sixties the employment share of establishments with less than 50 employees declined considerably. But the share of establishments in the size ranges from 50 to 500 employees remained remarkably stable. Consequently, the chief long-term change in the period to the late sixties has been the gain in the share of establishments with more than 500 employees at the expense of those with less than 50 employees. It should be noted that data on the number of establishments and employees in different size categories in different years do not allow one to trace the evolution of particular firms. It cannot be assumed that the establishments in a given size category in one survey are the same ones which appear there in a subsequent survey. Kennedy and Healy summarise the experience from the twenties to the sixties as follows: "what can be said is that the outcome of these forces resulted in a strong tendency towards an increasing concentration of employment in larger establishments — at least up to the end of the 1960s".

In the early to mid-seventies this process of concentration went into reverse. In particular, the share of employment in the largest size category (more than 500) declined. In discussing this Kennedy and Healy considered that this decline "may reflect forces special to the 1970s rather than a long-term trend. These forces include the impact of free trade on the older Irish import-substituting industries, the world depression following the oil crisis of late 1973, and factors peculiar to particular firms." It will be seen below that this reversal of the concentration process continued and, indeed, quickened in the late seventies and 1980s.

Of course, as always, we cannot attribute the whole of the observed trends, in this case de-concentration of manufacturing, to integration into the European economy. It is clear that, independent of integration, technical change and the turbulent economic events of the seventies and eighties have brought about changes in production and organisation which generally tended to somewhat reduce the percentage of employment in the largest size category.* This must

*A general contraction of employment, such as can occur in a period of technical change or prolonged economic recession, will tend to move firms into lower size categories and thereby reduce the percentage of employment in the large size categories making the overall industry appear less concentrated.

be borne in mind when considering the changes in industrial structure. It also means that the prediction of the new theory of integration — that trade will tend to bring about a concentration of industry — should not be taken so literally as to mean that employment in the largest size category will actually increase its share.

A brief international comparison of industrial structure can also be found in Kennedy and Healy (1985). In general it has been found that establishment size differences between countries are strongly and positively correlated with the size of the domestic market. In fact, given its very small market, Ireland does not have a particularly large proportion of employment in small establishments. Ireland emerges as having a relatively high average size of establishment for a country of its size. But in a skewed distribution, which is what usually exists, the average value is not a very informative parameter. Consequently, two other aspects of the structure are noteworthy. First, Ireland has a high concentration of manufacturing employment in middle-sized establishments. Secondly, and more significantly, the large establishments in Ireland have a very *low average size* by international standards (see Kennedy and Healy, 1985; Kennedy, Giblin and McHugh, 1988).

In reporting the evolution of the industrial structure in each sector of manufacturing we follow, as far as possible, the grouping of manufacturing industries derived in Chapters 4 and 5.

(iii) Export-Oriented, Grant Aided, High Proportion of Foreign Owned

Chemicals

The chemicals industry is one of those which experienced sharply increased concentration between the 1950s and the 1970s. It differed from many other sectors, and from manufacturing as a whole, in that this process of concentration (a fall in the proportion of employment in establishments with less than 50 employees and an increase in the proportion of employment in firms with more than 200) continued after 1973-75 until around 1979. After 1979 there was some reversal of concentration but this mainly took the form of contraction of the larger firms rather than an increase in the share of employment in the smallest establishments. Taking the period from 1958 to 1984 as a whole, and taking both indigenous and foreign firms together, the sector was in general *more concentrated* at the end of the period than at the beginning. However, as in several other sectors, there was a marked tendency to increase most in the middle size categories (50-100 and 100-200).

Some of the explanation for this pattern can be identified when we consider the Irish and foreign firms separately. Figures 6.1 and 6.2 show the size structure of the chemicals industry in 1973, 1979, 1983 and 1987 as revealed in the IDA employment surveys. In 1973 the Irish and foreign segments of the

industry had broadly similar structures — with the Irish having a higher proportion of employment in the smallest size category (0-50). Events since then have clearly altered these structures in very different ways. Among the Irish firms the period between 1973 and 1979 increased the share in small establishments but without altering much the share of the largest. But after 1979 the large establishments rapidly lost their share of total employment. It should be noted that the data summarised in these figures do not allow us to say whether the share of large establishments fell because the large firms contracted and/or closed or because of the establishment or expansion of many more small firms. Except, of course, in the case of the change from 1983 to 1987 — where the share of employment in firms with more than 500 went *to zero*.

The change in the size structure of foreign firms — though it also involved a reduction in the share in the largest size category — was clearly very different. The structure here is much more consistent with the idea that increasing returns to scale activities and/or science-based activities are being developed. The difference between the developments of the two segments tends to suggest that the Irish firms are in either declining sub-sectors such as fertilisers, dyeing, tanning, and colouring materials (which have low and declining levels of intra-industry trade) or small scale activities.

Metals and Engineering

Metals and engineering was another sector in which very different types of activities and different types of firms were found in our survey of developments in Chapter 4. In the late fifties it was a sector which had 31.3 per cent of its employment in establishments with more than 500 employees and a further 23.2 per cent in the size category 200-500. This made it a considerably *more concentrated* sector than manufacturing in general. Between 1958 and 1968 employment in the sector became even more concentrated in large establishments, with over 60 per cent in firms with more than 200 employees. By 1975 this concentration had been slightly reversed as the share of the smallest establishments rose at the expense of the share of the largest. This reversal of concentration continued through the seventies to the present.

Figures 6.3 and 6.4 show developments since 1973 for the foreign and Irish sectors separately. The change in the size structure of employment in the Irish firms reinforces the interpretation discussed in Chapter 4. Namely, that the employment growth among Irish firms during the seventies was heavily concentrated in sub-sectors like metal articles and mechanical engineering, which are mostly small scale activities which serve local markets in products which are somewhat protected from international competition. At the same time large establishments, in returns to scale activities which are open to competition such as, for example, electrical engineering, closed or contracted. The distribution of employment in foreign firms has a fundamentally different

shape. In addition, the only change between 1973 and 1987 has been a slight fall in the share of the largest size category (500+) and an increase in the share of the second largest category (200-500).

The developments in these two sectors suggest that the effect of integration identified by several researchers, in their studies of manufacturing industry in the EC, have *not* occurred in Ireland. More precisely, instead of integration stimulating dominant indigenous firms to exploit economies of scale and thus eliminate the tail of higher cost producers the larger Irish manufactures would seem to *have been part of the tail* eliminated by producers in other countries. The changes in the structure of *foreign* firms in chemicals and engineering confirm the tendency to rationalisation and labour saving technical change.

(iv) Industries Afforded a Degree of Natural Protection

Drink and Tobacco

The drink and tobacco industry has for a long time had a structure which is quite unusual in Irish manufacturing. It has been dominated by a few very large firms which date back over a century. Indeed, in his work on the decline of Irish industry in the nineteenth century O'Malley notes that Guinness' brewery was a notable exception among manufacturing firms in being able to withstand successive waves of technical and organisational change in British industry (O'Malley, 1981)*.

In 1958, 53 per cent of employment in the industry was in establishments greater than 500 — a quite unusual structure in Irish manufacturing. By 1968 the industry had become even more concentrated as the number of establishments fell from 136 to 120. In the late seventies and early eighties there was a very slight reversal of this process of concentration. Figures 6.5 and 6.6 show the changes in structure between 1973 and 1987 for Irish and foreign firms. The distinction between Irish and foreign firms is less significant in this industry than in chemicals or engineering since the foreign firms were much longer established in drink and tobacco.

Looking at the Irish and foreign firms together we can say that the slight reversal of the degree of concentration in the 1970s was associated with three developments in the industry: a reduction in the percentage employed in largest establishments but an increase in the share of slightly smaller plants, a fall in the share of very small establishments and a fall in the number of establishments. This strongly suggests that as tariff protection was reduced, larger firms undertook rationalisations and technical change, while a number of small firms, especially in the distilling and soft drinks sub-sectors, closed down.

*He attributes this to the fact that brewing is an industry in which the benefits of large scale production became important quite early and consequently early producers achieved a dominance which was not easily challenged.

The factors which make the interpretation of these changes in the structure of this industry relatively easy are the similarity between domestic and foreign firms, the small number of new firms, and the fact that the change in the concentration of employment occurred mainly at the large end of the size spectrum. Although none of these factors apply in most other industries it may be assumed that in them a similar pressure for technical change and rationalisation existed as protection of the domestic market was reduced.

The drink and tobacco sector in Ireland would seem to provide confirmation of one of the hypotheses noted in Chapter 3 — namely, that where there is extreme concentration in an industry the share of exports in value added would be relatively low, as the dominant producer can exploit economies of scale by relying on the domestic market. The share of exports in total turnover in drink and tobacco in Ireland is the lowest of any industrial sector — though it has increased in recent years.

The combination of the intra-industry trade calculations and the data on industrial structure allow a judgement to be made on the effect of economic integration on the industry. The retention of the home market, the concentration of the industry in large establishments, and in this case the falling level of intra-industry trade, are indicative of an industry that is fundamentally strong — though in a sector which is not internationally a 'fast growth' one, nor one where product development is particularly feasible. The fall in the share of employment in the very largest establishments would seem to indicate restructuring in response to new conditions which should be *once and for all*, rather than the start of a *process of attrition* which is likely to continue — as occurred in the Irish-owned segments of the chemicals and engineering industry, and in several other sectors (see below).

Glass, Non-Metallic Minerals

A sector which bears several important similarities with drink and tobacco is non-metallic minerals. It is one which relied heavily on the home market, in which employment and output increased during the seventies, and which has traditionally been highly concentrated by the standards of Irish manufacturing industry. In 1958 over 50 per cent of employment was in establishments with over 200 employees. This degree of concentration in large establishments increased through the sixties and, most importantly, continued to increase through most of the seventies. There was some reversal after 1979 as the share in small establishments rose — but the share in large establishments remained high.

Like drink and tobacco this is not a sector in which the indigenous and foreign firms can be sharply distinguished by date of establishments or type of activity. It can be seen from Figures 6.7 and 6.8 that the size structure of the indigenous and foreign establishments, and the changes in that size structure over time, are broadly similar.

Like other sectors which were reliant on the home market non-metallic minerals experienced net job losses in the 1980s. However, the sector consists of industries such as glass and glassware, cement and concrete, and ceramics which had somewhat different fortunes during the 1980s. The latter two were among those industries in which employment fell by more than 25 per cent between 1980 and 1985. By contrast, glass and glassware lost less than 10 per cent of its employment. The data on the size structure of establishments do not allow us to identify the structure of these very different industries.

Though the sector as a whole exports less than a third of its turnover this ratio would be much higher for sub-sectors such as glass and glassware. Our analysis of intra-industry trade showed that the trade in non-metallic mineral products has had a high and rising intra-industry trade index. This may well reflect trade in differentiated high value added products and, if the makers of these products are among the large indigenous firms which clearly still exist in this sector (see Figures 6.7 and 6.8) then this reflects a relatively healthy response to integration.

Paper and Printing

Employment in this industry has traditionally been heavily concentrated in large establishments, with a substantial tail of small producers. The sector became somewhat more concentrated between 1958 and the early seventies but this was slightly reversed between 1975 and 1979. Since 1979 there has been greater change in the industrial structure with the proportion in smaller and medium size establishments increasing.

Nevertheless from Figures 6.9 and 6.10 it can be seen that the size structure has been much more stable than that of most other industries in Ireland. The Irish and foreign segments have somewhat different structures, but not nearly so different as in other industries. Indeed, the contrast between the Irish and foreign is not one which coincides with differences in technology, activities or age. The largest firms in the sector have traditionally been Irish and this remains so (see Figures 6.11 and 6.12). However, despite the presence of large scale production Ireland has been, and remains, in substantial *trade deficit* in the products of this industry and there is evidence of increasing penetration by competing imports. A look at the trade statistics shows that neither the deficit nor the import penetration are accounted for by trade with newly industrialising countries. The trade in these products is mostly inter-industry trade — the index of intra-industry trade has remained at around 0.40 since 1964 (see Table 6.2 above). This would seem to indicate that the strong firms in this sector have not succeeded in establishing export markets in these relatively undifferentiated products.

Food

The food industry contains sub-sectors of such different types that it is of

limited value to analyse the changes in the industrial structure of the whole sector. Recall that we listed some sub-sectors, such as bread, biscuits and flour confectionery, sugar, cocoa and chocolate, and fruit and vegetable processing, among those showing signs of decline since the mid-sixties. Other parts of the food industry have shown strong output growth since accession and employment growth in the seventies. In 1958 the industry had a uniform size structure — that is, a roughly equal share of employment in each size category (0-20, 20-50, 50-100, 100-200, 200-500, and 500+). As in all industries there was increased concentration between 1958 and 1975; there was a slight reversal thereafter but this had the effect of increasing concentration in the medium size categories 50-100 and 100-200. In the mid-eighties the share in small or very small firms was lower than it had been in 1958.

In Figures 6.11 and 6.12 it can be seen that the change in structure for both Irish and foreign segments of the industry involved a reduction in the proportion of employment in the largest size categories and increased concentration in the medium sized firms. Given the mixed pattern of declining and growing sub-sectors it is not possible to say from these data that this involved contraction of the largest firms; it may have involved closure of large firms in sectors such as fruit and vegetable processing, etc. and their replacement by medium sized firms in activities such as meat processing. Nevertheless, allowing for this element of uncertainty, and taking account of the pressures for technical change and rationalisation that have been identified, it does seem in recent years that the food industry in Ireland is one that has broadly conformed to the pattern predicted by the new theories of integration. That is, faced with access to foreign markets larger domestic producers have eliminated or absorbed smaller firms (see Matthews and O'Connor, 1987). There are clear signs that relatively large firms having distinct advantages over smaller ones are now pressing these advantages home.

Wood and Furniture

Wood and furniture shared with drink and tobacco and non-metallic minerals a heavy reliance on the domestic market. But the size structure of this industry has traditionally been very different with a very large share of employment being in firms of size 0-50. In 1958, 60 per cent of employment was in this category with no firms with more than 200 workers. From 1958 to around 1975 there was some concentration with almost 12 per cent of employment appearing in firms size 200-500 in 1975. Thereafter, however, this concentration was reversed — especially in the 1980s.

This structure and change in it can be seen clearly in Figure 6.13 which shows employment in the Irish firms in this industry. This would seem to confirm the view that the process of integration forced Irish producers to concentrate on small scale, mostly non-traded, activities while larger scale activities have declined. A look at Figure 6.14 shows that the foreign segment of this industry

has had a very different structure and, despite removal of all employment in firms with more than 200, this difference has remained.

(v) Industries Subject to Intense International Competition

Clothing and Footwear

In 1958 employment in these industries was fairly heavily concentrated in large firms (but not in the largest size category). As in most of manufacturing there was a distinct increase in concentration till the early 1970s. The process of reversal is evident even in the 1975 Census of Industrial Production data. Thereafter job losses would seem to have been heavily concentrated in the large establishment category. This is confirmed by the IDA Employment Survey data represented in Figures 6.15 and 6.16. Figure 6.15 shows that the size structure of the Irish establishments has become much less concentrated between 1973 and 1987 — with somewhat greater change in the 1980s than the 1970s. Among the foreign firms in the sector the share of employment in small establishments has scarcely changed but the share in larger categories has decreased.

In the case of industries like these, these data on industrial structure is an important complement to our calculations on intra-industry trade. The increasing level of intra-industry trade in clothing and footwear in the sixties and seventies, reported by McAleese, *could* be a very positive sign for firms in traded sectors such as these. It would be a positive sign *if* it reflected specialisation, consolidation, and exploitation of economies of large scale. The information on the industrial structure of the indigenous firms shows that, for these industries taken as a whole, this is *not* what was happening. The share of employment in small establishments increased (compare the categories 0-50 and 50-100 for 1973 and 1979). Conditions which *increase* rather than reduce exposure to international competition were created. As a result the job losses of the seventies were not *once and for all* adjustments to the new trading environment. By the end of the 1970s it would seem that further negative adjustment was inevitable. This is precisely what we have seen in the output and employment trends in the 1980s (reported in Chapter 4), in the falling level of intra-industry trade, and now, most starkly, in the changes in the industrial structure between 1979 and 1987.

Textiles

A very similar pattern of development can be observed in textiles. The Irish textiles industry is one that was built up behind protective tariffs and had no natural protection when fully exposed to competition. In the late fifties the industry was dominated by large firms and this concentration increased through the sixties. But since accession to the Community, or slightly earlier, there was a steady increase in competing imports and loss of employment. Blackwell and O'Malley calculate that from 1967 and 1979 competing imports of textiles grew at an average rate of 2.8 per cent per year (Blackwell and O'Malley, 1984). IDA employment survey data show that by 1980 employment

in Irish firms existing before 1973 had fallen by almost 40 per cent while total employment in Irish firms in the sector fell by 33.4 per cent in the years 1973-80.

It is clear from CSO and IDA data that the excess of job losses over job gains ever since the late sixties has had the effect of reducing the share of employment in larger establishments and increasing the share at the lower end of the size spectrum. This process was considerably speeded up in the eighties — as can be seen from Figure 6.17. For the Irish establishments in the industry the share of employment in establishments with less than 50 employees increased from 14 per cent in 1973 to almost 60 per cent in 1987; the share in establishments with more than 200 fell from around 50 per cent to 12 per cent in the same period. The change in the size structure of foreign establishments was similar to that of the foreign firms in several industries (see Figure 6.18 and compare with 6.16).

3. CONCLUSIONS

In this section we summarise and interpret our findings on intra-industry trade and industrial size structure. We do this by discussing the hypotheses outlined in Chapter 3.

(i) Intra-Industry Trade

Integration

Previous research by McAleese confirmed that Irish integration with the UK and EC economies coincided with increased levels of IIT as predicted by new trade theory (McAleese, 1979). Also during the seventies there was relatively little change in the distribution of employment between sectors. This tended to suggest an intra-industry adjustment in which resources are reallocated to specific firms and products which have some competitive advantage. However, the trends in output, employment, intra-industry trade and industrial structure identified in this study indicate that this intra-industry adjustment requires some further interpretation before being compared with that found in other Community countries in the early stages of their integration into the European economy.

First, our calculations for 1980 and 1986 show overall IIT has fallen slightly — or in many cases ceased to rise. Although both the level and trend in the IIT index varies considerably across industries, a large number of industrial categories recorded lower levels of intra-industry trade in 1986 than in 1977. This is in contrast with most work on other countries. A recent study on *Structural Adjustment and Economic Performance* by OECD reported that, not alone in the sixties and seventies, but also between 1979 and 1985, the index of intra-industry trade increased in all ten countries studied with the important exception of Japan (OECD, 1988). Falling ratios of *intra*-industry trade imply,

by definition, increasing inter-industry trade. Second, in order to interpret the pattern of intra-industry trade we combine these calculations with information on employment and output growth and, most importantly, industrial structure. The relative performance of indigenous and foreign industry and the definite downward trend in the exposed sectors of indigenous industry would seem to indicate that since Ireland's accession to the EC, or perhaps even before, there was an *inter-industry* adjustment occurring. Through the late sixties and seventies this adjustment was masked by employment growth in other industries. This argument is quite consistent with McAleese's observation of increasing intra-industry trade during the years 1964 to 1977. A process of import penetration and export buoyancy could temporarily imply increasing intra-industry trade indices despite the fact that in the long run an inter-industry adjustment is occurring. This is not to deny that there was an element of genuine inter-industry specialisation in these and other industries.

Two broad patterns of inter-industry trade and inter-industry adjustment can be identified which seem capable of explaining the observed fall in overall IIT. The first is a trend towards inter-industry specialisation *into* sectors such as organic chemicals, pharmaceuticals, office and data processing equipment and parts of food processing such as meat and milk products. The second is a process of inter-industry specialisation *out of* industries such as clothing, footwear, textiles, transport equipment, travel goods, fertilisers, animal and vegetable fats, and parts of the food industry such as fruit and vegetable processing, biscuit and confectionery, and the large scale indigenous segments of metals and engineering, chemicals, and wood and furniture.

In the first of these groups falling IIT indices largely reflect the very large trade *surpluses* that prevail. Where a country builds up a particular industry, or narrow set of industries, with great extra capacity for exports, rather than developing firms in many sectors, this strategy tends to imply high levels of inter-industry specialisation (Pelkmans, 1984). To this extent Ireland's development differs somewhat from that of most other EC countries. In seeking an *explanation* for this we must consider the long-run evolution of manufacturing in Ireland and the industrial policies pursued. The inter-industry adjustment *out of* the industries listed above is less easily explained but will be considered again presently. But it should be clear that together these two trends amount to a substantial inter-industry adjustment that seems capable of explaining the observed trend in intra-industry trade.

