INTERNATIONAL DIVISION OF LABOUR PROGRAMME

ADJUSTMENT AND ECONOMIC PERFORMANCE IN INDUSTRIALISED COUNTRIES: A SYNTHESIS

by

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PREFACE

The present study of adjustment and economic performance in industrialised countries is published in the framework of the ILO Research Project on Employment, Trade and North-South Co-operation (Phase II). Designed to be a synthesis of the country studies on the United Kingdom, Japan, the United States, the Federal Republic of Germany and the Netherlands which appeared earlier in this series, it has also made considerable use of other relevant material. Work on the study began while the author was on secondment to the ILO in Geneva and was completed after his return to the University of Warwick (England).

This project, which is the follow-up of an earlier project carrying the same title, is addressed to the following questions:

(a) What are the socio-political factors, behavioural responses and the institutional arrangements as well as the policies initiated by governments which have been shown to be important in the promotion of successful industrial adjustment policies in developed countries;

(b) What are the socio-political, cultural and economic factors which have contributed to the successful economic development of the Newly Industrialising Countries (NICs); and

(c) What lessons can be learned from the success of the NICs that can be useful to other developing countries which have committed themselves to a broadly similar growth path.

These questions are being approached at two levels:

(i) By means of a number of country case studies on Developed Countries (United Kingdom, United States, Japan, the Federal Republic of Germany, the Netherlands), Newly Industrialising Countries (Republic of Korea, Singapore,

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1 For a description of the results of Phase I, see Geoffrey Renshaw (ed.): Employment, Trade and North-South Co-operation (Geneva, 1981).
Brazil and Mexico) and Developing Countries (Cameroun, Tunisia and the Philippines).

(ii) Through a general report synthesising the findings of the country studies, of which the present study forms a part.

Successful adjustment is thus the central theme of the studies on the developed countries. Questions that are being asked are: how successfully has each country adjusted to changes in the international economic environment and, in particular, to competition from developing and newly industrialising countries? What have been the most important factors in influencing the success of adjustment? To what extent can success (or lack of it) be attributed to policies (in the broad sense), and to what extent to differences in the social and institutional framework, differences in the behavioural responses of workers and managers, and other factors?

To anybody familiar with the characteristics and the prevailing economic philosophy of the countries selected—United Kingdom, United States, Japan, the Federal Republic of Germany and the Netherlands—it will immediately be clear that the answers to these questions will show considerable differences as these countries represent a wide spectrum of economic performance, policy approaches and socio-political systems.

In the present study, Mr. Renshaw approaches his task of synthesising the case studies of the five industrialised countries in the following way. In Chapter 1 he examines the meaning of the term "adjustment" in an industrialised market economy and argues that there are in general terms many reasons why market forces may be unable to deliver efficient adjustment at both the micro- and the macro-economic levels, and hence that the maintenance of full employment cannot safely be left to the market.

In Chapter 2 he reviews the performance of the five countries studied, in terms of their respective achievements in sustaining full employment, non-inflationary growth and balance of payments equilibrium in the past two decades. In Chapters 3, 4 and 5 he examines, in turn, the behavioural and institutional differences between the five countries with respect to the behaviour of enterprises, the workings of their labour markets and industrial relations systems, and in the differing roles of government in the sphere of
industrial policy. In the sixth concluding chapter he draws together his conclusions under these headings, arguing that the differences between the countries in their adjustment performance is by no means explicable by means of simple formulae which relate to presence or absence of state intervention and "respect" (or lack of it) for market forces. Rather, differences are explicable in terms of social, institutional and behavioural factors which are deeply embedded in the societies concerned. Policies have failed to address themselves to modifying these deep-seated factors and hence have met with little success.

Gijsbert van Liemt
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"Curiosity is never more agreeably or usefully employed than in examining the laws and customs of foreign nations."

(Samuel Johnson)
INTRODUCTION

This report is the outcome of the second phase of the ILO project entitled "Employment, Trade and North-South Co-operation". The first phase, completed in 1980, addressed itself to the perceived conflict between the employment objectives of the industrialised and developing countries which had arisen in many people's minds as the result of rising rates of unemployment in the North accompanied by rapid growth of imports from the South.¹

It was demonstrated in the first phase that despite their rapid growth, these imports accounted for such a small proportion of total consumption in the industrialised countries (even allowing for the most adverse of indirect effects), that only a tiny fraction of the unemployment in industrialised countries could be attributed to their displacement of domestic production. It was further argued that when allowance was made for the interdependence between the South's ability to export to the North and its capacity to purchase the North's exports, liberalised and expanded North-South trade would have favourable effects on employment in both North and South in contrast to current protectionist trends.

The tendency in the North to regard imports from the South as a threat to employment, and the resulting protectionist trends, resulted basically from the fact that the problem was viewed from a narrow national and sectoral perspective, from the difficulties in adjustment experience in the sector particularly affected, and above all, from high levels of unemployment experienced since the early 1970s.

It was clear from the findings of the first phase that slow growth and high unemployment levels in the world economy were not just parameters which had to be taken as given in examining the problem of adjustment to North-South trade problems. Rather these two, besides being inter-related, had a common cause, namely structural change in the world economy and the problems of adjustment to it. The second phase attempts to examine these issues in greater depth, from the point of view of both the North and the South.
The point of departure for the second phase of the project is that the world economy is experiencing its most severe depression for more than 50 years. The term "depression" rather than "recession" is appropriate because the latter implies that some recovery will occur in the fairly near future. There are few objective reasons for expecting this; indeed, most of these forecasters who do not have a political axe to grind are extremely pessimistic.

The world depression is sometimes referred to as a crisis. The accuracy of this is questionable because a crisis is a state of affairs which, by its very nature, creates an inescapable and urgent need for action. In contrast, because the world depression has developed slowly over the past decade and because optimism that a recovery would occur has only slowly evaporated (to be replaced by fatalism) there is surprisingly little sense of urgency in the minds of policy-makers or the public. Nonetheless, a great deal of social damage is occurring throughout the world. Millions of lives are being blighted by the depression, which therefore ought to be viewed as a crisis, even if it is not in fact viewed by many as such. It is also quite possible that fatalism will give way in time to anger and resentment in the minds of those who are suffering, then a political and social crisis may develop. Thus refusal to recognise the crisis now may lead to a bigger crisis later.

The crisis in the world economy is paralleled by a crisis in economic analysis and policy, though this latter crisis is (for similar reasons) largely unperceived. Among economic analysts there has been a breakdown of consensus on a number of fundamental questions about how modern economies work (e.g. the causes of inflation). In the face of this disarray among professional economists, politicians have tended to take advice from those whose advice was offered the most confidently and loudly and whose advice fitted best with the preconceptions and political requirements of the policy makers themselves.

International economic relations

Because of the interdependence of national economies, the world economic crisis is not simply the summation of the crises in individual countries. Yet because policy-makers view the situation almost exclusively from a national standpoint, they see only a national economic problem requiring national
policies which take the state of affairs in the rest of the world as given, and ignore the impact of their own policies on the rest of the world. At best this is inefficient because co-operative approaches to the problem which recognise and allow for interdependence can yield better solutions to the problem. At worst it is self-defeating because national approaches may cancel one another out.

An even greater danger is that mere failure to co-operate and to co-ordinate national economic policies for dealing with the crisis may give way to hostility and "policy warfare" between nations. Protectionism is the most obvious manifestation of this tendency. Policy warfare may develop either because policy makers have a faulty perception of the causes of their national economic problems (e.g. they believe that "unfair competition" from abroad is the cause) or because, in desperation, they attempt solutions which they know to be selfish (i.e. "exporting unemployment").

It is certainly clear that national policy-makers have failed to respond to the need for greater international co-operation which results from the world economic crisis. In any event there is incontrovertibly a need for greater international co-operation, and a better understanding of the problems confronting the world economy. It is to these problems that this project is addressed.

The North-South dimension

Overall economic growth rates in the South have up to now been less seriously damaged by the world crisis than those in the North. This has encouraged a complacent view in some quarters. But there are many reasons for a far more pessimistic view. The South looks to the North for markets for its raw materials and for its growing capacity to export manufactures (not confined solely to the NICs). It also looks to the North for capital in the form of commercial loans, investment and aid. Without these it cannot hope to achieve even reasonable growth of income per head given the rapid growth of population which will occur over the next two decades.

It is logically possible that the South could grow rapidly over the next two decades, while the North stagnated. But politically and economically, it is extremely unlikely. It would imply that an increasing proportion of
savings in the North would be used to finance investment in and aid to the South and that penetration of Northern markets by Southern exports would grow correspondingly. Even if this were envisaged, there would remain the problem of stagnant demand for the South's exports of industrial raw materials which are geared to world economic growth, regardless of where that growth is located. But it is difficult to envisage this since it would be politically unacceptable in the North; indeed the trend of policy is in the opposite direction, since Northern citizens overwhelmingly believe that "charity begins at home", i.e. that savings should be invested at home in order to create jobs at home, and that for the same reason domestic producers should be protected in order to preserve jobs. For these reasons, the prospects for the South in the face of the continuing world crisis are exceedingly poor. Even more so than the North, the South's future is dependent on an improvement in the world economic situation and on an improvement in international co-operation.

The scope, objectives and methods of this project

The discussion up to this point suggests an urgent need for:

- a better understanding of the causes of the world economic crisis, as a means to

- identification of policy initiatives which would help towards an improvement in the world economic situation.

These are questions on too grand a scale to be dealt with satisfactorily by any single research project, however large. It is necessary, without losing sight of them, to focus somewhat more narrowly on some sub-set of the many aspects of these broad questions.

In attempting to reduce the first of these questions (the causes of the world economic crisis) to more manageable proportions, one perception is that the problem of the world economy are seated in the loss of dynamism and adaptability which seems to have occurred in the industrialised countries. After two decades of full employment and price stability, these countries have progressively drifted into "stagflation" indicating that something has gone wrong with their internal dynamics. Since collectively the industrialised
countries are the "engine" of the world economy, a world recession has resulted.

More specifically, their limited capacity to adjust to changes in the world economic environment (resulting principally from the two oil shocks, the rise of the NICs and accelerated technological change) seems at least as a preliminary hypothesis to account for the onset of the depression. An operational approach to the problem which might be fruitful therefore seemed to be to set out to examine, in the industrialised countries, what factors account for the wide variations between countries in economic performance which have become even more pronounced since the onset of the crisis, and how economic policy has contributed to these variations.

The answers to these questions are not only important to industrialised countries seeking solutions to their unemployment problems; they are also of crucial importance to North-South relations. As indicated above, one of the sources of pressure to adapt in the North arises from increased international competitiveness in the South. Unless adjustment performance in the North can be improved, the South's development efforts are likely to be jeopardised by stagnation and protectionism. The study of adjustment (widely defined) in the North is therefore pivotal to the future progress of the world economy and North-South relations.

At the same time, economic performance in the South is also of crucial importance. Improved adjustment in the North might conceivably get the world economy moving again and create favourable demand conditions for the products of the South, but this is of limited value unless the South can take advantage of these opportunities.

In the context of the South therefore the project addressed the following questions:

i) What factors (and again, what policies) have been crucial in the outstanding economic performances of the Newly Industrialising Countries?

ii) Are any of these factors and policies replicable or transferable in the sense that by following them, other developing countries could achieve comparable results?
Research methods

Although the intellectual integrity of the project has hopefully been sufficiently established by the preceding remarks, in operational terms the project falls into two halves—North and South. In each half it was decided to take the country as the basic unit of analysis as a prelude to cross-country comparison. Four NICs, three non-NIC developing countries, and five industrialised countries were selected for study, and experts on each were recruited to prepare studies on their respective countries. The four NICs were Brazil, Mexico, the Republic of Korea and Singapore; three non-NIC developing countries were the Philippines, Tunisia and Cameroun; and the five "industrialised countries" were the Federal Republic of Germany, the Netherlands, the United Kingdom, the United States and Japan. For the North and South components, syntheses drawing together and elaborating the findings of the country studies were then prepared.

In order to achieve maximum comparability, collaborators in both the North and South were asked to work to a common brief which set out in some detail the methodological framework and the strategic questions they were to address. The methodology was extremely wide-ranging taking into account the analysis not only of conventional economic influences on performance but social, political, cultural and institutional factors as well. The underlying objective in the South was to try to distinguish factors which were, to a large extent, specific to the countries concerned, and those which could be transferred or emulated by others. Above all, the approach was strongly policy-oriented since this was not intended as an academic enquiry, but to show what countries could learn from each other which was of an operationally useful nature.

Notes:

1. For the studies undertaken in Phase I, see Geoffrey Renshaw (ed.): Employment, Trade and North-South Co-operation (Geneva, International Labour Office, 1981). This book is also available in French and Spanish language versions.

2. The country studies have been published as ILO Working Papers, as follows:
WP 17: Trade, Employment and Industrialisation in Singapore, by Linda Lim and Pang Eng Fong (June 1982).
WP 20: Trade, Employment and Industrialisation in Mexico, by Robert Edward Looney (October 1982).
WP 26: Structural Adjustment in UK Manufacturing Industry, by Margaret Sharp, Geoffrey Shepherd and David Marsden (December 1983).
WP 27: Adjustment in a Small Open Economy: The Case of the Netherlands, by Gerard de Groot and Ben Evers (December 1983).
CHAPTER 1

THE METHODOLOGICAL FRAMEWORK
As explained in the Introduction, the fundamental objective of these studies is to shed light on the reasons for the unemployment crisis in the industrialised countries. This crisis is not only imposing enormous economic and social costs on the countries themselves, but by virtue of its impact on North-South trade and co-operation, on developing countries too. The importance and urgency of this objective therefore requires no further elaboration; nor equally does the magnitude of the task require emphasis.

Having regard to the magnitude of the problem, both the quantity and the quality of explanatory studies previously published has been surprisingly disappointing. At the national level, one may explain this to a considerable extent by the fact that in many countries economic policy has in recent years become highly politicised and hence not a field in which independent and impartial inquiry was seen as either appropriate or useful. At the international level, this politicisation of national economic policy also helps to explain the paucity of studies, since national governments have not wished to encourage "outsiders" to examine national economic affairs. But it also reflects a general weakening of the spirit of international economic co-operation, and a tendency for nations to see themselves as competing against one another in order to reduce unemployment, rather than seeing it as a common problem requiring concerted policies to combat. These general observations will be amplified further below.

From existing research studies and policy statements, however, the conventional wisdom regarding the causes of the unemployment crisis emerges quite clearly. The crisis is viewed as being caused by something called "poor adjustment" in the countries concerned, which has led to something called "structural imbalance". In order to assess the validity and implications of this view, it is essential first to frame a precise, objective and operationally useful definition of the terms "adjustment" and "structural imbalance" and to articulate the way in which poor adjustment (and other factors) could lead to structural imbalance, and hence could account for the unemployment crisis. The need to explore the precise meaning of these terms arises from the fact that although they are in common use these terms are seldom explicitly defined and in practice are used in many different ways by different authors in different contexts.
In defining adjustment and structural imbalance there are a number of pitfalls. First, we must avoid attempting to define them by using other terms which are themselves vague or undefined. To say that adjustment is the process of adaptation or change in the economy, for example, is far too vague to be useful. Second, we must achieve the correct breadth of definition. If the definition is too broad, it will lose operational usefulness; for example, if adjustment is defined to encompass all those factors which influence employment, then the proposition that unemployment is caused by poor adjustment collapses into a tautology. If defined too narrowly, it will not encompass all the phenomena which are relevant to the analysis. Equally, it is necessary to avoid circularity. Finally, our definitions must be such as to permit us to elucidate and correctly characterise the underlying causal mechanisms in the economy.

In order to make progress it is necessary to start from first principles and to set up a conceptual framework in which we can first describe, then analyse, and finally evaluate the economic phenomena which interest us (particularly unemployment) in a consistent and coherent way.

Let us begin with the description and analysis of the economy. For this purpose the concept of structure may usefully be introduced. In its most elemental meaning, "structure" is simply a description of an economy (or part of it) in terms of its salient characteristics. For example, one may speak of the structure of the labour force in terms of its age, sex and skill composition; of the structure of a country's imports in terms of their commodity composition; of the structure of production in terms of the relative sizes of different industries. Besides physical quantities, structure in the descriptive sense may also refer to costs, production techniques, and prices. In effect, the structure of an economy is a description of the "supply side" of that economy, and "structural change" is therefore the evolution of the supply side over time.

But description is usually a prelude to analysis, so the term "structure" is often used analytically. When used analytically, it refers to the relationship between two or more components of an economic system or sub-system. As an analytical term, "structure" is intimately linked with the concept of "balance" or "equilibrium". Thus one may speak of the structure of the labour market in terms of the relationship between the supply and
demand for labour; if the supply and demand for labour are divergent (either in their totals or in their age, sex, or skill composition), one might say that structural imbalance or structural disequilibrium existed in the labour market. Similarly, one might analyse the relationship between industry's production capacity and the demand for its products, and conclude that a structural disequilibrium existed if there were a persistent discrepancy between the two. In this analytical sense, "structure" refers to the relationship between supply and demand. Structural imbalance or structural disequilibrium then denotes a persistent inequality between supply and demand. Such an imbalance implies a situation in which some economic agents are frustrated. For example, if in the market for fruit, apples were persistently scarce and pears persistently super-abundant, there would be frustrated would-be buyers of apples and frustrated would-be sellers of pears.

As a matter of logic, such imbalances may occur either in a centrally-planned economy or in a market economy, but our interest here lies in the latter. A market economy has two distinctive characteristics. First, since decisions to supply and demand particular goods and services are taken by individual economic agents (both households and companies) without direct knowledge of or reference to one another, it is obvious that imbalances between supply and demand can arise very easily. Second, in a market economy it is primarily the responsibility of the individual economic agents concerned to resolve the resulting frustrations. Imbalances are presumed to be reconciled in the short run by price changes which occur as the result of competitive bidding by buyers and sellers, and in the long run by changes in productive capacity and production costs.

Again using the market for fruit as an example, a shortage of apples and a surplus of pears (at currently prevailing prices) will result in frustrated would-be buyers of apples and would-be sellers of pears. To resolve these frustrations, it seems reasonable to expect that the former will offer to pay higher prices for apples, while the latter will offer to sell their pears at lower prices, this process continuing until supply and demand for each are brought into balance in the short run. If the high price of apples and the low price of pears persist, it again seems reasonable to suppose that more apple trees will be planted with possibly some aged pear trees being cut down to make room for them.
To the extent that markets in the real world conform to this simple stereotype, structural imbalance and the associated frustrations of individual economic agents trigger an adjustment response on their part, which through a combination of price adjustment in the short run and quantity adjustment in the long run, eliminates the imbalance. The market economy is thus "driven" by the behaviour of individual economic agents (consumers, workers, managers, shareholders, entrepreneurs) each seeking his own individual equilibrium and in doing so responding to (or anticipating) market signals. All their responses (including, throughout this discussion, anticipatory responses) may be considered as adjustment.

The picture painted so far may be summarised as follows. The structure of an economy is simply an inventory of what can be produced and at what cost — a description of the supply side. At any moment, what can be produced and at what cost may be inconsistent with what is demanded and at what prices, resulting in an imbalance between supply and demand and some frustrated economic agents. If this discrepancy is large and persistent, we have a situation of structural imbalance or structural disequilibrium which may affect individual sectors or the whole economy. Frustrated would-be buyers and sellers will try to escape from this situation; their consequent behaviour constitutes adjustment. Adjustment has the effect of changing costs and prices, production capacity and techniques, and labour force characteristics, i.e. it results in structural change (on the supply side) which continues until the imbalance is eliminated.

In this simplified picture of reality, typified by the example of the market for apples and pears, failure of adjustment to occur and hence the persistence of structural imbalance can only be explained by some "failure" of the competitive process. Either the relevant market signals (shortage and/or high price of apples; glut and/or low price of pears) are not being transmitted to consumers or producers; or the signals are being transmitted but not being acted upon; or they are being misinterpreted and the action taken is perverse. The first of these implies some restrictions on the freedom to change prices and/or quantities, which may be explained by constraints imposed by the government or by collusion among buyers and sellers. The second two imply some irrationality, incompetence or sloth on the part of the economic agents, which seems unlikely as a general explanation of persistent structural imbalance.
Thus we are led towards a general presumption that disequilibrium, caused by failure to adjust, is due to constraints which inhibit the working of market forces; and the prime suspects as the source of these constraints are by implication the government or collusion among groups of economic agents (trade unions, producer cartels). And the policy implication is to remove these constraints in order to allow markets to work efficiently. This indeed is the conceptual framework adopted by many who have studied the problems of the industrialised countries and is also the stance of policy makers in many, to a greater or lesser degree.

But this line of reasoning and the conclusions to which it leads, which we shall refer to as the competitive market paradigm, are based on a highly simplified and possibly simplistic view of the world. In essence the markets of the advanced industrialised economies are treated as being in no way fundamentally different from the market for apples and pears. This unstated assumption is questionable, to say the least, for a number of reasons.

Most importantly, the modern economy is so complex that market signals are difficult to interpret, and the appropriate adjustment response difficult to identify. If we consider the behaviour of companies, it is clear that even for a simple and not highly diversified company there are many possibilities with regard to exactly which products to produce and by what production techniques, and what will be the costs, prices and demand associated with each. There are thus many possible adjustment responses when the company finds itself in an unsatisfactory situation, each with large margins of uncertainty associated with it; it is not simply a decision to produce more apples and less pears.

The uncertainty resulting from the inherent complexity of modern products and production processes is reinforced by the fact that many markets are characterised by oligopoly - a few large producers rather than a host of small ones. This means that forecasting the behaviour of rival companies, as well as forecasting changes in demand, technology and prices, is a major component of business strategy. It also implies that the potential rewards from collaboration or concertation between companies are large. A third element which follows from these, and which further differentiates the real world from the text-book model of competitive markets, is the strictly non-marginal character of many company decisions, especially investment decisions. The
decision whether to produce a few more apples and a few less pears is a
decision which a fruit farmer can take "at the margin" without irrevocable
commitment. But a car manufacturer's decision whether the next model will be
front or rear wheel drive, or whether his new plant will be located in England
or Spain, involves an "all or nothing" decision which is largely irrevocable;
having once made the decision, the producer is unable to revise it whatever
subsequent changes in market signals may occur.

A further factor which weakens the role of market signals in guiding
resource allocation is the way in which capital markets function. In the
text-book model of competition, investors are supposed to have an accurate
perception of prospective profitability and hence investment funds are steered
towards high-profit opportunities, and away from low-profit opportunities,
thereby bringing about long-run adjustment of productive capacity. In
reality, perception of profit opportunities is fogged by uncertainty, and the
independent private investor consequently plays a minor role. Instead,
investment decisions are taken by "insiders" and are financed either by
retained profits or by private savings which are channelled through financial
institutions. Much of the complex information necessary to an investment
decision is consequently transmitted to decision-takers, not via market
signals but via the channels of communication within the company and between
the company and its supporting financial institutions. Risk in a complex and
uncertain world, nonetheless, remains high, but risk can be reduced by size
and concentration of resources. Hence large companies have an inherent
advantage over small; the weak tend to become weaker and the strong, stronger.

So for all these reasons to do with the nature of markets in the real
world, we should not be surprised to see persistent and widespread
maladjustment. But what are the policy implications? Is the market economy,
with all its shortcomings, best left to its own devices? Or is it possible to
intervene and modify the market economy so as to make it work better? These
are fundamental questions.

The labour market

Even more so than in the product market, the working of the labour market
in the real world is totally different from that postulated in the market
paradigm. The latter treats labour as a commodity, like apples and pears,
which is bought and sold in the market place. When labour is scarce or abundant, its price is postulated to rise or fall in the short term, and this in turn in the longer run should lead to the necessary changes in labour supply and demand. Very few labour markets have ever functioned in this way; the important thing is to understand why and the implications.

Wage flexibility requires that the contract between the employer and employee be re-negotiated. If labour were hired on a daily basis, an opportunity for such re-negotiation would present itself every day. There are many good economic reasons why labour is not re-hired from day to day; in most occupations, it is nowhere near homogeneous enough. Whatever the legal terms of the contract, an implicit contract is made whereby the worker is hired until some kind of force majeure requires his dismissal. The basic fact is that the firm always knows that it will do better to retain its existing labour force rather than to re-hire en masse from the ranks of the unemployment. The average worker with any length of service is almost bound to be worth more to the firm than his current wage, especially if the firm enjoys his goodwill (since work quality and effort are difficult and expensive to supervise and enforce). For the latter reason, the firm may be reluctant to ask for a wage cut - loss of goodwill may reduce productivity. Equally, knowing that any threat to re-hire from the ranks of the unemployed is actually an empty threat in aggregate, workers only need solidarity to be able successfully to resist wage cuts (or enforce wage increases).

So those who are puzzled as to why (a) the unemployed do not "price themselves back into a job", and (b) why firms do not combat slack demand by wage and price cuts have fundamentally misunderstood the economics of the labour market. The usefulness of price flexibility in the labour market (if it existed) is also reduced by the specificity of skills; this argument after all is used to justify stable and guaranteed rewards in professions, and is logically valid for other jobs too.

Adjustment in the labour market does not merely involve the question of wage flexibility. It also involves adjustment in the supplies of different skills. However, education and training opportunities are not, in general, bought and sold in the market place. Consequently, market signals regarding changes in the balance of supply and demand for different skills have a relatively weak and lagged impact on the availability to the economy of
different types of qualified workers. In short, a surplus of welders and a shortage of electricians should not be expected to have a very big impact on their respective rates of reward; and even if it did, this in turn would have only a limited effect on the numbers of qualified workers in these two skill categories.