Size of Country

In Chapter 3 we noted two contending hypotheses concerning the trade pattern likely to be found in very small countries. Without more detailed research on the level of product differentiation of Irish exports it is not possible to choose definitively between these two hypotheses. The fall, or levelling off, in the index of IIT tends to support Dreze's hypotheses that a small country will specialise

in *standardised* products. But the logic of that hypothesis was that a small country will specialise in this way *in order to reap economies of large scale*. The evolution of the industrial structure in many sectors of manufacturing is not consistent with this.* As a result it would seem that for much of indigenous manufacturing, the response to integration may have been neither *standardisation* (as predicted by Dreze) nor *differentiation* (as predicted by Jacquemin and de Jong) but *fragmentation*.

Foreign Direct Investment and IIT

McAleese's work on IIT in Ireland in the years 1964, 1971 and 1977 is taken as providing some evidence for the hypothesis that the level of IIT will be higher the greater is the role of multinational corporations in the economy — even in a very small country (Greenaway and Milner, 1986). The trends in IIT revealed in our study suggest that to this proposition there may be added a qualification: while foreign direct investment *per se* will tend to *raise* the level of IIT, the development of a *dual* industrial structure will imply inter-industry specialisation and will, consequently, tend to *lower* the level of IIT.

The Timing and Costs of Adjusting to Free Trade

It was hypothesised in Chapter 3 that *intra-industry* trade and *intra-industry* adjustment will be both *easier* and *quicker* than *inter-industry* specialisation. The developments surveyed in this chapter lend strong support to these propositions.

This statement is based on the conclusion that the late seventies and eighties have indeed seen a substantial inter-industry adjustment in the Irish economy. Despite the observation of greatly increased intra-industry trade in the seventies there was, in many respects, a distinct continuity between the seventies and the eighties. The continuity consists in the almost continuous output and employment decline in a long list of exposed industries and their continuous replacement by foreign firms in a narrow range of manufacturing activities. Thus, what may have seemed like a substantial intra-industry adjustment in the seventies, taking a longer view, turned out to be a slow and somewhat delayed inter-industry adjustment.

This observation casts a different light on the job losses and increased intra-industry trade that occurred during the early years of Ireland's integration into the Community. The most immediate effect of integration is likely to be the 'cold shower' effect, and no doubt this accounted for some of the rationalisation observed in the period after accession. The next effect is likely to be intra-industry adjustment and specialisation. Indeed, the message of

*The development of the Irish food industry does seem to conform to Dreze's hypotheses. In Chapter 4 we noted that to date, the industry has concentrated on relatively unprocessed, and therefore standardised, products. In this chapter we have seen that there has been a definite attempt to exploit scale economies.

much of the literature on the growth of trade following the formation of the European Community, is that this intra-industry specialisation completes the process of adjustment. Had the job losses in Irish indigenous industry in the seventies constituted the extent of the adjustments required (i.e. the cold shower effect and intra-industry adjustment) then we would expect to have seen some *concentration* in the industrial structure of these sectors — as producers specialised within specific product lines and exploited economies of scale by increasing establishment size. The evidence on changing industrial structure in the seventies and subsequent trends in IIT reveals the opposite tendency. In industries where economies of scale exist contractions of employment (except where they remove basic inefficiency) and contractions of output tend to *raise* costs rather than *lower* them. Consequently, such 'adjustments' rather than re-establishing competitiveness on a new basis, are the start of a process of attrition. What we observed in the eighties was precisely further contraction or elimination of many of the firms in exposed relatively large scale activities. There is, therefore, strong evidence that for *these industries at least* the adjustment to integration was not completed by 1980.

As to what explains this — a number of hypotheses can be advanced. First, there are ample general arguments as to why adjustment to integration may take time anyway (these are discussed in Chapter 7). Second, more specifically, the relatively strong performance of the Irish economy during the seventies, and maintenance of very high growth right up to the onset of the recession in 1981/82, may help to explain why adjustment, of the sort under discussion here, was delayed. It can probably be said that by the late seventies the further negative adjustment was virtually inevitable. The industrial structure was changing, but not in such a way as to strengthen the cost competitiveness of Irish producers — in fact the reverse.

(ii) Industrial Structure

Integration Increases Industrial Concentration

One of the most important propositions to emerge from research into integration is that trade will induce increased concentration of industry — because of the existence of economies of scale. Our study of the size structure of establishments in Irish manufacturing very strongly suggests that this proposition did *not* hold true for Ireland's integration in the EC. It would seem that in many industries even the larger Irish producers, instead of eliminating the tail of smaller higher cost local producers, were themselves a part of the tail of smaller producers in a British and Irish, or European market. This is a most significant finding. In trying to understand it we note that it has recently been argued that Irish protection from the thirties to the sixties, by building industries oriented to the small home market, left a legacy of undersized firms (Kennedy *et al*, 1988, p.234). Indeed, Kennedy *et al* conclude that the "poor performance of the larger indigenous firms emerges as a major factor inhibiting Irish industrialisation" (*ibid* p.243).

Domestic Market Size and Pattern of Plant Size

The data we have used do not allow a definitive test of the hypothesis that small countries have a high proportion of very large plants — because production will be oriented to economy of scale driven exports. However, the data we have surveyed definitely do *not* suggest that the pattern found in the Benelux countries in the early 1960s has been replicated in Ireland.

Extreme Concentration and Low Export Propensity

We have found some evidence which tends to confirm the hypothesis that where the domestic market is highly concentrated (dominated by very few firms) the proportion of output exported will tend to be relatively low. In this situation even a small home market may be sufficient to allow economies of scale to be exploited. The drink and tobacco industries in Ireland conform closely to this pattern.

(iii) Conclusion

In international literature, the effects of integration are frequently discussed by reference to intra-industry trade and the size structure of enterprises or plants. When the Irish experience in the EC is analysed in these terms some interesting and important features emerge. First, contrary to what would seem to be the trend internationally, the level of IIT for many sectors of Irish manufacturing industry has fallen or levelled off in the late seventies and eighties. This suggests that some inter-industry adjustment has occurred. Our study of the developments since 1973 suggests what the nature of this inter-industry adjustment was, and in this chapter and Chapter 7 we offer preliminary explanations as to why Ireland's integration into the European economy took this form.

Second, the process of integration seems not to have coincided with increased concentration in industry. To see the significance of this it is useful to note the way in which the OECD summarised a recent study of structural adjustment and economic performance:

it is a striking feature of post-war growth (and one that sets it apart from the inter-war years) that small countries — which rely most heavily on international trade — generally grew more rapidly than their larger counterparts. Moreover, their growth depended heavily on products characterised by economies of scale in production — products in which they could hardly have been efficient without access to foreign markets; while a large share of their imports consisted of goods characterised by great product variety — so that consumers in smaller economies benefitted from the same range of choice as in the largest national markets (OECD, 1988).

On the evidence of intra-industry trade and industrial structure examined in

this chapter it cannot be said that this synthesis of the experience of small countries in international trade accurately describes the experience of Irish manufacturing since accession to the European Community in 1973.

CHEMICALS

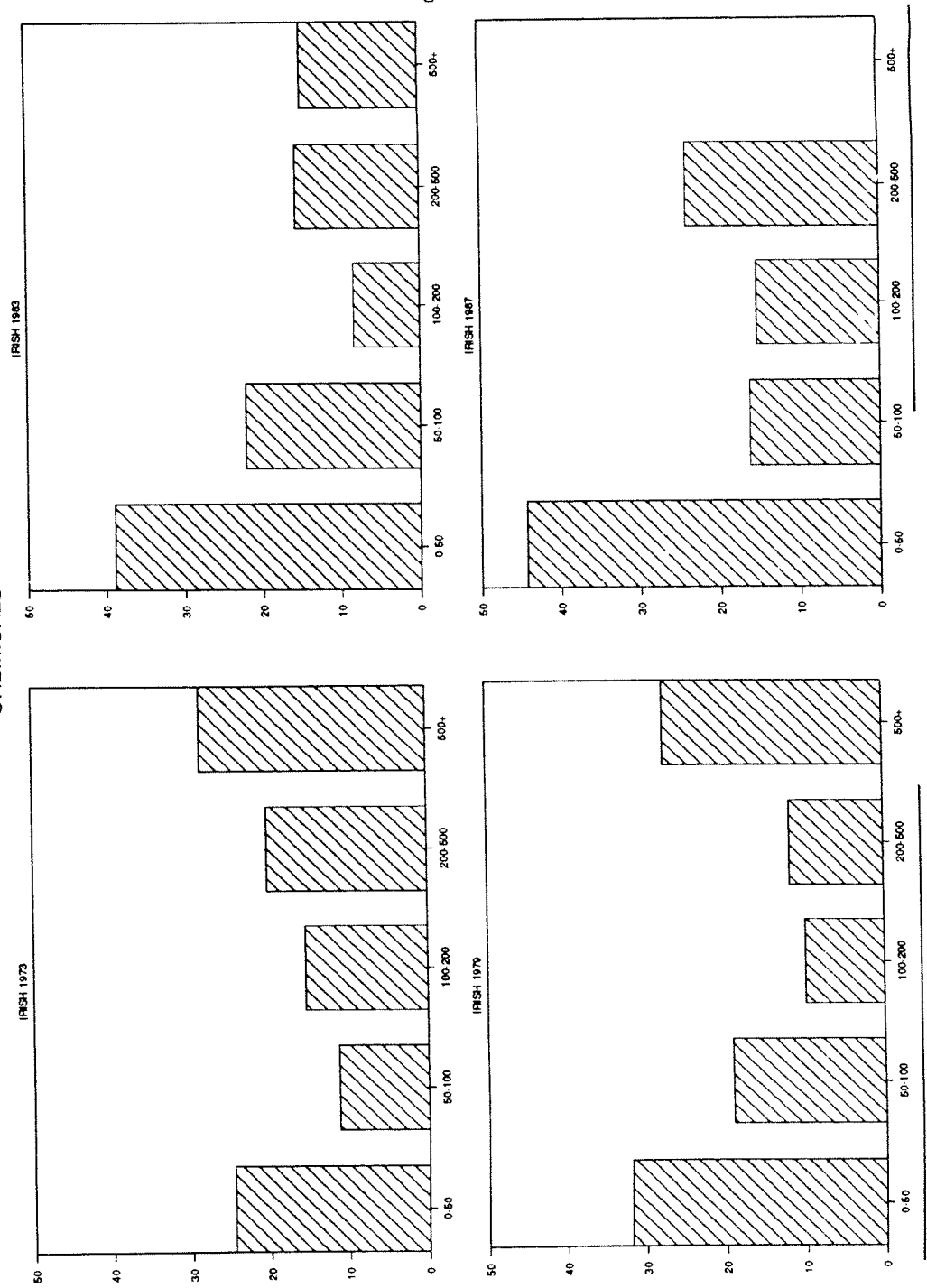


Figure 6.1

CHEMICALS

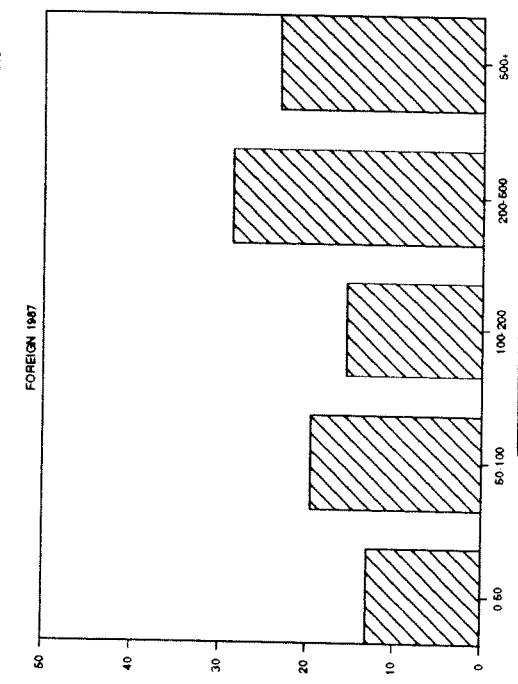
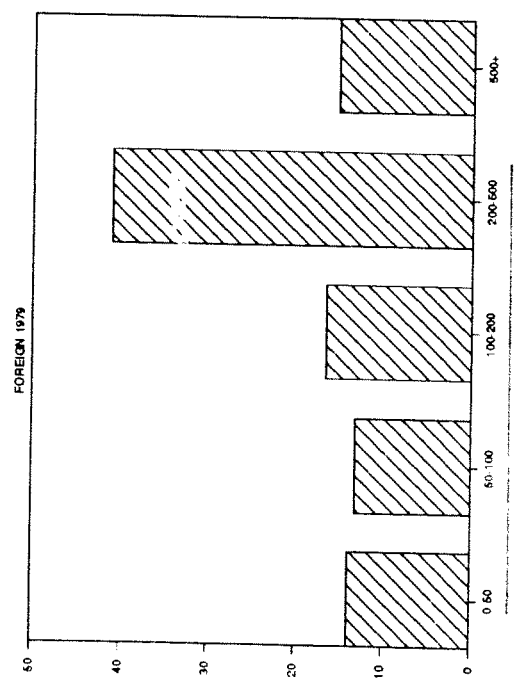
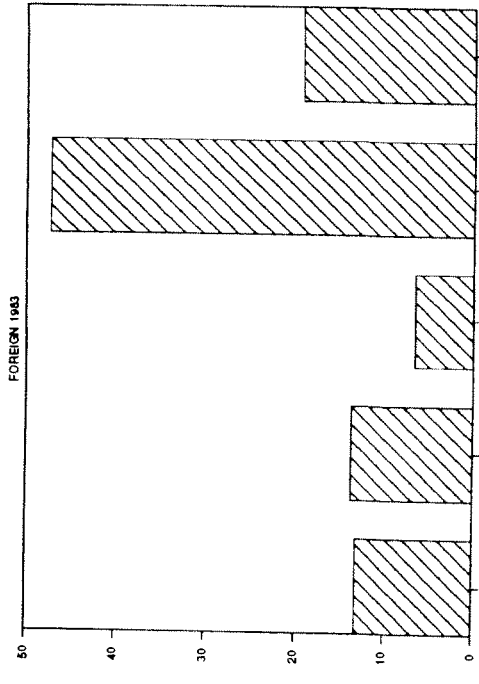
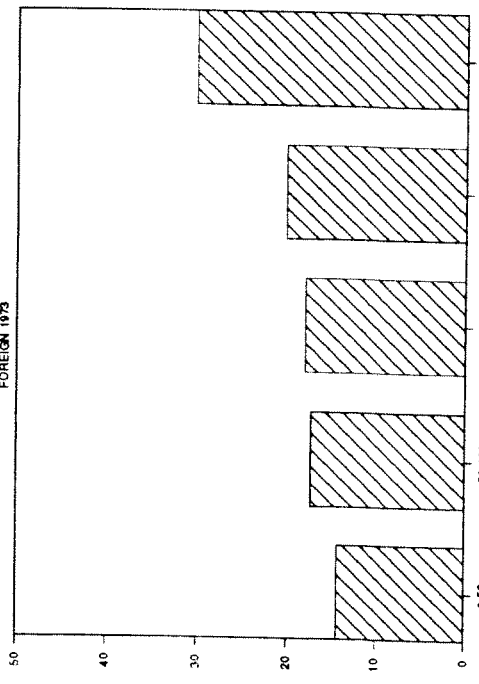


Figure 6.2

METALS AND ENGINEERING

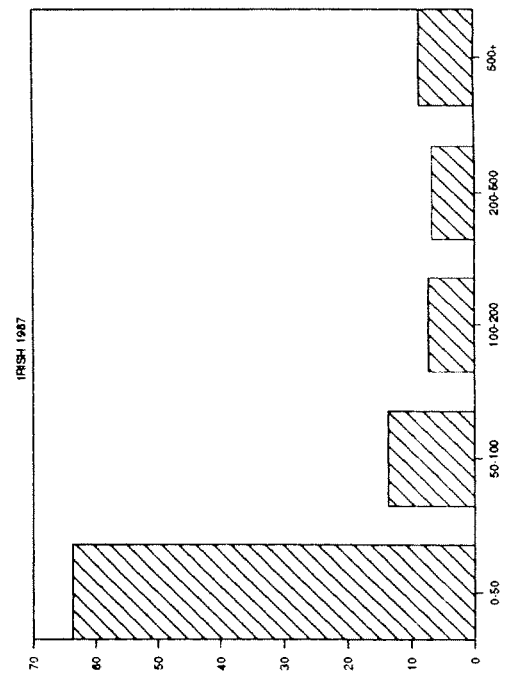
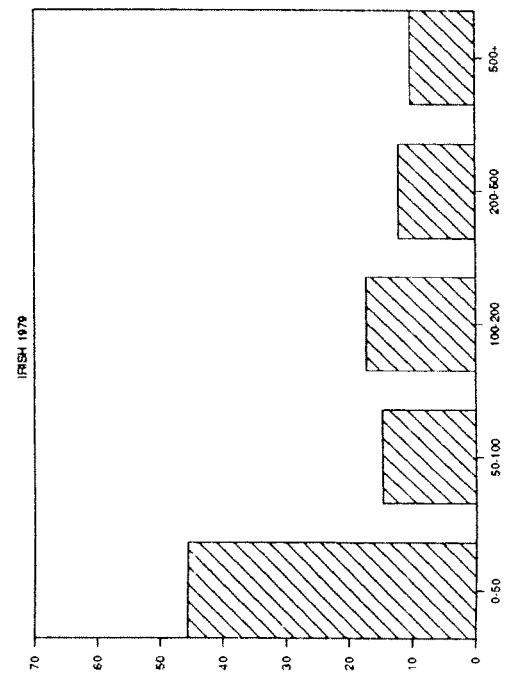
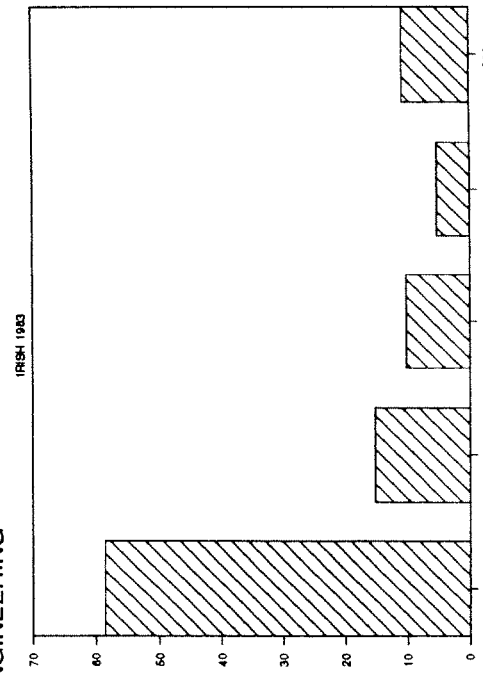
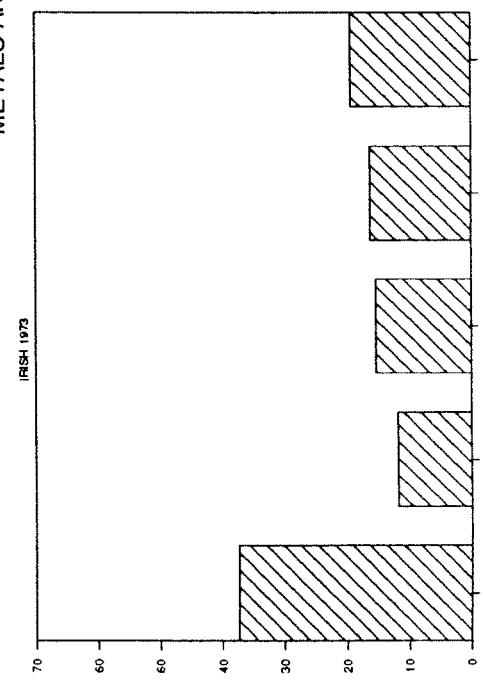


Figure 6.3

METALS AND ENGINEERING

Figure 6.4

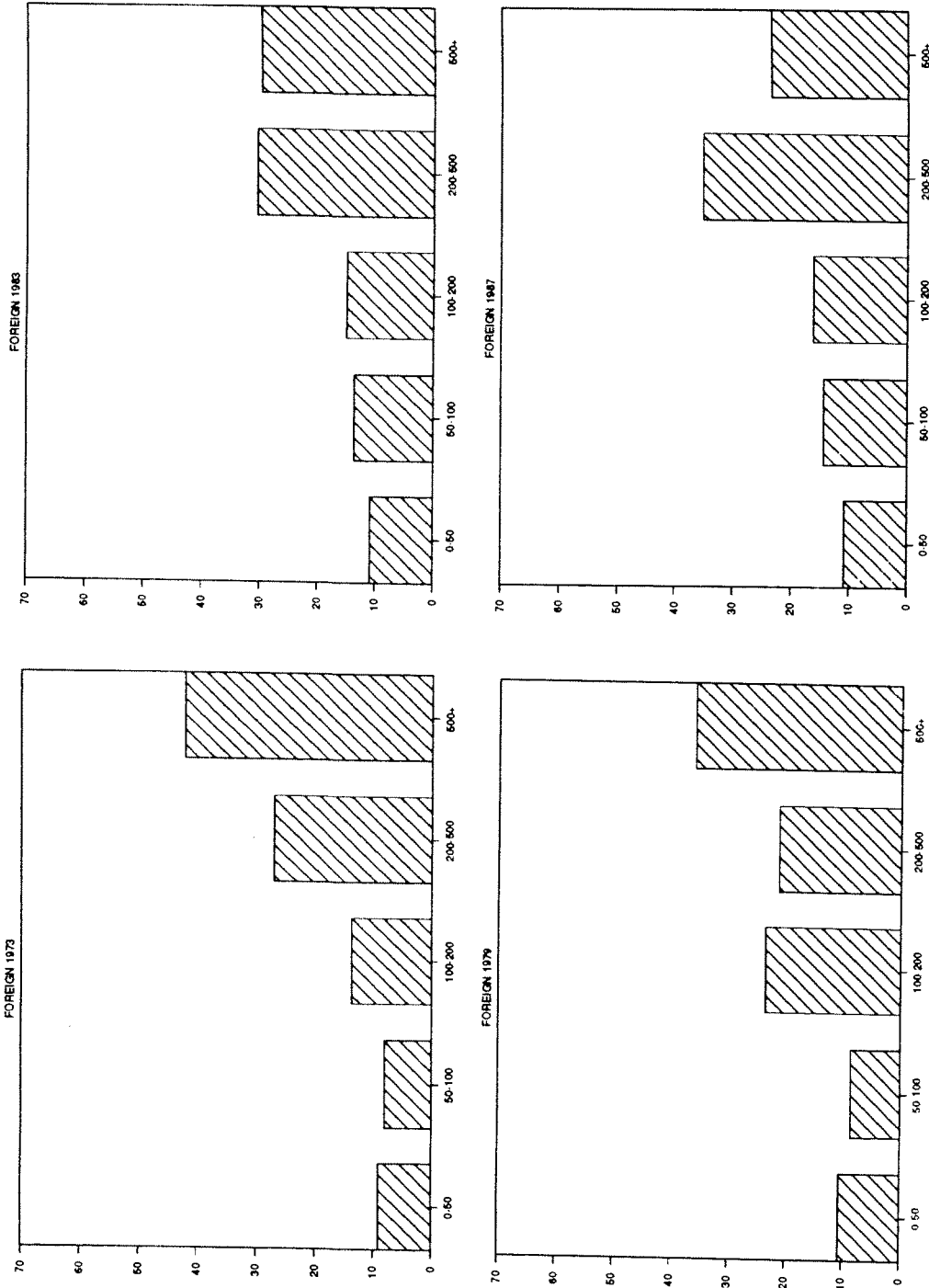
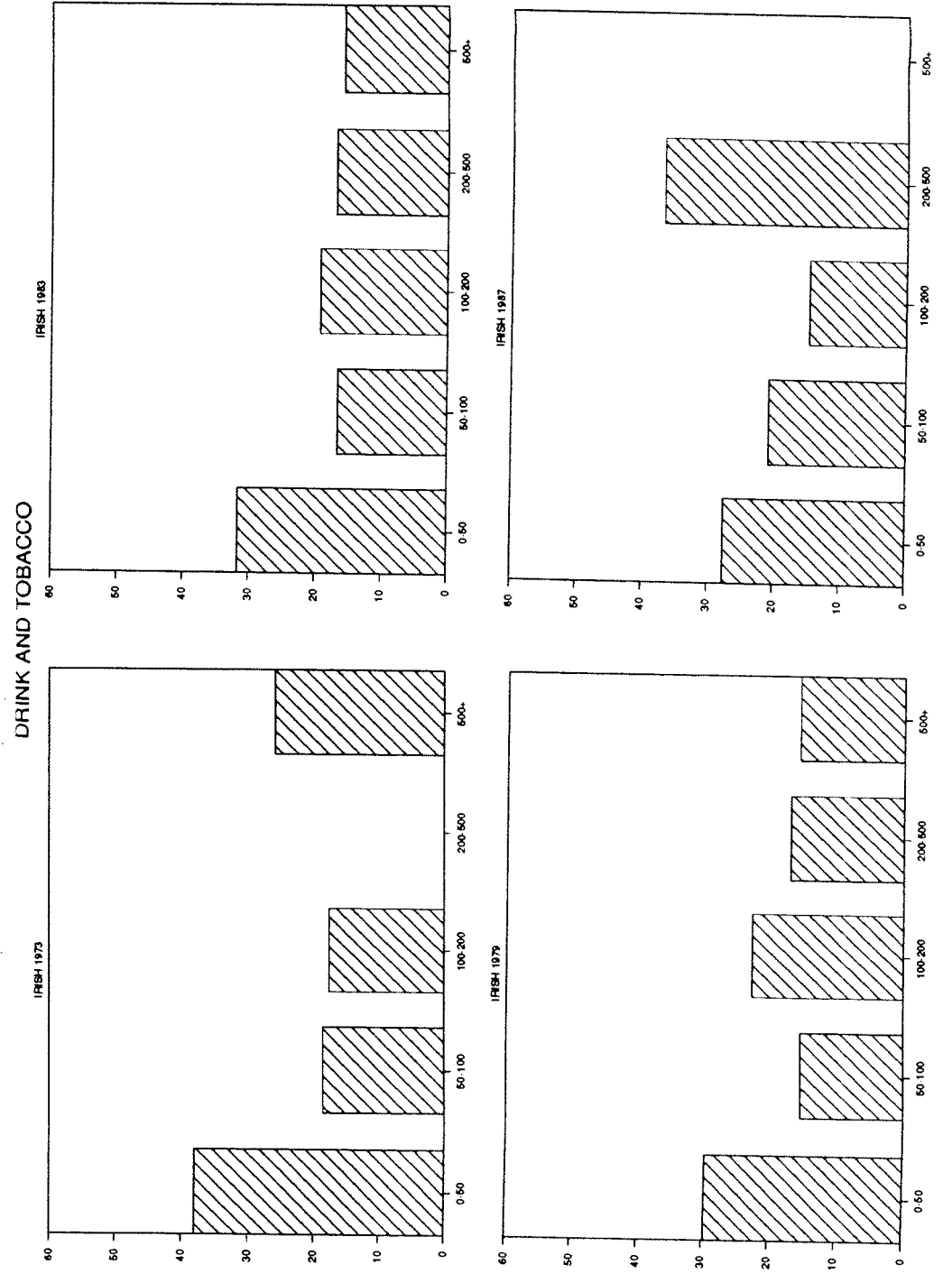
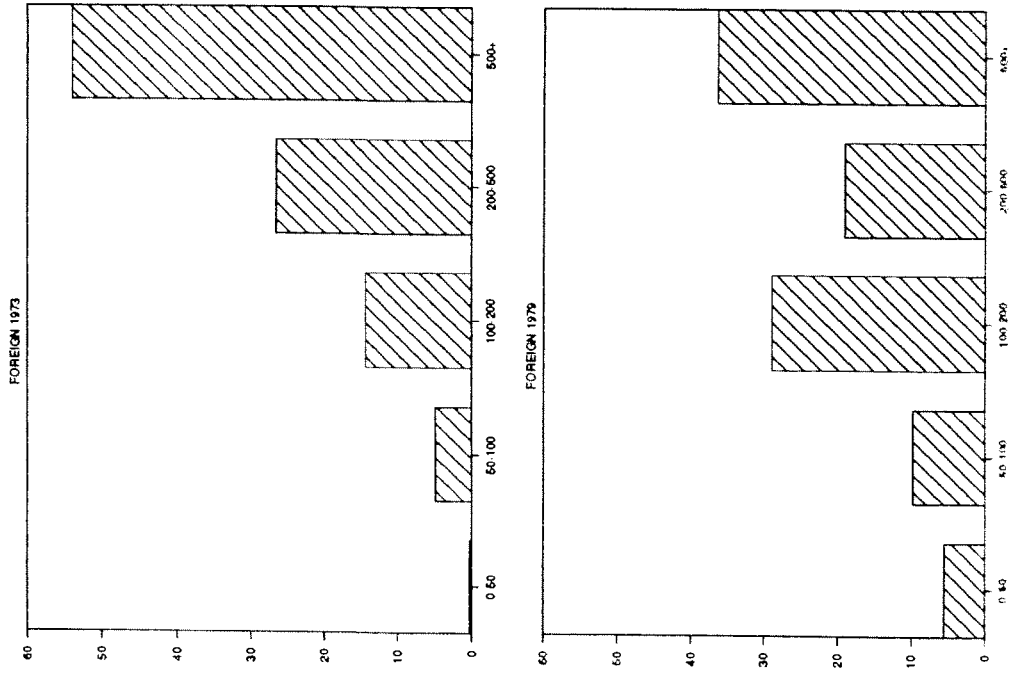


Figure 6.5



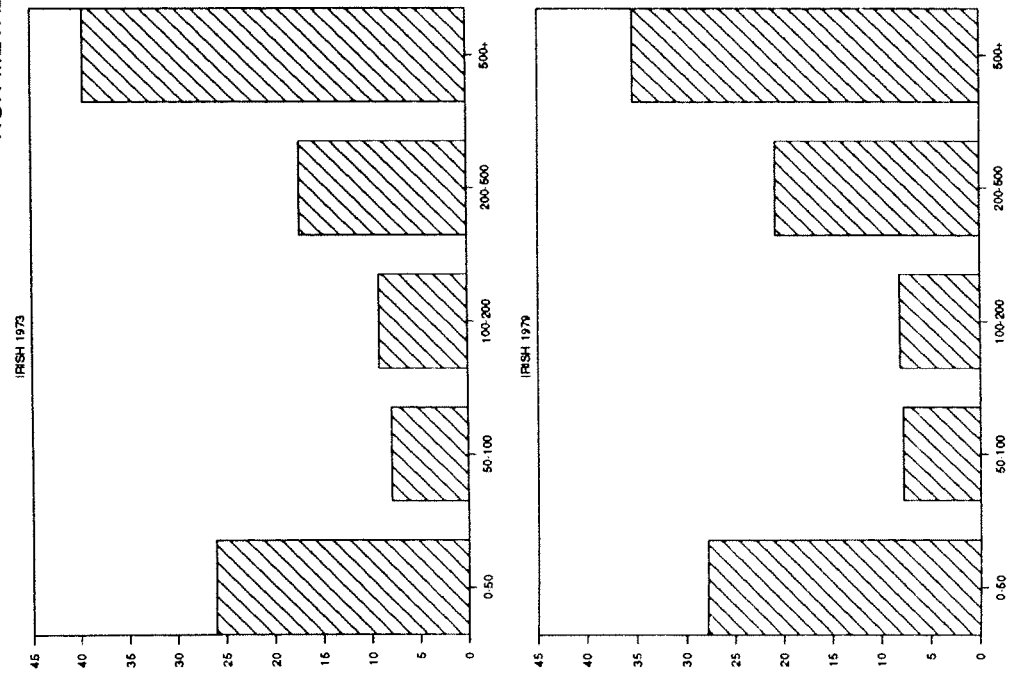
DRINK AND TOBACCO

Figure 6.6



NON-METALLIC MINERALS

Figure 6.7



NON-METALLIC MINERALS

Figure 6.8

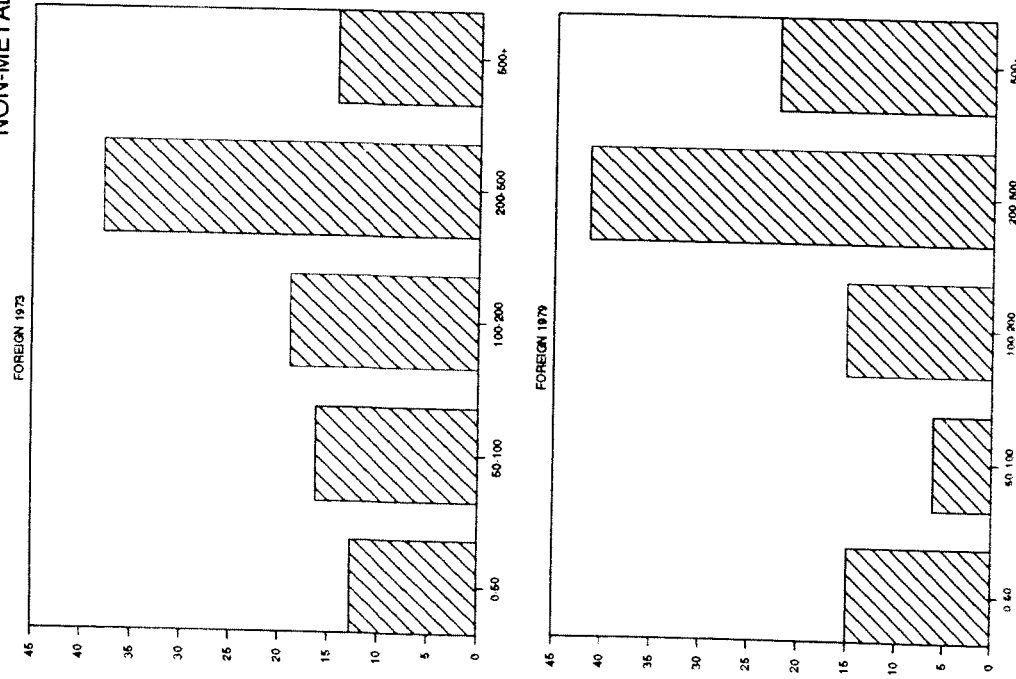
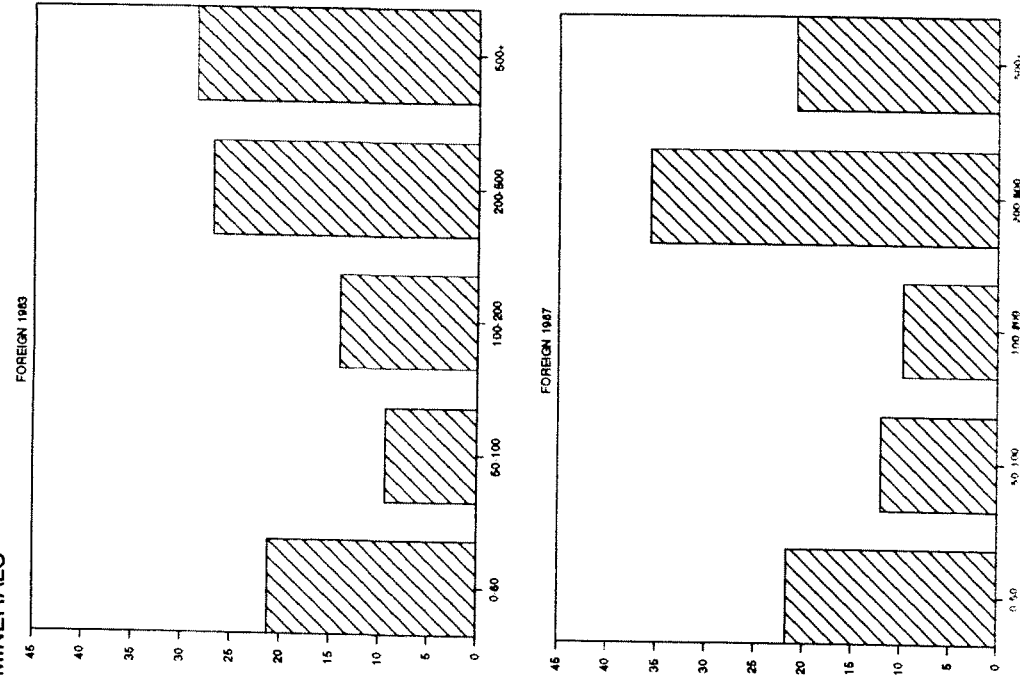


Figure 6.9

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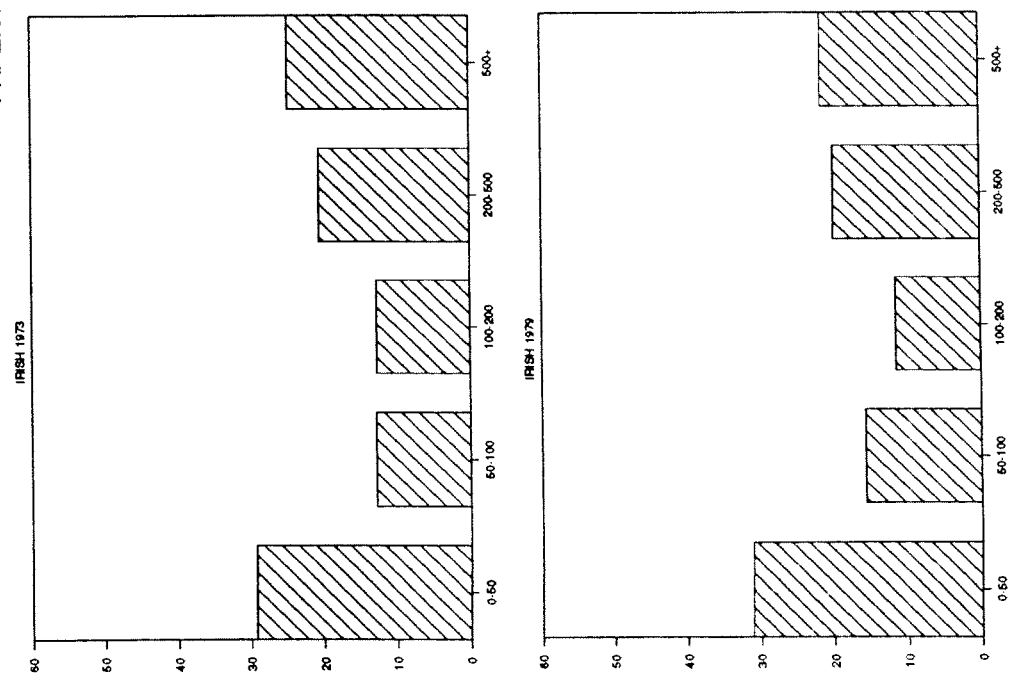
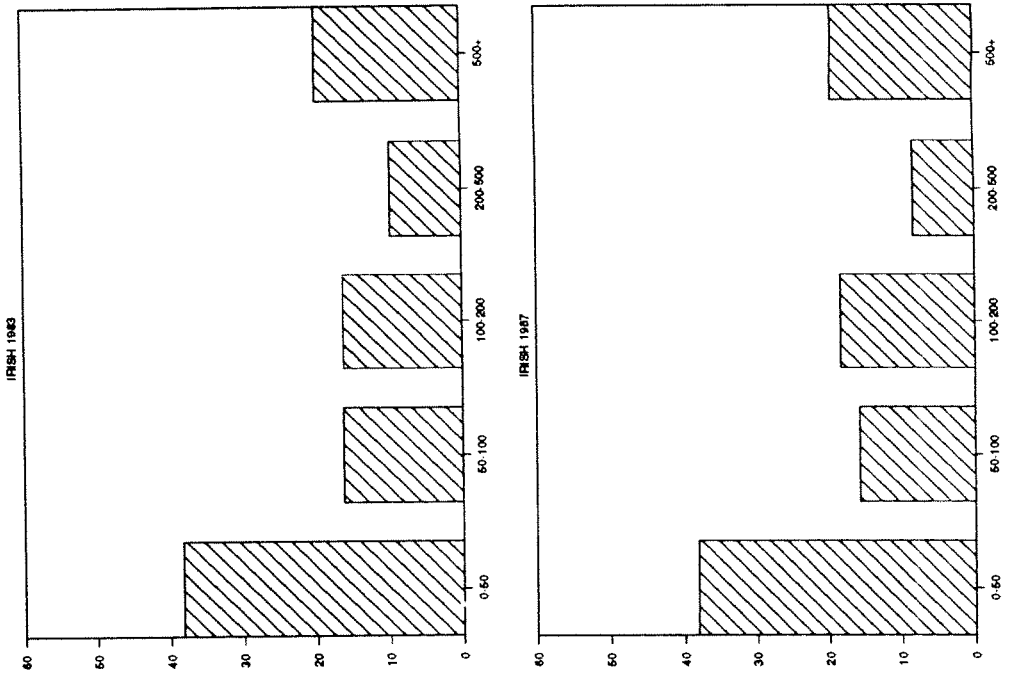