These tendencies are reinforced by social constraints. In particular, it is not considered "fair" that an unemployed worker should attempt to gain employment by offering to work for less than those currently employed. Indeed, even if the worker should wish to do so, it is not clear how he would transmit this information to prospective employers. There are those who regard this as a "rigidity" which subverts the workings of the competitive market. But even if it were the case that social constraints impede the adjustment process, who is to say that this is wrong? Society after all can and should balance off social against economic values and objectives. Furthermore, as we shall show below, phenomena such as the Japanese life-time employment system show that the conflict between social and economic objectives need not be acute and that more than one formula exists for reconciling social values and economic efficiency.

**Sectoral and aggregate adjustment**

The preceding paragraphs concerned the adjustment response of individual companies and workers; i.e. adjustment as a micro-economic phenomenon. But we also need to consider macro-economic adjustment, i.e. adjustment at the level of the economy as a whole—and in particular, the ability of the economy to achieve overall full employment.

Micro-economic adjustment is concerned with the allocation of productive resources between sectors of the economy. It is thus concerned with relative rather than absolute magnitudes—relative prices, costs, outputs and so on. But can we be confident that even if resources are correctly allocated between sectors, the aggregate of domestic and foreign demand for domestically produced output will exactly employ the existing labour force and capital equipment at current cost and price configurations? We thus distinguish between a micro and a macro adjustment problem.

It is a difficult analytical problem to say whether macro maladjustment is a problem in its own right, or whether it is simply the result of the
aggregation of sectoral maladjustments. Some would argue that provided relative prices are sufficiently flexible, and quantities supplied and demanded adjust in response to price changes, ultimately supply and demand in each sector and sub-sector will be brought into balance thereby eliminating any problems of sectoral maladjustment. It would then appear to follow that with supply and demand (for products and factors of production) equal in every sector, there could be no maladjustment at the aggregate level.

On this view the macro adjustment problem has no independent life of its own and requires no separate analysis. But though economists and other observers of the current crisis are divided, not many would hold such an extreme view. Most would agree that the adjustment of the economy as a whole is more complex and needs to be analysed in a different way from the adjustment of individual sectors and sub-sectors. A different approach is required because at the aggregate level there is a strong interdependence between supply and demand by virtue of the fact that, by and large, the suppliers and the demanders are the same people.

As a matter of national income accounting, aggregate supply and aggregate demand are equal so there can be no change in one without a corresponding change in the other. But in a more fundamental behavioural or causal sense, the question is whether changes in supply (output) are initiated by changes in demand, or vice-versa: i.e. whether the economy is "driven" from the supply side or the demand side.

In the explanation of macro maladjustment provided by Keynes, attention is directed to the main components of aggregate demand; the consumption expenditures of households, the investment expenditures of companies; the expenditures of governments; and the net demand of foreigners (i.e. exports minus imports).

The main source of disturbance of macro balance is fluctuations in demand, particularly investment spending by companies. If producers anticipate sluggish demand and are experiencing difficulties in selling all they can produce with current capacity, they are likely to cut investment in plant and equipment and to cut current production in order to run down stocks. These decisions reduce aggregate income and expenditure, and thus the expected sluggishness in demand becomes self-validating and may persist until
expectations regarding demand become more buoyant again. It is not considered that downward wage and price flexibility could contribute much to this problem (even if such flexibility in fact existed), because on balance the mechanism whereby falling wages and prices stimulated aggregation expenditure in real terms were considered by Keynes to be rather weak. Keynes accepted that a falling price level (or falling inflation rate) in conjunction with an unchanged money supply might reduce interest rates, but considered that in a deep recession this would have little effect on investment. He attached more importance to the increased foreign demand which might result from falling prices with a constant exchange rate - but the rest of the world might be sliding into a recession too. Finally, he feared that falling wages and prices might affect production and expenditure decisions adversely, since both might be postponed in order to take advantage of tomorrow's lower prices.

The question has been voiced, however, whether investment since 1973 has been more depressed than would appear warranted by depressed demand and excess capacity. The validity of this view is difficult to assess because the relationship between investment and capacity utilisation is difficult to quantify and may be expected, even when underlying behavioural relations are reasonably regular, to operate in different situations with varying strength and with varying length of lag.

It is perfectly reasonable to argue that, for a whole host of reasons, enterprises are now considerably more cautious in formulating and implementing investment plans, and that it will require a great deal of evidence (in the form of a sustained increase in demand) to convince them that the recession is really over and that it is time to think about expanding capacity once more.

Depressed private investment is thus both a cause and a consequence of the depression of the economy as a whole. It is a cause because investment is in itself a significant component of aggregate demand; it is a consequence because investment is highly sensitive to changes in demand. If capacity utilisation increases as a result of a recovery in demand which appears likely to be sustained, sooner or later companies will wish to add to capacity and an upswing in investment will occur. Hence a recovery in investment is most unlikely to initiate, but rather to follow, a recovery of output. In one sense this is a rather depressing proposition, but on the other hand it means that once a sustained recovery gets under way, investment will take care of
itself. Looked at in this light, emphasis in policy statements or the need to promote investment or the need to "transfer resources into private investment" may appear to put the cart before the horse. Resources released from other activities may simply become idle and thereby deepen the recession.

Given that an "investment-led" recovery is unlikely, recovery must be initiated by an increase in one or more of the other components of aggregate demand — private consumption, government expenditure, or net exports. Many countries are looking to a recovery led by net exports, to be achieved by reducing domestic inflation below the world rate without off-setting exchange rate appreciation (i.e. a "real" depreciation of the currency). This is obviously self-defeating at the global level, and hence cannot be endorsed as a policy by anyone with a cosmopolitan approach to the unemployment problem.

It follows that private consumption and/or government expenditures must lead any recovery. The balance between the two is a matter for socio-political judgement in individual countries. The only point we would wish to emphasise is that, of course, if an increase in government expenditure is to make a net addition to demand in the economy, it is essential that it be not fully offset by a reduction in some other component of demand. Thus the increase must be financed not by increased taxation but by tapping the private sector's savings. This, in fact, was the standard "pump-priming" procedure used by governments prior to 1973 to drag their economies out of recession — for example, by the Government of the Federal Republic of Germany in 1967-68 — but which has now fallen into disrepute for reasons we shall examine below.

The previous paragraphs have given a straightforwardly Keynesian account of the recession and the means to recovery. In the past decade or so, however, this view has become discredited in academic and policy-making circles and has been replaced by a new conventional wisdom which has been variously labelled as "monetarist" or "supply side" in its orientation.

In broad terms, the "supply siders" would argue that the Keynesian recipe of demand stimulation in order to achieve full employment is short-sighted. Ultimately, it undermines the capacity of the economy to meet demand and becomes thereby self-defeating. This comes about in a number of ways. First, government expenditure is subject to a "ratchet effect"; it rises in recessions as a result of Keynesian policies, but fails to fall once the
"pump-priming" stage is over. The resulting upward trend in the share of government expenditure in national product absorbs resources which might otherwise have been invested in order to strengthen the supply capacity of the economy.

Second, Keynesian policies result in inflation due to excess pressure of demand in the economy. This undermines investment because inflation results in additional uncertainty and because the resulting higher interest rates reduce profitability (the phenomenon of "front-end loading"). Consumption is also weakened because households are forced to save more in order to re-build the real value of their financial assets which are eroded by inflation. More generally, inflation leads to distortions in price signals emanating from the market place, and thereby reduces the efficiency of resource allocation. Inflationary pressure is associated with a tendency for real wages to outstrip productivity growth, further depressing profitability. Finally, Keynesian policies re-inforce social pressures towards an increasingly elaborate and generously-funded social security system. The resulting increase in the tax burden, together with the social security benefits themselves (especially if means-tested), may also weaken the incentive to work and add to inflation by driving up wages.

For these reasons, it is argued that an enduring recovery can only be led by private investment, and attention is accordingly focussed on the means whereby investment may be encouraged. To a large extent, this may be achieved by reversing the government policies and resisting the social pressures described in the previous paragraph. However, the supply-siders still have to combat the argument of the Keynesians to the effect that it is unrealistic to expect private investment to pick up again as long as considerable excess capacity exists, however favourable in other respects the economic environment may be. In part, they do this by arguing that the relationship between the incentive to invest, excess capacity, and the level of aggregate demand is not as simple and mechanical as the Keynesians believe. On the contrary — particularly in an era of rapid changes in technology and in the structure of costs, prices and demand — the presence or absence of profitable investment opportunities is largely independent of the level of aggregate demand in any particular national economy. But it is also true that those who lack faith in Keynesian prescriptions warn that the atmosphere of confidence which sustained private investment prior to 1973 can be restored only slowly and that the current recession may well last for the rest of the decade.
Enough has been said to justify the view that whether one is a monetarist, or a Keynesian, or an eclectic, a macro maladjustment problem can exist which is more than simply a summation of sectoral maladjustments. Hence, it is not sufficient, in seeking to explain the unemployment crisis in the advanced industrial countries, to proceed on a sector-by-sector basis. Rather we must look at the dynamics of the industrial system as a whole.

Having hopefully cleared out minds by this preliminary methodological discussion and review of the policy issues, the plan of the remainder of this study is as follows. In the next chapter we will briefly review the economic performance of the countries studied over the past two decades. We shall seek to bring out the essential features of their respective performances, measured in terms of the growth of national income, inflation and unemployment rates, and balance-of-payments equilibrium. From this review, the salient characteristics of the economic problem which each country faces in the 1980s will be identified. In the subsequent three chapters, we attempt to identify how the nature of the industrial system in each country — in its economic, social and institutional characteristics — has contributed to these problems. The industrial system is examined by looking in turn at each of the principal groups of actors on the economic stage; enterprises, workers, and governments. Finally, we shall attempt to draw some conclusions regarding the directions for future policies and future behaviour.

Notes:

1. References to "rigidities" in the industrialised economies acting as impediments to adjustment and thereby causing or at least exacerbating the recession are to be found in, for example: IMF: *World Economic Outlook* (Washington D.C., International Monetary Fund, 1982); OECD: *Positive Adjustment Policies: Managing Structural Change* (Paris, Organisation for Economic Co-operation and Development, 1983);
   
   EC Commission: *Structural change in the European Economies since the Recession* (The Maldague Report) (Brussels, Commission of the European Communities, 1980);

   "European Economy", Special Issue on the Recession, 1981.

2. Use of the term "system" is not intended to carry any deterministic connotations, but simply to imply some degree of order or predictability: the absence of chaos.
CHAPTER 2

PERFORMANCE REVIEW
In the previous chapter we examined, in general terms, the nature of the economic problem in the industrialised countries. It is now time to look at the experience of the individual countries which are the subject of this study: The Federal Republic of Germany, the Netherlands, Japan, the United Kingdom and the United States. The object of this chapter therefore is:

i) to make a comparative analysis of the economic performance of the five countries at the level of broad aggregates;

ii) to attempt to identify, for each country and at this level of aggregation, the nature and magnitude of the adjustment problem; and hence

iii) to furnish a list of explicanda or questions to be answered which will hopefully provide a focus for the chapters to follow.

As argued in the previous chapter, adjustment has both a sectoral and an economy-wide dimension. It is beyond the resources of the present discussion to consider systematically, and in depth, the sectoral problems of the countries studied. In the space available we must necessarily content ourselves with broad indications and illustrative examples of sectoral problems. Thus this chapter will confine itself to economy-wide problems of adjustment.

At this level of generality, economic performance is taken to be measured by the growth of national income, together with the presence or absence of inflation, unemployment and balance of payments problems. The period reviewed is from the early 1960s to the present, with a natural break in the review at 1973. The break at this point should not be taken as indicating too sharp a distinction between the two periods, for a number of adverse trends (particularly in inflation and unemployment) were clearly evident in the late 1960s and merely became more pronounced after 1973. But 1973 may nonetheless be viewed as a turning point, not only in a number of economic variables but also in attitudes and expectations.

A summary of the performance of the five countries is shown in Table 2.1. A wide range of experience is revealed. Though the weights which should be assigned to the various performance criteria are, of course, necessarily
subjective, nonetheless a fairly clear ranking of countries seems to emerge with Japan as the most successful, followed in order by the Federal Republic of Germany, the United States, the Netherlands and the United Kingdom. It is worth noting though, in view of current preoccupations of policy-makers with reducing inflation rates, that the Japanese experience seems to indicate that low inflation is by no means a pre-requisite for rapid growth. Similarly, the relationship between unemployment and economic growth is less clear cut than many might expect: Japan had overwhelmingly the fastest growth and the lowest unemployment, but the United Kingdom, which had by far the slowest growth, had by no means (until 1975 at least) the highest unemployment.

Despite the diversity of experience shown in Table 2.1, the countries also have much in common in that in all of them performance with respect to inflation, unemployment and economic growth deteriorated markedly after 1973 and became quite catastrophic in the 1980s. It is as much an objective of this study to explain this similarity as to explain the differences, because much can be learned from both. Of course, one may say that since these countries are all embedded in the same world economy with a degree of international economic integration, which (except for the United States) is very high, and in view of their socio-politics similarity, this commonality of experience is hardly surprising. While this is true, it is an observation which is devoid of explanatory power until the precise mechanisms producing these common trends in the different countries have been spelled out.

Before proceeding to the examination of the individual country experiences, some remarks about problems of inference may usefully be made. When confronting the data we face three main methodological difficulties:

i) separating out cause and effect within the growth, inflation, unemployment and balance of payments nexus;

ii) distinguishing between phenomena originating on the demand side of the economy and those originating on the supply side;

iii) getting the right time dimension so that underlying relationships, constraints and trends can be distinguished from cyclical and short-term problems.
Table 2.1 Some indicators of economic performance

<table>
<thead>
<tr>
<th>Share in OECD GNP</th>
<th>Annual Average Growth of real GNP</th>
<th>Annual Average Inflation (GDP deflator)</th>
<th>Average Unemployment (standardised)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1963-64 to 73-74</td>
<td>1975 to 73-74</td>
<td>1963-64 to 73-74</td>
</tr>
<tr>
<td>Japan</td>
<td>12.5</td>
<td>9.4</td>
<td>5.2</td>
</tr>
<tr>
<td>Federal Republic of Germany</td>
<td>10.8</td>
<td>4.4</td>
<td>3.5</td>
</tr>
<tr>
<td>United States</td>
<td>38.6</td>
<td>4.0</td>
<td>3.4</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>5.7</td>
<td>2.7</td>
<td>1.3</td>
</tr>
<tr>
<td>Netherlands*</td>
<td>2.1</td>
<td>5.3</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Source: OECD: Economic Outlook, various issues.

* GDP data.
Regarding the first of these problems, post-war experience in industrialised countries indicates that the four performance indicators tend to interact in a mutually re-inforcing way, leading to vicious and virtuous circles. For example, rapid growth of output is almost inevitably associated with rapid growth of imports, requiring a correspondingly rapid growth of exports if balance of trade problems are to be avoided. But the products of an economy which is growing rapidly are likely to be technologically advanced, the capital equipment used to make them is likely to be modern, and so on, so that foreign demand for exports is likely to be growing rapidly. All this has been most notably true of Japan, and its converse most notably true of the United Kingdom. But this tells us nothing about causation, and attempts to identify a unique chain of causation running from exports to economic growth or vice-versa, are bound to be misleading. At best we might argue to the effect that an initially favourable external position (resulting, say, from an undervalued exchange rate) created strong potential demand for exports and therefore the possibility of rapid growth of output. But it in no way follows that an undervalued exchange rate is a sufficient condition for accelerated growth.

More generally, the interdependencies within economies make for great difficulty in explaining success and failure because it is impossible to distinguish unequivocally between cause and effect. Does inflation cause low productivity growth, or does low productivity growth cause inflation? Does inflation cause depreciation of the exchange rate, or does depreciation of the exchange rate cause inflation? Are low profits the cause or the effect of low investment? These questions cannot be definitively answered because in each case there are causal links running in both directions at once. Indeed, once the concept of interdependence in the economic system is grasped, it become apparent that it is a mistake to think in terms of cause and effect at all. Instead, one must think in terms of interaction.

With these problems in mind, we now proceed to examine the experience of the individual countries.
THE FEDERAL REPUBLIC OF GERMANY

In the decade ending 1973-74 the Federal Republic of Germany achieved an average annual growth of GNP of 4.4 per cent. Apart from the recession of 1967 when GNP fell by 0.2 per cent, growth was never less than 3 per cent per annum, and in the strong period of expansion 1968-70 GNP grew by 21 per cent in three years. The inflation experience was also exceptionally good. Inflation in consumer prices averaged 3.0 per cent in 1961-71 which was better than any other OECD country. This was all the more surprising in view of the very strong pressure of demand throughout virtually the whole of the period, as measured either by demand indicators in the labour market or by measures of physical capacity utilisation or by length of order books. This relative price stability undoubtedly contributed to the strength of the Federal Republic of Germany's balance of payments which was a third distinctive feature of economic performance up to 1973-64. While rapid growth generated a strong demand for imports, Germany increased its share of world exports substantially during this period, though the average current account surplus was only 0.9 per cent of GDP 1961-71 and only in 1967 and 1968 did the surplus exceed 2 per cent of GDP.

Growth of national product was driven by exports and investment. Around 25 per cent of GNP was invested in fixed capital formation, with a low of 22.5 per cent (1968) and a high of 26.6 per cent (1964). Exports were 22.6 per cent of GNP in 1966 and the proportion rose through the period. Private consumption absorbed a share of GNP comparable with, e.g. the United Kingdom (57 per cent in 1966), but public consumption was only 14 per cent of GNP in the same year. That the economy was driven by exports is to a large extent confirmed by the fact that cyclical fluctuations in exports were closely followed (with a lag) by fluctuation in investment. The combined fluctuation of the two obviously largely determined movements in national income, though this does not of course rule out the possibility that investment was influenced not directly by exports but by monetary and fiscal intervention motivated by fluctuation in exports or the trade balance. The direct effect of fiscal policy on economic activity, however, was minor though broadly in the correct direction.

Good balance of payments performance was obviously explained by the Federal Republic of Germany's low inflation rate and the associated increasing tendency towards undervaluation of the DM. (This had been revalued once, and only by 5 per cent in 1961.) But one analysis concluded that national export
performance in the 1960s had not been outstanding when compared with the (weighted) growth of its foreign markets. The Federal Republic of Germany's increased share in world trade was no better than the increased registered by the rest of the OECD (at the expense of non-OECD countries).

There is some evidence of "export-push" (cf. Japan) in the experience during the 1967 recession. The growth of exports in that year (which recovered the market share which had been lost in the previous three years) suggests that export effort was increased because the home market was depressed. This raises some interesting and important questions concerning business behaviour. However, relative export prices were also moving in favour of the Federal Republic of Germany and continued to maintain this advantage up to the revaluation of 1969.

This broad overview suggests, as the central question, how such rapid growth and exceptional and sustained demand pressure was compatible with such low inflation. A brief and conventional answer would point to three factors. First was the fact of rapid growth itself which neutralised the impact of wage increases on companies' labour costs. Second was the fact that the labour force in manufacturing was growing rapidly due to increased participation, movement of workers from other sectors, and inflows of foreign workers. This contained the pressure of demand for labour within reasonable bounds. Third was the increasing undervaluation of the DM which made production, both for home and foreign markets, highly profitable.

Such an answer is somewhat superficial, however. It does not explain why productivity grew so rapidly, except by pointing to high levels of investment which in turn has to be explained. It does not explain how wage increases were kept in line with productivity growth. And the contribution of an undervalued exchange rate is at best ambiguous since, in other circumstances, this is often seen as adding to inflationary pressure rather than reducing it. A true explanation must therefore look behind these purely conjunctural factors and look at the behavioural relationships and institutional mechanisms which underlie them. This was attempted by the Federal Republic of Germany Case Study and will be examined in the chapters to follow.

In any case the Federal Republic of Germany's "economic miracle" was showing signs of fragility by the beginning of the 1970s. Following the
policy-induced recession of 1967, the subsequent upswing led in 1969 and 1970 to a sharp acceleration in inflation. In common with a number of other countries, Germany experienced a "wage explosion" — or so it was described at the time. Hourly wage rates in manufacturing rose 4.3 per cent in 1968 and 6.4 per cent in 1969, but by 12.7 per cent in 1970 resulting in an increase in unit labour costs of about the same magnitude. The GNP deflator rose 7.5 per cent in 1970, about twice the highest rate experienced during the previous decade. This may be viewed as being largely the result of wage inflation generated by labour market pressure following three years of very rapid growth, and also as "catching-up" in both wages and prices which had risen surprisingly slowly during the earlier stages of the upswing. Some inflation was also "imported" by virtue of a sharp increase in world food prices in 1968—69 and accelerating inflation abroad — though this effect was moderated by the DM revaluation of 1969. (The overall price index for imported goods fell by 0.7 per cent in 1970, after rising by 2.5 per cent in 1969.)

But there was also clear evidence — in the Federal Republic of Germany as elsewhere — of a breakdown in previous relationships between inflation and indicators of demand pressure. Such a breakdown could be attributed either to a behavioural change on the part of wage bargainers and price setters, or to a shift in the relationship between the conventional indicators of excess demand and the "true" situation. The latter constitutes a form of "structural" explanation of inflation which will be discussed further below. The debate which began at this time continues to the present.

One behavioural factor which seems to have been unusually important in the Federal Republic of Germany (and remains so) is concern with the distribution of income between wages and profits. The boom conditions of 1969—70 led to a big increase in profits (especially when compared to the 1967 recession), leading it was suggested to a sense of social injustice. Earnings increased rapidly too for the same reason, but the benefits of this were not evenly distributed which may also have led to a sense of injustice. These factors were blamed for increased grass-roots militancy in 1969 which forced union leaders into a more aggressive negotiating stance.

Distribution between wages and profits was (and is) not only considered important on equity grounds, but also because profits are widely seen in the Federal Republic of Germany as the principal determinant of investment (both
in terms of financing and incentive), and therefore of demand, growth and employment. This contrasts with the United Kingdom, where this question is not a matter for great public discussion or interest, and where certainly no consensus exists as to the appropriate relationship between wages and profits as proportions of national income.

The wage explosion seems to have put considerable strain on the conventional wage-negotiating procedures at the national level. More specifically, trade union leaders found themselves open to the accusation that by participating in periodic consultations with employers' associations, the Council of Economic Experts, the Central Bank and the Government in the framework of "Concerted Action", they were prejudicing the outcome of subsequent negotiations. The desire to avoid this accusation made it difficult to agree on "orientation data" with respect to wages in particular, and in fact no norm was agreed for wages in 1970. It became clear that individual negotiations were paying little regard to those norms which had been agreed, because these norms were regarded as unrealistic by union members who expressed their dissent in a number of unofficial strikes.

Consensus between the social partners in the Federal Republic of Germany may thus be said to have broken down briefly, but by the end of 1971 the worst of the wage explosion was over. Nonetheless the economy moved into the upswing of 1972-73 with a rather unfavourable underlying situation with inflation already unacceptably high, with relatively little margin of spare capacity, and with unit labour costs rising at around 10 per cent per annum. The upswing was strongly export-led, because inflation abroad was sufficient to offset the combined effects of national inflation and DM appreciation, and because of the upswing in the rest of the world. The result was a spectacular trade surplus in 1972-73.

The upswing in the Federal Republic of Germany was somewhat weaker than elsewhere because the Government adopted contractionary policies at an early stage, and because private investment proved unexpectedly weak in comparison with past upswings. Consequently, GNP and its components were already stagnating by the second half of 1973 before the price of oil began to rise sharply. The recession followed a somewhat similar pattern to that of, e.g. the United States. GNP growth began to decline in mid-1973 and reached its trough in early 1975, but the recession was less deep; for the two years 1974 and 1975 GNP changed by 0.5 per cent and 1.8 per cent, respectively.
The Federal Republic of Germany's inflation following the oil crisis was very successfully controlled, resulting in an improvement in relative unit labour costs (compared with foreign competitors) of 1.4 per cent in 1974 and no less than 7.9 per cent in 1975. Hourly (contractual) wages experienced a surge in 1974 (13.0 per cent), but the increase declined to 9.3 per cent in 1975 reflecting the characteristic sensitivity to cyclical factors. The share of employees' income in national income levelled off in 1974-75, having shown a sustained upward trend since 1967 - in sharp contrast to the experience of other countries. In this sense, workers accepted the terms of trade loss in real income exceptionally well. This is perhaps less surprising in view of the fact that unemployment reached 4 1/2 per cent of the dependent labour force in the first quarter of 1975; in the most severe of the previous post-war recessions (1967), it had never exceeded 2.8 per cent.

Experience since 1975

As in other countries, the story of the Federal Republic of Germany since 1975 is one of hesitant recovery followed by recession triggered off by the second round of oil-price increases in 1979. The 1976 recovery was strongly export-led, with exports rising by 11 per cent in volume and GNP by 5.7 per cent. The growth of exports was, in part, the reward for success in bringing wage and price inflation quickly under control. Subsequent growth of GNP in 1977 and 1978 was modest, however, at 2.4 per cent and 3.4 per cent, respectively. This is explained by the fact that two major components of demand, private consumption and exports showed only slow growth, which in turn tended to discourage investment. Investment was, in any case, discouraged by the continuing excess capacity; even by 1977 capacity utilisation had still not recovered even to the level of the recession of 1967, which was itself about 5 per cent below "normal". Profits rose strongly in 1976 as the cyclical rise in productivity led to an absolute reduction in unit labour costs, but declined thereafter. Labour productivity growth followed a similar pattern.

With slow growth of GNP in the latter 1970s it is not surprising that unemployment remained high. From its peak of about 1.1 million in 1975, unemployment fell gently and reached a low of about 0.8 million in the first quarter of 1981. (It had been less than 0.2 million in 1970.) Although unemployment was reduced by a big outflow of foreign workers (270,000 in 1975,
and 125,000 in 1976), on the other hand the indigenous population of working age was growing rapidly.

Regarding international competitiveness, this deteriorated in 1975-79. The effective exchange rate appreciated by about 25 per cent, and in consequence relative export unit values and relative unit labour costs also moved against the Federal Republic of Germany. This was undoubtedly the main source of the squeeze on profits during this period. The offsetting benefit was that exchange rate appreciation, together with high unemployment, reduced price and wage inflation to levels comparable with the 1960s.

Policy in the period 1976-78 was concerned with reducing the large surplus on current account, so the appreciation of the DM was not unwelcome. The trade balance began to deteriorate in 1978, and by 1979 was already moving into deficit, before the second round of oil-price increases. The 1979 deficit on current account was the first for 10 years, and in 1980 the Federal Republic of Germany had the largest deficit anywhere in the OECD. Domestic economic activity rose quite strongly in 1979 and it was particularly encouraging that investment rose sharply. The second round of oil-price increases in 1979 did not have an immediate impact, but in the second quarter of 1980 however all components of demand began to turn down sharply and growth of GNP dropped to only 1.8 per cent for the year as a whole. Unemployment quickly passed the 1 million mark, while at the same time inflation accelerated once again.

The growth rate of national income, which had been over 4 per cent at the beginning of 1979, had fallen to zero by 1981, and there was an absolute decline of about 1 per cent in 1982. Business confidence was evidently much more severely undermined than in the 1974-75 recession, and hence companies were less inclined to keep on workers in anticipation of an up-turn. At the same time the pressure on the labour market from population growth remained strong, and the cushion of foreign workers had largely disappeared. Consequently unemployment rose steeply to 1.3 million in 1981, 1.8 million in 1982 and 2.3 million (8 1/2 per cent of the labour force) by mid-1983. Despite labour shedding by companies, productivity growth fell to a historical low of 1 per cent (hourly productivity) in 1982.
Trade union negotiators were initially quite successful in protecting their real wage rates against imported inflation, so much so that the wage share in national income rose 1 per cent in 1980 to 71.8 per cent. But as the recession deepened, wage settlements fell below the inflation rate, and by 1982 real labour costs were back to pre-recession levels and well below the levels of 1974-75. The main factor depressing both profits and investment appeared to be excess capacity. Inflation itself, although high by national standards (5-6 per cent), was well below the OECD average and by 1983 was almost zero. The combination of rapidly falling domestic economic activity and slower inflation than its competitors, moved the Federal Republic of Germany's current balance of payments back into surplus by the beginning of 1982.

Conclusions

Arising from this brief review of the Federal Republic of Germany's performance at the level of broad aggregates, what questions suggest themselves as warranting closer examination?

Even more than most advanced industrialised countries, the economy of the Federal Republic of Germany is highly integrated with the rest of the world. Its economic performance therefore cannot be assessed in isolation; conjunctural events in any country in such a position must be expected to follow, more or less closely, developments elsewhere - notably the two world recessions associated with the two rounds of oil-price increases. There is also a high degree of social integration between the Western industrialised countries. Assumptions, expectations, and hence goals and behaviour of economic agents in these countries are becoming more similar with the passage of time. For these reasons it is scarcely surprising to observe that the Federal Republic of Germany has also been subjected to the same underlying pressures which have been felt in the other advanced industrialised countries in the past decade or so; increasing "underlying" rates of inflation and unemployment, downward pressure on profits, and a declining investment ratio.

Nonetheless, having made allowance for these forces making for similarity in the experience of the advanced industrialised countries, it is clear that the Federal Republic of Germany's performance, in terms of growth, price stability and unemployment levels, has been highly impressive at least until
1980. Though monetary, fiscal and other government policies can doubtless take some of the credit for this, a full explanation must go deeper.

The most distinctive feature which needs to be accounted for is the rate of inflation which has been consistently one of the lowest in the OECD area. To explain this, we must look more closely, in the chapters to follow, at the processes of wage and price formation, and in particular at the interactions between wage changes, productivity growth and profits.

Though low inflation is a much—cherished prize which countries, such as the United Kingdom, have recently pursued with great vigour, it is notable that low inflation has not guaranteed growth and high employment. Unemployment in the Federal Republic of Germany in the 1970s was high by the standards of the 1960s, but was acceptable as long as one could suppose that a recovery was in prospect — as appeared to be the case at the beginning of 1979. In 1983, unemployment is not only almost three times as high, but the prospects for a significant reduction are slight. Current unemployment and the discouraging outlook for the future are attributable, in roughly equal measures, to the growth of the population of working age and the fall in employment which has occurred. The crux of the problem is that the growth of demand and output necessary to reduce unemployment to acceptable levels is implausibly high. It is not just a question of postulating the necessary expansion of demand. Even if demand were there, it is doubtful whether there is enough plant and equipment in the economy to meet it. This implies that investment to expand capacity must occur before the available labour force can be employed. It is difficult to be precise about the quantitative magnitude of the investment necessary, but estimates suggest that this is the largest single constraint on employment in the Federal Republic of Germany at the present time.

What would cause the necessary investment to occur? This is perhaps the central question in the conduct of economic policy, not only in the Federal Republic of Germany, but elsewhere. The view of the authors of the Federal Republic of Germany Study is that current and prospective profitability is the key. This is viewed as depending on international competitiveness, which depends in the medium to long run on real labour costs relative to competing countries (though exchange rate movements may blur the relationship in the short run). However, real labour costs depend on productivity, which in turn depends on investment, thus completing the circle of causation.
The economic miracle of the Federal Republic of Germany occurred because there were abundant investment opportunities and scope for raising labour productivity generally, opportunities which companies were willing to take advantage of, because social and institutional mechanisms ensured that wages and productivity growth were kept in line, thus stabilising real labour costs and profit rates. It now appears that these investment opportunities, and confidence in the stability of real labour costs, have dried up. If this is correct, the real wage will come under sustained downward pressure, and increasing strain on the social and institutional mechanisms influencing wage settlements, manning and deployment of workers and hence levels of unemployment has resulted. All this has been exacerbated by structural shifts in demand and technology, which means that much past investment must be written off and considerable new investment is required, which is predominantly labour saving in character.

It is clear therefore that a closer examination is required of the causal linkages between investment, profits, productivity and real wage determination. What are the factors underlying the behaviour of companies in the Federal Republic of Germany in their investment decisions? What are the factors underlying the behaviour of workers and employers in bargaining over real wages, and the changes in working practices and labour force deployment which underlie productivity changes? What part has the German Government played in oiling the machinery of interaction between the social partners in this vital areas? These are the questions to be kept in mind in the discussion to follow.

THE UNITED STATES
The period up to 1973

In the decade ending in 1973-74, GNP growth averaged 4.0 per cent per annum, slower than any other major OECD country except for the United Kingdom (which averaged 2.7 per cent) and slower than the overall average for the OECD (5 per cent). Over the same period manufacturing output grew by 4.6 per cent per annum. This slow growth was associated with a comparatively low share of gross fixed investment in GDP; during this period the lowest share is 17.4 per cent (1961) and the highest 19.1 per cent (1973), without any obvious trend underlying cyclical fluctuations. This ratio was broadly similar to that of the United Kingdom, and was lower than any other major OECD country.
The highest figures achieved were those of Japan where the share of fixed investment in GDP was 29.9 per cent in 1960, rising to 36.4 per cent in 1973.

Fixed investment in manufacturing was even more sluggish. Having risen rapidly in the early 1960s, it was no higher in real terms in 1973 than it had been in 1966 (and in the recessions of 1966-67 and 1969-70 had been substantially lower). The same pattern is apparent in the data for manufacturing capacity utilisation; capacity utilisation in manufacturing peaked in 1966 and declined thereafter; even at the height of the 1972-73 boom it was some 10 per cent below the 1966 peak. Thus it would appear that stagnation in investment was induced by a tendency towards excess capacity. In turn, associated with this tendency for capacity utilisation to decline and investment in manufacturing to level off in the period 1966-73, the rate of profit (return on capital) exhibited a pronounced downward trend, with a similar time profile. Since this is clearly very important, but also because a similar downward trend is detectable in other countries, discussion of this phenomenon is postponed.

Turning to the labour market, we do not see quite the same picture of relative stagnation. True, the United States unemployment rate (OECD standardised) fluctuated in the 3 1/2 to 5 1/2 per cent range, which was higher than Japan, the Federal Republic of Germany, France and the United Kingdom, but lower than Canada or Italy. On the other hand, the United States experienced rapid growth of employment (2.2 per cent per annum 1964-73) which was exceeded only by Canada among major OECD countries, and which was almost twice as fast as that of Japan and France (to say nothing of the Federal Republic of Germany, Italy and the United Kingdom, where employment was static or declining). As in all advanced industrialised countries, however, the proportion of the labour force employed in industry has been declining; in the case of the United States, a peak of 33.8 per cent was reached in 1967. In the economy, as a whole, both labour force and participation rates were growing quite rapidly, yet unemployment rates were falling through much of the 1960s, and did not begin to display a clear upward trend until 1969. Between 1964 and 1973 the employed population expanded from 69 million to 84 million, but less than 4 million of this increase of 24 million found jobs in industry. Expansion of the labour force was particularly biased towards women and youths, and unemployment rates for both these groups and also for Blacks were much higher than average. Reflecting this, the concept of the "full
employment rate of unemployment" was revised upwards from 4 per cent to 4.9 per cent at the beginning of the 1970s. Given the comparatively slow growth of GNP and the comparatively fast growth of employment, it comes as no surprise to observe that overall productivity growth (GNP/employment) was, at 2.1 per cent, slower than any other major OECD country. (The next slowest were Canada, 2.3 per cent, and the United Kingdom 2.9 per cent.) Growth of manufacturing productivity was better.

A deterioration in performance with respect to both inflation and the balance of payments also occurred in the period 1960-73. In the 1950s and early 1960s, the United States enjoyed an extremely large trade surplus which had become to be regarded as "traditional". In 1963, exports were about 30 per cent larger than imports, and although much of this surplus was used up in outward official transfers, there was a current account surplus of about 0.6 to 0.7 per cent of GDP in the early 1960s which broadly served to finance the United States long-term overseas investment. The trade balance, however, deteriorated fairly steadily through the 1960s and moved into deficit for the first time in 1971; not surprisingly, the current account of the balance of payments followed a similar path. Cyclical adjustment of the figures has little effect on what were clearly underlying trends. Reflecting this deteriorating trade position, the United States share of total world exports to OECD countries fell from 17.1 to 13.8 per cent in 1962-67, and the United States became the destination for 12.3 per cent of OECD exports of manufactures compared to 9.3 per cent. Compared with the rest of the OECD's producers, therefore, the United States had lost ground both at home and abroad in manufactures. In terms of its trade in all goods and services, import volume rose about 1 per cent faster than export volume (8.0 per cent versus 7.0 per cent) and import value about 1/2 per cent faster (3.7 per cent versus 3.3 per cent) in 1961-73, giving a combined adverse effect of about 1 1/2 per cent per annum on the trade balance, or 20 per cent over 12 years. Other measures make the United States' trade performance in manufactures look even worse. The volume of imports of finished manufactures rose nearly three times as fast as real total final expenditure in 1966-72, and the rate of increase of the volume of manufactured exports was only 2/3 that of competitors over the same period.

The trade balance deterioration may perhaps be partly explained by the deterioration in export price competitiveness prior to the dollar devaluation.
in 1971. The United States relative export prices rose by about 16 per cent in 1960-70. But structural factors also played a part. It has been suggested that the United States exports were concentrated in products in which other OECD producers were making rapid progress in product quality and technology, etc., while remaining very competitive in terms of price. The same general arguments have been advanced on the import side. This question will be developed further.

The growing United States balance of payments difficulties of the 1960s, and the associated weakness of the dollar influenced United States policies, both internal and external, and were of profound significance for the stability of the international monetary system. But the direct effects of a declining trade surplus on the United States economy are more difficult to assess. The initial degree of "openness" of the economy (imports/GNP) was only of the order of 3 per cent, and even by the early 1970s was only about 7 1/2 per cent, a feature which distinguishes the United States economy from that of its main competitors and indeed from almost every other economy in the world. For this reason, the direct deflationary impact of a deteriorating trade balance was quite small, and the sectoral impact was also quite limited. So it is probably fair to say that the deteriorating United States trade performance was primarily a matter of concern to government rather than to citizens, and that concern was centred around its implications for the dollar and for inflation, should the dollar be devalued.

In any event, the combined problems of inflation and balance of payment weakness come to a head in the early 1970s. The average inflation performance of the United States economy in this period looks good; the GDP deflator rose at only 4.1 per cent per annum on average in 1963-64 to 1973-74 which was slower than any other major OECD country. (One puzzle is why, in view of this, the United States relative export prices rose so much over the same period) But this average concealed a rising trend, with inflation increasing from less than 1 per cent in 1961 to nearly 6 per cent in 1970. This acceleration has been attributed to increasing demand pressure set in motion initially by the Kennedy Administration, but fuelled later by deficit-financing of the Vietnam war. But there seemed to be something of a "ratchet effect" at work, in that inflation was not greatly slowed down by the 1969-70 recession, and as already noted the underlying trend of unemployment seemed to be rising. This experience was shared by many other OECD countries.
however, and therefore reflected some fairly deep-seated forces at work rather than factors or policies peculiar to the United States.

The Nixon Administration tackled the problem vigorously. The dollar was devalued in 1971 and 1973, and with the usual long lags, trade performance began to improve. Wage and price controls were introduced and inflation eased somewhat. Immediately prior to the oil crisis the outlook appeared moderately encouraging.

The period since 1973

The situation in which the world economy finds itself in the 1980s stems, in large measure, from the traumatic events of 1973-75. It is therefore of interest to bring out the similarities and differences between the experience of the United States and that of other countries during this period.

In common with other countries, the United States experienced a sharp upswing in activity in 1972-73 which seemed to run into capacity constraints somewhat earlier than might have been expected - constraints in both product and labour markets. The synchronisation of expansion in many OECD countries caused world prices of industrial raw materials to rise very sharply. Because of the United States' high comparative degree of self-sufficiency in raw materials, the higher prices were of less significance than in other countries for the balance of payments, but were presumably more inflationary since they raised the incomes of domestic residents rather than foreigners. The result was that wholesale prices of crude products rose 36 per cent in 1973, food prices by 13 per cent and the GNP deflator by 5.8 per cent which was the highest since the Korean war. Inflation was clearly led by prices since wage inflation accelerated only slightly despite the pressure of demand, partly due to wage and price controls. The devaluation of the dollar in 1973 contributed only modestly to inflation.

When the oil crisis hit the economy in the fourth quarter of 1973, activity was already turning down. The trough was reached in mid-1975, by which time real disposable income had fallen by 5 per cent from its 1973 peak, industrial production by 14.4 per cent, and unemployment had reached 9.2 per cent. Fiscal policy was somewhat passive, and hence as a result of strong fiscal drag induced by inflation became rather contractionary in effect.
Similarly, monetary policy was fairly tight and had unexpectedly severe effects due to the squeeze on liquidity resulting from rapid inflation. As output and employment fell, inflation accelerated with oil prices providing the impetus. The impact of the oil price increase was most noticeable on the wholesale prices of intermediate products which rose by nearly 24 per cent in 1974. Wholesale prices, as a whole, rose by 19 per cent, consumer prices by 11 per cent, while major wage settlements were running at 7 per cent as workers tried to catch up with past as well as current inflation. The balance of payments, however, showed extraordinary strength. Fuel imports rose by $18 thousand million at current prices, but merchandise exports rose by nearly 11 per cent in volume and by $27 thousand million in value. This trade performance was probably attributable to the cumulative lagged effects of successive improvements in relative price competitiveness with respect to both imports and exports. This improvement had been almost continuous since 1970 and had cumulated to about 15 per cent by the end of 1973.

In terms of growth of GNP, the recovery in 1976-79 was good. Having fallen by 1.4 per cent and 1.3 per cent in 1974 and 1975, GNP growth was 5.9 per cent, 5.3 per cent and 4.4 per cent in 1976, 1977 and 1978. The recovery did not seem very firmly based, however. Comparing the end of 1978 with the beginning of 1970, GNP was 26.8 per cent higher, but non-residential fixed investment was only 9.3 per cent higher. Capacity utilisation had not recovered its level at the peak of the 1973 upswing, yet at the same time there were doubts whether, in view of the low investment levels, there was sufficient capacity to provide enough jobs to bring unemployment down to acceptable levels. The slow growth of labour productivity, which had been difficult to detect at first due to the sharp cyclical fluctuations of 1964-75, had now become established as a trend, and besides being disturbing in itself, had an important bearing on the likelihood of moderating the inflation rate. The unemployment rate fell only gradually from its 1975 peak (not helped by quite rapid growth both in the activity rate and in the population of working age), and in 1978 was still at the level reached in the 1971 recession.

Another disturbing feature of the recovery period was the persistent weakness of the balance of payments. In the period 1976-78 only France and the United Kingdom of major countries had larger current account deficits relative to GDP. Between 1975 and 1977 imports increased by over 50 per cent
($50\text{ thousand million at current prices}), while exports increased by only 12 per cent, yet in terms of relative price and cost movements there was little indication of any general or persistent lack of competitiveness.

In sum then the United States in the latter 1970s was suffering from unacceptably high inflation (in the 7 per cent to 9 per cent range) which seemed to be accelerating despite persistently high unemployment, excess capacity, and a low investment ratio; from disturbingly low productivity growth (\text{GNP/employee grew only 4 per cent in the five years 1975–1979}); and from rapid import penetration and slow growth of exports. None of these phenomena could be easily explained in simple terms by reference to macro economic relationships and variables. These therefore are the problems we must seek to shed light on in the discussion to follow.

\textbf{JAPAN}

\textbf{The period up to 1973}

As is well known during this period, Japan's GNP grew extremely rapidly averaging 10 per cent per annum in 1960 to 1973. Fluctuations in growth were, however, quite pronounced ranging from a peak of around 15 per cent to troughs of around 5 per cent in the recessions of 1962, 1965 and 1971.

The reasons for this rapid growth have been fully analysed elsewhere. Here it is only necessary to draw attention to the high and rapidly rising share of private business fixed investment in GNP, which (having risen steadily since the early 1950s) rose from around 15 per cent of GNP in the early 1960s to about 22 per cent by the early 1970s. The distinctive characteristic of such an economy, in which productive investment is growing faster than national income, is that investment serves as an important demand stimulus as well as adding simultaneously to the ability of the economy to meet that demand. Looking at the period 1965–76, for example, we see that GNP rose at 11.2 per cent per annum. On the demand side, the chief sources of incremental demand were private non-residential fixed investment (17.6 per cent per annum) and exports (16.3 per cent). Other components of demand, of course, had to grow more slowly than GNP in order to "make room for" investment and export growth; the slowest-growing component of demand were private consumption (8.7 per cent per annum) and public consumption (6.4 per cent per annum). In this "accounting" sense, Japan's growth during this
period was "led" by investment and exports. But this is also true in a more profound, causal sense, in that growth would surely have been slower, and would possibly have been brought to a halt either by capacity limitations or by balance of payments constraints, if investment and exports had not grown as rapidly as they did.

Though this last point is difficult to prove, there are some indications as to its validity. First there are clear indications that the economy was operating at, or near, the limits of its capacity for much of this period. This is shown directly by capacity utilisation figures which show that apart from the three recessions of 1963, 1965 and 1971, already mentioned, capacity utilisation never dropped below 90 per cent. Similarly, the labour market was clearly becoming increasingly "tight" as indicated by the sharply rising ratio of job offers to job seekers, particularly from 1966 onwards. The rate of increase of per capita compensation per employee for the economy as a whole is also indicative of increasing competition among employers for the available labour supply (though there are other interpretations of this trend). Without rapidly rising investment, and hence labour productivity growth, it seems certain that labour market pressure would have become intolerable and hence slowed or halted growth.

The importance of rapidly growing exports as an essential ingredient of Japan's rapid GNP growth may be established by looking at the composition of imports. Imports were (and remain) predominantly industrial raw materials and fuel, so that despite favour trends in international prices a large growth of import volume was a pre-requisite for rapid growth of GNP. In addition to paying for these imports, exports had to cover Japan's "traditional" deficit on invisible transactions. The alternative of financing a current account deficit by means of sustained capital inflows was not available, since the Japanese economy despite its rapid growth was probably not sufficiently attractive to foreign investors. In any case, capital flows were tightly controlled, which suggests that Japanese policy-makers would not have welcomed such inflows even if they had been possible.

In fact, export growth was more than sufficient to finance the necessary imports, and the result was sustained current account surpluses which became embarrassingly large in 1971 and 1972 (2.5 per cent and 2.3 per cent of GDP, respectively), resulting in a strong pressure from the international community
to appreciate the Yen which, under the Bretton Woods system of fixed exchange rates, had been pegged at 360 Yen = $1 since 1953.

Given then the importance of rapid growth of investment and exports, the question is how such rapid growth was achieved. If one examines the sectoral flows of funds, it is clear that the high personal savings ratio was crucial in financing investment and holding down the growth of private consumption. This high savings ratio, in turn, has been explained by low levels of social security provision (particularly for old age) and job insecurity of those not employed by large companies.

The reasons for rapid export growth are more complex. At a relatively superficial level one can refer to rapid growth itself as implying a growing capacity to produce a wide range of products of increasing quality and sophistication. Coupled with relatively low inflation and a fixed and increasingly under-valued exchange rate, this is the classic recipe for export-oriented growth. However, such an explanation is almost completely devoid of analytical content, and raises more questions than it answers. A full account must explain how and why Japanese producers were able to identify, produce and successfully market the products with strong potential in foreign markets. This is one of the questions to be addressed in the main body of the discussion to follow.

One component of Japan's economic performance which is noteworthy is that of inflation. This is not only important in terms of the functioning of the domestic economy but, given the fixed exchange rate which prevailed until 1971, was clearly crucial to trade performance. The distinctive feature of price behaviour in the period up to the early 1970s was the disparity between the behaviour of consumer prices and other prices. Contrary to what many people might imagine, consumer prices (measured by the CPI) rose relatively rapidly during this period, averaging more than 5 per cent per annum which was higher than any major industrialised country, except the Netherlands and Denmark. Wholesale prices measured by the Wholesale Price Index (WPI) rose only 1.3 per cent per annum, while import and export prices rose only 0.6 per cent and 0.5 per cent, respectively. Thus, whether or not the inflation rate was high or low in this period in Japan depends on which price index we look at.
A full explanation of these disparities would be complex, but some indications may be given here. The difference between the CPI and the WPI movement may be explained partly by the fact that the CPI includes distributors' profit margins; since productivity was rising more slowly in distribution than in manufacturing, mark-ups on sales had to rise faster to maintain equality in rates of return on capital. The WPI also excludes small firms' products, and hence understates overall price increases since small firms' productivity was also rising more slowly than that of large firms. The slow growth of import prices is relatively easily explained by the slow growth of world prices of raw materials and fuel which as already explained formed the bulk of Japanese imports. The real puzzle is the slow growth of export prices relative to the WPI, since it suggest that producers were willing to accept a continuous deterioration in their profit margin on export sales relative to home sales. This is strongly suggestive of price discrimination as between home and foreign sales.

Along with prices, the growth of money wages also deserves examination. As might be expected from the increasing tightness of the labour market referred to above, average cash earnings in manufacturing grew at an increasingly rapid rate from the mid-1960s onwards, accelerating from around 10 per cent per annum growth in the first half of the 1960s to around 15 per cent per annum in the latter 1960s. Labour productivity growth in manufacturing was also on an upward trend however, so that unit labour costs were largely unchanged. The question raised by this is whether earnings growth was determined by productivity growth (i.e. "responsible" wage bargaining); or whether productivity was determined by earnings growth (i.e. employers were forced to take steps to increase productivity in order to remain competitive, while paying the higher wages forced on them by bargaining processes); or whether indeed the relationship between earnings and productivity growth was a causal one in either direction. This provides us with a second question to underlie our discussion to follow.

It is clear, however, at the level of the economy as a whole that growth of per capita compensation of employers caught up with growth of real GNP by 1970 (having grown significantly more slowly in the 1960s). From about 1970 onwards the Japanese economy began to experience difficulties on a number of fronts, although performance still remained very impressive. First, in common with other industrialised countries, there was a burst of inflation in 1969-70
which was partly domestic in origin and partly imported. Second, there was a sharp recession in 1970-71, triggered by a weakening of investment which suggested that capacity had begun to outstrip the growth of demand, and therefore that the phenomenon of investment-led growth might be less pronounced in the future. Finally, as remarked earlier, pressure for appreciation of the Yen led to a 17 per cent appreciation against the dollar in December 1971, and a further appreciation in March 1973 (when generalised floating of exchange rates began) which left the Yen 36 per cent higher against the dollar and 24 per cent higher against a weighted average of other major currencies.

In fact, the balance of payments turned round very quickly to a deficit in 1973 which was even larger than the previous embarrassing surpluses of 1971 and 1972. There were a number of major factors all pushing the balance of payments in the same direction. Apart from the revaluation of the exchange rate (the significance of which was in any case questionable), there had been important measures of trade liberalisation and active encouragement of net capital outflows. The main factor, however, was probably the very rapid upswing in economic activity in 1972-73; this upswing was shared with most other industrialised countries, as was its sharpness, but Japan was somewhat ahead of other countries in timing. Though the relationship between domestic activity and Japanese exports is debatable (see below), it is clear that imports (because of the high content of industrial materials and fuel) are very sensitive to cyclical movements within Japan.