Figure 6.10

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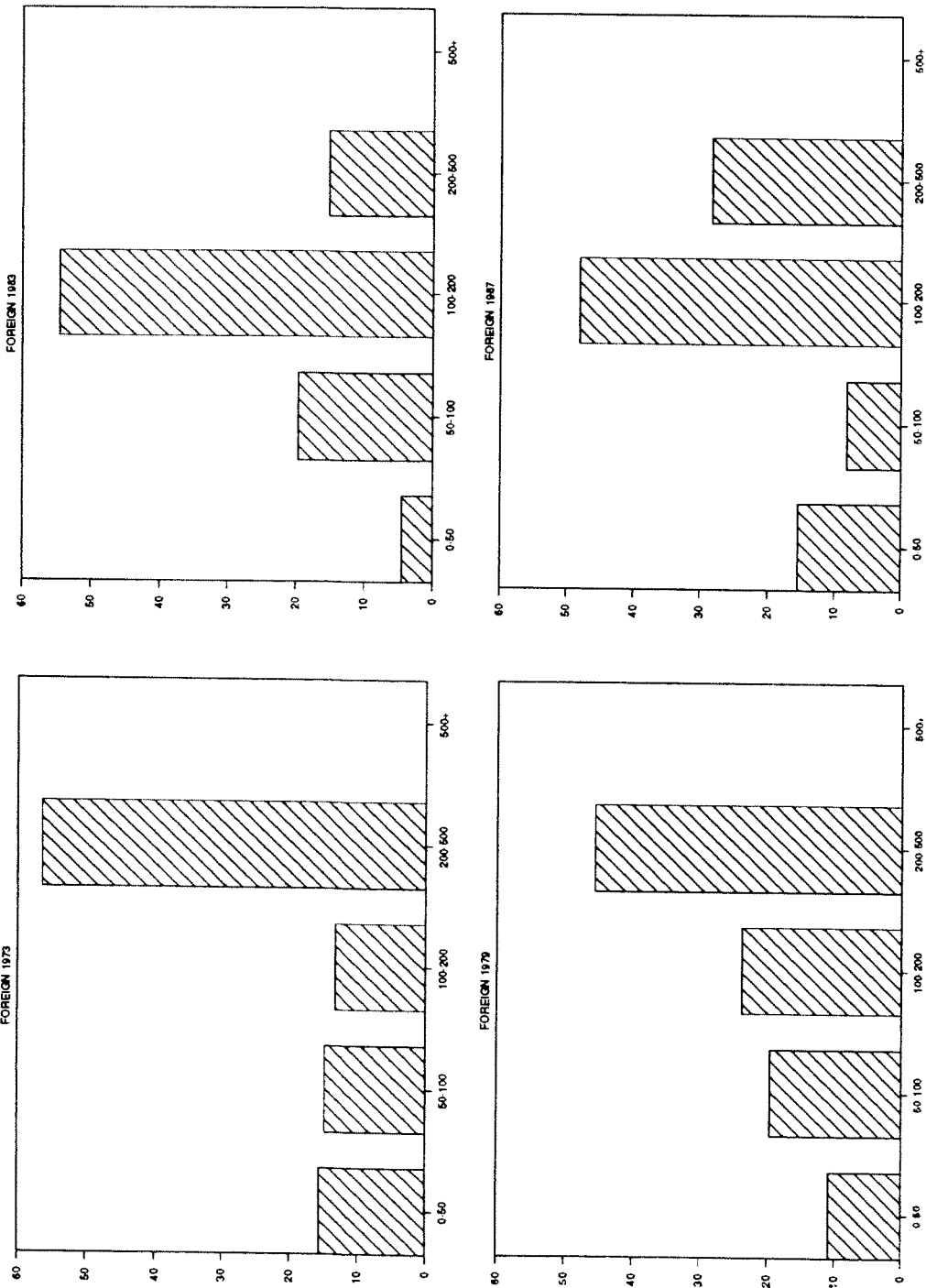
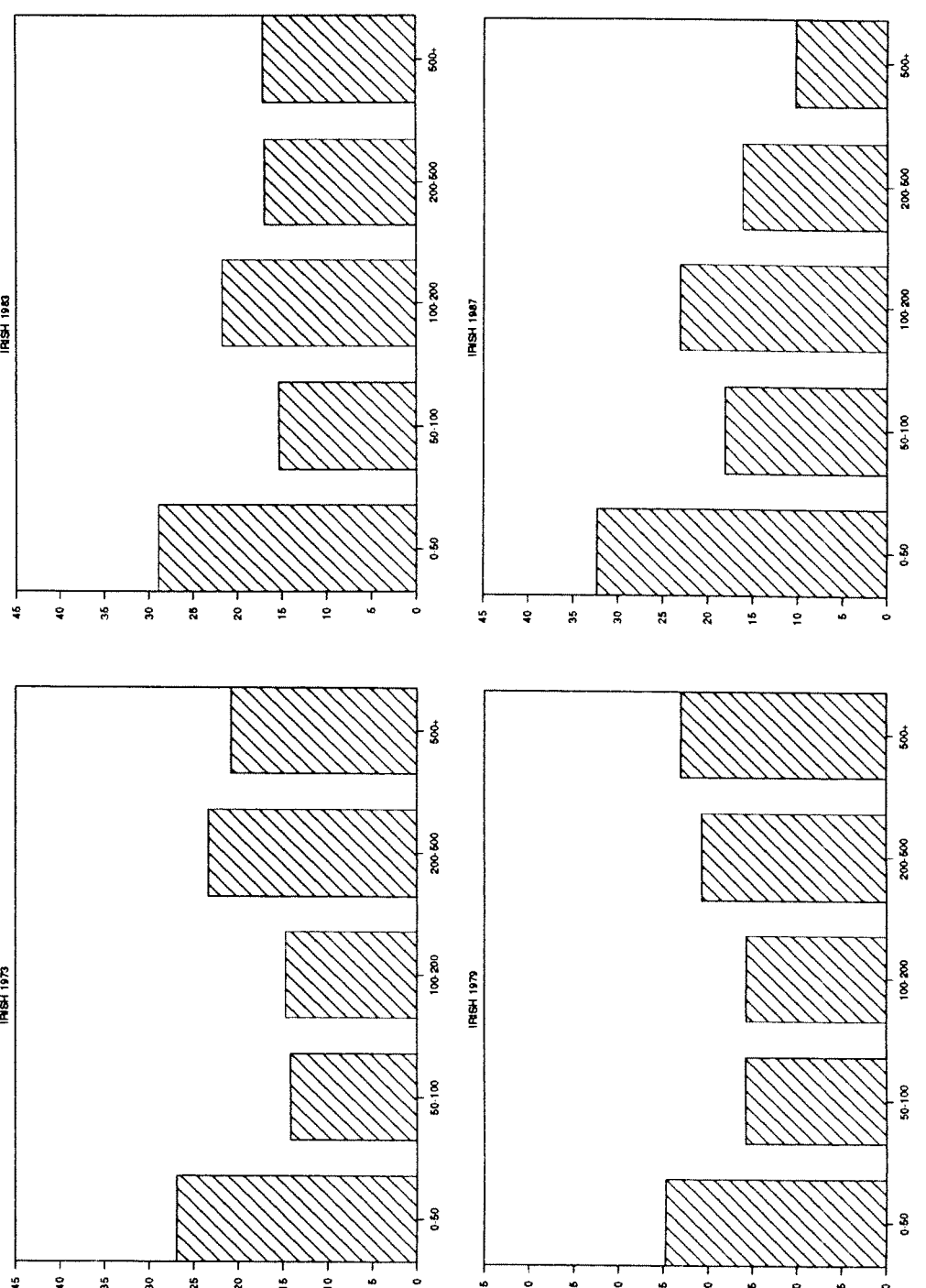


Figure 6.11

FOOD



FOOD

Figure 6.12

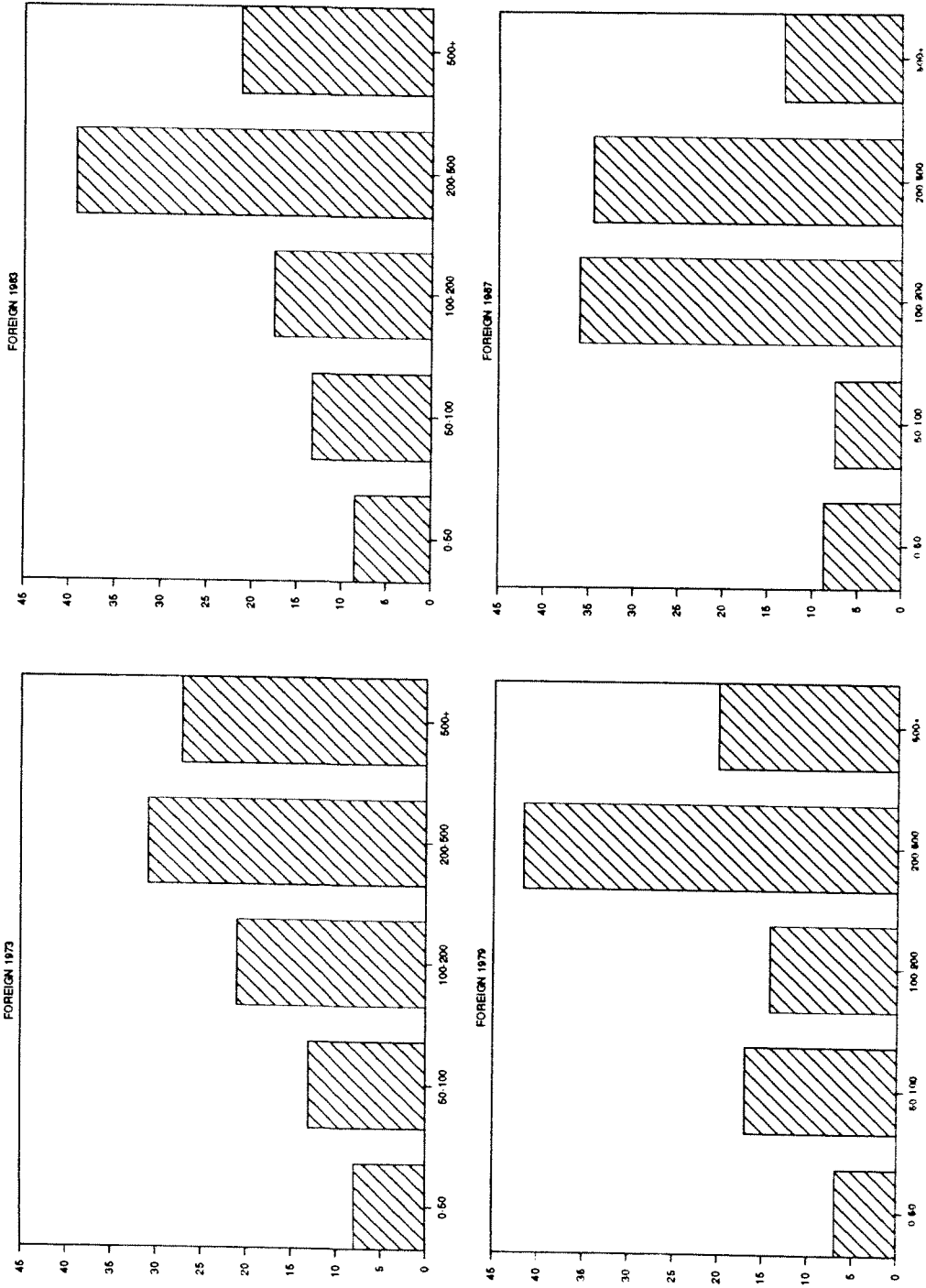


Figure 6.13

WOOD AND FURNITURE

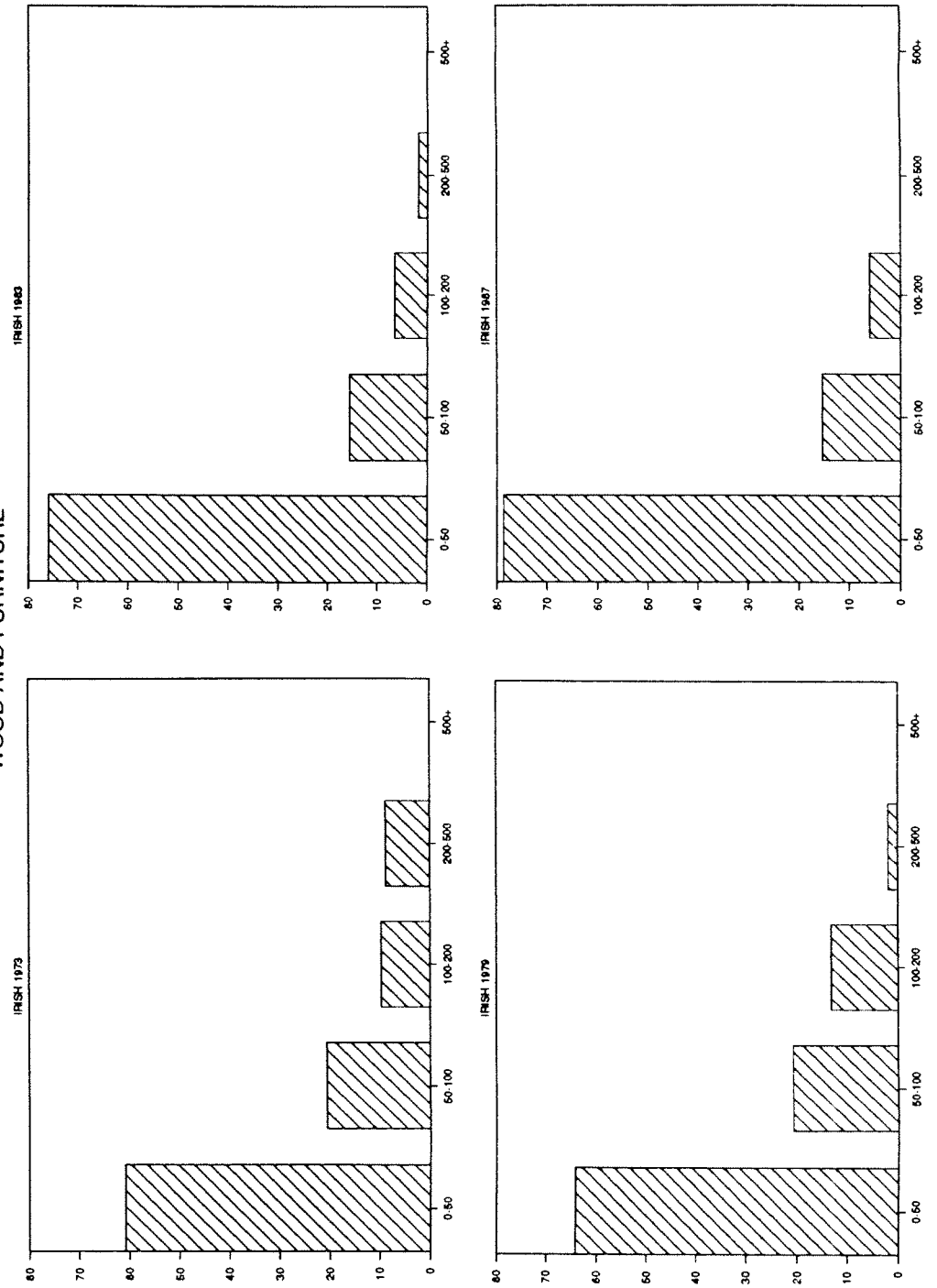


Figure 6.14

WOOD AND FURNITURE

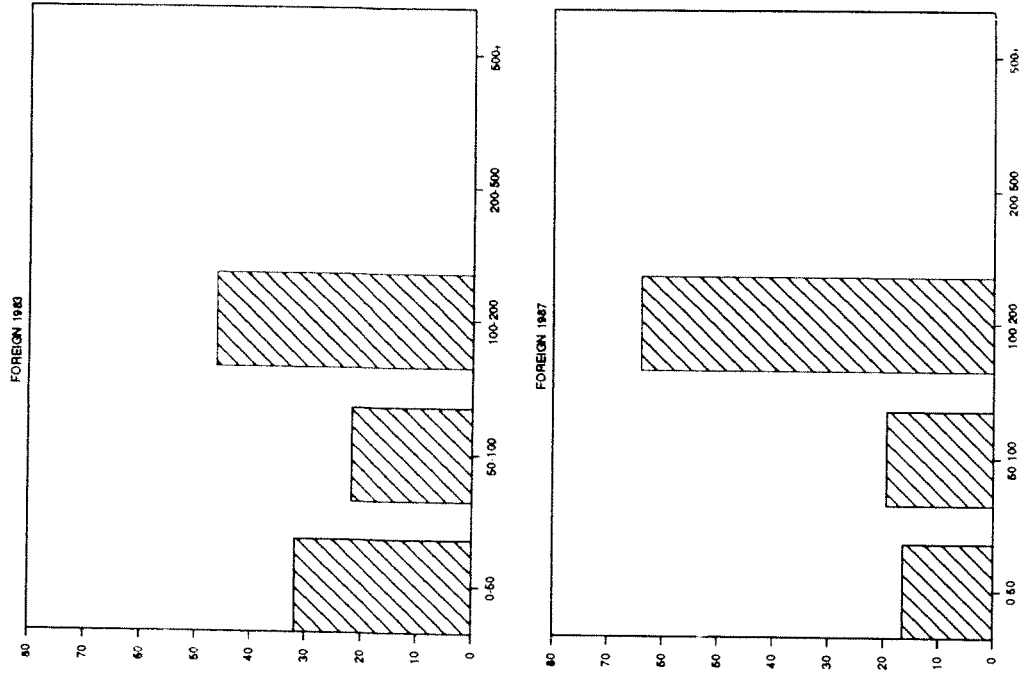
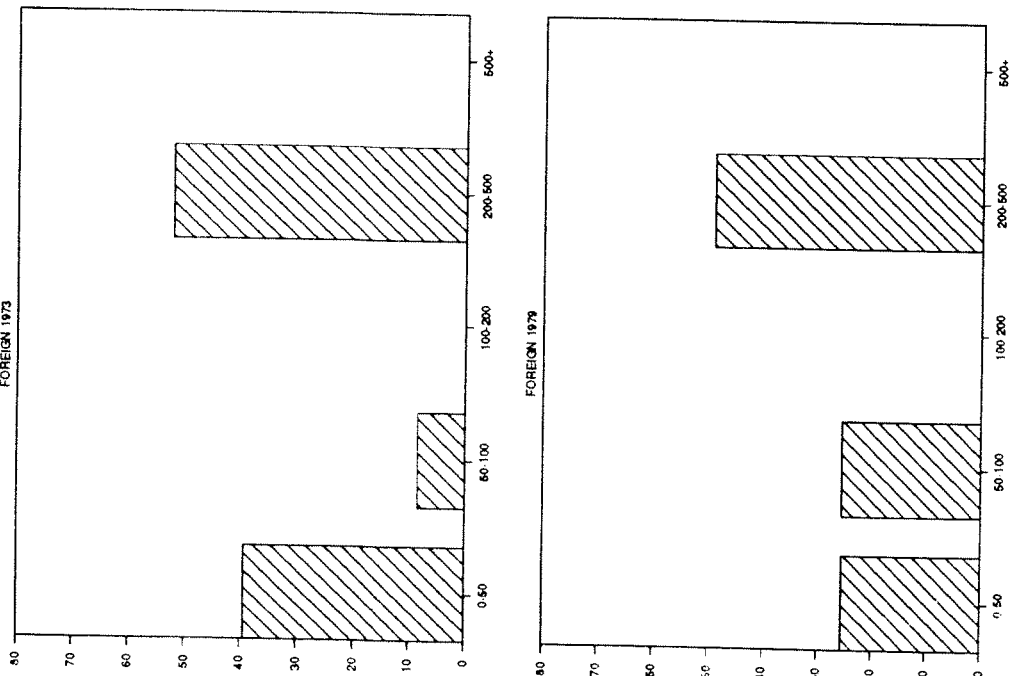