Most important of all, during 1973 Japan experienced unprecedented imported inflation largely due to rapid increases in world raw material prices coupled with the appreciation of the Yen, but with an additional domestic component resulting from the boom. Import prices rose by 21 per cent in 1973 (having fallen by 4.3 per cent in 1972), within which raw material import prices rose by 37.4 per cent. It should be emphasised that the contribution of rising oil prices came only later; the price of imported mineral oil rose only 7.4 per cent in 1973 as a whole, but 88.8 per cent in the first quarter of 1974. Thus even before the oil crisis, Japan was in deep trouble with respect to inflation. Moreover, the sharp boom in activity had started to turn down in mid-1973, so that the economy was heading for an inflationary recession before the oil crisis. In this respect, Japan's position was not dissimilar in its nature (but only in its extent) from a number of other
industrialised countries. As far as the associated increase in domestic wholesale prices is concerned, import prices were estimated to have contributed one-half, while the contribution of wage costs in 1973 was negligible.

Japan then plunged into a deep recession, balance of payments deficit, and extremely rapid inflation. GNP began to fall in the last quarter of 1973 and only recovered its previous peak in mid-1974. As is normal in recession, industrial production fell even more sharply and recovered even more slowly. Though the trade balance remained in surplus (higher import prices being offset by reduced imports due to the recession, and by increased exports), the overall balance was in deficit in 1973, 1974 and 1975, and official reserves fell.

The remarkable features of 1974 was that the volume of exports rose by 21 per cent despite the deeply depressed state of the world economy, implying a remarkable increase in Japan's share of export markets. Although this growth was not sustained in 1975, it played an important part in cushioning the impact of the recession and in promoting the recovery which began in early 1975. This increase is all the more remarkable in view of the very rapid increase in wage costs which Japanese exporters were experiencing, and therefore deserves careful examination since it is clearly an important element in the resilience of the Japanese economy. Confronted with inflation, recession, and external deficit, an increase in exports alleviates all three problems simultaneously, but the question is what mechanisms bring about the necessary behavioural response by exporters.

The explanation which has been offered of this export phenomenon (which was not an isolated event) has been described as "export push". Japanese exporting firms are principally large firms which adhere to the "lifetime employment" system. Hence, to a far greater extent than in other countries, their labour costs are fixed (though of course some flexibility in costs is provided by the bonus system which constitutes up to 40 per cent of total labour earnings). In a recession, the only alternative to a catastrophic decline in gross profits is to maintain sales volume at almost any price, particularly abroad. The high gearing of Japanese companies (i.e. debt/equity ratios) makes this even more imperative since companies can quickly find themselves in a position, when gross profits fall, of having to borrow
to meet interest charges. This question will be looked at in more detail below.

After 1974, domestic inflation moderated. Wage increases fell sharply as the labour market remained weak, even after production began to turn up. Unemployment has risen almost continuously since the end of 1973 from about 1.2 per cent to about 2 per cent, despite a fall of about 2 per cent in the participation rate. The ratio of job offers to job seekers has stood at about 0.5 to 0.75, compared with a figure close to 2.0 at the peak of the 1973 boom. Wage increases have been very moderate, partly as the direct result of labour market weakness but also, no doubt, to revised expectations about what the economy can afford to pay. This latter feature of the Japanese economy (i.e. with the exception perhaps of 1974, highly "responsible" wage settlements) will be discussed further below in a later chapter.

The main reason for the slow growth 1975-79 was the weakness of private investment. Compared with its 1973 peak, investment fell by about 50 per cent while real profits were similarly down by over 50 per cent. The deep recession of 1973-74 reduced capacity utilisation from close to 100 per cent to barely 75 per cent, and it was not until the end of 1979 that overall capacity utilisation became high enough to justify general additions to capacity, particularly in view of much more pessimistic expectations about growth prospects in both home and foreign markets.

Because investment as an "engine of growth" effectively went into reverse gear after 1973, and since the balance of payments remained healthy and inflationary pressure moderate, the Government made fairly vigorous attempts to expand the economy by means of fiscal policy. It correctly perceived that since the savings ratio remained very high (and indeed, increased with more rapid inflation, as in other countries), an enlarged public sector deficit was essential in order to soak up the excess of private savings over private investment.

Another feature of government policy, since the 1974-75 recession, has been the attempt to promote the structural changes necessitated by reduced growth prospects and higher energy prices. The Japanese Government has, in fact, pursued a more vigorous and determined set of adjustment policies in the past decade than are to be found in any of the countries in this study. One
reason for this is, of course, the fact that government intervention in the economy is a long-established and well-accepted fact of life in Japan. A second reason is that, by virtue of Japan's dependence on the rest of the world as a market and a source of inputs, the energy crisis was seen as having more profound implications for Japan than for other countries. These motives, and the forms of intervention which flowed from them, will be examined further below.

A feature of the later 1970s was the very sharp fluctuations in the exchange rate. By 1976, Japan had "digested" the shocks of 1973-74 better than any other industrial country, and in particular, had overcome inflation to such an extent that relative export prices had returned to the levels of the early 1970s. Together with the "export push" described earlier, this contributed to a 23 per cent increase in export volume, while imports rose only 9 per cent due to the high level of domestic inventories and excess capacity. From the end of 1976 to mid 1978, the exchange rate appreciated by 28 per cent, and the price effects of this led to the wholesale price falling by 2 per cent, while consumer prices rose only 4 per cent (and 1977 to mid 1978). The immediate effects of the Yen appreciation on the trade balance were slight, due to lagged quantity response to price changes (the "J-curve").

Encouraged by these very favourable domestic price developments, the Government embarked upon an expansionary fiscal/monetary policy which in one sense was very successful in that, by the beginning of 1979 there were signs that private investment was recovering well and that the policies had therefore worked in a "pump-priming" way. In another sense, however, further instability resulted in that the current account surplus largely disappeared and the exchange rate had begun to depreciate as rapidly as it had previously appreciated; by the end of 1979 it was almost back at its level of three years earlier. At this point the second round of oil-price increases struck the Japanese economy.
THE UNITED KINGDOM
The period up to 1973

In the 1950s, GNP in the United Kingdom grew at only just over 2 per cent a year, considerably more slowly than in any other advanced industrialised country with the exception of the United States. At the time this slow growth attracted little attention among policy-makers who, in the main, were more concerned with the short-term problems of inflation and balance of payments equilibrium. Britain's slow growth was frequently attributed to her greater industrial "maturity" in comparison with other countries (though this term was seldom operationally defined); while, on the other hand, faster growth in continental Europe and Japan was viewed as a "catching-up" process.

By the early 1960s Britain had been overtaken in level of per capita GNP by France and Germany, and concern about slow growth was becoming widespread. Growth was somewhat faster in the 1960s but was still less than 3 per cent, so that growth in other comparable countries (again with the exception of the United States) was 50 per cent to 100 per cent faster. (See Table at beginning of this Chapter).

In other dimensions of economic performance, Britain did not enjoy any benefits to compensate for slow growth. Inflation was faster than in other of the major industrialised countries except Japan. And although full employment was, by and large, achieved in the 1950s and early 1960, unemployment rose sharply in 1966-67, and as the table shows, the unemployment rate in Britain 1965-74 when standardised according to OECD definitions was higher than any of the other countries in this study.

In the same way that it may be argued that growth in rapidly growing countries, such as Japan and the Federal Republic of Germany, was "driven" by exports and investment, so in Britain it is apparent that the growth rate was retarded by a low level of investment and by sluggish exports. In the 1950s Britain invested only 16 per cent of its GNP, and although this figure increased to nearer 20 per cent in the 1960s it remained lower than any other industrialised country. At the same time, Britain's share of world exports of manufactures was falling from 18 per cent in 1958 to 11 per cent in 1968. In seeking explanations for the underlying causal mechanisms, however, two distinct schools of thought may be identified. One view of the problem laid
emphasis on the balance of payments and inflation as constraints which prevented any sustained expansion of demand. The slow growth of demand, and more importantly, the frequent checks to growth which the authorities were forced to impose whenever expansion threatened excessive inflation and a balance of payments crisis, were viewed both as discouraging investment and inhibiting measures to improve industrial relations and working practices which were responsible for low productivity levels. By the mid 1950s value added per worker in manufacturing was already 10–20 per cent below the Netherlands, Belgium, the Federal Republic of Germany and France, and the gap has widened continuously since. It followed from this diagnosis that priority in policy-making should be given to improving the relationship between demand pressure and the inflation rate and to easing the balance of payments constraint. The former pointed to a need for policies to promote price and wage restraint, while the latter pointed to devaluation of sterling.

On the other hand, there were those who argued, implicitly or explicitly, that inflation and balance of payments difficulties were symptoms of slow growth rather than causes. Devaluation of the pound sterling, and price and wage restraints, could only give illusory short-term benefits. In real terms the balance of payments could only be improved by a halt to the decline in Britain's share of world exports (and equally by halting growing import penetration). This required an increase in productive efficiency in every sense of the term, which could only be achieved by a radical improvement in working practices in British industry, an improvement in the quality and effectiveness of British management in all their areas of activity, ranging from R and D through product design and development to production, marketing, sales and after-sales service. These improvements, if they occurred, would directly stimulate demand and also encourage the necessary increase in investment. Though there were no policies available to government which could directly contribute towards these objectives, policies which seemed to be indicated were those which promoted greater competition in product and labour markets (implying possibly the abandonment of full employment as an over-riding objective of policy), together with the promotion of collective action within industry to identify and overcome constraints on productivity improvements. Devaluation of sterling (and any similar policies such as import tariffs or quotas) would only shelter British industry from the spur of foreign competition, while price and wage restraint would, in the medium to long term, result in a progressive misallocation of resources due to the distortion of market signals.
Thus the two schools of thought had no difficulty in agreeing that Britain was trapped in a vicious circle of low productivity, investment and growth, associated with increasing inflation and balance of payments problems; but they differed markedly in their view of the underlying causal mechanisms, and hence on the best way to break out of the vicious circle. In the event, governments in the period up to 1974 embraced elements of both viewpoints, though not always willingly. In the first half of the 1960s, the government conducted a planning exercise which was heavily influenced in its general conception by the apparent success of "indicative planning" in France. This exercise and its legacy in the 1970s are examined in the United Kingdom country study, and hence will not be elaborated here; but it may be noted that the exercise was "indicative" in the most literal sense since the government had no means of securing the achievement of any of its targets except in the public sector. In the latter 1960s the pound sterling was eventually and reluctantly devalued for the first time since 1949, and centrally-administered wage and price controls were instituted. No benefit to the underlying growth of the economy was observable as a result, however, because the devaluation was accompanied by deflationary policies which reduced domestic demand to a greater extent than foreign demand was increased by devaluation, resulting in a sharp rise in unemployment in 1969-72; and because wage and price restraint was abandoned in 1969 after only three years because of political hostility from all quarters.

At the beginning of the 1970s Britain thus found itself at the bottom of a downswing in its "stop-go" (i.e. policy-induced) cycle of economic activity. The outlook was bleak for two reasons. First, the failure of the policy initiatives of the 1960s (indicative planning, devaluation, price and wage restraint) had discredited these policy tools, and thereby made it more difficult to use them in the future. Second, underlying trends were now becoming increasingly disadvantageous. As in other countries, inflation had accelerated from 3-5 per cent in the 1950s and 1960s to 5-10 per cent in the early 1970s; while unemployment which had never exceeded 0.5 million (approximately 2 per cent of the labour force) prior to 1966, was never below this figure subsequently, and by 1972 had passed the one million (4 per cent) mark. Furthermore, the phenomenon of "de-industrialisation" - an absolute reduction in the size of the manufacturing sector - was beginning to attract attention. Employment in manufacturing, having peaked in 1966, fell by about one-eighth by the mid 1970s and since then has fallen by a further
one-quarter. Between 1966 and 1982, one job in every three in manufacturing in the United Kingdom disappeared.

In common with other industrialised countries, the United Kingdom experienced a cyclical upswing in 1972-73 which had just peaked when the first round of major oil price increases occurred. The upswing was particularly sharp and to a greater extent than in other countries was policy-induced. The government, having waited fruitlessly for a spontaneous recovery from the downswing of 1969-72, was determined to break out of the recession and accordingly freed the economy from the balance of payments constraint by allowing the exchange rate to float in 1972. Later in the year, when it became apparent that inflation was accelerating sharply, it imposed price and wage restraints which were economically effective, although politically very costly since the government was effectively driven from office in February 1974 after a series of confrontations with the trade unions.

The period since 1973

The experience of the United Kingdom during the recession of 1974-76, and the recovery phase of 1976-79, was different from that of other countries in a number of important ways. In 1974-76 Britain was in a radically different position from, say, Japan and the Federal Republic of Germany, because the established status of sterling as an international currency (an attraction enhanced by the weakness of the dollar and by the prospects of self-sufficiency in oil from the North Sea) meant that the excess liquidity of oil-exporting countries was deposited, to a considerable extent, in sterling assets. This prevented the drastic fall in the exchange rate which, in view of the rapid domestic inflation of 1974-75 and the doubling of the trade deficit from $6 thousand million to $12 thousand million from 1973-74 to 1974-75, would otherwise have occurred. Freed from exchange rate and balance of payments anxieties, the government was thus able to pursue an exemplary Keynesian counter-recessionary policy, expanding the budget deficit to about 7.5 per cent of GNP in 1974-75 and thereby partly off-setting the fall in private consumption and investment. Nonetheless this did not prevent GDP (which had grown by no less than 5 1/2 per cent in 1973) from falling by 3/4 per cent in 1974 and by 2 1/4 per cent in 1975, to the accompaniment of a rise in unemployment to 3.9 per cent in 1975. More importantly, perhaps, this freedom from external anxieties permitted the government to adopt a relaxed
attitude to escalating wage inflation as workers attempted to achieve compensation for the impact on the general price level of higher oil and commodity prices, and for the perceived real income losses which they had suffered during the period of wage restraint 1972-73.

After this period in which the government tried unsuccessfully to insulate the economy from the world recession and to avoid the reduction in living standards necessitated by higher oil prices, more conventional policies were resumed after 1975, and were given added impetus by the exchange rate crisis of 1976 which necessitated drawing on IMF facilities to the extent of $3.9 thousand million to stem a slide in the exchange rate. A determined effort was made to reduce the government budget deficit, and inflation was progressively brought under control between 1975 and 1978 by means of a voluntary, but highly effective, formula for wage increases and supervision of prices. As in other countries, by 1978 the economy was over the worst of the "stagflation". Admittedly, total fixed investment was only 17 per cent of GDP in 1978 — its lowest proportion since 1964, but this was accounted for by sharp falls in public sector investment and in private residential investment; investment in manufacturing had recovered at least to its 1970 level. The strongest component in the recovery was private consumption which rose because of increases in real personal disposable income and a fall in the savings ratio, both consequences of reduced inflation. Growth of GDP averaged about 2.5 per cent a year between 1975 and 1979, and this was sufficient to hold unemployment constant at about 5 1/2 per cent.

All these moderately favourable developments went into reverse in 1979. The inherently fragile voluntary wage restraint agreement broke down and inflation accelerated as workers sought to recover what they believed they had foregone during the period of restraint. The contribution of government to aggregate demand, whether through government consumption or investment, continued to decline as the incoming Conservative Government stepped up the fiscal and monetary stringency which the previous government had been pursuing. Equally important, between 1978 and 1980, the exchange rate appreciated by no less than 30 per cent relative to the dollar and by about 40 per cent against a weighted average of other leading currencies. This appreciation against a background of accelerating inflation had an extremely perverse effect on the "real" economy via its effects on international competitiveness, and was attributable partly to the government's monetary and
fiscal stance and to the attractiveness of sterling as an investment currency; an attractiveness enhanced by the fact that Britain was approaching self-sufficiency in oil and was therefore insulated from the second round of oil price increases in 1979.

Not surprisingly, under these circumstances, investment in manufacturing turned down sharply from mid-1979 and manufacturing output proceeded to fall by 9 per cent in 1980, and a further 6 1/2 per cent in 1981, bringing output back to its level of the mid-1960s. Unemployment rose from 1 1/4 million in 1976-79 (5 1/2 per cent) to over 3 million by the end of 1982 (12 1/2 per cent). By the end of 1982 one-quarter of those employed in manufacturing in 1975 had lost their jobs.

With output and employment falling very rapidly, inflation declined steadily from a peak of 22 per cent for retail prices in early 1980 to less than 5 per cent three years later. The effective exchange rate, having appreciated sharply between 1979 and 1980, fell back again equally sharply. But this was not sufficient to off-set the substantial increase in United Kingdom costs and prices which occurred before the inflation rate fell back in line with the rest of the world. International competiveness, measured by labour costs per unit of output relative to foreign competitors, deteriorated by a staggering 45 per cent between 1979 and 1982, most of this being attributable to wage inflation and low productivity growth, rather than to exchange rate movements. After an initial fall in 1980, due to destocking by domestic producers and wholesalers, the volume of imports rose sharply while export volumes declined; the market shares of the United Kingdom manufactured exports declined 25 per cent in 1977-82.

Conclusions

What emerges from this review regarding the nature of the adjustment problem in the United Kingdom? The starting point must be the decline of manufacturing output and employment which has been established as a trend since the late 1960s, but which gained enormous momentum in the 1980s. Though the recent deterioration may be viewed as partly cyclical, it is clear that so much productive capacity has been closed down, and home and foreign markets lost, to such an extent that retrieval of Britain's position as a major world producer of manufactured goods - even the position of 10 years ago - will be a long and laborious task.
It has been argued that the existence of North Sea oil makes it unnecessary, and perhaps impossible, for Britain to retain its previous position in the "first division" of world producers and exports of manufactures; unnecessary because of the benefits of North Sea oil to the balance of payments and to the government's budget, and impossible because a continued trade surplus in manufactures, coupled with self-sufficiency in oil, would necessarily drive up the exchange rate to astronomical heights. This is a short-sighted view, because North Sea oil production is already approaching its peak and is necessarily of finite dimension. It also ignores the fact that although tax revenues from oil do indeed provide a "painless" means of financing the budgetary costs of unemployment, they do not alleviate the social costs of unemployment which, by any reckoning, are substantial.

It is therefore necessary to address ourselves to the question how Britain's manufacturing base may be rejuvenated — or at least its progressive decline into senility arrested. This requires an increase in productivity and an increase in investment. It is unrealistic to imagine that increased investment will generate the required increase in productivity because profits are so depressed and capacity so excessive that no such increase can be expected. Thus productivity must increase before an increase in investment can occur. In this study therefore it is necessary to attempt to throw some light on the reasons for low productivity in the United Kingdom's economy, going beyond the traditional "measurable" variables, such as capital per worker, and looking into questions such as labour force quality, industrial relations and company organisation. One of the key questions here must be the role which markets may reasonably be expected to play in promoting an increase in productivity, because government strategy, in the past few years and for the foreseeable future, is based upon the premise that the recession, by stimulating competition in both product and labour markets, will enforce the necessary changes.

A second, but closely related question, is how the inflation rate in the United Kingdom can be kept under control, if and when the country climbs out of the current recession. To the extent that inflation reflects a struggle between the social partners over slicing up the national cake, the propensity to inflate will be automatically diminished if the cake grows faster. However, United Kingdom governments, in at least two cyclical episodes in the past, have gambled unsuccessfully that growth, if sufficiently rapid, would
check inflationary tendencies. We therefore need to look into the social
atitudes and the bargaining processes whereby wage increases are determined,
to see how they might be better related to productivity growth.

Finally, it is necessary to examine the character of British management
and their environment to try to determine what is distinctively different in
Britain, which may help to account for that country's outstandingly poor
industrial performance.

THE NETHERLANDS

In the period up to 1973 GDP in the Netherlands grew at 5.3 per cent a
year, faster than any other industrialised country except Japan (Table 2.1).
Though the labour force was expanding modestly, rapid growth was primarily
attributable to rapid growth of labour productivity, which in manufacturing
grew at no less than 7.7 per cent per annum 1967-73. The growth of output was
strongly export-led. The Netherlands, by virtue of its small size,
geographical location and historical legacy, is a highly open economy and
growth of exports and growth of national product almost inevitably proceed
hand in hand. Export volumes were growing at a rapid — and increasing — rate
in the 1960s as the Netherlands participated to the full in the world trade
boom of the period.

The Netherlands has a long-standing industrial strength in processing of
both home produced and imported food and agricultural products; activities
which benefited from the decline trend of primary product prices in the 1950s
and 1960s and from rising incomes in advanced countries which generated a
growing demand for more sophisticated and highly-processed food products.

Alongside these activities, the Netherlands in the post-war period
specialised heavily in petro-chemical products which, like food processing,
relied heavily on cheap and abundant supplies of raw materials arising from
the discovery and exploitation of indigenous natural gas deposits and from
low world oil prices. The concentration of growth in these activities, all of
which are by nature highly capital-intensive, goes a long way towards
explaining how such rapid growth of labour productivity was achieved despite
overall savings and investment rates which was no higher than a number of
other industrialised countries. At the same time, overall labour productivity
growth was assisted by a rapid decline of sectors such as textiles and coal mining where productivity was low.

Despite rapid overall productivity growth, the Netherlands experienced above-average inflation rates in the 1960s and early 1970s. In this combination of rapid productivity growth and rapid inflation, there is some similarity with Japan, and the explanation is somewhat similar too. In both countries, productivity growth was concentrated mainly in the export sector, and the resulting increases in wage rates and earnings were transmitted to the rest of the economy, raising costs and prices in other sectors where productivity growth was lower. This transmission process was partly the result of a very tight labour market and partly the result of a highly centralised wage bargaining system in which egalitarian principles were a dominant motivating force. Up until 1958, wages had been more or less directly controlled by the government, but subsequent relaxation of control in the hope that sectoral wage movements would correspond more closely to sectoral productivity growth, merely produced a "wage explosion" in 1963 and centralisation was resumed.

Rapid wage inflation and the associated rapid growth of unit labour costs did not, however, have the adverse effect on trade performance which one might have expected. This experience contrasts sharply with, for example, the United Kingdom where rises in labour costs in the same period were quickly reflected in deterioration in export market share. In fact, export prices rose by only about 5 per cent during the whole of the 1960s, compared with a rise of over 50 per cent in the internal price level. The differing experience of the Netherlands may be explained in part by the fact already noted that exports were concentrated in a few sectors in which productivity was growing exceptionally rapidly. Another explanatory factor may be that with a small number of large multinational companies accounting for the bulk of exports, the link between wage costs and prices was weakened. Unfortunately, data on a sufficiently disaggregated basis do not exist to permit these conjectures to be examined more closely. For whatever reason, however, the Netherlands unlike other countries was not compelled by balance of payments problems to take vigorous counter-inflation measures.

Consequently, with hourly earnings in manufacturing growing by 13.9 per cent per annum 1967-73 compared with labour productivity growth of 7.7 per
cent, the wage share rose steadily from the late 1950s to the early 1970s with a corresponding decline in the share of profits and rent, particularly in sectors experiencing below-average productivity growth. Despite this, the rate of return on capital remained virtually constant through the 1960s, suggesting that the structural shift towards energy intensive products substantially raised the productivity of capital as well as that of labour.

In the period 1969-73 inflationary tendencies accelerated, though it is difficult precisely to allocate the blame for this between internal and external factors. Inflation throughout the world accelerated in 1969-70 and both import and export prices in the Netherlands rose correspondingly, with wage rates and earnings quickly following suit. In these respects, experience was typical of the industrialised countries, but at the same time features peculiar to the Netherlands began to become increasingly evident. On the one hand, underlying productivity growth remained very healthy and export market shares actually increased in the period 1969-72, as did profit margins. On the other hand, difficulties began to develop arising from the tendency on the part of both government and citizens to pursue egalitarian objectives without sufficient regard to the question of who ultimately to bear the real costs. Labour's share in enterprise income was creeping steadily upward. From figures of 66-70 per cent in the 1950s, the share rose to 79 per cent in 1971. Most of this increase was attributable to increases in employers' social security contributions. These rose from 6.8 per cent of national income in 1963 to 12 per cent in 1974, reflecting a desire to finance the generous level of social security provision which was felt appropriate in an increasingly prosperous society. Second, as already noted, the high degree of centralisation of wage bargaining taken in conjunction with an egalitarian consensus tended to divorce sectoral wage increases from sectoral productivity growth, and this was accentuated by the conscious pursuit of narrower pay differentials by the trade unions. To this was added an increasing tendency for wage bargains to be struck which fully compensated both inflation and tax increases. As inflation accelerated in the early 1970s, indexation against inflation spread rapidly and by 1973 covered 90 per cent of workers, compared with only 10 per cent a few years previously. Indexation against inflation meant that any exogenous inflationary impulse, such as the world inflation of 1969-70, produced a wage-price spiral which had little tendency to die away. Similarly, tax indexation of wages and salaries meant that the tax increases necessary to finance social objectives were either paid out of profits or else were passed on, thereby adding a new twist to the wage-price spiral.
These factors gave an upward bias to inflation in the Netherlands and made the economy particularly vulnerable to any kind of disturbance originating in the rest of the world, whether that disturbance took the form of inflation or a deterioration in the terms of trade.

In these features, the Netherlands was (and remains) perhaps different in degree rather than in kind from many other social democracies. But what is of particular interest to the outside observer is that this inflationary bias was not the result of a society which was deeply divided on distributional questions or one in which the government lacked the power to intervene to resolve conflict. The Netherlands Government had (and retains) considerable formal powers to influence and even veto price and wage increases, but what it lacked during this period was the necessary political authority, derived from a clear mandate, as to how these powers were to be used.

Immediately prior to the crisis at the end of 1973, inflation in the Netherlands was relatively stable (at around 8 per cent) and well below the European average, thanks to appreciation of the guilder, slack international demand, and price controls. The quadrupling of world oil prices and the surge in other commodity prices which immediately preceded it led to massive imported inflation. This was quickly reflected in wage negotiations and earnings rose by 16 per cent in 1974. However, the Government took special powers to control prices which prevented these cost increases from being passed on, with the effect that real wages rose sharply and profits declined very steeply. Much of this was reversed the following year when price control was eased.

The Netherlands moved into a recession in the second half of 1974 and GDP fell by about 2 per cent in 1975, with unemployment rising to a post-war record of 5 per cent despite the checks to the growth of the labour supply resulting from the two recent additions of one year to the minimum length of schooling. Though government expenditure expanded at about 6 per cent per annum, private investment was very weak and there was a sharp fall in export volumes, but the balance of payments remained strong due to an even bigger fall in imports. The growing contribution to the trade balance of the Netherlands' indigenous natural gas was also significant.

Having weathered the first oil crisis and the associated world recession moderately successfully, economic management in the Netherlands began to
confront the longer term problem of adjusting to the anticipated continuance of high and rising energy prices. As in the United Kingdom, higher energy prices had little impact on the terms of trade (and hence on aggregate real income) because the Netherlands was on balance by the mid-1970s largely self-sufficient in energy. But higher energy prices and the alignment of internal energy prices with world prices had a marked internal redistributional impact from energy producing to energy consuming sectors. The Netherlands' export specialisation in energy-intensive intermediate products, which had been based on cheap and abundant energy, was thereby handicapped (and suffered in addition from recession in the rest of the world which had a bigger impact on intermediate products such as chemicals than on finished manufactures). Given the Netherlands' overall self-sufficiency in energy, this handicap could have been offset if the Government had used its tax revenues from oil and natural gas to reduce taxation in energy-consuming sectors, but instead these revenues were used to finance unemployment and other social benefits and expanding public sector employment. Export and import competing sectors were in addition handicapped by the appreciation of the Guilder in the second half of the 1970s; as the somewhat parallel experience of the United Kingdom confirms, such appreciation would appear to be an inevitable consequence of emerging energy self-sufficiency in an industrialised country.

Despite these handicaps, the Netherlands retained and even improved its export competitiveness in the second half of the 1970s, whether this be measured in terms of relative export prices or relative productivity growth. Performance with respect to inflation, indeed, was among the best among OECD countries, thanks to exceptional moderation in wage negotiations. Depending on one's predilections, this moderation may be explained either by continued high unemployment or by the influence of government on wage negotiations. On balance, while exchange rate appreciation and pay restraint held down costs, this was insufficient to offset higher energy costs in energy-using sectors, where profit margins deteriorated. The pronounced distributional impact of higher energy prices is demonstrated by the fact that while profits as a whole exhibited a slight upward trend in the 1970s, this was entirely accounted for by the energy sector; profitability experience in manufacturing was one of the worst in the OECD area.
Having successfully controlled inflation and retained a healthy balance of payments, the main problems facing the economy in the latter 1970s were continued high unemployment (now over 5 per cent) and the rapid expansion of public expenditure. Public expenditure relative to GDP had exhibited a remarkably steady upward trend growth of about 2 per cent per annum since the mid-1960s and by the early 1980s the general government budget was around 60 per cent of gross national income. As already stated this was largely an automatic consequence of the long-standing policies of linking public sector pay to that of the private sector, maintaining the real value of social benefits in the face of inflation and an increasing number of eligible recipients, and the steady upward drift in public sector employment. Even in the 1960s, when national product was growing rapidly, the share of public expenditure in the total had itself been rising but there was a general consensus that this was both affordable in a context of growing affluence and necessary if egalitarian objectives were to be achieved. When the growth of GDP slowed down and ultimately in the latter 1970s virtually ceased, the built-in pressures towards increased public expenditure automatically increased. Thus there was little or no acceleration in the underlying trend of government expenditure other than that resulting from the recession-induced growth in the numbers of eligible recipients of social benefits; rather, it was the fact that growth of GDP fell persistently below what appeared at the time to be reasonable expectations which increased the ratio of government expenditure to national income.

Given the inevitable political resistance to increased tax rates and the lack of buoyancy of revenue resulting from the recession, the Netherlands' Government budget moved heavily into deficit from the middle 1970s onward. Deficits in the 1960s and first half of the 1970s had been of the order of one and half per cent of GDP; but by the early 1980s the deficit had grown to around 10 per cent of GDP.

By 1976 it was generally recognised that only renewed economic growth would deal with the twin problems of persistent high unemployment and the mounting share of public expenditure in national income. At the macro-economic level, restraining the growth of wages below the inflation rate and hence redistributing income in favour of profits was seen as the main means of encouraging renewed economic growth. Since welfare benefits were linked to wages, it was thought that this would also automatically help to hold down the growth of public expenditure.
This policy was remarkably successful in its primary objectives. Real wage rates, which had grown at three and a half per cent per annum 1969-75 showed virtually no change between 1976 and 1982, while productivity grew at one and a half per cent per annum over the same period. But the gain to profits was much less than these figures would imply, largely due to wage drift and the burden on the energy consuming sectors of the second round of oil price increases in 1979.

Thus in stabilising the share of profit in private sector incomes and in controlling inflation, the Netherlands' performance was one of the best among industrialised countries. Yet the hoped-for reduction in unemployment did not materialise. Domestic investment fell by no less than 23 per cent, 1980-82, and the tightening of fiscal policy in an attempt to reduce the budget deficit also contributed to depressed internal demand. At the same time the rest of the world was moving into recession following the oil price increases of 1979; though export market shares were retained, export growth was modest. The overall result was that GDP fell in 1981 and 1982 and a sustained and unprecedented fall in living standards occurred, with unemployment rising from 4 per cent to more than 13 per cent, 1979-83. The sharp rise in unemployment was accounted for in roughly equal proportions by the growth of labour supply and a decline in private sector employment.

In conclusion, it seems clear that, more than any other country in the industrialised world, the Netherlands faces an acute problem of structural adjustment arising from the rise in world energy prices and, more importantly, from the expiry of the post-war world economic boom. Post-war prosperity in the Netherlands has been founded upon a high and growing degree of international specialisation in energy-intensive sectors where world demand was growing rapidly. Such an orientation of the economy is not one which can readily be reversed, at least not within a time-scale which is socially and politically acceptable. As in other countries faced with a similar but less acute dilemma, too much faith has been placed in the manipulation of broad economic aggregates as a means to achieving the necessary renewed dynamism. In particular it can scarcely be expected that the inevitably small shifts in distribution between real wages and profits or between the public and private sectors (even if achieved) can contribute much to a renewed dynamic. As our case study of the Netherlands indicates, we must probe more deeply into the internal dynamics of the economy, particularly the forces which underlie, in
individual sectors, investment, productivity and wage and price setting. This we shall attempt to do in the following pages.

CONCLUSIONS

In this chapter we have reviewed and compared the overall economic performance of our five industrialised countries, and attempted to characterise the essence of the economic problem faced by each. Substantial differences in performance were revealed, but what was particularly noteworthy was the extent to which success (or failure) in one dimension of economic performance tends to go hand in hand with success (or failure) in other dimensions. Because of this revealed interdependence between performance indicators or objectives, it is difficult, if not impossible, to distinguish between cause and effect. Yet without some insight into the key causal relationships underlying economic performance, we can give no guidance to countries wishing to improve their performance.

How then are we to proceed with our task of explaining economic performance? One method would be to collect as much quantitative information as possible about the relationships between the main variables of the economy and then to assemble the results together to form a model of the economy. With the aid of a computer, this model (which takes account of some, but inevitably not all, of the interdependencies we have described) could then be used to assess, for example, the effect on the inflation rate of an increase in investment, to distinguish between those economic performance objectives which are feasible and those which are not, and to identify how best those objectives might be achieved.

Such an approach would not be very satisfactory for our purpose even if it were feasible. The strength of the computer model lies in its ability to give reasonably accurate, but mainly short-term, quantitative forecasts of the likely development of the economy and of the impact of various possible fiscal and monetary policy options. Most of the questions which concern us here — and which were elaborated in the Introduction — cannot be settled by formal modelling because the answer to them have been largely assumed at the outset by those who constructed the model. Furthermore, because of its preoccupation with quantitative estimation and forecasting, such a model inevitably greatly simplifies the behaviour of economic agents and abstracts almost entirely
from institutional factors. The result has all the animation of a cardboard cut-out.

Our approach here is to attempt to derive conclusions of a qualitative rather than a quantitative nature, but above all to attempt to capture the realities of how these economies actually work. In order to avoid giving offence to purists, it may be better to describe this approach as "political economy" rather than "economics".

In this spirit, the discussion of the chapters to follow is structured in terms of the three principal groups of actors in the economy - enterprises, workers and governments. In Chapter III we look at enterprises in the countries studied, and examine how the pattern of ownership and control, market structure, and management organisation, education, training and objectives differ between the countries. In Chapter IV we proceed in a similar way to examine differences in labour force characteristics, industrial relations systems, employment practices, and the workings of labour markets. Finally, in Chapter V we consider the differing roles and impacts of government in the five countries. In this way it is hoped progressively to build up a picture of the essential characteristics of the industrial system of each country, and thereby to gain an overall insight into its economic behaviour and performance which forms the basis of the concluding chapter.

Notes:

1. The main data sources for this examination were the annual economic surveys of the countries concerned published by the OECD, together with the OECD's bi-annual publication: Economic Outlook.
CHAPTER 3

ENTERPRISE BEHAVIOUR
INTRODUCTION

As explained earlier our intention is to try to explain differences in industrial economic performance between the five countries. We have already argued against the simplistic view that poor economic performance reflects a failure of market mechanisms to work as they should, and the view that these failures are attributable directly or indirectly to government intervention in the economy. We have argued instead that in a modern industrialised economy the ability of market forces to promote good economic performance is questionable and certainly cannot be established from a priori reasoning.

To avoid these pitfalls, we therefore intend here to approach the question in a strictly pragmatic way. We intend to ask the following questions: How do enterprises in the different countries actually behave? Can this behaviour properly be described as competitive? Is such behaviour conducive to efficiency? What accounts for possible differences in behaviour in the various countries? How is enterprise behaviour influenced and constrained by the environment in which enterprises operate? What features of this environment are or could be the result of government policy? In general, what are the realities once the preconceptions and prejudices are swept aside?

Our approach will be to structure the examination of these questions around the behaviour of the three principal groups of actors in the system; enterprises, workers and government. We begin with enterprises since they may justifiably be regarded as the "prime movers" of the industrial system in a market economy.

Enterprise behaviour may be regarded as being determined by the following factors:

(1) Which individuals control the enterprise, in the sense of strategic decision making.

(2) The characteristics of these individuals, in terms of their abilities, objectives, etc.

(3) The constraints imposed upon them by the context or economic environment within which they operate.
In the context of the large, privately-owned enterprise, the first question is one of the division of power between shareholders (who in law are the owners) and management (who are nominally the shareholders' servants). Thus a distinction is drawn between ownership and control, a question which has been a matter for extensive debate for the past half-century. In the case of a small business there is no problem. It is quite easy to identify its controllers since the directors are typically the majority shareholders and other managers are small in number and can be closely supervised by the directors. Thus power in terms of both ownership and control is vested in the directors.

But in the case of large enterprises in the industrialised market economies it is not always easy to identify, in a clear-cut way, those who are responsible for strategic decision taking for two reasons. First, share ownership is often widely dispersed, with directors owning little or no shares. There being no institutional mechanism whereby shareholders can co-ordinate their behaviour, they have no way of bringing systematic pressure to bear upon the directors who are nominally their servants and in any case they lack the information and resources to appraise authoritatively the directors' performance. Other than in exceptional circumstances of crisis in the company's affairs, shareholders have virtually no power to influence strategic decision taking, with a corresponding increase in the power of the board of directors who are nominally of course merely the servants of the shareholders. Second, because of the sheer size of the typical modern company, the power of the board of directors is itself weakened by virtue of the fact that the management team is much larger and therefore cannot be so closely supervised by the directors. This question of the diffusion and weakening of management control in large enterprises has also been much debated in the past two decades. These features of the modern company which are present to a greater or lesser degree in all the countries studied mean that a substantial degree of autonomy resides in management. Salaried directors together with senior managers below board level will collectively have a considerable influence on the performance of the enterprise in terms of both its level of efficiency and the objectives it pursues.

Variations between countries in the extent of this management autonomy (or "managerial discretion", to use economists' terminology), and variations in the use to which it is put, may well be an important fact in explaining
differences between countries in enterprise behaviour and hence in industrial performance. Part of our task therefore is to try to assess the extent of these variations in the countries studied. Before looking at the evidence, however, it is necessary to examine the phenomenon of managerial discretion and its implications more closely.

The true degree of autonomy

The true degree of management independence from shareholder control has been hotly debated in general terms and also clearly depends considerably on the facts in particular situations. One view on the question is that little ultimate autonomy is conferred on management by the dispersal of shareholdings. The shareholder is interested in the best possible return on his investment, i.e. in maximum profit, taking due account of risk and the fact that profits have a time dimension (it may be worth sacrificing today's profits for the sake of bigger profits tomorrow). If management use their discretion in a way which is inconsistent with maximum profit, the shareholder can express his dissatisfaction by switching into another company's shares. Alternatively, if share prices have become depressed by poor performance so that shareholders are "locked in" to the company (because they can only sell out at a loss), shareholders may be stirred into action and use their powers to enforce changes of personnel at the board level. Though this may not happen very often, the threat is ever-present as a constraint on management. Arguably therefore management have no ultimate discretion because they are forced to pursue the interests of their shareholders. Their discretion lies only in the choice of means whereby their shareholders' objectives are pursued; this is as it should be, since by definition managers are better qualified to make decisions about means (as opposed to ends) than are shareholders.

Measure of performance

If there were only one unequivocal measure of a firm's performance (e.g. current profits) then this argument would be more plausible. A company which was performing badly could be readily identified and shareholders could take action either by combining at the Annual shareholders' meeting or simply by selling out (with possible takeover). Either way poor performance could not persist. But not only are there many indicators of performance but even if
performance is unequivocably bad it is not always obvious what is to be done and whether a change of personnel is appropriate. This problem besets both managers and shareholders, as described earlier in the adjustment context. This adds to managers' autonomy.

Furthermore, the sanction which the shareholder has, of switching his investment from company A into some other company, or accepting a takeover bid, is effective only to the extent that management of other companies are looking after their shareholders' interests better than the management of company A. Given the shareholders' lack of voice, where ownership is diffused, it is quite feasible that, collectively, management could pursue their own objectives (e.g. a quiet life) and aim at securing only the minimum profit necessary to keep shareholders happy. Shareholders could be unaware that they were being "taken for a ride" because they lacked the information and analytical equipment necessary to see that profits could be higher; and even if they were aware, their lack of organisation would make it difficult to do much about it. Consequently if all managers in the economy are incompetent or pursuing their own objectives, "exit" may not be an effective shareholder sanction (except exit abroad which has its own problems for the small shareholder).

Goals

Autonomy also would not matter if the interests or goals of shareholders (and creditors) and management coincided or at least were congruent. Again there is dispute in this area.

In discussing whether or not the objectives of shareholders and managers coincide, we ought to pay some attention to shareholder objectives. Earlier we assumed their objective was maximum profit but, since profit has a time dimension, this is not unambiguous. Further, the preference as between risk and return of both shareholders and managers needs to be considered. In looking at shareholder influence we must also look at share ownership - its degree of concentration, and in particular whether share ownership is concentrated in the hands of financial institutions or individuals. Furthermore, the discussion should not be couched purely in terms of shareholder and management influence and objectives. Creditors constitute another interest group whose objectives may differ markedly from both
shareholders and managers. There are major differences between countries in the reliance of companies on loan finance.

Drawing together the threads of the above, in trying to explain differences in enterprise behaviour, we need to look at differences in the degree of management's independence from shareholder or creditor control, and the apparent objectives of the various groups of economic actors.

**Constraints: the economic environment**

**Competition and concentration**

Regardless of how control of a company is divided between management, shareholders and creditors, and regardless of their objectives, the freedom of action of those in command is constrained by many other factors. The most important of these in the market economies studied here is competition in the market place. In market economies competition between firms is assigned a key role in the promotion of efficiency. It may be argued that no enterprise which sells its products in a vigorously competitive market has any real autonomy; if it is to survive in the long run the price, quality and other non-price characteristics of its products must at least match those of its competitors. At the same time if it is to attract and retain outside funds it must also match its competitors in terms of profitability and risk which necessitates matching its competitors in production costs. Furthermore, although matching competitors' efficiency (in the sense of identifying consumer wants, selling the resulting products at competitive prices, and producing them efficiently) is a condition for survival, in a dynamic world a constant effort to surpass rather than merely match competitors is necessary. If this were entirely true, our discussion above concerning the dichotomy between ownership and control, and the objectives of shareholders and managers, would be superfluous.

What is the extent and form of competition between enterprises in modern industrialised market economies? Before looking at the facts, it is necessary to decide what is meant by the term "competition" since it is by no means unambiguous.
In any economic textbook we shall find a description of a hypothetical world of "perfect competition". In the world of perfect competition, "competition" is quite unambiguous. Within the constraints set by consumer preferences and technologically-determined production possibilities, a large number of small-scale producers (where both "large" and "small" are defined in relation to the size of the market) independently pursue the goal of profit maximisation. Any producers who can undercut his rivals' prices can expect an indefinitely large increase in sales volume (and therefore in profits) because products are assumed to be homogeneous and there is therefore no customer loyalty. This induces vigorous price competition which drives prices down to the minimum set by the willingness of workers to supply their labour time and the willingness of the companies' owners to risk their capital. Not only are prices minimised but maximum efficiency is achieved because any producer not at the frontier of efficiency will be unable to meet the price set by competition in the market place, while earning the rate of profit set by competition in the capital market, and paying the wages set by competition in the labour market.

This world of perfect competition is usually contrasted in the textbooks with a world of perfect monopoly in which there is assumed to be only one producer who is assumed to be protected in some way against "entry" by new competitors into his market. In the search for maximum profit he has an incentive to raise his price to the point where any further increase becomes self-defeating by virtue of disproportionately reduced sales volume. The monopolist's price is thus higher, and his output lower, than under perfect competition. Whether production is efficient is uncertain; in the search for maximum profit the monopolist has an incentive to minimise costs but he is not subject to the same pressure to do so from the market place as exists under perfect competition. If he fails unwittingly to minimise costs he will not be made aware of it through market forces as a perfect competitive firm is.

The hypothetical worlds of perfect competition and perfect monopoly provide us with two polar extremes which serve as benchmarks in examining the real world. While the real world is obviously very different from these two extremes, the fundamental issue is whether the real world is situated nearer to the "perfect competition" end of the spectrum rather than the monopolistic end. It is often argued (or assumed) that since pure monopoly is extremely rare and there are in fact a fairly large number of producers in most markets,
competition is alive and well and that the difference between the real world and the world of perfect competition is one of degree and not of kind.

In fact the differences are in many situations fundamental. First, to the extent that the products of one firm are differentiated (in consumers' eyes) in both their subjective and objective characteristics from the products of other firms, then an element of monopoly is enjoyed by each producer; but it is not a secure monopoly. This by no means eliminates competition between firms but rather alters the form which competition takes. Product differentiation implies customer loyalty which reduces the extent to which a price cut will attract customers from rival firms and by the same token reduces the extent to which a price increase will lead to a loss of customers. Thus price competition is reduced and instead the emphasis in competitive behaviour by the firm is shifted towards building up the loyalty of its own customers and towards undermoming the loyalty of rival firms' customers. Competitive behaviour is thus shifted towards product rather than price characteristics.

Emphasis on non-price characteristics aimed at increasing product differentiation, re-inforcing existing customer loyalty and attracting new customers has some good features from the consumer's point of view - market research aimed at establishing consumer preferences, to guide current and future products; R and D aimed at satisfying consumer preferences more effectively (as well as more cheaply). But it also has some bad features - advertising and "cosmetic" model changes implying built-in obsolescence.

In sum, the prevalence of product differentiation (which to a considerable extent is an inescapable fact of the world, given the complexity and variety of modern products) means that even vigorous competition may not necessarily produce a situation which is optimal from the consumer's point of view. Further, it introduces many additional dimensions into the competitive process, in addition to price competition. Also it means that much of so-called competitive behaviour, to the extent that it aims at increasing customer loyalty, is actually aimed at reducing competition by increasing the security of the firm from encroachment by other firms.

Another feature of the real world which constitutes an important difference from the world of perfect competition is the prevalence of the
phenomenon of economies of scale. The primary meaning of this term is the production cost advantage associated with producing in large volume, this being the result of a finer division of labour and greater specialisation of machinery (as well as fuller utilisation of inputs) all of which is made possible by large volume. More generally, size and an established position in the market place give a firm numerous advantages which it is scarcely necessary to spell out.

From the point of view of society, the fact that size confers an advantage is something of a two-edged sword. On the one hand, it may mean that production costs are reduced to the advantage of society (though the advantage may be difficult for society as a whole to capture if prices are not correspondingly lower). But many of the advantages of size do not clearly result in a social gain. The most important adverse effect of size advantage is that it tends to result in industrial concentration, i.e. a situation in which individually and collectively a small number of large enterprises supply a large share of the market.

Once again it is often argued that industrial concentration is not detrimental to society (and may, on balance, be beneficial) provided the number of independent firms remain large enough that each feels continuously threatened by the others and is therefore under constant pressure to produce at the lowest cost, etc. - in other words to strive for maximum static and dynamic efficiency.

But the phenomenon of industrial concentration has important implications for the form which competitive behaviour among enterprises will take and its consequences for society. If there are 100 sellers each with a 1 per cent market share, then any one of them can plan to double his share of the market by attracting one customer in a hundred from each of his 99 competitors, which is something that his rivals will probably not notice. In an unconcentrated market each seller can therefore pursue any profit-maximising strategy on the assumption that his competitors' behaviour will remain unchanged. But if there are only two sellers, each with 50 per cent of the market, one can only double his market share by putting the other out of business, which his rival most certainly will notice. When the market is shared between a small number of sellers, rationality requires each to forecast the effects of its own actions on its rivals and their consequent retaliatory response. When this
response is allowed for, the likely pay-off from any action designed to increase profits or market share at the expense of rivals is bound to be reduced. Compared with an unconcentrated market, concentration must introduce a bias into enterprise behaviour against actions from which the gains in profits are likely to be partly or wholly neutralised by the response evoked from rivals. A corresponding bias is introduced in favour of actions which reduce the vulnerability of the enterprise to aggressive behaviour by its rivals and towards actions which increase the firm's profits without reducing those of its rivals.

It is important to see that the presence of these biases in concentrated (or oligopolistic) markets may be deduced by a priori reasoning, without reference to the facts of any particular situation. This point is often overlooked by those who argue that in a concentrated market, a variety of possible forms of behaviour is possible. At one extreme, it is argued, firms may collude (covertly or overtly, implicitly or explicitly) and thereby create a cartel or quasi-monopoly. At the other extreme, firms may "slug it out" in a life or death struggle, resulting in aggressive competition. Which of these corresponds more closely to reality can only be settled by appeal to the facts. On the whole, it is argued, the facts would suggest that competition rather than collusion is the rule, even in quite highly concentrated markets. In support of this view, appeal is made to the aggressive struggle for increased market share which appears to characterise many highly concentrated markets and to the fact that the number of cases of collusion uncovered by government investigative bodies in most countries has been relatively small. In fact, as already argued, the pursuit of market share may be seen as reflecting companies' desire for increased security against competition, though this may be countered by the argument that from society's point of view it is the effect and not the motive of company behaviour which is important.

This view fails to distinguish between competitive behaviour and what may be called rivalrous behaviour. The former is the search for maximum profit without regard to its effects on competitors, and can therefore logically only occur in unconcentrated markets. Rivalrous behaviour, on the other hand, is the pursuit of profit in a concentrated market in which competitors' responses and possible initiatives must be built into any calculations. Any action which appears likely to be rendered self-defeating by virtue of a predictable response from rivals must be ruled out. Any action which would reduce
competitors' profits or market share significantly must be scrutinised with great care and undertaken only if it seems likely that effective retaliation will be impossible. On the other hand, any action which increases the company's profits and the profits of its rivals acquires a particular attraction. Thus behaviour may be rivalrous and at the same time may be what may be called quasi-collusive. For example, heavy advertising by one individual cigarette manufacturer may appear as an aggressive, competitive struggle for market shares. But each company may know full well that its own advertising is largely cancelled out by that of its rivals. The net effect may simply be to reinforce smokers' brand loyalties, thereby increasing the stability of market shares; and it may also increase the total number of cigarettes smoked, to the benefit of all sellers.

So it is not to be expected that companies in concentrated markets will behave competitively in the same sense as companies in unconcentrated markets. Rather, their behaviour will be rivalrous and quasi-collusive. What effect will this behaviour have on industrial efficiency, the question which underlies this discussion? First, let us be clear that it is not being argued that concentration necessarily implies a benign and complacent "live and let live" attitude among enterprises — though this is entirely possible in particular situations. Rather, it is being argued that the search for profit may be conducted very vigorously but is channelled in certain predictable directions by the interdependence which results from concentration.