Figure 6.15

CLOTHING FOOTWEAR AND LEATHER

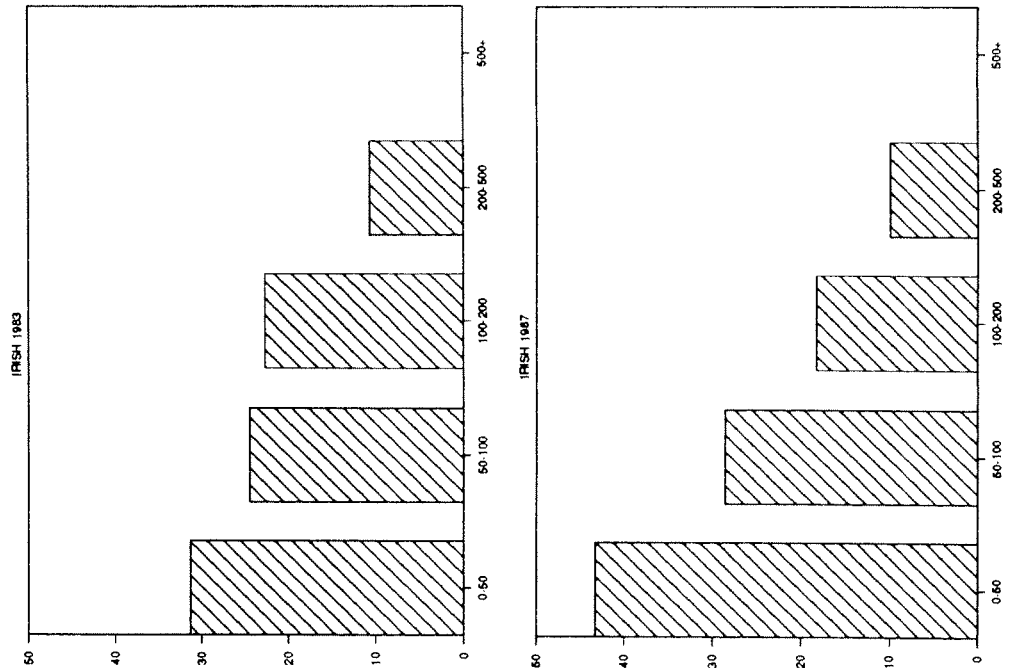
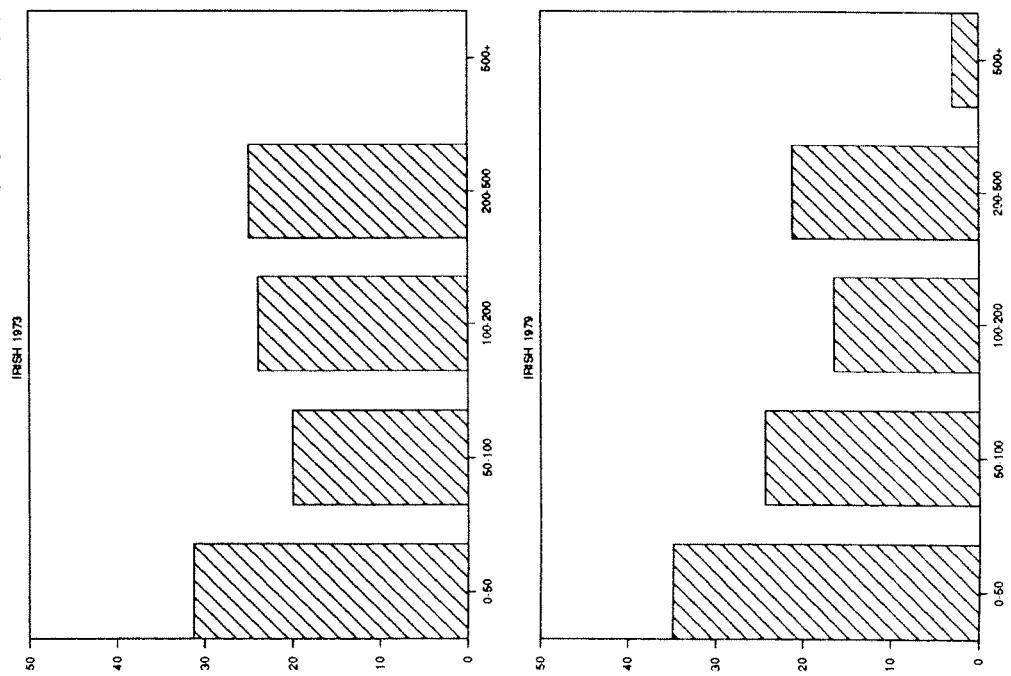


Figure 6.16

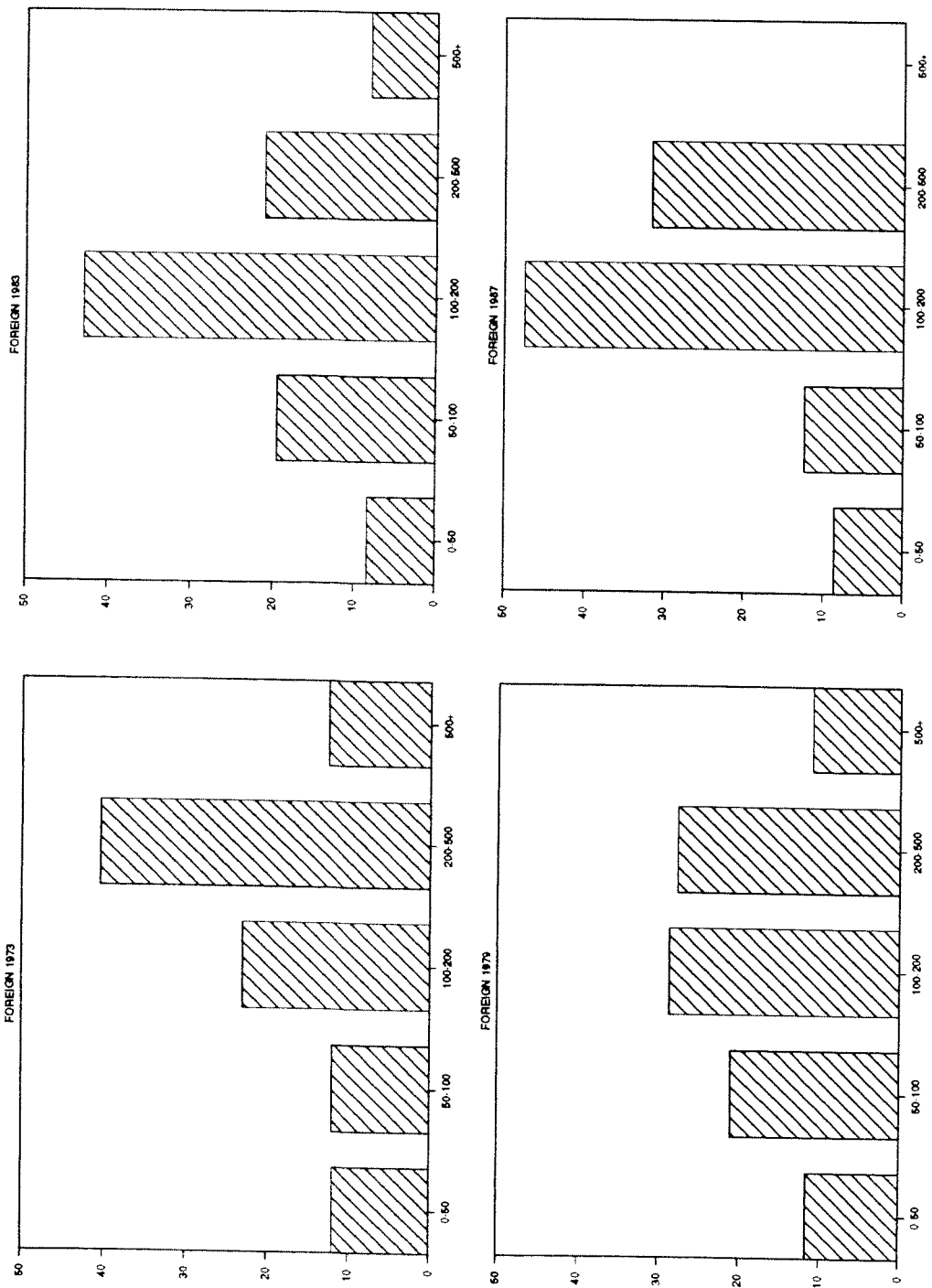
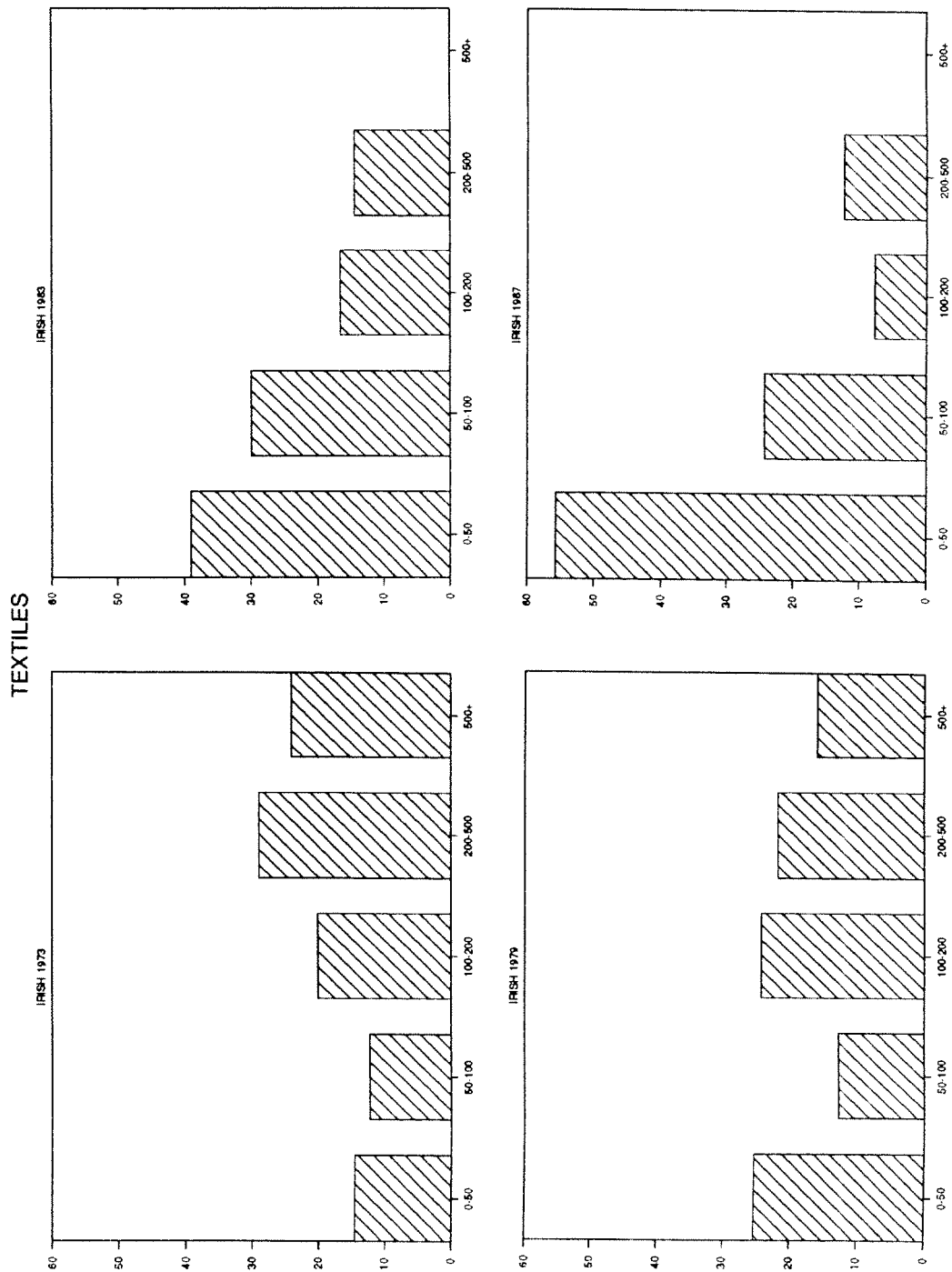


Figure 6.17



CONCLUSIONS ON THE IMPACT OF EC MEMBERSHIP

1. THE TASK OF INTERPRETATION

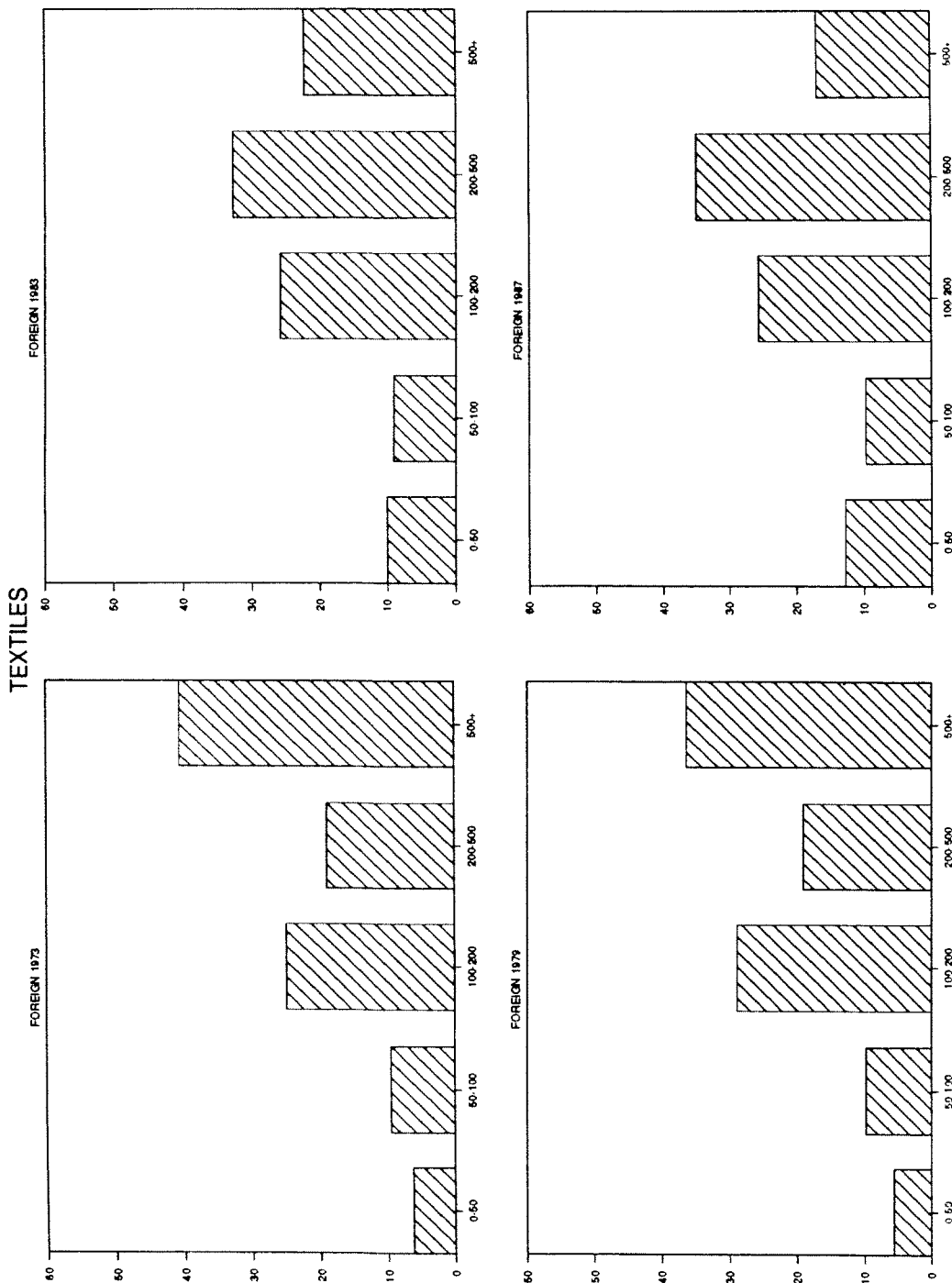
In assessing or interpreting Ireland's economic performance in the EC two steps are necessarily involved. The first is to identify what it is we wish to explain. In the preceding Chapters we have examined Ireland's performance in the EC relative to its economic evolution prior to 1973, and we have compared Ireland with other EC member countries and, to some extent, with non-EC small European economies.

In this chapter we present our interpretation of the effects of EC membership on the Irish economy and of Ireland's economic performance since 1973. This assessment of the experience in the EC to date will greatly inform our analysis, in Part III of the report, of the likely effects of the completion of the internal market. It will also have a direct bearing on our identification, in Part IV of the report, of the major policy issues arising for Ireland and the Community.

In reading this chapter it is important that the nature of the task of interpretation be understood. Economic theory and economic research give us some idea of the possible effects of economic intergration. Some of these — such as increased trade with member countries — are unambiguous, uncontroversial and relatively uninteresting. But economics tells us that a range of very different effects is possible, depending on the circumstances of the countries integrating. These different possibilities imply very different prospects for employment, unemployment, incomes, regional prosperity and emigration. It is from among these uncertain outcomes that the really important effects of economic integration will emerge. Furthermore, economics gives us little guidance on what effects integration might have on some aspects of the economy — the rate of growth being a good example. Since the effects of integration cannot be predicted precisely it follows that, in looking back over the past 15 years, the effects of EC membership could not be precisely distinguished from the effects of other forces at work.

The problem of distinguishing cause and effects is one that always exists. However, it is particularly acute when attempting to understand the effects of Ireland's membership of the EC. We have noted several times that Ireland's accession to the Community in 1973 coincided with a major change in the world economy — abandonment of the Bretton Woods system of exchange rate

Figure 6.18



management, a recession and increasing inflation. It also coincided with a change in domestic macroeconomic policy — a move to greater deficit financing. The period since 1973 has also seen some distinct movements in international cost competitiveness and major changes in the international division of labour. Ireland's membership of the EMS in 1979 — another step in economic integration — coincided with a second oil crisis and subsequent deep European recession. The formation of the EMS also coincided with a very sharp change in macroeconomic policy in the UK — an economy which has in the past strongly influenced that of Ireland. Subsequently, there was a distinct reversal of Irish macroeconomic policy. Also, in the early eighties there were unprecedented movements in major world currencies and monetary variables. Finally, through all of this period Irish governments pursued other policies which must be taken into account in assessing what actually happened. The most important of these was industrial policy; while that policy did not undergo major changes during the years in question there is reason to believe that the *effects* of the policy changed over time.

All of these forces are likely to have influenced the development of the Irish economy in the period since 1973. Furthermore, none of these forces operated independently of the rest. For example, volatility in major exchange rates influenced the decision to join the EMS. Membership of the EMS in turn influenced the domestic macroeconomic policy which could be pursued. Likewise, the increased openness of the economy was accentuated by economic integration with the EC. But the increased openness of the economy altered the effects of domestic fiscal and monetary policy. The weakened effect of domestic macroeconomic policy could, therefore, be viewed as an indirect effect of integration. Ultimately, these are matters of judgement and in this chapter we advance what we consider to be a balanced view of the effects of EC membership.

2. IDENTIFYING WHAT WE WISH TO EXPLAIN

(i) Performance Relative to Other EC Countries

In Chapter 5 we have undertaken a detailed comparison of the Irish economy with the rest of the EC since 1973. The following are the major differences which emerged

- slower growth of income and consumption
- higher growth of investment
- substantially slower growth of income and consumption per head
- slightly better than average employment growth
- above average rate of decrease of employment in agriculture
- a considerably worse than average increase in unemployment
- much the highest rate of net migration
- a much greater than average accumulation of public debt

- a larger than average inter-industry adjustment between sectors of manufacturing
- a lower than average level of intra-industry trade
- a decrease in concentration in manufacturing industry.

Finally, one of the most persistent points to emerge was that the period since 1973 consisted of two and perhaps three, very different phases. One, from 1973 to around 1980, in which Ireland's record, at least as measured by income growth, employment, production and unemployment, was relatively good. And a second phase from around 1981 to 1987 in which Ireland's record on all these dimensions was well *below* the EC average. It is clear from our list above that this second phase dominates the calculations for the whole period since 1973. To these two phases should be added a third phase — or at least the first signs of a new phase — from 1987 to the present, in which the Irish economy is performing in line with that of other Community countries, and all are experiencing fairly rapid growth.

(ii) The UK Factor

When comparing Ireland's very long-term economic performance with that of other OECD countries we established that Ireland's growth rate was fairly similar to that of other small European economies.

However, in the period since 1973 the Irish growth rate diverged considerably both from the growth rate of these economies and from that of the EC as well. This divergence is portrayed in Figure 5.7 which shows how Ireland surpassed other countries from 1973 to 1980 and fell well below them from 1980 to 1986. A question which naturally arises is: How much of the difference between Ireland's growth record and that of other small European economies, or of the EC countries, can be explained by the performance of the British economy? Some idea of the strength and nature of the UK influence can be gained and the details of this are considered in an Appendix to this chapter.