First, there will be a bias towards a relatively large profit margin on sales for two reasons. One reason is that a relatively large margin gives the leeway necessary to cut price quickly in retaliation, should a competitor do so, and thus serves as a useful deterrent to such price cutting. Second, the attraction of cutting the profit margin in order to increase sales and profits is reduced by the knowledge that competitors will rationally have allowed themselves the same leeway and will therefore retaliate. Price cuts will only be attractive if rivals cannot match them, which will be true only if rivals are inefficient and have higher costs. Even then, price cuts may induce a "crash programme" of cost-cutting by competitors and it may appear safer to leave well alone rather than to set off a process which may ultimately rebound. An efficient firm with low production costs may therefore be content to allow inefficient firms to continue to exist. Taking these two factors together, the industry's products may be produced at higher costs and will certainly be sold at higher prices, as a result of industrial concentration.
Second, both individually and collectively, producers have an interest in making it difficult for new firms to enter the market since this would threaten the profits of all. Advertising is an important way of increasing "barriers to entry", since it reinforces customer loyalty, but when carried out by all firms it tends, as remarked above, to stabilise market shares. The efficiency implication of such activity is that it tends to "freeze" the production structure and renders structural change more difficult.

The existence of economies of scale is also important for the whole discussion of the efficiency effects of concentration. Those with a Panglossian view of modern industry tend to argue that the trend to concentration reflects the fact that in the search for profits firms have kept profit margins and prices low in order to achieve large sales volumes and have thereby achieved the lower production costs made possible by economies of scale. This may well be true as an historical generalisation about the emergence of large firms but, once achieved, scale economies constitute a substantial barrier to entry which secures existing firms against possible encroachment by new entrants and therefore permits them to set higher prices and to enjoy high profits. It might be argued that these profits are of no consequence (they can, after all, always be captured for the community by means of taxation), provided the efficiency gains of economies of scale are realised. But even if this argument is accepted, examination of the facts suggests that in many industrial sectors the degree of enterprise concentration goes far beyond that necessary to achieve the most efficient scale of production.

The three features of the modern corporate economy which we have focussed on above are separation of ownership from control, concentration and the associated question of managerial objectives. Each of them has certain general implications for enterprise behaviour, the form and extent of competition, and therefore for industrial efficiency, the concern for which underlies this study. Let us now try to draw together the main implications of this discussion which are relevant to the purposes of this study.

To the extent that ownership and control are separated, managers of enterprises will not in general pursue a single-minded search for profits since this is likely to conflict with managerial objectives. These objectives, besides conflicting with maximum profits, also conflict with each
other. On the one hand, managers desire the enhanced status and income which will result from growth of the enterprise; but they also desire security and a quiet life. So no generalisation can be made about the precise balance which will be struck between stability and growth.

The behaviour of the management of the individual enterprise in a concentrated industry will be heavily influenced by the interdependence between its own behaviour and that of its rivals (including potential new entrants). The desire for security will encourage considerable resources to be devoted to discouraging rivals from encroaching on its territory (i.e. on creating and maintaining barriers to entry) and on having in place a credible response to possible entry in order to deter it.

As with the Cold War, deterrence is a matter of having powerful weapons ready to hand. In this case, the weapons are the ability to beat off competition by price cuts, improvements in the product, etc. In order to have this potential it is necessary as a matter of logic that the price be higher than it could be, and the product not as good as it could be, etc. To implement these improvements (to the benefit of the consumer), unless forced to do so by competitors, would be to behave like a country which acquired an arsenal of weapons for deterrent purposes but then fired them off in a pre-emptive first strike. This strategy therefore would only be used if one were confident that a first strike would destroy retaliative capability.

The desire for security has to be balanced against the desire for growth. The latter motive encourages attempts to encroach on the territory of other companies, which have their counter-measures ready as described above. Aggressive behaviour will only pay if rivals have no effective rejoinder, which suggests that the smaller, weaker firms will be progressively eliminated and concentration will increase. When a high degree of concentration has been reached, firms are likely to be of roughly equal size and strength (apart from a "tail" of small specialist producers who do not directly compete with the giants). At this point, market shares are likely to stabilise and behaviour to become predominantly quasi-collusive.

These characteristics (ownership and control, market concentration and management quality and objectives) which we have argued are the key influences on enterprise behaviour will be examined in a country-by-country comparison in the remainder of this chapter.
THE UNITED KINGDOM AND THE FEDERAL REPUBLIC OF GERMANY

Ownership, financing and control

We begin by examining whether there are differences between the United Kingdom and the Federal Republic of Germany in industrial organisation — more specifically, differences in financial structure, ownership and control — and whether these differences are such as to lead to significant differences in enterprise behaviour. We are asking two basic questions: where does power reside? How is that power used?

There are substantial differences between the United Kingdom and the Federal Republic of Germany in company size, financial structure and ownership. The reasons for this are to a considerable extent embedded in history. During its formative years as an industrialised economy Germany was much more decentralised than Britain both economically and politically, and nascent enterprises had to rely on local sources of finance. Consequently many firms remained as sole traders or partnerships; a further large proportion grew through finance provided by relatives, friends, and acquaintances; while an alternative source of finance was provided by local banks. Both directly and indirectly the banks were far more important than in the United Kingdom in promoting the growth of firms. They not only provided finance in long-term loan and share form from their own resources but also brought other lenders and borrowers together, "placing" blocks of new shares and providing a market for existing shares. Only later, at a more mature stage of Germany's industrial revolution, were shares sold in the open market to the general public.

These historical factors in the Federal Republic of Germany industrial development are reflected in the size distribution and ownership of companies today. First, the sheer number of companies is much larger than in the United Kingdom, reflecting the greater importance of small firms. Second, the number of companies whose shares are publicly quoted is also much smaller. Because the banks play a larger role in providing finance, the disadvantages of not being publicly quoted are less, and so the majority of firms including some very large ones are of the GmbH type (Gesellschaft mit beschränkter Haftung) which are not eligible for public quotation. But of even those
companies of the AG type (Aktien Gesellschaft) which are eligible for public quotation, only about one-quarter actually are quoted. Third, and reflecting this, equity capital is relatively unimportant as a source of finance for the Federal Republic of Germany's industry, shareholder liabilities being estimated at only 25 per cent of total liabilities of corporate firms compared with 46 per cent for loans. For the United Kingdom, the corresponding figures are 38 per cent and 20 per cent respectively. As a source of new finance the importance of equity is even lower; between 1963 and 1979 only 5-10 per cent of the external funding of German enterprises took the form of share issues. Other sources suggest a figure of only 2-3 per cent.3

The higher debt-equity ratio in the Federal Republic of Germany is important in its own right because it may be expected to have some effects on company behaviour which will be discussed separately. What is of interest in the present discussion of control is that 50-75 per cent of external financing of German companies between 1963-79 has been through bank loans.

The banks do not only make loans to companies, they also acquire shares. Overall, banks own about 7-8 per cent of all quoted shares. These shares may be initially deposited as collateral against a loan, and subsequently pass into the bank's ownership if the loan is not repaid or renewed. Alternatively, a bank may take up shares at the same time as it makes a loan, in order to participate in the anticipated profits. A further reason for acquiring shares is in order to obtain voting rights and membership of the supervisory board. German company law provides for a two-tier system of management with a 25 per cent shareholding conferring the power in law to block or veto major decisions affecting the company's future such as a merger or a new issue as well as the dismissal of a member of the supervisory board.

In the United Kingdom, not only are loans of much less importance as a source of finance, but the banks are also of less importance as a source of loans, particularly long-term loans. Where in the Federal Republic of Germany more than half of bank lending to companies and the self-employed is long term, the United Kingdom banks do not even have a separate category of "long-term lending" in their published data. Although the average duration of the United Kingdom banks' medium-term loans (i.e. more than two years) has been increasing, there is no doubt that the average duration continues to fall well short of that of the Federal Republic of Germany. This reflects a
long-standing reluctance on the part of United Kingdom banks to become "locked in" to the fortunes of individual companies, a reluctance which also reveals itself in the banks' very small holdings of company shares—estimated at less than 2 per cent including the holdings of unit trusts which are managed by banks on behalf of individuals. Though representation on the boards of the larger companies, by bank directors, is not as uncommon in the United Kingdom as these facts might lead us to expect, it appears on closer examination that it is rather company directors who are typically invited to sit on the boards of banks rather than the other way round. It is thus clear that although banks in the United Kingdom doubtless play an important advisory role in company affairs, they are not in a position to exercise control except in cases of crisis in a company's affairs. The incidence of such cases has increased sharply in the last three or four years because of the desperate straits to which many British companies have been reduced by the very severe recession. As a result, the United Kingdom banks have become "locked in" to a quite large number of United Kingdom companies.

As far as share ownership is concerned, an important feature of the United Kingdom is that about one-half of all equity shares in non-financial companies are owned by non-bank financial institutions, such as insurance companies. The institutions, however, follow the same behavioural pattern as the banks: they are reluctant to become heavily involved in the affairs of any one company, except when forced to do so by a crisis situation. Consequently, their equity holdings in individual companies tend to be in the 1-2 per cent range, although some financial institutions are so large that they find themselves holding, somewhat against their will, up to 5 or 6 per cent of a single company's shares. Of course, such small shareholdings would not prevent the institutions from exercising a considerable degree of control, should they choose to act in a concerted fashion. There is some fragmentary evidence that such concertation has increased in recent years, but it remains the exception rather than the rule of behaviour.

It is hardly to be expected that the banks in the Federal Republic of Germany would be willing to lend to companies on such a scale if they did not have some formal voice in company affairs, and (as is explained in the Federal Republic of Germany country study) this is achieved by the fact that the banks are represented on a large scale on company supervisory boards. The shareholders, of course, elect the supervisory board and the way in which the
banks achieve the election of their representatives to boards is partly via their own relatively small shareholdings but more importantly by use of proxy votes which small shareholders habitually assign to them. As indicated in the Federal Republic of Germany country study, when these proxies are taken into account, the German banks collectively control 60 per cent of the voting shares in companies. The potential degree of their control over the industrial sector is thus clearly substantial. It has been suggested however that the banks' influence is considerably less than might appear from these bald figures. First, because there are many banks, and shareholding (direct and indirect) in individual companies is dispersed among them. The Gessler Commission found that in 1974 there were only 300 out of 2,036 quoted companies in which a single bank controlled more than 25 per cent of the equity. However, it is not sufficient just to look at the number of companies in which the banks had a substantial interest; account must also be taken of the size of these companies. The Gessler Commission found that in 74 large companies accounting for 84 per cent of stock market capitalisation there were "many" cases in which a single bank controlled 25—50 per cent of the equity. The significance of this figure is enhanced when we take into account that these companies in turn have a considerable degree of shareholder control over many other smaller companies.4

In any case, from the point of view of the power of shareholders and creditors to circumscribe "managerial discretion", it is clear that the influence of the banks exercised via their representation on companies' supervisory boards is substantial. In broad terms what serves the interests of one bank will serve the interests of all, so that we may confidently assume that management in Germany is prevented from pursuing its own interests at the expense of shareholders and creditors and that therefore the phenomenon of "managerial slack" is not widespread. This argument is re-inforced by the importance of other large blocks of shares owned by families and the "interlocking" pattern of company ownership, all of which combine to bring management in individual companies under outside — and informed — scrutiny.

However, it is argued in the Federal Republic of Germany country study and elsewhere that the banks in fact make little use of their power.5 Not only is there no interference in day-to-day running of companies (as is to be expected) but there is little evidence of long-term strategic influence except on matters relating directly to banks' own sphere of competence, i.e. the
provision of finance, although this depended on individual cases, personalities, etc. This is borne out by the fact that bank representation on boards does not seem to correspond very closely with their shareholdings (including proxy rights) — though it may correspond more closely with their loans. But this view, tending to minimise the banks' influence on companies, is based largely on interviews with bank and company officials. This method of assessment is highly suspect, especially in such a delicate matter; a priori, it follows almost by definition that if the banks have large volumes of fixed interest debt owed to them by companies, and the constitutional power to influence major decisions by virtue of substantial voting rights in the determination of membership of supervisory boards (including their own representative), then they will use this power to safeguard their loans.

In the nature of things it is difficult to observe the exercise of this power, but it seems likely that it is exercised in two main ways. First, by involvement at the initial stages of major strategic decision-taking. One study reports the view (by a representative of a leading German bank) that the purpose of control by the supervisory board was "no longer to detect mistakes but... to begin at decision-making level in order to avoid mistakes from the very beginning".

Apart from limiting managerial discretion and thus raising efficiency generally, what impact on industrial performance might the banks be expected to have? Here we come to the question of gearing, i.e. the ratio of debt to equity in the company's financial structure. The general presumption here is that any lender (as opposed to shareholder) in a company is bound to be biased against risky projects (since he gains nothing if the risk pays off) so that the view, expressed in the Federal Republic of Germany country study, that the role of the banks is "detrimental to structural change" (p. 152) would appear justified, though this is offset by the fact that the banks own shares and also advise their customers in share purchases, so might derive an indirect benefit from profits of "their" companies. We can add to this, by the same reasoning, that the role of the banks will induce a bias against competition because "past performance plays a decisive role" in the granting of loans which penalises the small, innovative and aggressive company to the benefit of the larger company whose profits owe more to its entrenched market position than to its dynamism and efficiency; though a similar bias may exist when equity financing occurs. Also, in the context of the study of Japan, the
Japanese country study suggests that high gearing promotes the investment of profits because shareholders are more easily satisfied. On the other hand, in recession lenders may be "locked in" and have to curtail lending to safeguard their existing loans. Thus debt/equity ratios may well have important effects on the allocation of investment funds between companies, the choice of investment projects, and on the level of investment, both on average and at different stages of the business cycle. These questions are worthy of more consideration than we have been able to give them here.

Returning to the role of the banks, the case study of the Federal Republic of Germany makes the point that the power of banks is tempered by "fierce competition" between them (p. 152). How would this work in practice? Presumably what is implied is that if the firm's main lending bank was excessively cautious in its lending criteria and thereby forced the firm to forego investment in certain projects, or per contra if the bank tried to push the firm into projects which management regarded as unduly risky in relation to the prospective return, then the firm would go to another bank. But to go to another bank is only possible where the bank in question lacks the necessary 25 per cent of votes to block it at the supervisory board level. Furthermore, even where possible, this would only be a fruitful course of action to the extent that other banks either evaluated risk and return somewhat differently, or else had different preferences as between risk and return.

But there is another dimension to the role of the banks which is very important for the present study. This is the part which they may play in facilitating and promoting explicit or implicit collusion between firms. This question must be considered in conjunction with a consideration of the second major constraint in enterprise behaviour, namely, the degree of industrial concentration in the two countries, a question which we shall examine first before returning to the role of the banks.

Firm- and product-market concentration

In general terms the two countries exhibit similar characteristics of a fairly high degree of industrial concentration to which a large volume of mergers has contributed over the last twenty years. In both countries, it is fair to regard oligopoly as being typical.
However, unequivocal generalisations about industrial concentration are difficult to make because they must be based on a limited number of summary statistics which may be challenged as unrepresentative. Subject to this inherent limitation, let us examine some summary statistics on industrial concentration in these two countries.

One of the first studies published used 1963 data which showed industrial concentration to be much higher in the United Kingdom than in the Federal Republic of Germany, with the latter country being broadly comparable to its immediate neighbours, Belgium and France. More recent data seem to suggest that this difference still exists, but that the Federal Republic of Germany has to a considerable extent "caught up" with the United Kingdom in terms of concentration; and moreover that the absolute level of concentration in the Federal Republic of Germany is, by any standards, high. In more than half of the industrial sectors of the Federal Republic of Germany, the largest three firms have more than 30 per cent of the market, while the largest six firms have more than 60 per cent of the market in one-third of industrial sectors. The nearest comparable figures for the United Kingdom indicate that the five largest firms have more than 60 per cent of the market in roughly four-tenths of the industrial sectors.

The significance of these data is clear. In terms of the discussion of the previous section, if 5 or 6 firms between them supply 60 per cent (and in many cases, of course, substantially more than 60 per cent) of the market, then this has a two-fold implication. First, collectively, they have substantial influence, amounting to dominance of that market in the sense that the "tail" of smaller producers who account for the rest of the market will find themselves under strong commercial pressure to follow the leaders both in respect of prices and of product characteristics (unless they are "specialist" producers). Second, each of the five or six major producers or sellers will inevitably recognise the substantial degree of interdependence which must exist between them in all aspects of competitive behaviour. The stage is thus set for "quasi collusion".

Interesting light may also be shed on industrial concentration by looking at the share in output of the "Top 100" - the one hundred largest companies. The Federal Republic of Germany Monopolies Commission states that the largest 100 accounted for only 24 per cent of industrial sales in 1978, whereas the
equivalent figure for the United Kingdom has been estimated at 41 per cent for as long ago as 1968.\textsuperscript{9} Sales figures may understate the importance of the top 100 in the Federal Republic of Germany because small firms probably sell relatively more to each other, so that the share of large firms in total final output may be considerably higher than the share in gross output. In this connection, the share of the top 100 in manufacturing net output is reported as 41 per cent in 1970, compared with over 50 per cent in the United Kingdom.

This difference between the two countries is also borne out by figures for the number of companies with more than 40,000 employees; in 1972 this was 30 in the United Kingdom, but only 12 in the Federal Republic of Germany.\textsuperscript{10} These two numbers can be compared fairly directly because the labour forces of the two countries are very similar (though of course the output of the Federal Republic of Germany is much the larger). Also relevant to the comparison of concentration between the Federal Republic of Germany and the United Kingdom is the much larger number of small firms in the former. Income from self-employment was 18.1 per cent of the Federal Republic of Germany national income in 1976 compared with 10.9 per cent in the United Kingdom, and one study suggests that there might well be over 40 per cent more small businesses in Germany than in the United Kingdom, even allowing for differences in population. The importance of these small businesses (Mittelstand) is indicated by the fact that about 30 per cent (falling from 44 per cent in 1970) of bank business lending was to them in 1979.\textsuperscript{11} This long "tail" of very small firms is ambiguous in its implications for concentration. On the whole, it probably increases the true market power of large firms if they are surrounded by small firms - a comment which is also relevant to the study of Japan.

Scale economies

It is often argued that although large companies may inhibit competition, there is a compensating benefit in that they are able to take advantage of scope for economies of scale in production. The latter, however, may be presumed to depend on plant size rather than company size as such, and it is therefore of interest to consider the extent to which the two are correlated in the various countries.
The most direct comparison is unfortunately somewhat dated, but showed that "the relative size of German plants vis-à-vis the United Kingdom is much greater than the relative size of German firms". A more recent three-way comparison of Britain, the Federal Republic of Germany and the United States showed the situation to be somewhat more complex. Compared with the United Kingdom and the United States, the Federal Republic of Germany appears to have proportionately more of both very large and very small plants, measured in terms of numbers of employees. There are important differences, however, in relative plant sizes in the three countries, according to whether "light" or "heavy" industries are examined - a distinction which corresponds more or less to consumer and capital goods production. In heavy industries, plant sizes in the Federal Republic of Germany are significantly larger than in either the United Kingdom or the United States. But the ranking is completely reversed in light industries, where plants in the Federal Republic of Germany have tended to remain small by both American and British standards. Furthermore, while Britain has the smallest plants of the three countries in heavy industries - precisely those sectors where economies of scale are generally considered to be important - on the other hand, Britain has the largest plants of the three countries in the light industries. On balance, while no broad generalisation appears possible, it would certainly not appear that the higher degree of industrial concentration in the United Kingdom carries with it any corresponding benefit in terms of large, efficient plants; nor per contra that the lower degree of industrial concentration in the Federal Republic of Germany is associated with any general tendency toward small, inefficient plants. In heavy industry indeed plants in the Federal Republic of Germany are fully comparable with those of the United States.

Returning to the question of market concentration, it appears from the above data that the Federal Republic of Germany is characterised by considerably less industrial concentration than the United Kingdom. Can we conclude from this that the (domestic) market for the Federal Republic of Germany producers is more competitive and that therefore the spur to efficiency is greater? At this point it is necessary to return to the question of the role of the banks in facilitating or promoting collusion between firms. The question which needs to be examined is whether despite the lower degree of oligopoly in product markets in the Federal Republic of Germany, nonetheless because control over firms is more highly concentrated in
the hands of a relatively small number of people, it is possible for collusion to occur on a larger scale.

The study cited earlier points out that there are relatively few cases in which one bank controls a major portion of the equity of one company. As is to be expected, the banks diversify their portfolios both in their equity and loan components. Thus a bank is likely to have a small but by no means negligible share in a large number of companies and board representation (or the ear of board representatives) on many.

The banks would therefore appear to be well informed and influential in the affairs of a large number of competing companies in which they have an important stake. How are they likely to use this knowledge and influence? Consider one possible scenario. Company A proposes to embark on some course of action which will substantially increase its profits, but will also substantially reduce the profits of Company B. A bank or banks have a substantial interest in, and influence upon, both companies. What will they do?

One possibility is to discourage Company A, since there is no net gain for the banks. (Company A may then wish to go to another bank but this runs into the problems discussed earlier in connection with competition between the banks.) If the banks behave in this way, they thereby inhibit competition and efficiency.

A second possibility is that they may inform Company B of Company A's plan, so that B can prepare a defence of its profits. This would appear to promote competition by speeding up information flows and responses, thereby avoiding waste of resources. In effect, some of the signals which would otherwise be sent through the market are internalised. However, if Companies A and B each have a substantial share of the market, it seems possible and even likely that a successful response by B (in order to protect its profits) may largely nullify the prospective increase in profits by A. In effect, the whole question may well become a zero or negative sum game in that the combined profits of A and B might remain constant or even fall. In this case, being aware of this, Company A might abandon the proposal. So once again competition would be inhibited.
The logic of this is quite straightforward. Where a bank or banks are equally interested in the profits of two companies, they cannot be expected to support any action which promises to increase the profits of one at the expense of the other. By the same token, they are likely to support and encourage any action which seems likely to increase the profits of A and B combined - such action including all forms of quasi-collusive behaviour such as price agreements, market sharing, etc.

Thus even though the degree of market concentration may be relatively small, the extent of collusion via the banks might more than offset this. So we cannot safely conclude that the Federal Republic of Germany markets are more competitive than in the United Kingdom.

It might be argued that the banks are just as likely to goad lethargic management into action as to restrain aggressive management, so that there is no presumption as to whether they will on balance promote or retard competition and efficiency. This is not quite correct. On the one hand, it is certainly true that the role of the banks must be to reduce the degree of separation of ownership from control and thereby to reduce management's discretion to pursue objectives which conflict with shareholders' or creditors' interests and generally promote competition among managers. Thus we would certainly expect German companies to be more efficiency-oriented and less prone to "managerial slack". But the greater recognition of interdependence between firms which we have just discussed is likely to mean that the goal of profit maximisation, while vigorously pursued, is pursued in an oligopolistic rather than a competitive framework and will therefore have all the characteristics discussed in the previous section. (These remarks about profit maximisation are also subject to all the qualifications relating to the debt/equity ratio, discussed earlier).

From the point of view of the performance of industry as a whole (and in particular foreign trade performance) it is possible to look at the facts in a way which is more favourably disposed towards concentration and less convinced of the virtues of competition. From this standpoint it may be that the pool of information, network of contacts and "web of influence" which the big banks constitute means that they function somewhat like an unofficial planning agency for the economy. This could result in the co-ordination of investment plans between both complementary and competing firms as well as other aspects
of strategy such as product planning, market development, and the occasional "rescue" operation. There are some analogies here with the workings of the Japanese industrial system, as we shall see later. One important effect of this might be to direct company behaviour towards competing with foreign producers (both at home and abroad) rather than competing "wastefully" against one another. Of course the use of the term "planning agency" is potentially misleading. We do not wish to pretend that any plan, in the sense of a coherent and consistent set of objectives, exists in the banks' or firms' collective mind. As the case study of the Federal Republic of Germany says (p. 152) "they (the banks) follow no structural concept, and they do not play a leading role in structural change, but they try to seize the opportunities which are offered". All that is being suggested here is that this may offer some benefits to the economy in terms of inter-firm consistency and quicker response to changing economic circumstances.

Other influences on managerial behaviour in the Federal Republic of Germany and the United Kingdom

There are important differences between the two countries in the education and training of managers, their attitudes, goals and values, and in management organisation, which taken together contribute to explaining why managers in the Federal Republic of Germany seem to behave rather differently from their United Kingdom counterparts.

Educational attainment of managers is a concept with many dimensions, and differences between the countries are difficult to document. The proportion of all employees in manufacturing who have university-level qualifications, is about the same in both countries (3.7 per cent in the United Kingdom, 3.5 per cent in the Federal Republic of Germany, although in the labour force as a whole the difference is greater (5.5 per cent, 7.1 per cent). In Britain, however, a much smaller proportion of the labour force has university-level qualification in engineering and technology; in the Federal Republic of Germany there are about 50 per cent more engineering and technology graduates per thousand workers than in the United Kingdom. These are statements about the stocks of qualified workers, but it is also noteworthy that when we look at the flow of newly qualifying workers, we see no sign that the United Kingdom is catching up with the Federal Republic of Germany. "British universities continue to produce about one-third fewer graduate engineers and
technologists than the Federal Republic of Germany”, and "this discrepancy rises to 41 per cent if allowance is made for the 21 per cent of foreign students in engineering and technology at British universities".15

These data for the workforce as a whole have implications for work organisation, productivity, etc., which will be taken up in a later chapter, but at this point in the discussion we are concerned primarily with managerial behaviour and performance. As far as managers are concerned, many surveys have been carried out in both countries, but few have been conducted on a sufficiently comparable basis to permit hard quantitative conclusions to be drawn. Having examined the evidence, one researcher concluded that both graduate and non-graduate managers in the Federal Republic of Germany possessed more formal educational qualifications than their counterparts in the United Kingdom.16 The only strictly comparable international study relates only to chief executives, and this showed that 78 per cent in the Federal Republic of Germany were graduates compared with only 40 per cent in the United Kingdom.17

More important perhaps than broad quantitative measures of educational qualifications is the evidence relating to the content of qualifications and the relationship between a manager's education and training and the functions he performs. The greater emphasis on science and technology qualifications in the Federal Republic of Germany has already been noted. A counterpart of this is the relative absence in the Federal Republic of Germany of accountants and those with qualifications in "management studies". These two qualifications are widespread in British industry, and the qualified accountant is well paid, enjoys a certain prestige and has good promotion prospects, though his scientific and technical knowledge may well be limited to what he has been able to "pick up" in the course of his career.