Two conclusions emerge from our analysis of the UK factor. It seems likely that over the long run the relatively slow growth of the UK economy has had the effect of slightly *slowing* the growth of the Irish economy. However, the more significant effect was surely that it made Irish economic growth more *volatile*. Despite these undoubted influences, the major *divergences* between Ireland's growth rate and that of other European countries, which were analysed, cannot be easily explained by reference to the UK performance. These divergences are first, the much higher growth in Ireland in the late seventies and, second, the much slower growth in the eighties.

3. INTERPRETING IRELAND'S EXPERIENCE

We noted on a number of occasions that one of the most striking differences between Ireland's economic performance since 1973 and that of other EC

countries was the timing of phases of growth and recession. On the criteria of output, consumption, and employment Ireland did better than the average from 1973 and 1980 and considerably worse than the average after 1980. Consequently, when interpreting events since 1973, with a view to assessing the effects of integration, we initially examine these two periods separately.

However, when we look beyond the outcome for growth, consumption, and employment we see that economic performance in the seventies and eighties were in fact very closely connected. One obvious connection between the two phases is the state of the public finances. Another is the balance of payments. But we will see that the performance of industry and agriculture in the two periods also contain important continuities. Consequently, we finish by discussing the period from 1973 to 1987 as a whole.

4. ECONOMIC PERFORMANCE 1973-1980

In this section we consider what forces can explain Ireland's relative economic performance in the years 1973 to 1980. We have seen in Chapter 5 that during this period the Irish economy grew faster than other Community countries, and this was associated with rapid growth of both consumption and, especially, investment. Trends in employment and unemployment also compared favourably with other EC countries, and manufactured output grew faster than average. Turning from real to financial indicators, Ireland's experience was not so strong. Both inflation and the balance of payments deficit were high by EC standards — as was the growth of public sector deficits and public debt. Finally, we have seen in Chapter 5 that Ireland's cost competitiveness in manufacturing industry (as measured by movements in hourly earnings and the nominal exchange rate) decreased steadily in relation to the UK, increased relative to most other EC countries, and decreased slightly relative to Ireland's main trading partners as a group.

(i) Overall Growth

The decline in growth after 1973 can surely be attributed, in the main, to the worsening economic climate worldwide. Ireland's relatively good growth performance, when compared to other EC or European economies, was probably determined by a number of factors. The maintenance of buoyant domestic demand was ensured by increased government deficit spending for both current and capital purposes. Two other influences were also working to raise the rate of growth — both related to EC membership. First, there was an increased inflow of foreign direct investment. This was determined by two developments. First, Ireland's accession to the EC guaranteed foreign firms free access to the British and other EC markets and, given that US foreign investment was increasing anyway, this would have attracted an increased proportion to Ireland. Second, the availability of a generous package of grants and tax incentive in Ireland's industrial policy influenced the flow of foreign investment.

The second factor which tended to stimulate the economy during the period 1973-80 was the buoyancy in agricultural prices and markets. This was a direct result of EC membership.

(ii) Manufacturing Industry 1973-1980

Viewed in terms of broad aggregates of employment and output growth, manufacturing industry in Ireland performed relatively well between 1973 and 1980 when compared with other EC countries. However, to understand the forces at work we have looked at manufacturing industry in considerable detail in Chapters 4, 5 and 6. In Chapter 4 we identified three groups of industries — each characterised by a different response to the changed environment in the seventies. We summarise these findings here since they are necessary to identify the effects of integration.

Three Groups of Manufacturing Industry

1. *Foreign-owned, grant-aided, export-oriented firms*

These are found in:

- Pharmaceuticals
- Chemicals
- Electronic and data-processing equipment
- Instrument engineering.

They experienced both output and employment growth based on export markets. In analysing the source of their competitive advantage two different types can be distinguished: *mass-production* industries and specialised or *product differentiation* industries. All were in receipt of substantial state support through capital grants, tax exemptions and other industrial policy measures.

2. *Industries in which the domestic market is naturally protected.*

These are of two types

(i) *large scale*

- Paper and printing
- Drink and tobacco
- Food (parts of)
- Non-metallic minerals.

They experienced some growth of both output and employment in the 1970s based on reliance on the home market; at the same time there had been creeping import penetration. Productivity growth was slow in these industries. In general, the poor output performance of these industries after accession was a *reversal* of the trends which prevailed before 1973. Both output and employment declined considerably in the 1980s. These industries were, and still are, dominated by large firms — both Irish and foreign owned — and, indeed, there is some evidence of increased concentration of firm size.

- (ii) *fragmented*
 - Metal articles
 - Mechanical engineering
 - Electrical engineering (parts of)
 - Wood and furniture.

These industries serve very local markets and consist of many small producers. The most significant fact about these industries is that the number of enterprises and workers increased considerably during the 1970s and output grew in the very buoyant demand conditions. Indeed, given the difficulties experienced by much of indigenous manufacturing, the growth in these industries was a substantial part of the overall growth of the economy during the transition period. In the weak domestic demand conditions of the 1980s both output and employment declined.

3. *Internationally Traded, Relatively large scale*

- Textiles
- Clothing
- Footwear
- Leather
- Chemicals (parts of)
- Motor vehicles and parts
- Electrical engineering
- Shipbuilding
- Bread, biscuits and flour confectionery
- Sugar, cocoa, chocolate
- Fruit and vegetable processing.

These relatively large scale activities showed both output and employment decline in the 1970s and especially in the 1980s. For some of these, this was a continuation of a trend that began in the mid to late 1960s; in others, decline was a new phenomenon. After the removal of tariff protection import penetration was rapid and, in the highly competitive environment, the larger Irish producers were eliminated from these industries. In many industries this is in marked contrast with the experience of most member states, in which the response to free trade was for large domestic firms to eliminate small scale producers in the process of exploiting economies of scale and specialising in narrow product ranges within the industry.

Interpretation

Viewed in this way the performance of manufacturing industry during the period 1973-80 does not seem so good. When we combine this detailed study of output and employment trends and changing trade patterns (Chapter 4) with examination of intra-industry trade and industrial structure (Chapter 6) it becomes possible to suggest an interpretation.

In studies of the development of the international trading system great stress is put on the fact that the growth of trade has mainly, though by no means exclusively, entailed specialisation *within* industries, rather than *between* them. This pattern of international specialisation has a number of advantages. One of the most important of these is that specialisation *within* industries involves firms moving into particular products and processes, whereas specialisation *between* industries involves running down whole sectors and building up others. This pattern of specialisation within industries is related to the way in which the growth of trade has fundamentally reshaped industrial structures, in particular, by making it possible to implement production technologies where competitiveness depends on large scale (see OECD, 1987). The performance of the Irish manufacturing sector during the seventies was such that these trends may seem to have applied to Ireland also. In particular, the very slight changes in the distribution of employment between sectors and the developments in foreign trade seemed to indicate an adjustment in which resources were re-allocated to specific *firms* and *products* *within* each industry.

However, the longer view which can now be taken (in particular the trends in output and changes in the size structure of firms in various sectors and sub-sectors) indicates that developments in Irish manufacturing require further interpretation before they can be compared with conditions found in other European countries in the initial stage of economic integration.

The performance of indigenous industry can broadly be seen in the second and third groups summarised above. There were very large job losses in all those industries which were exposed to international competition (group 3). To some extent these difficulties were offset by increased employment in indigenous firms in the second group — especially metal articles, mechanical engineering and wood and furniture. The definite downward trend, and in some cases its emergence in the mid-sixties, in the exposed indigenous industries (group 3) would seem to indicate that there was an *inter*-industry adjustment occurring, that is, a process in which Ireland specialises *into* some industries and *out* of others, and which therefore implies the run down of some whole industries, and the build-up of others. Through the late sixties and seventies this adjustment was masked by employment growth in other industries. In addition, of course, there is no doubt that some firms were specialising on particular products *within* industries in the manner discussed above.

This interpretation of what kind of adjustment occurred after accession is strengthened when changes in the *industrial structure* in the seventies are considered. Recall the trend observed in several countries — that growth of trade induced a concentration of industry. Indeed, it was even argued that firms threatened by the low cost of dominant producers will search for counter-strategies, which themselves imply a slow but steady reorganisation of industry towards large scale production with weeding out of fringe producers. Our study

of industrial structures (Chapter 6) shows that the exact reverse was occurring in the exposed indigenous sectors of Irish manufacturing industry in the period after accession. The proportion of employment in medium to large firms declined during the seventies. The segments of metals and engineering, and chemicals, which are included in group 3 (those industries under severe competitive pressure) are precisely the *large scale* activities in which the larger Irish firms declined disproportionately. Furthermore, much of the increased employment in indigenous industry was in the highly fragmented sectors, metal articles, mechanical engineering, and wood and furniture. Together these developments constitute a distinct adjustment from one set of industries to another set.

Viewed from this perspective the presence of a substantial movement *between* industries in the period after accession seems clear enough. But at the time there were several complicating factors. One of these was that much of the industrial change in the seventies is likely to have been part of what we called above the 'cold shower' effect — that is, the process in which basic inefficiencies are removed as a result of the shock provided by international competition following reduction of tariff protection. We will see later that this improvement in efficiency is one of the things which can enable firms to postpone, but not avoid, the adjustments dictated by free trade.

Explanation

What do these developments mean? The buoyancy of domestic demand clearly explains the creation of new enterprises and new jobs in the fragmented industries of group 2. It also explains the increased employment in the large firms in this group of naturally protected industries.

The severe difficulties in the exposed sectors is explained by a combination of three things. *First*, the deep recession of 1974-75 was clearly instrumental in placing so many businesses and jobs at risk. We use the word 'instrumental' advisedly because there is a sense in which recessions are the instruments through which other forces make themselves felt. The *second* major force at work in the Irish context was membership of the EC and the consequent exposure to increased competition. It must be recalled that Ireland's accession to the EC involved not only (eventual) abolition of tariff barriers within the Community, but a reduction of tariff barriers with the rest of the world. This change in trade regime, combined with recession, revealed the fragility of much of Ireland's manufacturing industry.

We say that it revealed the fragility because it can, of course, be argued that economic integration did not *create* the weakness in Irish manufacturing industry. This brings us to the *third* reason for the severe difficulties of indigenous manufacturing, especially firms in traded and relatively large scale activities, in the years from 1973 to 1980. That third reason is the failure of

developmental policy to address some of the major barriers facing indigenous manufacturing. This problem did not exist only, or especially, in the period 1973 to 1980, but the changed trading and growth environment in those years brought to light the consequent weakness of the manufacturing base.

The developmental policy pursued in the period 1973 to 1980 and before was not, of course, the ultimate cause of the weakness of Irish manufacturing. But for various reasons, it failed to overcome the basic constraints to industrialisation (see NESC Reports No. 56, 64, 66, 67 and 83). It has been argued that the earlier policy of industrial protectionism left a legacy of undersized firms, involved mainly in the final assembly of products for sale on the small home market (Kennedy *et al*, 1988). On moving towards free trade, the state sponsored intensive study into the strengths and weaknesses of indigenous manufacturing and established an industrial policy with a wide range of incentives. While the incentives for attraction of foreign direct investment were very successful, those aimed at indigenous industry had much less impact.

Indeed, in its operation, if not in its intention, industrial policy strongly favoured new foreign-owned enterprises over older and indigenous firms (Ruane, 1984). To this extent it not only failed to overcome the obstacles facing indigenous industry, but actually encouraged Ireland's subsequent specialisation *out* of many industries and *into* others. The result was a manufacturing sector which was not well placed to grasp the opportunities or withstand the threats posed by free trade. From inadequate scale stemmed other weaknesses such as low levels of R + D and innovation. It is this structure, encouraged — or at least not successfully altered — by past and contemporary industrial policy that was so thoroughly challenged by free trade. This is the challenge that is documented in our study of industrial output and employment, intra-industry trade and adjustment, and industrial structure in Chapters 4 to 6. Indeed, it has recently been said that "The poor performance of the larger indigenous firms emerges as a major factor inhibiting Irish industrialisation" (Kennedy *et al*, 1988).

5. ECONOMIC PERFORMANCE 1980-1986

We now consider what forces explain Ireland's relative economic performance in the years 1980 to 1986. Again we begin by synopsising the main developments. We have seen in Chapter 5 that this period was one of great difficulty for the Irish economy. Economic growth was lower in Ireland than in other EC countries and this was exacerbated by sharply increased outflows. As a result consumption grew very little indeed — though total investment growth was higher than elsewhere in the Community. The contraction of total employment in Ireland was well above the average and this contraction was heavily concentrated in industry. At the same time employment in services grew

— but much less than in other Community countries. In addition, the Irish labour force grew very rapidly by European standards — because of the unusual demographic characteristics of Ireland. As a result of these trends unemployment in Ireland increased substantially more than in the EC at large. Industrial production grew by a relatively small amount — except in those sectors dominated by new foreign-owned firms.

Developments in inflation, the balance of payments and the public finances were also distinctive in the period 1980 to 1986. In the early years of the period Irish inflation was far higher than the EC average and, for the first time, a very large difference between the Irish and the UK rate emerged. In the second half of the period there was a rapid disinflation and a most remarkable balance of payments adjustment — such that by 1988 inflation was below both the EC average and the UK rate. This adjustment was not reflected in the public finances for a number of reasons. Finally, the cost competitiveness of Irish manufacturing (as measured by movements in relative earnings and the nominal exchange rate) deteriorated considerably relative to that of other countries in the European Monetary System for most of the period. Competitiveness versus UK manufacturing increased in the early years of the period, and then decreased sharply — mainly as a result of movements of sterling on the foreign exchange markets. What can explain this very poor overall performance in the years 1980 to 1986?

(i) Overall Growth

The rate of growth of the European economy slowed further in the prolonged depression that followed the second oil price increase in 1979. This clearly has a role in explaining the slow growth of the Irish economy in the early eighties. However, what we wish to understand is why Ireland's performance was so much worse than that of other EC countries — having been better than their's in the years 1973 to 1980.

The factors which must be considered in explaining this are: very weak domestic demand, the reversal of agricultural fortunes, changes in the taxation and welfare systems, the change in the exchange rate regime and developments in cost competitiveness.

Domestic Demand

One remarkable contrast between the earlier period of EC membership and the years 1980 to 1986 was the relative growth of domestic demand. In the later period a set of circumstances prevailed which at different times reduced each component of domestic expenditure and thus ensured that overall domestic demand continued very weak for a prolonged period. This had an important role in Ireland's poor relative economic performance.

The first component of demand to weaken was private investment — which

contracted very significantly in 1980. The growth of consumer demand decreased to very low rates in 1980 and 1981. In these years the expansionary macroeconomic policy of the seventies was continued in an attempt to offset the severe recession.

Before considering the path of domestic demand later in the eighties it is important to make some comments about this attempt to use expansionary macroeconomic policy to sustain growth of output and employment. For two reasons this attempt was doomed to failure. The first of these relates directly to Ireland's EC membership. It has frequently been noted that very substantial deficit spending from 1977 to 1981 did little to stimulate growth of output and employment, leading instead to large balance of payments deficits and/or inflation. To some extent this is explained by the fact that fiscal stimulus was on occasion pro-cyclical — being applied when the economy was already growing. But this was less true in the early eighties, and thus points to an additional explanation. During the seventies the economy had become much more open, and this inevitably weakened the impact of domestic macroeconomic policy. But this was a direct result of Ireland's membership of the EC. Consequently, it is clear that the effects of economic integration cannot be confined to changes in trade patterns and cannot be considered as strictly separate from other forces.

Secondly, an important aspect of the increased openness of the economy was enhanced mobility of capital flows. In this new context, the extent of the exchequer borrowing, and the greatly increased size of debt outstanding, tended to put upward pressure of Irish interest rates, which would reduce private investment and consumption expenditure, so partially undoing some of the stimulus to demand.

In 1982 the volume of both consumption and private investment expenditure fell sharply again, as real interest rates increased from being negative to being positive, such that overall domestic demand fell by 3.4 per cent. But the severe imbalances in both the public finances and international payments dictated that no further counter-cyclical macroeconomic policy could be pursued, and in 1983 and subsequent years the macroeconomic policy followed from 1977 to 1982 was reversed. This was effected through increased taxation and real reductions in the Public Capital Programme. For a number of years after 1982 all forces were working to depress the level of domestic demand. A deflationary fiscal policy was acting directly on domestic demand. But, because of the effect of the prevailing depression on government revenue and expenditure, and a rising debt-service burden, this policy made little or no impact on the public finances. This in turn created financial conditions which tended to require Irish interest rates to be even higher than the historically high real rates which prevailed internationally. This tendency was compounded by movements and anticipated movements in the Irish pound/sterling exchange rate.

This remarkable conjunction of circumstances was reinforced by two other factors. Outflows of 'trading and investment income' quadrupled between 1981 and 1985. Much of this was payment of interest on that portion of the national debt held by foreigners and has, consequently, been dealt with in our comments on macroeconomic policy. But, in addition, profit repatriation by multinational corporation increased from £285m in 1980 to £1321m in 1985. This further deflation of demand was related to the industrial policies pursued in earlier years.

Reversal of Income Growth in the Agricultural Sector

Another factor tending to slow growth, from as early as 1979, was the reversal of fortunes in the agricultural sector. We have seen in Chapter 4 that a number of developments conspired to reverse much of the growth in incomes achieved since accession. Farm incomes dropped precipitously in 1979 and 1980 and, while there was some recovery in the early eighties, this was sharply interrupted in 1985.

Changes in Taxation and Welfare Provisions

The late seventies and early eighties saw very substantial changes in taxation and welfare payments. Not only was there a sharp rise in the overall burden of taxation, but also increases in average and marginal tax rates, an increase in the ratio of gross labour costs to disposable employee income, and severe erosion of the income tax base by the proliferation of allowances, reliefs and exemptions. (These developments are documented in the Council's report *Strategy for Development 1986-1990*, Chapter 4). At the same time there were some increases in the real value of social welfare payments — though these varied considerably across different welfare programmes (see *Strategy for Development 1986-1990*, Chapter 3). It is likely that these changes in taxation and welfare had some effects on the labour market and on the overall level of output and employment. At present we do not know with any certainty the nature or significance of these effects (see Blackwell, 1986). In view of this gap in our knowledge the Council has recently initiated several research projects on the nature and functioning of the Irish labour market (see NESC Report No. 86). Therefore, while we cannot, at present, identify what role changes in taxation and welfare had in the poor economic performance from 1980 to 1986, it is clear that these factors must be kept in mind when interpreting Ireland's experience in the Community.

European Monetary System

A factor which must be considered in discussing the contrast between Ireland's relative growth performance in the two periods 1973-80 and 1980-86 is the change in exchange rate regime resulting from the decision to join the European Monetary System in 1979. There are two aspects of the change in regime which must be considered: its impact on the *level* of the real exchange rate and its impact on the *volatility* of exchange rates. We are not concerned in what

follows with an evaluation of the decision to join the EMS, but merely with an assessment of whether exchange rate movements have any role in explaining developments in the period 1980 to 1986. Indeed, the Council has previously endorsed the policy of maintaining the value of the Irish pound within the EMS (*Strategy for Development 1986-1990*, pp. 173-180).

What happened to the *level* and *volatility* of the exchange rate in the period 1980 to 1986? We have recorded the movements in the real exchange rate in Chapter 5 — using relative earnings growth as a proxy for relative costs and combining this with nominal exchange rate movements. This revealed that there was considerable appreciation of the real exchange rate against both EMS currencies and those of 'all trading partners', and alternating periods of real depreciation and real appreciation against sterling (see Figures 5.10 to 5.12). As to volatility of exchange rates, the period since 1980 has seen very large movements of both sterling and the dollar against the Irish pound. However, there is widespread agreement that the EMS has reduced, but not eliminated, the volatility of currencies participating in it — compared to what would have occurred in its absence. There can be little doubt that this applies to the Irish pound, which was stable within the system and suffered from only occasional bouts of speculative exchange market activity.

Given these changes in the level and volatility of exchange rates there are reasons to believe that the altered exchange rate regime has some role in explaining developments in the 1980s. Two influences can be identified.

The appreciation of the real exchange rate probably reduced foreign demand for Irish goods and put pressure on the profit margins of Irish firms, and simultaneously increased Irish demand for foreign goods. Indeed, it has been pointed out that not only was there a real appreciation between 1978 and 1987, but this period contrasted sharply with the years from 1970 to 1978 — when Ireland experienced a significant gain in competitiveness (a real depreciation) as a result of depreciation of sterling. On this basis it has been argued that "maintenance of the sterling link may have shielded traditional industries from the effects of increased competition from Europe and the newly industrialising countries (NICs) in both home and export markets" (Massey, 1988, p. 54). This observation points unambiguously to the conclusion that the appreciation of the real exchange rate must be considered as one of the factors which explain the especially difficult experience of Irish manufacturing industry in the eighties. It is also consistent with our view that the effects of economic integration can, in certain circumstances, take considerable time.