In social background, managers in the Federal Republic of Germany seem to be more homogeneous. There is not the differentiation provided in Britain by the public schools and Oxbridge, nor are regional origins of importance, but nor equally does there seem to be the same upward mobility of people of working class origins. Although the greater social mobility in the selection and promotion of British managers may appear both democratic and efficient in the sense that the pool of talents of the entire workforce is tapped, in reality it has been argued that this merely reflects the lower social and economic status of management in Britain.18
When we try to look at how managers are recruited and the relationship between qualifications and the functions performed, there are of course no comprehensive statistics, but a number of sample surveys have been made. Overall, overwhelmingly the qualifications of managers in the Federal Republic of Germany with university-level qualifications are in law, economics and engineering — the latter predominant. In general, the system in the Federal Republic of Germany appears less fluid in the sense that the subject of university study more heavily conditions future career than in the United Kingdom. However, the greater mobility of British managers between different management functions and the greater diversity of their qualifications, reflects a view that management is a generalised or integrative activity for which intelligence and "judgement" are required, but not specialised knowledge; the latter even being viewed as a handicap.

An important cultural difference (referred to in the United Kingdom study) is the distinction in Britain between the "pure" scientist and the engineer/technologist, with science enjoying higher status and being studied by larger numbers of people. Even the term scientist is difficult to translate into German. It is also significant that in the Federal Republic of Germany there is no concept of "the professions" as that term is used in the United Kingdom. Another difference is that management and business studies are not taught at the undergraduate level in the Federal Republic of Germany; this reflects a different conception of business management and the skills it requires.

In terms of social attitudes, work organisation, and promotion practices, there appears to be greater upward mobility within companies in the Federal Republic of Germany, so that "management positions" (a term which in Britain carries some prestige and is "distanced" from lower ranking occupations) are not reserved for graduates or their equivalents. This mobility is made possible by the existence of an important sub-university qualification awarded by senior technical colleges (Fachhochschulen). This leads to two important qualifications: *graduierte Betriebswirt* for those who have studied business economics, and *graduierte Ingenieur* for those who have studied engineering.

Another factor in the Federal Republic of Germany reducing the "us and them" mentality which is pervasive in the United Kingdom, is the fact that it is not unusual for an engineering graduate proper to have also completed an
apprenticeship, and quite normal for a "graduierte Ingenieur" to have done so. These qualifications tend to be very much either/or in the United Kingdom, especially the former.

Without the same pecking orders (the professions, Oxbridge, pure versus applied subjects), the manager in the Federal Republic of Germany enjoys a higher status that his United Kingdom counterpart. This may in part reflect a possibly more materialistic society, although this remark should be treated sceptically, since any society with a higher standard of living is likely to appear more materialistic. But it is certainly true that "Tecknik" is important in the Federal Republic of Germany; the objective of business activity is viewed as "making things", and consequently engineering skills are valued more highly, not just among production managers but also among salesmen, etc. By contrast, the United Kingdom engineer enjoys miserable status. Along with the admiration of Tecknik goes an admiration for what a person knows (about production and related questions) and his commitment and hard work. Qualifications (including university qualifications) are valued for their content. There is less snobbery (or inverted snobbery) about qualifications, and little evidence of the "graduate aversion" found in the United Kingdom.

JAPAN

We shall now attempt a discussion of enterprise behaviour in Japan on a basis which permits a comparison with the Federal Republic of Germany and the United Kingdom.

The problem of arriving at a correct perception of behaviour is even more acute when studying Japan than in the case of the other countries. While the dynamism and impressive performance of the Japanese economy are of course not in dispute, there are conflicts of opinion among informed observers as to whether this has been achieved by vigorous competition among enterprises or whether, on the contrary, the degree of collusion, not only within the business community but between business and government, has been so great that the economy is essentially monolithic, as is implied by the term "Japan Inc". It is clear from the Japanese case study that the attempt to dichotomise Japanese business behaviour as either competitive or collusive can succeed only by distorting or over-simplifying reality. Nonetheless, to preserve
cross-country comparability and consistency, we are obliged to conduct our
discussion of Japanese enterprise behaviour in the same conceptual framework,
leaving the nuances to be explored by the reader in the Japanese country study.

As with the United Kingdom and the Federal Republic of Germany, we begin
by looking at ownership and control patterns in Japan. It is well known that
Japan is characterised by strong financial linkages both between industrial
and commercial companies, between companies and financial institutions, and
between companies and the state. These financial links go hand-in-hand with
correspondingly strong influence, in some cases amounting to control. The
nature of these linkages will be elaborated and their significance explored in
the following paragraphs, but we may note at this stage that their very
existence must necessarily inhibit freedom of competition in the Japanese
economy, though to an extent which we have yet to determine. Competition is
further inhibited by the degree of product-market concentration which will be
explored further below. Yet in many respects, as we shall see, the Japanese
economy is highly competitive. Once again, this drives home the point made in
the methodological introduction regarding the multi-dimensionality of the
concept of competition.

Full understanding of patterns of ownership and control in Japan would
require a lengthy excursion into history, which space here does not permit.
Briefly, until the end of the Second World War the Japanese economy was
dominated by ten zaibatsu organisations, each consisting of a collection of
manufacturing, trading and financial companies and ultimately headed by a
number of wealthy families which were able to achieve control of such large
volumes of assets by a pyramid structure of holding companies as well as by
strategically significant blocks of share ownership. The four largest
zaibatsu controlled about one-quarter of the paid-in capital of incorporated
business in Japan at the end of the Second World War.20

Despite vigorous efforts to dissolve them in the immediate post-war
period, three leading zaibatsu - Mitsui, Mitsubishi and Sumitomo - survived
and began to reconstitute themselves from the early 1950s, albeit with a
somewhat lower profile. From the remnants of the other zaibatsu, new
groupings emerged, centred around giant banks - principally, Fuji, Dai-Ichi
and Sanwa. In addition to these two sets of groupings, cross-company
concentration of ownership is found in a number of giant industrial
conglomerates in which substantial horizontal and vertical inter-firm linkages exist. Finally, the state itself controls (partly or wholly) a considerable proportion of corporate assets both directly via public corporations and indirectly via public participation in long-term credit banks. The quantitative significance of these various controlling groups is indicated in the table, where it will be seen that in 1970 over 80 per cent of the assets of large corporations belonged to one of these four sets of groupings. It should be added that concentration of influence (falling short of control) may extend even further than this, since there are additional clusters of firms around eleven large banks not listed in the table. The strength of these linkages, however, is distinctly less.

Another source of concentration in influence arises from the extensive network of subsidiaries which exists in Japan. A study in the 1960s found that the largest 100 non-financial corporations had interests in a further 4,270 companies - interests of sufficient magnitude to give influence amounting to control over major decisions. Finally, to complete the picture we may note that large companies have considerable influence over small by virtue of the high degree of sub-contracting by large companies. Discussion of this is more appropriate later when we shall examine market power in general.

What is the significance of these complex networks of influence and affiliation? Our general argument at the beginning of the chapter suggested that the pattern of ownership and control was important for three reasons. First was the question of diffusion of share ownership which increased managerial autonomy, the question being how tightly those who manage the company are supervised and influenced by "outsiders" such as shareholders and long-term creditors. This factor will influence both the goals adopted by the firm and the efficiency with which they are pursued. A second question was whether the allocation of capital between firms was achieved by competitive bidding for investment funds in the market place in accordance with neo-classical economic principles. Clearly concentration of ownership or control goes hand in hand with control over capital allocation. Thirdly was the question that concentration in ownership and control might inhibit competition in the market place; that is, the extent to which concentration of control over assets reinforces or substitutes for concentration in market shares. Thus industrial performance is influenced in three important ways by ownership and control factors.
Table 3.1 Distribution of assets of large corporations, by group affiliation, 1955, 1962 and 1970

<table>
<thead>
<tr>
<th>Affiliate group</th>
<th>Distribution of assets</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1955</td>
</tr>
<tr>
<td>State enterprise group</td>
<td>62.2</td>
</tr>
<tr>
<td>Long-term credit bank groups</td>
<td>2.1</td>
</tr>
<tr>
<td>Private financial institution groups</td>
<td></td>
</tr>
<tr>
<td>Mitsui</td>
<td>23.3</td>
</tr>
<tr>
<td>Mitsubishi</td>
<td>6.1</td>
</tr>
<tr>
<td>Sumitomo</td>
<td>5.0</td>
</tr>
<tr>
<td>Fuji Bank (Yasuda)</td>
<td>3.2</td>
</tr>
<tr>
<td>Dai-ichi Bank</td>
<td>2.9</td>
</tr>
<tr>
<td>Sanwa Bank</td>
<td>3.1</td>
</tr>
<tr>
<td></td>
<td>1.4</td>
</tr>
<tr>
<td>Giant industrial corporations</td>
<td>5.6</td>
</tr>
<tr>
<td>Foreign-owned enterprises</td>
<td>1.0</td>
</tr>
<tr>
<td>Companies outside the affiliate system</td>
<td>5.8</td>
</tr>
</tbody>
</table>

At first sight the fact that two-thirds of company shares are held by other financial and non-financial companies, together with the data we have already presented concerning the re-formed Zaibatsu and other affiliate groupings, would appear to suggest a high degree of concentration of ownership and control. This impression is reinforced when we consider another important feature of Japanese industry; the importance of long-term loan finance and the corresponding importance of the banks. Japanese firms are very highly geared. In manufacturing, equity accounted for only 20 per cent of total capital in 1970, having declined from 31 per cent in 1950. Debt to financial institutions accounted for nearly 40 per cent of total capital. With loan finance of such importance it is to be expected, as we have already argued in the case of the FRG, that banks will have considerable influence on company affairs which need not be reflected in the size of their shareholdings.

However from the point of view of assessing managerial autonomy the important question is not in itself whether the company's shares are owned by individuals or institutions, nor the debt/equity ratio, but whether shareholder and creditor relationships are sufficiently concentrated in the hands of a sufficiently cohesive group to give effective "outside" control - a point which has already been made in discussing the United Kingdom and the Federal Republic of Germany. One study of the top two hundred Japanese companies concluded that in 1959 the distribution of share ownership was such that only 33 of them could be considered to be controlled by their shareholders. The remainder fell into two groups. Sixty of them belonged to Zaibatsu-successor groups in which a substantial proportion of shares was held by other companies within the affiliate group, while 85 of the remaining 95 non-financial companies were affiliated with major financial institutions. Should the individual companies within these two latter groups, and the groups themselves, be considered as owner-controlled or as management-controlled? The answer depends partly on the form and the strength of the ties within the group; that is on whether the pattern of share ownership and debtor-creditor relationships is such as to create a more or less unified hierarchy of control within the group, or whether in contrast these relationships are such that the groups are merely federations in which the rights and obligations of members are broadly equal. If a hierarchy of control does indeed exist, we need to examine whether those who ultimately "pull the strings" within the groups are best viewed as owners or as managers - a question which it is not always easy to answer. To settle these questions we must look more closely at the ownership and control structure of the various groups in Japan.
If we consider first the revived Zaibatsu — Mitsui, Mitsubishi and Sumitomo — the most authoritative study found that for a typical member firm, only 10-20 per cent of its shares were held by other members of the group and these holdings were in turn divided among many holders. This suggests that no clear unique hierarchy of control via a pyramid of shareholding exists within the revived Zaibatsu, but rather that inter-company shareholdings within the group do no more than encourage collaboration and reciprocity, the shareholdings perhaps only occasionally providing the muscle to enforce collaboration or compliance which otherwise might have been forthcoming only half-heartedly or not at all. Indeed, it is often pointed out that collaboration is at times replaced by outbreaks of competition between group members.

Nonetheless from the point of view of the individual firm within a revived Zaibatsu group the network of inter-firm shareholdings acts as a constraint on managerial autonomy in the same way but to a lesser degree that membership by a company of a large, diversified conglomerate group in, say, the US does. And in the same way there are the compensating benefits of mutual assistance to offset this. With blocks of shares held by other firms within the group, the firm's management may be sure that its performance will be subject to informed scrutiny and that persistently poor performance may eventually trigger a collective response by other shareholding members.

Thus from the point of view of the individual company within the group, inter-company shareholdings mean that managerial autonomy is circumscribed compared with the situation which would exist if shareholding were widely dispersed as in, say, the United Kingdom. But these constraints on the individual firm would appear to be weaker than those which a member of a conglomerate group in the west would be subject to, because of the apparent absence of a hierarchy of control. In pre-war days such a hierarchy certainly did exist with a "top holding" company at its apex, this holding company in turn being controlled by a few wealthy families. For the Zaibatsu successors, the counterpart today to the top holding company is the group bank, but it has been suggested that its power is much less, mainly because the groups' members though heavily dependent in general on banks as a source of finance, obtain only about half of their loan finance from the group bank. The "presidents' clubs" and inter-locking directorships provide continuing co-ordination between group members at the top level but there is no formal mechanism here for exercising systematic control over individual members.
A similar story may be told about the three bank-centred groups — Fuji, Dai-ichu and Sanwa, where it is argued that ownership and control linkages were relatively weak and therefore that "corporate decisions may be influenced by other group members, but hardly compelled". For other bank-centred groups evidence of ownership and control linkages is even weaker.

Thus on this evidence it appears we may conclude that the various groupings of companies in Japan which at first sight give such an impression of extreme concentration in ownership and control are in fact somewhat loose federations rather than monoliths.

This evidence though may understate the strength of inter-company links, resting as it does on patterns of share ownership alone. Much depends on what one is mentally comparing them with. As we have already suggested the management of individual group members will be subject to surveillance by other members of the group. This follows from the interdependence of their profits. This surveillance despite its informality may nonetheless be a highly effective spur to managerial efficiency in a country such as Japan in which peer-group opinion is considered highly important. As far as coordination of behaviour and goals between group members is concerned the group bank or banks may be expected to exercise some coordinating role. Notwithstanding the argument that the group banks are by no means the sole source of loan finance for members of the group, great importance attaches to the relation between a company and its principal bank, with other banks to a greater or lesser degree merely following the leader. This must give the principal bank considerable authority over group members though falling well short of outright legal control.

Autonomy of management of individual companies is thus inhibited first by "peer group review", and second by the necessity at every level of retaining the approval of group banks. This must prevent managerial slack and also influence goals and conduct (i.e. the way in which the goals are pursued). There is an absence of clear hierarchy in terms of share ownership but a hierarchy of power and authority may exist nonetheless, based perhaps round a hierarchy of authority and influence in management and authority which flows from control over lending. As in the Federal Republic of Germany, formal power derives from shareholding, but de facto power derives from lending because of the great relative importance of loan finance.
It is clear that with considerable blocks of shares held within the group and with group banks providing half of the loan finance, the autonomy of the group as a whole in terms of independence from "outside" shareholder or creditor influences is considerable to say the least. Subject of course to the constraints of competition in the product market and constraints imposed by government (both discussed further below) and subject to the strength of power relations between its members, the group's ability to pursue its own objectives is thus relatively unimpeded. What are the group's objectives and how are they pursued? What are the consequences for industrial performance?

Answering these questions is made difficult by the apparent absence of any clear hierarchy of control within the affiliate groups. If such a hierarchy existed, we could identify the ultimate controllers and attempt to assess their objectives and hence likely patterns of behaviour. The existence of a hierarchy of control would then be some guarantee that pursuit of these objectives throughout the group would be enforced.

A study of industrial organisation in Japan concluded that no such hierarchy exists and that therefore the groups are correctly characterised as loose federations of companies, controlled by their managers, practising reciprocity and various forms of discrimination in one another's favour. Given management control, the objectives pursued are naturally those perceived as desirable by management, which may help to explain the growth orientation of Japanese companies. Alternatively if a hierarchy of control does exist (despite a lack of hard quantitative evidence) it then becomes crucial whether ultimate control of the apex of the group is in management hands or is in the hands of shareholders or creditors. If the former, then again "managerial" objectives would prevail implying lower reported profits and lower distribution of profits with some potential profits being absorbed to satisfy managerial objectives - such as their own salaries, but more important, the level and growth of sales. If on the other hand ultimate power rests with a minority but cohesive group of shareholders and/or creditors behaviour may be somewhat different, since as we have argued in the introduction to this chapter, the objectives of managers, shareholders and creditors do not in general coincide.

The question whether a hierarchy of control exists is not a question of black and white, but rather one of degree. Our view is that a hierarchy does
exist to a certain degree and that within each group the banks are focal points of power. By and large this conclusion follows inevitably from the importance of loan financing for Japanese companies and the position of power which principal lenders inevitably acquire as a result. (In this respect the reasoning parallels that for the Federal Republic of Germany).

The counter-argument that the banks have relatively little influence is based on the fact that no bank seems to account for more than 30 per cent of the lending to any one company, and the range is more commonly 13-18 per cent. Further it is pointed out that in the re-formed Zaibatsu, only about 50 per cent of loans are obtained from affiliate banks. But the first of these facts is explained by simple portfolio considerations (risk spreading); while the second merely implies that the network of bank influence cuts across the structure of the groups without necessarily diminishing the power of the banks. In any case if a bank is providing, say, 15 per cent of a company's borrowed funds which in turn are the main source of finance for its investment programme this would appear a large enough contribution to give the bank considerable influence.

As with the Federal Republic of Germany, we must consider the possibility that the influence of the banks over companies is weakened by the fact that they may be competing against one another in the search for lending outlets. While this may be true at the margin, it is not very plausible as a generalisation. One factor which makes this argument implausible is that, by the same token, companies are competing against one another in the search for loans and there is no reason to suppose that the outcome of competition on both sides of the market should be particularly favourable to either borrowers or lenders. For long-term viability, banks are forced to protect the security of their substantial long-term loans (both past and prospective) by actively informing themselves about the company's performance and supervising the goals and performance of its management. A degree of control is achieved by concentrating power into informed hands which have access to company information and in this sense is not "hands off" control but is "insider" control. Power comes from the ability to refuse loans or to impose conditions. The ability of firms to go elsewhere is some countervailing power but not much, since all banks are likely to have similar objectives and lending criteria.
Given the power of the banks, the next question is to what ends this power is used. Since the role of the banks is somewhat similar, we would expect the outcome to be somewhat similar to the Federal Republic of Germany. Because banks have to protect the security of their loans and loan capital does not participate in profits (debt servicing being a cost) our a priori expectation is that banks would encourage firms over which they have influence to seek out low risk, low return investment opportunities. This would also incline towards lending to firms with an established record as a way of reducing risk. For these reasons, as suggested earlier in the context of the Federal Republic of Germany, banks may inhibit dynamism and structural change.

But reality seems to be rather more complex than this. Companies financed predominantly by loan capital and where control is vested in informed "inside" groups can pursue objectives which do not yield any immediate benefit in terms of published "track record" — in particular, which do not add to current or short-term profits. So they are perhaps more free to invest in acquiring intangible assets with a long-term but uncertain pay-off — one is thinking here particularly of R and D.

Banks as lenders may also take a longer-term and more growth-oriented view than shareholders, particularly fragmented shareholders. Since banks are effectively "locked in" to the company in the long term in a way that shareholders are not, they have a stronger interest in the company's long-term prospects. They have to think of fostering opportunities for new loans and growth will make this possible without the exposure rate rising too high. There is an attraction in lending to a company with which the bank already has close links since the heavy initial investment in acquiring expertise about the company's prospects and person-to-person contacts has already been carried out.

At the same time (as the Japanese case study suggests) a low ratio of equity to total capital makes it easy to maintain an adequate dividend and additional profits are available for investment. The ordinary fragmented shareholder cannot do much to stop this, and in any case, he may be happy to see this if he is averse to risk, since dividends and hence share prices are thereby stabilised.
Possibly one should not make too much of the debt/equity question as such. Although large companies borrow from many banks there is always a principal lender which enjoys a special relationship with the company and has the major influence. It is argued that this bank is in effect a "subordinated creditor" in that in an emergency its claims would effectively rank lower than those of other creditors. In effect its loans have something of the status of equity and in return it enjoys more influence in the company's affairs (and possibly participates, in mysterious ways, in the profits). The distribution between debt and equity is thereby blurred.

Since individual banks spread their lending around many firms they are probably fairly efficient in allocating capital between client firms. From the point of view of overall efficiency in capital allocation this depends on the extent to which banks compete with each other and the extent to which firms are "locked in" to banks. These two points have already been discussed in the Federal Republic of Germany context and similar reasoning and conclusions apply for Japan. The banks probably are not closely in competition with one another in the sense that existing client companies cannot readily change banks. However, it may be that banks compete more closely to acquire new clients for loans. They may also compete as borrowers, i.e. in attracting deposits, although government regulation of interest rates substantially inhibits this.

**Market concentration in Japan**

Concentration in the ownership and control of assets, a predominance of large companies and concentration in companies' market shares reinforce one another in inhibiting competition and influencing enterprise behaviour and industrial efficiency. Our discussion of the zaibatsu and other affiliate groups must therefore be complemented by an examination of the extent to which markets in Japan are characterised by small numbers of dominant sellers (market concentration) and the associated question of company size. Concentration in company ownership, company size, and market shares are logically independent of one another. For example it is possible to imagine an economy in which companies tend to be very large, but are highly diversified so that none has a large share of any one product market. Similarly one can imagine an economy with large companies but fragmented ownership and control, or small companies but a high degree of concentration in ownership.
When we look at the situation in Japan some difficulties arise because the picture varies according to whether one looks at concentration in assets, profits, sales or value added. One study reported that in 1963 the one hundred largest companies in Japan controlled 39.4 per cent of all paid-in capital, plus a further 13.8 per cent through affiliates, making a total of 53.2 per cent. This is an impressively high degree of concentration of assets when compared with the corresponding figure for the United States which in 1960 was 30.8 per cent. However the same study reported that these same companies accounted for only 28.7 per cent of operating profit and only 21.3 per cent of value added. These discrepancies between shares in assets, profits and value added are difficult to interpret. Another source gives 33 per cent as the percentage of total capital controlled by the 100 largest (non-financial firms) in 1969. If this figure, rather than the 53.2 per cent cited above, is accepted, it would suggest the degree of concentration of the "Top 100" to be roughly the same in Japan as in the United States.

This impression is confirmed by looking at concentration in sales rather than assets. As far as the more recent picture is concerned, there were a large number of mergers in both countries in the 1960s, but according to a more recent study of the United States, the share of the top 100 in manufacturing value added has remained at 33 per cent since 1963. Whether the top 100's share in Japan has increased (it was 29.2 per cent of manufacturing sales in 1967, not including affiliates) we do not have the available data to say.

From the point of view of competition in the market place, it is important to know to what extent particular product markets are dominated by a small number of sellers each with a large market share. Data on the four-firm concentration ratio - the proportion of sales accounted for by the four largest sellers - are available for a large number of product markets in Japan. These data indicate that in 1963 (the most recent year available) the four largest firms on average accounted for about 35 per cent of the sales in any particular product in the domestic market in Japan, compared with just over 40 per cent for the same year in the United States. These figures would appear to reinforce the conclusion that the level of industrial concentration (and therefore by implication the degree of competition) is broadly comparable between Japan, the United States and the Federal Republic of Germany with all three being somewhat more competitive (in this sense) than the United Kingdom.
But these figures for Japan do not in general include affiliates, which as indicated above are substantial. The top 100 owned more than half the shares in a further 2,818 companies in 1970 and in a further 4,794 they owned between 10 per cent and 50 per cent of the shares. As well as these minority and majority shareholdings in affiliates, it is as we have seen common for large companies to own shares in one another. This need not add to concentration as such, since if two firms of equal size take a 10 per cent shareholding in each other, concentration measured in terms of assets is left unchanged. But it clearly has considerable implications for enterprise behaviour which reminds us that concentration data are only an indicator of likely behaviour, nothing more.

There are a number of other features peculiar to the Japanese industrial scene which are relevant to the purposes of our study. The first is the prevalence of cartels. Japan has a long history of extensive cartelisation which reached its peak during the 1930s and the wartime period. In this respect, Japanese industrial history has much in common with the Federal Republic of Germany. In fact, cartels have considerable government approval; around 1,000 cartels were legally authorised during 1965-75. Trade associations are widely prevalent too, with 20,553 registered with the Fair Trade Commission at 31 March 1974, of which about 10 per cent derived their existence from various laws. These associations typically serve as a clearing-house for the exchange of information among firms concerning prices, production and inventories. Such practices with government approval would be unthinkable in the United States and the United Kingdom. The government (as will be discussed further in the chapter of the role of governments) encourages co-operation among firms, not only in these matters, but in investment decisions as well. As the Japanese case study points out, the cartels have served as an important vehicle for discussion and agreement on rationalisation of capacity in some sectors undertaken since 1973. Thus once again we find that a conventional measure of the degree of competition (in this case the existence of cartels) has implications for economic performance which are ambiguous.

A second feature is the strength of vertical links which exist between producers of final products and their component suppliers ("backward" linkages) and between final producers and distributors ("forward" linkages). Both of these types of linkage are important in understanding the internal.
dynamism of the Japanese industrial system. Both are discussed in the case study. Regarding the first, it is well-known that the typical large company is surrounded by a host of small supplying companies with which it enjoys a close relationship. By using its bargaining power the company is enabled to enforce very competitive conditions of contract on its suppliers. The most noticeable impact of this is to create a very pronounced dualism in the labour market, with employees of the large company being very much the "aristocrats of labour", a phenomenon which we shall return to in a later chapter. Such a situation of course exists to some degree in most if not all advanced industrialised economies but it is more widespread and more pronounced in Japan than in any other country. Dualism extends not only to wages, working conditions and job security; there is also a pronounced discontinuity in salaries and working conditions of management, technology and capital equipment are inferior, and so on.