Second, the appreciation of the real exchange rate directly reduced the imported component of inflation. It almost certainly had a major impact on the *domestic* component of inflation also, but this probably only worked through its negative effect on the level of domestic output and employment.

Determinants of Cost Competitiveness

In citing movements in the real exchange rate as one of the factors in an understanding of Ireland's relatively poor economic performance in the period 1980 to 1987, we cannot claim to have *explained* developments in those years. This is so because the real exchange rate is itself an outcome of other forces and not a *cause*. Specifically, movements in the real exchange rate are the outcome of relative international cost or price movements and changes in nominal exchange rates. These two determine the real exchange rate and, therefore, international cost competitiveness, and anything which is influenced by it. Each may be compared to one blade of a scissors. If export performance, import penetration, and employment in the traded sector are influenced by cost competitiveness (which itself is by no means certain) then they are certainly influenced by these two acting together.

It is of limited relevance to ask which blade of a scissors performs the cutting; likewise there is a limit to our ability to tell whether high domestic cost inflation, or the nominal exchange rate squeezed the traded sector. However, something can be gained by considering each in turn. The trends in the nominal exchange rate since 1980 are easily described. Exchange rate policy centred on maintaining the stability of the Irish pound with the EMS. In practice, during realignments, this meant staying broadly in the middle, i.e., neither devaluing nor revaluing. Given this choice of exchange rate against the Deutsche Mark (DM) the exchange rate against sterling and the dollar were determined by the value of those currencies against the DM. This approach was steadfastly adhered to, but for a devaluation in March 1983 and in August 1986 — both of which occurred when sterling and the US dollar had depreciated strongly against the Irish pound.

On the side of domestic inflation four things should be considered: macroeconomic policy, relative earnings growth, the trend of other domestic costs, and the relative inflation rates at the time of formation of the EMS.

There is no doubt that the fiscal and monetary policy pursued from 1979 to 1982 was incompatible with maintenance of the Irish pound's nominal exchange rate with other EMS currencies, and especially the DM. Rapid growth of domestic credit, to finance large budget deficits, created balance of payments deficits and, more importantly, fuelled domestic inflation. It is precisely this relatively high inflation which created the appreciation of the real exchange rate noted above — given the decision to hold the nominal exchange rate steady. It can be argued then that it was macroeconomic policy which ultimately created any squeeze on exports and employment in the traded sector resulting from the real appreciation of the Irish pound. It could do this in two ways: directly — by fuelling domestic inflation — and indirectly — by raising the gap between Irish and EMS inflation, and thereby increasing the size of the disinflation which would ultimately have to be undertaken — a disinflation

which was almost certain to involve a squeeze on output and employment as well as prices.

However, despite its role in fuelling price inflation macroeconomic policy does not determine the rate of growth of earnings in Irish manufacturing in a mechanical way. It can be seen from the almost straight W line in Figure 5.11, that the rate of growth of earnings in Irish manufacturing, relative to that of other EMS countries, continued almost unaltered after 1979, despite the changed exchange rate regime. Although complex price and cost impulses were probably at work (given the nominal depreciation against sterling) it seems certain that the wage determination process was unresponsive to changed underlying economic conditions. Consequently, this inertia of pay determination — both private and public sector — was probably an additional cause of cost inflation — and consequently of the appreciation of the exchange rate and associated loss of cost competitiveness — additional, that is, to macroeconomic mismanagement.

However, the public policy and private sector spheres interact to an enormous extent, and part of the wage inflation of the early eighties represented the attempt of workers to recoup tax increases. This episode illustrates that satisfactory implementation of the decision to join the EMS required not only recognition and acceptance of the macroeconomic policy conditions, nor only acceptance of the implications for wage increases in the private sector, but also consensus on the management of the public finances, especially taxation.

Thirdly, in the early 1980s there were increases in other costs which are not included in the relative earnings data used in the calculations of competitiveness in Chapter 5. Increases in items such as excises on industrial inputs, the price of public utilities, and the costs of services, placed additional pressure on the profit margins in the traded sectors of the economy.

These three observations about the cost blade of the real exchange rate scissors all attribute the real appreciation or loss of cost competitiveness — and any negative impact it may have had on output and employment in the traded sector — to the *continuation*, well into the eighties, of policies and wage and price setting behaviour, which were inappropriate given the new regime. They strongly suggest that inconsistency between the exchange rate policy and these behaviours caused sustained real appreciation and loss of cost competitiveness.

However, it should not be inferred from this that had macroeconomic policy been adjusted in 1979 *no* real appreciation or loss of cost competitiveness would have followed the change in the exchange rate regime. This is because Ireland joined the EMS with an inflation rate above the average of other EMS countries, and substantially above that of Germany — whose currency and monetary policy dominate the system. Immediate adoption by Ireland of a

monetary and fiscal policy consistent with a fixed parity with the DM would certainly have led to a much *earlier* achievement of a low inflation rate, but would also have involved a severe deflation of output and employment. All the international evidence suggests that substantial reduction in price inflation, when pursued by means of monetary or exchange rate policy or both, takes considerable time and impacts severely on the real economy as well as on prices and costs.*

This is not to deny that these real costs of disinflation can be reduced by consensus on the appropriate measures to be undertaken; that is, by going beyond monetary and exchange rate policy. But this inevitable component of the costs of disinflation must be kept in mind when attributing loss of competitiveness and of employment to excessively expansionary macroeconomic policy and relatively high earnings increases in the early and mid-eighties.

It is probable, however, that in the circumstances prevailing in Ireland in the early eighties *postponing* the adjustment in prices, wages and the balance of payments, *increased* the burden of adjustment. The build up of debt through the decade is an obvious example of this. More generally, allowing the economic cycle in a small integrated economy to get out of time with that of the Community at large can generate problems. For example, by the time Ireland was undertaking serious disinflation, other EC economies were starting recovery. But the fiscal and other financial imperatives meant that for several years Ireland could not fully share in this upswing.

(ii) Manufacturing Industry 1980-1985

We have seen in Chapter 5 that in the 1980s the performance of most manufacturing industry in Ireland was distinctly worse than in most Community countries. In Chapter 6 we saw that the level of intra-industry trade in many industries fell and that the reduction in the concentration of indigenous manufacturing in traded sectors accelerated. We can identify four forces all of which were pushing in the same direction during these years.

Domestic Demand

First, the collapse of domestic demand, discussed above, undoubtedly had a devastating effect on an indigenous manufacturing sector which had, largely, failed to achieve export markets on the scale that was hoped for. The deflationary macroeconomic policy of the 1980s was largely a result of the deterioration of the public finances and the balance of payments in the previous years. Therefore, anything which contributed to that fiscal crisis can be counted as having contributed to the severe problems of manufacturing

*This real cost of getting down to the EMS inflation rate is distinct from any longer-run cost, in the form of slow growth, of adhering to the low-inflationary discipline implied by the hegemony of Germany's monetary policy in the EMS.

industry in the eighties. We will discuss some determinants of the fiscal crisis presently.

Economic Integration

Despite the influence of the world recession, and of the especially deep and prolonged recession in Ireland, a balanced view requires that the role of economic integration also be considered when explaining the severe difficulties in manufacturing industry between 1980 and 1986. A realistic view shows that there are many reasons why the effects of economic integration on the patterns of production, employment and trade could take a considerable number of years to work themselves out. First, we saw in Chapter 6 the hypothesis that specialisation *within* industries will tend to be both *quicker* and easier than specialisation *between* industries. Second, one of the more immediate effects of reducing tariff protection is to shake-out basic inefficiencies; the resulting gain in efficiency can postpone further adjustments for a time.

Third, in the Irish case integration occurred first with the UK, then with the EC-nine (six of whom had already integrated since 1958), and finally with Greece, Spain and Portugal. In his original analysis of the changing pattern of Irish foreign trade after accession to the EC, McAleese noted that the Anglo-Irish Free Trade Agreement (1965) should be considered differently from the subsequent multilateral tariff reductions (after accession), because the UK had very similar prices of labour, capital and materials to Ireland — whereas the economies and societies of the EC-six differed much more. An implication of this is that as integration widens and deepens, a country may experience *more* disruptive adjustment in the pattern of production and employment because *greater differences* between countries come into play. Fourth, it was argued in earlier chapters that in industries where there are economies of scale then costs will become *more* and not less important — despite the presence of non-price determinants of competitive advantage. Fifth, in the 1970s the EC Common External Tariff provided some measure of protection to sections of European industry — particularly clothing and textiles. Finally, internal EC tariffs were reduced in stages during the transition period 1973 to 1978.

The evidence reviewed in Chapters 4 to 6 suggests precisely that in the early eighties a pattern of severe adjustment *between* industries emerged to dominate the adjustment *within* industries which seemed prevalent in the seventies. This adjustment *between* industries in the eighties — seen in the pronounced rundown of some industries and build up of others — should almost certainly be seen as in part a delayed effect of Ireland's economic integration into the European economy. But we have also seen that the trends in the seventies and the eighties should not be distinguished too sharply. In particular, we have argued that the adjustment *between* industries — notably the run down of a long list of 'traditional' manufacturing firms in relatively large scale activities — was in fact occurring in the seventies and, in some cases, from the late sixties.

But, during the early years of EC membership, this trend was less pronounced, and other developments were occurring which could camouflage it.

Indeed, it is possible to interpret the entire experience of manufacturing, since accession, in terms of the response of firms to economic integration. The most immediate effect of economic integration was almost certainly the 'cold shower' effect (see Chapter 3). There can be little doubt that the removal of inefficient practices accounted for some of the rationalisation observed in the period after accession. Where job losses reflected improved efficiency, in response to the shock of competition, then firms could produce the same output at lower cost and would, indeed, have improved their position. The next effect of integration on firms is likely to have been specialisation on particular products *within* their own industry. Indeed, the message of much of the literature on the growth of trade following the formation of the EC, is that this specialisation within the industry often *completes* the process of adjustment.

But if the firms' basic scale was too small relative to their competitors, or if they suffered other competitive disadvantages, (both of which seem to be true of Irish manufacturing industry in the seventies), then the breathing space offered by removal of inefficiency, and by an element of specialisation on particular products, would only have been temporary. Consequently, competitive pressure for further adjustment inevitably built up.* Where this further pressure forced contraction of output and employment, the adjustment to intensified international competition tended to become the process of long-run decline, inherent in international specialisation *between* industries. The reason was that, in industries where economies of scale existed, contractions of employment (except where they remove basic inefficiency or introduce new technologies), and contraction of output, tended to *raise* costs rather than *lower* them. Consequently, such 'adjustments', rather than re-establishing competitiveness on a new basis, were the start of a process of attrition. What we observed in the eighties was precisely *further* contraction or elimination of many of the indigenous firms in exposed and relatively large scale activities. Thus, the experience of Irish manufacturing industry since accession can be seen to be consistent with a sophisticated and realistic understanding of how trade and integration can work where there are initial differences in level of development, technology and scale of production. The analysis of the Irish experience in these terms suggests that some of the severe problems of manufacturing industry in Ireland in the period 1980 to 1986 should be seen as effects of economic integration, unredressed by counteracting policies.

*Had the job losses in the seventies constituted the extent of the adjustment necessary then we would expect to have seen some concentration in the industrial structure of these sectors — as producers specialised within specific product lines and exploited economies of scale by increasing establishment size. In fact we have seen that in the seventies many manufacturing industries became less concentrated, as larger scale Irish producers suffered disproportionately.

Cost Competitiveness and the European Monetary System

In considering the overall performance of the economy in the period 1980 to 1987 we have discussed the influence of real exchange rate movements. That discussion also applies to the traded sector of the economy, and especially to manufacturing industry.

Developmental Policy

A fourth factor which helps to explain the experience of manufacturing in the eighties is the industrial policy pursued not only then but, more significantly, in earlier years. We noted in our discussion of the years 1973 to 1980 that while the incentives for attraction of foreign firms were very successful, those aimed at indigenous industry had much less impact. And we have seen how the unresolved weaknesses of many indigenous firms were exposed in the first period of EC membership. With industrial policy unaltered and international competition intense, it is hardly surprising that the structures necessary for business to be competitive were not built in the late seventies and early eighties. Consequently, the weakness of much of indigenous industry was exposed again when international and domestic demand weakened. But, in the eighties new problems in the other, more successful, prong of industrial policy emerged. Profit outflows reached very high levels and, with the change in the pattern of international capital flows, the life-cycle effect in foreign projects in Ireland could not be concealed by an increasing flow of new projects.

6. FACTORS COMMON TO THE SEVENTIES AND EIGHTIES

Despite the very different overall performance in the first and second periods of EC membership, our analysis strongly suggests that the worse than average outcome in the second period (1980-87) was connected to the better than average outcome in the first period (1973-80). The most obvious connection arises when the deficits in the public finances and the balance of payments are considered. There can be no doubt that much of the contraction of demand in the eighties arose from the need to adjust the public finances and the current account. Overall, this contains many lessons for the conduct of macroeconomic policy in one small part of an integrating Europe. Indeed, we have argued that one of the reasons for the declining effectiveness of domestic macroeconomic policy was the increasing economic integration in the EC — a factor which is common to both the seventies and the eighties.

Our detailed study of output and employment trends, the changing geographical and commodity composition of trade, the levels of inter and intra-industry trade, and the changing industrial structures shows that the economic performance in the first period of EC membership (1973-80) was not as strong as is suggested by growth rates of aggregates, such as income or consumption or even manufactured production. In particular, the position of indigenous industry in traded sectors was disturbing. But this implies a distinct *continuity*

between the seventies and eighties — for indigenous manufacturing suffered even greater losses in the later period. The continuity consists in the almost continuous output and employment decline in a long list of exposed industries, and their continual replacement by foreign firms in a narrow range of manufacturing activities. Thus, what may have seemed like a substantial adjustment and specialisation *within* industries in the seventies, taking a longer view, turned out to be a slow and somewhat delayed adjustment process in which Ireland was specialised out of many industries — especially those where innovative activity and scale are significant. We have analysed this by reference to the timing and costs of three different types of adjustment to free trade: the increased efficiency which follows the shock of competition, specialisation on particular products within an industry, and specialisation between industries. In the period after 1973 increased basic efficiency, an element of specialisation within industries, a very buoyant home market, and devaluation of sterling, slowed the adjustment between industries — in Ireland's case, the run down of most indigenous firms in relatively large-scale traded activities. But factors capable of reversing that adjustment were not found.

This leads us to two general conclusions concerning the experience of manufacturing in Ireland in the whole period since accession to the European Community. First, in the case of Ireland, the adjustment to integration has involved considerably more than increased efficiency, resulting from the shock of international competition, and specialisation on particular products within each industry. It seems to also have effected a very substantial rearrangement of the pattern of manufacturing activity undertaken in Ireland. Second, overall the experience since 1973 seems, unfortunately, to confirm the accuracy of Pelkmans' observation that "for smaller EC countries scale-driven exports (within and without the customs union) are the *conditio-sine-qua-non* for international competitiveness in many industries" (Pelkmans, 1984).

There are other ways in which the experiences of the seventies and eighties are linked. In discussing the forces at work in each period we found that Irish developmental policy was significant in both the seventies and eighties. We saw that during the first period of EC membership, and before, industrial policy had failed to overcome the fundamental obstacles facing indigenous firms, and had at the same time strongly favoured new foreign projects. The implications of this approach — the failure of indigenous industry in a free trade environment, heavy job losses in grant-aided projects, a life-cycle in foreign firms involvement, and profit repatriation — made themselves felt increasingly over time, but in a way which was *not essentially different* in the boom years of the seventies or the slack years of the eighties.

Indeed, there is another aspect of developmental policy which links the economic experience in the seventies and eighties. We have seen in Chapter 5 that Ireland had a higher rate of fixed capital formation in the 1970s than any

other Community country. But heavy investment in the public capital programme seems not to have greatly enhanced the productive capacity of the economy — including both capital stock and efficiency of supply. Likewise, large public expenditures on manpower policy and structural policy in agriculture did not prepare the economy to face the problems of the eighties.

It is important that these factors are kept in mind when considering the divergences from average European growth in the late seventies and eighties. It is these factors which provide the link between what is known, and agreed, about weaknesses in macro-management, and what is known, partly as a result of the NESC's work, about the long-run structural weaknesses of the Irish economy. The inability to let domestic demand grow in the 1980s, at the rate prevailing in the UK or Europe (which itself is low by world and historical standards), stems from past problems in macro-management. But the ability of the traded sector to respond to demand (domestic or foreign), and to cope with international competition, depends on finding solutions to some of the structural problems — which clearly requires more than correction of budgetary and trade account aggregates.

Furthermore, the presence of structural problems, arising from historical factors and/or peripheral location, has *long-term* implications for public finance. It implies that achievement of any given rate of growth will require a greater level of public expenditure on industrial policy, infrastructure, or manpower policy in Ireland than it would in small European economies without those structural problems. Of course this expenditure need not be deficit financed. But it does imply a base of expenditure, on top of which spending for social or demand management purposes will have to be placed. Indeed, the other side of the coin of structural problems in the economy is low income per capita and high dependency rates, which tend to require higher base-line levels of social expenditure also. This line of argument leads to the recognition that there is a public finance dimension to the developmental problems of the economy. Consequently, even though a proportion of the problems of the eighties can be fairly directly ascribed to the severe financial imbalances of the late seventies, that fiscal crisis has, in turn, some longer-run determinants. In later chapters we will consider the European dimension of this question.

7. THE IMPACT OF EC MEMBERSHIP ON AGRICULTURE

In interpreting the experience in the agricultural sector since 1973 we are necessarily involved in assessing the impact of Community membership and Community policies. In Chapter 4 we identified three problems in the agricultural sector:

- (i) The reversal between 1978 and 1986 of the progress in incomes made between 1973 and 1978;

- (ii) The persistence of very low and volatile farm incomes for a sizeable segment of Irish farmers;
- (iii) The slow rate of development of the food industry.

The persistence of these problems despite the receipt of very substantial support from the FEOGA (see Tables 4.18 to 4.20) indicates that in some way the constraints on the development of Irish agriculture have not been fully removed by the Common Agricultural Policy. In this section we consider why this might have been so.

(i) Reversal of Income Growth

We have seen in Chapter 4 that the strong progress made in average farm incomes between 1972 and 1978 was reversed after 1978, and a significant trend was resumed only after 1986. Although many factors were involved, these events can be attributed to two broad developments. The first was the continuation of Ireland's high inflation rate, compared to that of other member states, in years following the formation of the EMS. The second, and related reason, was the moderation of common EC price increases. Together these worked to create a very severe price-cost squeeze on Irish farmers. It was shown in Table 4.17 that Irish farmers experienced the greatest decrease in 'real' prices in the Community between 1978 and 1980, and between 1980 and 1985.

Earlier in this chapter we have drawn attention to the continuation of Ireland's high inflation in the years 1979 to 1984, despite membership of the EMS. The major explanation which suggests itself was pursuit of domestic fiscal and monetary policies which were not consistent with the exchange rate policy inherent in EMS membership.

Over the years there have been many proposals for reform of the CAP (some of these are surveyed by Fennell, 1987). It is widely agreed that the process of reform has been slow relative to the size of the problems which confront the agricultural policy. In the late seventies and early eighties the process took the form of a 'prudent' price policy; this involved keeping common price increases agreed in Brussels to low or zero figures. Initially, progress on this front was slow, but since 1982 the restrictive price policy has been adhered to with consistency (Sheehy, 1986, 1988). To this price policy were added two other reforms. First, access to intervention has been restricted. Second, in some commodities price policy has been complemented by the establishment of binding quotas and guarantee thresholds. By far the most significant of these measures for Ireland was the introduction of milk quotas in 1984.

The introduction of milk quotas brought about a sharp reduction in milk production in Ireland and, because it limits dairy cow numbers, also induced a fall in beef production. This has indeed had the effect of strengthening the milk and beef prices. At the same time the very sharp fall in Irish inflation since

1985 has greatly eased the pressure of costs on farmers. The distinct recovery of average farm incomes in recent years suggests that the reversal of the years 1978 to 1986 should be attributed primarily to the inflation and exchange rate developments in those years, rather than to the reforms of the CAP which have been achieved to date. However, the problems associated with the CAP have by no means been solved and, consequently, there can be no doubt that further changes in European agricultural policy are necessary and will occur. This aspect of agricultural policy is discussed in Chapter 14.

(ii) Low Farm Incomes

The persistence of a segment of Irish agriculture showing very low farm incomes is related to the existence of structural problems. In Chapter 4 we saw these structural problems to be the small size of many holdings, the age and educational profile of their occupants, and the rigidity of the land tenure system. These structural problems prevented a large proportion of farms from responding to the incentives offered by the CAP and so sharing in what prosperity was available.

We noted in Chapter 4 that the Community Farm Modernisation Scheme introduced in 1974 did not succeed in having a significant impact on these structures. In theory the Community's 'prices and markets' policy is intended to be complemented by the 'socio-structural' policy of the CAP. However, the fact that Community funding of socio-structural policy (FEOGA Guidance fund) accounts for only about 4 per cent of the EC agricultural budget, is a clear indication that the Community views structural reform in agriculture as primarily an issue for national governments. Indeed, in their survey of the impact of the CAP on Ireland Cox and Kearney concluded that "the amelioration of these [structural] problems should never have been anticipated under a CAP regime as they are essentially Irish problems requiring Irish solutions."

This implies that these structural problems, if they were to be solved, would have to have been the subject of national policy. Consequently, it is to national policy rather than Community policy that we must look in trying to understand those problems in agriculture which derive from structural factors. Four general types of agricultural policy can be identified: price policy, productivity policy, structural policy and programmes outside agriculture (Matthews, 1987). Only the first of these policy areas was fully circumscribed by the existence of the CAP.

But the structural reform activities of the Land Commission and the Department of Agriculture and Fisheries before that — between which there were many parallels — quite failed to change the pattern of land tenure and transfer (Kennedy *et al*, 1988). The absence of a coherent land policy in Ireland (despite the publication of a Green Paper and a White Paper by the government

in the late 1970s), and the failure of the Government to effectively implement the EC Farm Retirement Scheme in the mid-1970s, has meant that in practice socio-structural policy in Irish agriculture has been virtually non-existent.

Furthermore, it has to be recognised that conventional agricultural support policies — ‘prices and markets’ policies — are likely to have some impact on structural characteristics. The precise effects of the CAP on the structural problems of Irish agriculture are by no means clear cut. The common price policy definitely yielded greater benefits to those with higher levels of output, but it also improved the income position of the non-commercial farmers to a limited extent. But in doing so it may have widened the dichotomy between the commercial and non-commercial layers of Irish agriculture. It could have done this in a number of ways. First, by offering differential price incentives in different products it may have favoured one pattern of farming over another — in particular favouring dairying over drystock. But there is considerable evidence that the division between the dairying and cattle sectors coincides with favourable and unfavourable structural, demographic and educational characteristics (O’Hanlon and Tracy, 1985). Secondly, quite apart from *differences* in price incentives, the very focus of the CAP on price may itself have widened the dichotomy in Irish agriculture. This is because those farmers with the greatest structural difficulties are not responsive to economic policies (Conway, 1974). In particular, the level of economic activity on such farms does not respond to changing prices. But, equally, these farmers tend to display a strong preference to continue on in farming, even at very low income levels, rather than choose an alternative option, such as retirement or disposal of the farm.

The existence of structural problems may also have influenced the effectiveness of price and markets policies in assisting the development of the potentially commercial farms. Given the rigidity of the land tenure system, the large price increases under the CAP in the seventies can, to some extent, be seen as having increased the *rental* income of landowners. But an increase in rentals could not be expected to assist the transfer of land-use to those most capable of building commercial farm businesses. In effect, a process of rapid price increase simultaneously *assists* farm development, by giving the farmer an income capable of servicing loans, and *hinders* it, by raising some of the obstacles to it. Furthermore, large price increases may have mitigated the pressure for structural change — other than the steady decline in numbers employed in agriculture.

Conclusion on Structural Problems

These points highlight all the more clearly that if the price and other incentives are somewhat beyond national control — as they are under the CAP — then an active national policy, under other headings, is an imperative — unless the pattern of allocation created and sustained by the incentives is optimal from a national point of view.

But we know of course that there was structural change in agriculture since 1973, as before, mainly taking the form of movement of people out of the sector. Here there is a certain parallel with the job losses in indigenous manufacturing firms in exposed sectors in the early years of EC membership. Adjustment, of a painful sort, occurred to be sure; but that adjustment did not always solve the structural problems of either manufacturing industry or agriculture. Consequently, further adjustment, of the same sort, was inevitably necessary.

(iii) The Slow Development of the Food Industry

The third problem identified in our review of performance since 1973 was the disappointing progress in developing Ireland’s food processing industry (see Chapter 4). Clearly there was both an industrial and agricultural dimension to the poor performance of this sector. The industrial constraints were broadly those which face all indigenous firms and which the NESC has studied in depth (see NESC Report Nos. 56, 64, 66, 67 and 76). However, each manufacturing sector has specific characteristics (as discussed in Chapters 4 and 6). In the case of food processing the difference between the scale of Irish firms and firms abroad has not been as marked as in other industries. Furthermore, food processing is one sector where there has been a definite process of *concentration* rather than *fragmentation* in recent years.

The agricultural constraints on the development of Ireland’s food processing industry in the period since Ireland’s accession to the EC were the pronounced seasonality of supply, and availability of supply in the broadest sense.

While the CAP was not the original cause of these features it would seem to have inadvertently reinforced them by the set of incentives it created in attempting to achieve income, production and stabilisation objectives.

In the case of the beef processing industry the very marked seasonality of supply has constrained the development of the processing industry. The CAP has created competition between beef exporters and live cattle exporters for available supplies, by offering live cattle exporters a level of support which gave them a considerable competitive advantage over beef exports (Matthews and O’Connor, 1987). Certain aspects of the EC beef support system has tended to prevent the processing industry from realising its full growth potential. Intervention has provided a low-risk outlet for commodity type products and thereby reduced the incentive for beef plants to get involved in the riskier, but ultimately more beneficial, market for high value-added products (*ibid*). The Monetary Compensatory Amounts (MCAs), export refunds, and the UK variable premium have all, in the past, worked to create incentives which disfavour processing, and therefore add value to Irish meat (*ibid*). In the case of milk processing, by far the most serious constraint has been the seasonal nature of Ireland’s milk supply. Because of this seasonality the Irish milk

processing industry has been concentrated on bulk products like butter and hard cheese, rather than the higher value-added products such as yoghurts, milk liquors, coffee creaming agents and soft cheeses. But this pattern of specialisation was encouraged by the availability of intervention and export refunds for butter and its by-product, skimmed-milk powder.

Matthews and O'Connor conclude that while the CAP was designed to support farm prices and incomes "in many ways it has been antipathetic towards the food processing industry". It is their opinion that "in the face of these disadvantages, it has been almost impossible for Ireland to develop a vigorous food processing industry" (Matthews and O'Connor, 1987). In contrast with the structural problems, it is less easy to see that *national* policy could have *directly* altered the set of incentives facing producers and processors — since they emanated largely from the CAP. But, if a strategic emphasis on the development of an industrial sector based on agricultural produce had been adopted earlier, measures may have been possible under the heading of industrial or regional policy and, in addition, the problematic aspects of the CAP could have been given priority in Ireland's negotiations at Community level.

(iv) Conclusions on Agriculture

The crucial difference between the Irish industrial and agricultural sectors in the EC has been that the Community system from 1973 to the early eighties was one which made adjustment in industry unavoidable; and if that adjustment had some severe negative consequences (as indeed it did) then the need for national policy and/or supplementary Community policy was brought to light. The Community system in agriculture was one which made adjustment partially avoidable, while at the same time rewarding the strong far more lavishly than the weak. While this system had much to recommend it, it had one unfortunate consequence. It could conceal the need for a range of long-term national policies concerning the role of agriculture in the overall development of the economy, and the need for national policies to achieve agricultural objectives which were not, and probably could not, be addressed by the CAP.

This strongly suggests that the criterion by which Ireland's membership of the Community be assessed should primarily be the kind of economy which evolved as a result of EC membership and only secondarily whether a particular strategy maximised receipts from the Commission. Furthermore, it suggests that the conception of what is meant by Ireland's European policy should be broadened from reference to the strategic and tactical positions it took at the Council to include the set of domestic policies devised, or not devised, in the light of the common policies adopted at EC level.

Sectoral Autonomy in Community and National Policy Making

There is one important feature of the Community's functioning to date which has a bearing on the conduct of Ireland's European policy, and on the balance between national and Community policy. In diagnosing the problems of the Community system Padoa-Schioppa noted that "the segmentation of powers between several specialised Councils of Ministers led in some degree to policy making by interest-groups, each armed with veto powers, and weakened the possibility for coherence between different policies" (Padoa-Schioppa, 1987, p.72). The normal check on each sectoral policy provided by cabinet government in a system of parliamentary democracy was absent at the Community level. Laffan (1985) has pointed out that this insulation of sectoral policy from general Community policy was greatest in the case of agriculture (see also Fennell, 1987). Indeed, she notes that agricultural policy tended to be autonomous not only at the Community level but also in the member states (Laffan, 1985). While this autonomy has certainly begun to break down, it was an important feature of the Community for most of the period since Ireland joined.

This feature of the Community system has a number of implications. The first and most immediate is that while the sectoral autonomy of agricultural policy may have been of little economic significance in most member states, it may have had profound implications for Ireland — which was faced precisely with the need to develop an indigenous manufacturing sector based on agricultural raw materials and, therefore, required the closest possible integration of agricultural policy with industrial and other economic and social policies. In the period since accession Irish policy making on these different fronts has not always been adequately co-ordinated, nor been perfectly integrated with the country's European policy. This highlights the need for a more structured, analytical and perceptive co-ordination of policy — something that can only be achieved if sufficient resources of the right kind are allocated to this task.

8. LESSONS OF THE PERIOD 1973 TO 1987

The Council believes that the experience since 1973 documented in Part II of this report contains several very important lessons which must be clearly understood if the country is to make the most of its membership of the European Community.

(i) Macroeconomic Management: Fiscal Policy

The macroeconomic policies pursued from the late seventies into the eighties contained serious errors. In particular, the experience shows that the attempt by Ireland, or any other small Community country, to use expansionary fiscal policy to achieve a faster rate of growth than the Community at large, is likely to fail and to create other economic problems. The essential reasons for this is the extremely open and interdependent nature of EC economies. The Council believes that this was not adequately appreciated in Ireland.

(ii) Macroeconomic Management: Monetary Policy

There is no doubt that the macroeconomic policies pursued after 1979 were inconsistent with the decision to join the European Monetary System and to keep the Irish pound stable within that system. Excessive domestic monetary growth fuelled inflation and therefore decreased the competitiveness of Irish industry. This was also caused by the continuation of relatively high earnings growth despite the changed underlying economic conditions. But our analysis of this episode shows that the public policy and private sector spheres interact to an enormous extent, and this illustrates that satisfactory implementation of the decision to join the EMS required not only recognition and acceptance of the macroeconomic policy conditions, plus acceptance of the implications for wage increases in the private sector, *but also* consensus on the management of the public finances, especially taxation. This was not adequately appreciated by either government or the social partners at the time.

As a result the Council strongly believes that continuation and development of the consensus represented in the Programme for National Recovery must now be an integral part of Ireland's overall European policy (see Chapter 17).

(iii) Macroeconomic Management: The Community Dimension

The unambiguous conclusion that European integration limits the macroeconomic policy autonomy of the member states points, equally unambiguously, to the fact that national macroeconomic policy should be replaced by Community level management of the macroeconomy. This has not been fully appreciated in the past and remains to be firmly established as a normal and indispensable part of the Community system.

(iv) Effects of Economic Integration: Timing of Adjustment

Although the commitment of Ireland to Community membership was very strong, this was not matched by detailed study of the likely effects of economic integration. In particular, it was not widely appreciated that the effects of integration can take considerable time to work themselves out. Adjustments to membership of the EC were experienced in the 1980s as well as the 1970s.

(v) Effects of Economic Integration: The Pattern of Specialisation

The greatest single difference between the regime of protection, such as that which prevailed in Ireland for several decades, and membership of the Community is the necessity of *specialisation* in a freer trade environment. Recognition of this is the first requirement of a successful policy or corporate response. But a second requirement is recognition that, in modern economies, comparative advantage is only to a small extent determined by purely natural factors like supplies of land and labour. In this context the task of policy and corporate strategy should have been to *foster* activities in which Ireland could develop a *genuine, sustainable* and, indeed, *renewable* competitive advantage. This requirement was not always kept sight of under the pressure to create jobs

and exports. The very pronounced specialisation which did occur did not provide a foundation for indigenous economic development.

(vi) Effects of Integration: Uneven Distribution of Benefits

The evidence presented in Part II of this report confirms that economic integration is not adequately described by the textbook view that free trade increases the welfare of all countries by allowing them to specialise on the basis of their given strengths. That view excludes any role for economies of scale, economies of agglomeration, and the effects of innovation. By doing so it excludes consideration of much of the gains from integration, but also of the reasons why the benefits and costs are likely to be distributed unevenly.

In the Council's view, Ireland's experience since 1973 confirms that economic integration is a complex process which both reflects and reinforces existing advantages and disadvantages. Consequently, negative integration — the removal of tariff and non-tariff barriers to trade and factor movements — cannot be expected to automatically create convergence or to remove all barriers to economic development. This requires both national and Community measures of *positive* integration — the establishment of common institutions and Community policies — and it is only this combination of approaches that the Council considers to be a genuine move towards European union. These facts are not yet fully understood throughout the European Community.

(vii) Development Policy

The NESC has previously demonstrated that the developmental policies pursued by successive governments did not sufficiently and consistently address some key structural constraints on Irish economic development (see NESC Reports No. 56, 64, 66, 76 and 83). This factor is relevant in an understanding of the experience since 1973. It is this factor which provides the link between what is known, and agreed, about weaknesses in macro-management, and what is known about the long-run structural weaknesses of the Irish economy.

(viii) Short-Term Orientation

During a significant portion of the period since Ireland's accession to the EC, priority was given to short-term goals. Indeed, several of the lessons stated above are but specific examples of this general phenomenon. Short-term considerations frequently predominated in taxation, public expenditure, macroeconomic management, exchequer borrowing, job creation, industrial policy, pay bargaining and approaches to issues at the European level. However, the Council stresses that this approach was not confined to government policy making — which largely reflected priorities in the society.

Such an approach was profoundly mistaken, not only because it created more economic problems than it solved, but also because, pursued over a period, it

undermines the ability of policy makers and the social partners to use the experience of dealing with one problem to inform their approach to the next. The priority of short-term considerations implied that each problem was dealt with in a partial way and the connection between one problem and the next was obscured. This approach ultimately drowns out any long-term thinking about the evolution of the economy or the society.

(ix) The Relation of National to Community Policy

In the years since 1973 the balance between Community and national policy competence has not always been correct. In some cases, for example agriculture, the existence of a Community policy was seen as virtually precluding national policy. In other cases, for example regional policy, an increased Commission role was viewed with ambivalence — but not on the basis of a superior national grasp of regional development planning.

(x) Policy Implications of Community Membership

Looking at this list of lessons it is apparent that some are related to Community membership, but many are not. This in turn yields a further lesson, which is, in fact a general finding of this study: membership of the Community does not reduce the need for clear Irish policy aims and methods. In particular, membership of the Community does not diminish the need for a national ability to identify solutions to national problems — even where those solutions require Community policies and action. This point is valid in all contingencies. A firm national grasp of how to solve a problem strengthens the argument for adoption of a common or Community policy. It helps enormously when agreement to adopt a common approach is achieved. In the case where a Community policy is not achieved, a member country is on its own, and must have well worked out solutions to its problems — or fail to solve them.

APPENDIX

THE INFLUENCE OF THE GROWTH RATE OF THE UK ECONOMY ON IRELAND

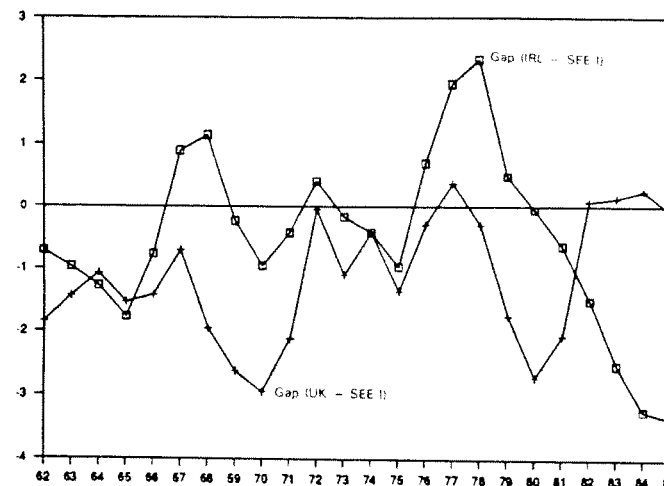
In this appendix we explain in a fairly general way the two propositions in Section 2(ii) concerning the strength and nature of the UK influence on the rate of growth of the Irish economy in the period 1960 to 1985. Although detailed statistical analysis would be necessary to confirm these hypotheses we feel confident that they can be adopted provisionally.

The relatively slow growth of Britain in the mid-sixties would seem to have some role in explaining why Ireland's growth rate was below that of our first group of small European economies, Austria, Belgium, Denmark, Finland, The Netherlands, Norway, Sweden and Switzerland (what we called SEE-Group 1) in those years (see Figure 7.1). However, in the mid- to late-sixties the rate of growth in Britain declined somewhat, while it increased considerably in Ireland and, indeed, rose above that of the other European small economies. This cannot be explained by the performance of the British economy.

Although the Irish economy continued to grow at over 4 percent per year it soon fell below the growth rate achieved by other small European economies (see Figure 7.1). This would seem to be partly explained by the downturn in Britain in the late sixties.

The early seventies provide an interesting case study. The European economies experienced slowing growth (but from a very high level) up to 1973. By contrast, Britain attempted rapid growth (from a much lower level) by means of

Figure 7.1



expansionary monetary and fiscal policy and actually reached the growth rate of SEE Group 1 (see 1972 in Figure 7.1). Ireland also experienced increased growth — rising above the growth rate of the other small European economies.

The Irish growth rate remained well above the British rate during these years — and was frequently closer to the SEE Group 1 rate than to the UK rate. This and the patterns reviewed suggest that the influence of the UK was not in *determining* the long-run growth rate in Ireland but in shaping its fluctuations about this rate. This is our first conclusion concerning the influence of the UK economy on Ireland's long-run growth performance.

The influence of the UK would seem to be evident in the mid-seventies also. The rate of growth in Ireland fell below that in SEE-Group 1, OECD-Europe, and OECD-total, but not lower than the UK. This would suggest that the early and deep recession in the UK dragged down the rate of growth in Ireland. The influence of Britain is also evident in the initial recovery from the 1975 recession. Both the UK and Ireland started this recovery much earlier. Again, it should be noted, from Figure 5.2, that for the OECD as a whole the timing of recession and recovery was similar to that in Britain rather than in SEE-Group 1 and, consequently, Britain was not the only external influence on the Irish economy.

However, the *large positive gap* between Irish growth and SEE-Group 1 growth in the late seventies certainly *cannot* be attributed in any measure to the UK influence (see Figure 7.1). The UK (and OECD-Europe) experienced slowing growth, while in the small European economies and in Ireland growth increased. But Irish growth was much higher and this suggests that we look for an explanation particular to Ireland. This burst of growth and the recession of the late seventies and early eighties saw a distinct change in the relationship between Irish and UK growth rates. Once again, the UK recession was earlier and deeper, this time much deeper, than in the OECD, OECD-Europe, or SEE-Group 1. However, this time Ireland seems to have moved more in line with other small European economies. Does this indicate a weakening of the UK influence as a result of its decreased role in Irish trade? Or was expansionary domestic policy responsible? Indeed, the slow and declining growth of the UK in 1978, 1979, 1980 and 1981 may be one reason why the high growth of the Irish economy in those years was accompanied by such large public sector and balance of payments deficits.

The second major **gap** between Ireland and other European economies which requires explanation is the *negative* one in the period from 1982 to 1985 (see Figure 7.1). From this figure it is clear that the overall performance of the British economy cannot explain this. Indeed, for the first time since the mid-sixties (and then only marginally) was the UK growth rate nearer to that of small European economies than the Irish rate. The significance of this change

cannot be overestimated. If the pattern of the past had been repeated, Ireland would have had growth well above the European average in the eighties. The explanation must be sought in factors other than the UK performance.

Thus, our second conclusion concerning the UK factor is that, despite the undoubted influence of the UK, the major *divergences* between Ireland's growth rate and those of other European economies *cannot* be easily explained by reference to the UK performance.