The overall effects of this on industrial efficiency are very difficult to assess. Since the "dualistic" characteristics are essentially the result of the exploitation by large companies of their strong bargaining position vis-à-vis their small suppliers, there is a presumption that in the main the effects are distributional, i.e. the large companies (shareholders, managers, and other employees) gain while their counterparts in the supplying or sub-contracting firms lose. There may be deadweight losses to society, however. For example, sub-contracting may be pushed too far; because of lower wages and profits in sub-contracting companies, a component may be put out to a sub-contractor when in real terms it could be produced at a lower cost "in-house". This same distortion in production costs resulting from dualism in both labour and capital markets may inhibit productivity growth. The large company has no incentive to search for ways of making a component more efficiently if it can sub-contract its production, while the sub-contractor himself may lack the resources and the security which would justify investment in productivity improvement.

The forward linkages

It is common in Japan for final consumer products to be sold by exclusive dealerships. This is usually justified by producers on the grounds that the distributive sector is backward, inefficient and undercapitalised and without assistance from the production sector would be inadequate to deal with modern
high-technology products, which require heavy investment in stockholding by distributors and investment in the acquisition of specialised technical knowledge for sales and servicing. On the one hand, distributors are not willing to make these investments unless they are given exclusive rights to marketing the products in question. On the other hand, manufacturers are not willing to assist distributors in making these investments unless they are confident that their products and only their products will benefit. This may be assured either by an exclusive dealing contract, or by ownership or at least control of the distributorship.

These practices make it very difficult for a newcomer to break into the market for a particular product range without the forbidding expense of establishing a marketing and distribution network from scratch. Resale price maintenance was also almost universal until the early 1970s but has broken down to some extent since then. The overall effect must be to inhibit competition between manufacturers and distributors, and this is reinforced by the degree of product differentiation and advertising outlays, both of which are comparable with that of, say, the United States.

The most important effect of vertical links between producers and distributors, which deserves particular mention, is that it acts as a substantial barrier to imports. Domestic producers obviously prevent or at least discourage distributors and dealers over whom they have influence or control from handling competing imports. The result is that imports are brought in, if at all, at purely nominal sales volumes and sold with very high profit margins - for example, a Datsun dealer might have one or two glamorous imported cars in his showroom to entice potential customers through the doors, but these cars are in no sense competing with "bread and butter" domestic products.

We have identified and discussed a number of distinctive features of Japan's industrial system which have important implications for competition and efficiency. Market concentration - product markets dominated by a small number of large volume sellers - seems to be at levels broadly comparable with the United States or the Federal Republic of Germany. Concentration in the ownership of assets seems to be substantially higher though and the strength of inter-company linkages and links between banks and industrial and commercial companies are uniquely strong. Trade associations are very
important and there is a high propensity towards cartelisation. Countervailing pressure from the government to prevent these collusion promoting arrangements is weak or even negative in that many arrangements are approved or even promoted by government (on which we have more to say in a later chapter). This evidence suggests that the institutional and behavioural context is strongly inimical to competition. How can we reconcile this with the outstanding performance of the Japanese economy in recent decades?

The resolution of this apparent paradox involves a number of arguments. The first, which may hold outside Japan as well as within it, is that although industrial concentration may result in excessive profits it may have the compensating virtue of promoting growth and technological change - an argument first put forward by the economist Joseph Schumpeter at the beginning of this century. As we have suggested, companies with a dominant position in the market can earn excess profits but they have to protect themselves against the erosion of these profits by the entry of new competitors. One important way of doing this is by engaging in R & D activities in order to achieve a technological superiority which potential competitors cannot match. At the same time, the excess profits which are made possible by their market power serves to finance these R & D expenditures.

Another feature of concentrated markets is the incentive which exists for companies to add to productive capacity. This may have both an offensive and defensive character. New capacity is simultaneously a threat to rivals that their markets may shortly come under attack, and a warning to rivals that the investing firm will not tolerate any attempted encroachment on its own market share. All companies therefore may engage in additions to productive capacity. If this behaviour is sufficiently widespread in the economy it will generate, via its demand effects, a rate of overall economic growth which will prevent the excess capacity which would have otherwise have developed and push the economy onto a sustained growth trajectory.

These patterns of behaviour - heavy R and D expenditures and additions to capacity - would of course not occur if rival companies were able to agree implicitly or explicitly not to attempt to encroach on one another's territory. It is of course impossible to find any direct evidence on the extent of such agreements and while the cartels and the trade associations provide an institutional framework promoting collusion of this kind, on the
other hand the structure and philosophy of the Zaibatsu and bank-centred groups seem to militate against it. In the main, such groups seem to aim at being represented in all the main sectors of the economy; in other words diversification rather than concentration in particular products or sectors seems a predominant motive of the groups. The recognition that a rival group was increasing its strength in a particular sector therefore spurs other groups to do likewise; although obviously the strength of individual groups varies between sectors there appears no tendency for the group to "parcel out" the economy between them. This observation is subject however to our earlier comment that banks' influence to some extent cuts across the recognised groups and that no bank is likely to encourage cut throat competition between two companies in which it has a substantial creditor interest.

One reason for this absence of collusion in setting prices and market sharing may be the sheer size and diversity of the Zaibatsu and similar groups. Interestingly, size and diversity are a two-edged sword. They make it easier to break into any chosen market and therefore encourage aggressively competitive behaviour by a particular group. Equally, however, the fact that there are other large and diverse groups in the economy, any one of which could launch an attack, means that no particular group is particularly secure in any of its existing markets. Consciousness that barriers to entry are easily surmounted by large and diverse groups may well inhibit "excessive" profit taking. This does not argue that there is not the desire to collude, only that price and cost margins cannot be raised far without attracting new entrants.

The view that the extent of collusion among companies in Japan is smaller than the facts regarding industrial concentration would lead one to expect, at least in the period up to 1973, is endorsed by statistical studies which have been carried out. "Concentrated industries do earn excess profits. High rates of outlay in advertising do sustain market power... But in periods of extremely rapid growth the conventional behaviour patterns of rival sellers disappear, and market structures of individual industries have little effect on their performance". Rapid growth is probably the most important single factor both weakening the incentive to collude and making it more difficult to achieve. It makes successful collusion more difficult because the essence of collusion is market sharing. It is much more difficult for rival companies to agree, whether implicitly or explicitly, over market shares when the overall
market is growing very rapidly but at an uncertain year-to-year rate. This is because agreement or consensus must be achieved both on the expected growth of demand and how that growth is to be allocated between companies and translated into investment in new capacity by each.

Rapid growth may also encourage price competition aimed at increasing profits and market share. In a market dominated by a few producers, the main factor inhibiting price competition is the fear that the damage inflicted on rivals will force them into possibly even more damaging retaliation. In a rapidly growing market, competitors might not respond so sharply to a reduction in their market share since their absolute volume of sales may still be growing quite rapidly. The pay-off to a company from increasing its share of the market is also greater if that market is growing. However, at the other end of the growth spectrum, when a market is in recession it is often suggested that the proportionately large fixed cost burden on Japanese firms - resulting from high debt ratios and "lifetime" employment (discussed in the next chapter) make them more ready to resort to aggressive price competition.

The argument that rapid growth discourages collusion and encourages competitive behaviour of course holds much more strongly in the period up to 1973. Before 1973 demand was expanding so rapidly that the limiting factor was the rate at which capacity could be expanded, so there was little need or incentive for agreement on these difficult matters. In other words, collusion was scarcely necessary since all firms could achieve their objectives. Since 1973 of course the situation has been very different and as the Japanese study indicates the degree of (government-promoted) collusion over capacity limitation and contraction has increased. Moreover growth since 1973, though reduced, has continued rapidly in most sectors of the Japanese economy.

It is not only the fact of rapid growth that makes collusion simultaneously more difficult but also less necessary. The desire for growth also discourages collusion. On the face of things, as was suggested earlier, the importance of loan finance and the power of the banks which is its corollary might be expected to discourage risk-taking and thereby discourage growth and encourage collusion. Since growth presumably adds to risk, why are Japanese companies so strongly growth-oriented? There are a number of possible explanations but inevitably we are unable to adjudicate finally between them. One possibility is that whatever the balance of power between
them, both banks and companies are both essentially controlled by their managers who seek growth, even if it increases the risk of exposure of their shareholders and depositors, as a means of enhancing their own salaries and status. A second possibility is that banks have less power over their client companies than would appear. A third possibility is that banks do not see growth as risky, but rather as a way of reducing risk since the larger and more diversified a company is, the less presumably is the variability of its profits.

A further possibility is that the pressure for growth may come from the banks' need and desire to find outlets for their growing loanable funds. There is a very high degree of financial intermediation in Japan, i.e. most savings are channelled to investment outlets via the financial institutions including banks and savings and loan associations. Given the high savings ratio in Japan and the limited extent of government borrowing, these funds will tend to pile up in the banks and exert downward pressure on interest rates unless new loans are taken up either by consumers or the company sector.

Finally, the case study of Japan argues that the high debt/equity ratio encourages investment and growth because dividends are small in relation to gross profits, making expansion financed from retained profits relatively easy. The resulting increase in the capital value of the company then accrues to shareholders in the form of appreciation of share values. This may be correct, but it is not clear why shareholders should acquiesce in this. Possibly the tax treatment of capital gains is more favourable than that of dividends. Possibly shareholders have little effective voice in the profit retention policies of companies and are forced to go along with the growth orientation of those in control; possibly they share this growth orientation.

Quality and organisation of management

In terms of historical legacy and point of departure Japan is obviously rather similar to the Federal Republic of Germany. In both countries there is an emphasis on production, high respect for technology, high standing for the business community, consciousness of a need to export, etc.

The overall quality of Japan's labour force, in terms of number of years education, is well known. In the context of this chapter we are interested in
management quality, of which level and content of its educational attainment is an important indicator. Here educational attainment is very high by international standards; "in 1966, 94 per cent of the top management group of 25 large companies were college or university graduates, as were 74 per cent of middle management". Although there are no precise data to hand relating to the fields of qualification of Japanese managers, it is clear than Japan possessed a comparative large stock of scientists and engineers: "By 1971 Japan ranked... ahead of West Germany, France and the United Kingdom, though still well behind the US". The actual figures for qualified scientists and engineers per 1,000 population were: Japan 1.9; the United States 2.6; the United Kingdom 0.8; the Federal Republic of Germany 1.4; France 1.1. The composition of this stock was heavily biased towards engineers with a ratio of engineers to scientists of seven to one in Japan, compared to three to one in the United States and France, and only one to one in the United Kingdom.

In assessing management quality, lifetime employment is an important factor because it makes it worthwhile for the firms to engage in extensive "on the job" training. Furthermore, although the importance of seniority rather than merit in promotion clearly has some efficiency costs, it does have the advantage that an older man has nothing to fear from teaching all his tricks to a younger colleague. Lifetime employment encourages the manager to identify with the company interest. Equally, the company identifies with the manager's interest, since disgruntled managers have nowhere to go. Organisation structure also contributes by making salary and status secure and unrelated to the individual's current post. Organisation structure does not recognise so many formal positions as in, say, the United Kingdom. Responsibilities are assigned to departments with more flexibility for the allocation of responsibilities within them. Responsibilities can be more readily re-assigned since there is less obsession than in other countries with the question whether this constitutes a promotion for Mr. A and a downgrading of Mr. B. Progression of individuals is related to both age and ability, with age serving as a benchmark though of course with greater dispersion as age increases. There is less day-to-day competition between individuals. Annual recruitment is in batches and a group of entrants with the same length of service is clearly identified throughout their careers. Within an organisational unit, team work and identification with the group are fostered in many ways, but this has the disadvantage that communication between units is cumbersome. Where western systems assign much more clear responsibility to
individuals, decision-taking in Japan is collective. In Japan chiefs "take" responsibility in a formal sense but the true responsibility is considered to lie with the relevant groups. Western systems in contrast rely on allocating responsibility and hold an inquest to find the culprit. In Japan, for the motivation of individuals reliance is placed on "commitment rather than control".

These organisational and behavioural characteristics of Japanese industry, which have been described succinctly as a "general group orientation syndrome", are of course well known. Clearly it is a system which works very well, but it might be considered rather fragile in that, as a system, it is very vulnerable to breakdown in the event of any substantial degree of alienation on the part of individuals. It is also a system which depends very much for its viability on continued growth which is necessary in order that the majority can achieve their career aspirations merely with the passage of time.

That the Japanese system of industrial organisation and management works so well is undoubtedly due to the fact that it reflects and is therefore assisted by socio-cultural norms. Consequently, we should be wary of the idea that copying Japanese structures would, in itself, be helpful in Western countries, unless this is seen explicitly as a means of modifying the values and objectives of individuals. The possibility of modifying values in this way must be extremely limited in countries such as the United States and the United Kingdom, where individualism and resistance to corporatism are so strongly entrenched. Features which derive from traditional personal relationships in Japan - deference and acceptance of superiors' rights to make unquestioned assessment of merit - are unlikely to appear. If anything, one might regard a movement in Japan in the Western direction to be more likely. But at the same time there is probably some scope for two-way traffic in these respects: one specialist in organisational theory has argued that the United States has much to learn from Japan, because the values and behaviour of individuals have been shown to undergo significant modification when significant change occurs in the organisational structure in which they are embedded.
Our earlier performance review showed that there were some grounds for disquiet regarding United States industrial performance in the last decade, particularly with respect to the decline in R and D expenditures and the slowdown in labour productivity growth. So we now have the two-fold task of trying to explain, or at least gain some insight into, the internal dynamism of the United States industrial system, and also of attempting to shed some light on the reasons for this deterioration in performance.

The case study on the United States emphasises the importance which is attached to competition as the principal determinant of industrial efficiency. Unfortunately the evidence for this presented in the study is highly circumstantial, consisting mainly in pointing to the outstanding productivity performance of the United States economy over many years, together with the absence of any formal apparatus of government assistance to industry coupled with a relatively strong legislative framework for discouraging monopolistic and restrictive practices. Blame for the recent deterioration in industrial performance — in particular the difficulties experienced in some sectors — is assigned to a weakening of the government's resolve in the face of intensification of lobbying activities by industrial groups and misguided intervention to "regulate" industry. Our task is to probe more deeply into these matters. Employing the same analytical framework as we have already used in discussing United Kingdom, the Federal Republic of Germany and Japan, we first examine ownership and control characteristics in the United States.

This question is dealt with very briefly in the United States case study, where it is stated that "most large corporations have such widespread stock ownership that they are effectively controlled by their managers, who often also form the majority on the board of directors" (p. 32). This is a somewhat sweeping generalisation. The question of who controls a company cannot be determined unambiguously since the percentage of share ownership required to achieve control depends on how the remaining shares are distributed and on other features; the necessary percentage for control may therefore be quite low and varies from case to case. Not surprisingly therefore studies have reached different conclusions, and the United States case study's view is presumably based on a study which found that in only one-sixth of the top 200
companies were 10 per cent or more of the shares held by a single person or group. Another study, however, taking a somewhat lower threshold of share ownership as sufficient for control, concluded that owner control is still important in the US; about one-fifth to one-sixth of the 200 largest companies were still controlled by the families of their founders, while a further one-third of these companies could be considered as being controlled by financial institutions, on the basis of a shareholding of 5-10 per cent which is arguably enough (given the typical diffusion of ownership of the remaining shares) to give effective control. Thus the United States appears to lie somewhere between the Federal Republic of Germany and the United Kingdom in the size of financial institutions' shareholder interest in non-financial companies. If anything, the United States is probably closer to the Federal Republic of Germany because the 5-10 per cent stakes owned by the United States financial institutions may well give them just as much influence as the larger stakes typical in the Federal Republic of Germany, because of the difference between the two countries in company law. These blocks of shares give the financial institutions both the means and the motivation to play a considerable part in the running of company affairs. This contrasts with the British situation where as has already been noted financial institutions rarely hold more than 1-2 per cent of a company's shares and keep the holdings low precisely in order to avoid being drawn into a controlling position. Furthermore, control by financial institutions is probably increasing in the United States since there has been a marked shift away from persons and towards institutions in the distribution of share ownership over the past twenty-five years or so - though, without further data on the institutions' ownership of particular companies, inferences about control are not strictly valid.

Second, the fact that the management form the majority of many United States boards of directors is not inconsistent with owner-control if those managers are themselves shareholders, as is commonly the case. Of course, their shareholdings are likely to be negligible in percentage terms but have the effect that a significant proportion of top management's income is profit-related, with the effect that their motivation in strategic decision-taking becomes much more closely identified with that of "outside" shareholders. This is reinforced by the widespread practice of linking top management salaries and other benefits to profit performance, a practice which is very rare in the United Kingdom, the Federal Republic of Germany and
Japan. An indirect but nonetheless very powerful piece of evidence that the shareholder interest remains at the forefront in many large United States companies is furnished by the widespread adoption there of the so-called "M-form" (or multi-divisional) organisational structure. While any large company is necessarily subdivided organisationally, the essence of the M-form structure is that subdivision is not according to function (production, sales, etc.), but according to the product markets served by the various subdivisions. Each division is then responsible for its own performance and accountable to a central supervisory management. The object in adopting an M-form organisational structure is to give top management tighter control over the running of the company with respect both to day-to-day operations and to strategic decisions. While it is possible that such tighter control may be desired by top management for its own sake, it is much more likely that pressure for greater control comes from organised groups of shareholders (possibly including top management itself) who wish to obtain tighter control over factors influencing actual and potential profit streams and the use to which those profits are put.

Having been pioneered by a few very large United States companies in the 1920s, the M-form organisational structure has become predominant among the largest one hundred companies there, and to a lesser degree this is also true in Europe. This has important consequences for likely patterns of company behaviour. It is a well-established proposition in the mainstream of industrial organisation theory that companies which are controlled by managers who are not accountable in any real sense to shareholders or other "outside" interests will be run in the interests of management - indeed this is almost a truism.

It has been argued that it does not necessarily follow that a top manager's interest in the profitability of his company will necessarily be greatly enhanced by personal share ownership, even if this constitutes a significant proportion of his income, because his share in the profits is bound to be negligible. For example consider a top manager who is considering whether to endorse a proposal to build a new executive dining room at a cost of $100,000 - money which would otherwise be distributed to shareholders as profit. If he owns even as much as 1 per cent of the company's shares this will for him only result in a once-for-all cost, in terms of dividend foregone of $1,000; which may well appear worthwhile in relation to the pleasures to him of the new dining room.
But more important than his concern with dividends perhaps is the concern of the shareholding executive director with share values. Presumably his shareholdings are a major component of his wealth, and since capital gains are taxed more lightly in most countries than are high salaries, he may well be more interested in seeing an increase in the share price than in dividends as such. A factor which adds special force to this hypothesis is the high probability that such a senior company officer will be relatively close to retirement (or, if younger, is likely to move to another company). Should he leave the company or retire his salary will cease or fall dramatically but he takes the capital value of his shares with him intact.

Given this personal interest in the price of the company's shares one would imagine that a share—holding manager would wish to influence company policy in directions which enhanced the share price. The easiest way to raise the share price of course is to raise the dividend, but this policy cannot be pursued to an unlimited extent since stockbrokers and other company analysts will eventually alert the general investing public to the danger building up for a company with inadequate profit—retention and investment. Since share prices are determined in the market place, maximising the share price requires persuading the average investor (via those from whom he gets his information) that the shares represent the most desirable available combination of current and prospective dividends. The shareholding executive director is thus forced to attune company behaviour to the preferences of the average investor.

This is an important conclusion. Our preoccupation with the question of ownership and control stems from the premise that we cannot expect to understand enterprise behaviour unless we can develop some insight into who controls the enterprise and what objectives its controllers pursue. In our analysis we have identified a number of distinct ownership and control situations. One is where share ownership is diffused among individuals or institutions to an extent that none has any decisive voice in the company's affairs and it is effectively controlled by its managers, who are not themselves shareholders. (This seems to be the United Kingdom situation.) The second (situation), which perhaps corresponds to that of many American companies, is one in which there are concentrations of shareholding, sufficient to give control, in the hands of institutions, but these shareholders essentially remain "outsiders" in that their financial stake is small enough, and sufficiently liquid, that it is not worth their while to
become heavily involved in the company’s affairs; while at the same time top management are significant shareholders, not in the sense that their holdings are large enough to give legal control, but large enough to cause them to view the world through shareholder eyes. Because neither of these groups is "locked in" to the company in the sense of finding that their financial futures are irrevocably intertwined, neither has an overriding interest in the long-term future of the company. This contrasts markedly with the structure in Federal Republic of Germany and even more markedly with that in Japan.

The conclusion is that those with a substantial voice in the running of United States companies — whether they be institutions or substantial family shareholders, or shareholding executive and non-executive directors — seem likely to be mainly concerned with the value of the company's shares. Since share values depend on the preferences of small, uninformed shareholders, in order to maximise share values it is necessary for those with influence to operate on variables which the "average" shareholder recognises and responds to. This points to an emphasis on various financial measures of performance which investment analysts and their readership respond to. This preoccupation may well lead to a shorter horizon and relative neglect of activities which increase long-run profitability but which yield little tangible short-run pay-off which can be measured by share-analysts - to the neglect of, for example, R and D and also of important factors such as labour force quality.

Quality and organisation of United States management

This view of behaviour may be looked at in conjunction with the kinds of skills which are valued and acquired by United States management. We must assume that these skills are acquired and practised because they are valued by those who control companies. Complementing the distinctive United States pattern of ownership and control are important differences in organisational structure and managerial philosophy. Although American industry has an enviable and justified reputation for the quality, inventiveness and sophistication of its products, the high degree of diversification of large United States companies suggests a certain absence of product orientation on the part of decision-takers. Although difficult to substantiate and inevitably somewhat speculative, there may be a significant difference in this respect between on the one hand American (and to some extent British) management and on the other hand their counterparts in Japan and the Federal
Republic of Germany. Management in the Federal Republic of Germany is extremely product-oriented in that they see the key to their company's success as lying in technical superiority in the design and manufacture of the product. Expansion into new product areas is therefore intrinsically unattractive since the difficulty of acquiring expertise in these technical aspects is seen as a major handicap. Similarly in Japan, companies, we are told in the country study, do not readily venture into totally new product areas and moves even into "related" areas are approached with caution.

On the other hand in the United States there is perhaps a stronger faith in the concept of "management" as an abstract skill, science or profession which can be applied by its practitioners quite readily in almost any manufacturing sector. Management itself has become "professionalised" and in the process has become sub-divided into a number of fields of specialisation - sales, marketing, finance, production and so on - and a manager with, say, marketing training experience would expect to move in the course of his career quite readily from one industrial sector to another. Hand in hand with this specialisation of industrial managers goes an organisational structure of the company in which different management functions are performed by different departments. Given this individual and corporate specialisation communication is inevitably de-personalised and loses its qualitative dimensions. Instead, emphasis is shifted to quantitative measures of performance which tend to be of a primarily financial nature - turnover, sales, rates of return and so on. The company increasingly tends to assume the character of a financial organisation of which the raison d'etre is the efficient management of a portfolio of assets. Assets which do not meet the targets of financial performance despite application of the appropriate management techniques are discarded and new ones acquired. Apart from production managers and design and development staff - who occupy a fairly low position in the management hierarchy - no particular product expertise is required. This lack of product emphasis on the part of senior management is likely to lead to a relative lack of emphasis on improvements in product quality (both in the short run by better production methods and in the longer run by R & D investment), since the benefits from activities of this kind are not readily reflected in the conventional financial performance indicators and yield their returns only slowly over a long period of time. Within such a philosophy it is easy to see why it should appear more attractive to close down a loss-making plant rather than to seek to diagnose and rectify the underlying causes of the losses. To
close the plant requires only a certain ruthlessness and the perception (which is usually justified) that there are probably easier profit opportunities somewhere else in the economy. To diagnose and cure the problem requires a deeper understanding of such difficult areas as labour relations, product and process technology and future market possibilities. Of course, closing down loss-making plants and thereby releasing workers, management and capital for use elsewhere in the economy is an essential part of the adjustment process. But it bodes ill for the future of any economy if this is the only activity which industrial management are good at.

We have thus identified two broad factors which may have substantially altered the content of United States enterprise behaviour in recent decades. One is the desire of top management and institutional shareholders to maximise, over a fairly short horizon, the value of the company's assets. A necessary condition for achieving this is to regain or retain control over the typically large and diversified company which requires a divisionalised organisation structure. This in turn has both encouraged and been encouraged by the setting of performance criteria at every level of the company in terms of quantifiable "objective" measures, inevitably principally financial; and by the increased specialisation in terms of skills and experience of US management. 37

Concentration in the United States

Some indication of concentration in the ownership of assets in the United States is provided by the fact that the largest 200 non-financial corporations controlled about 40 per cent of corporate assets in 1976. This figure had remained virtually constant over the previous decade, suggesting that the wave of conglomerate mergers in the late 1960s did not have the effect on concentration, at least among the largest companies, which might have been expected. Of these 200 companies it has been estimated that the largest one hundred controlled 30.8 per cent of assets in 1960. Among manufacturing companies which are of more direct relevance to the present study concentration is higher; the largest 200 United States manufacturing companies controlled 61.1 per cent of total manufacturing assets in 1977 (with overseas assets, accounting for perhaps 2.8 percentage points, included), this figure having drifted upward over the previous 20 years - it was 52.9 per cent in 1956. 38
How do these figures compare with those for the other countries we are studying? In Japan, ownership of assets is widely recognised as being substantially more concentrated than in the United States, though the precise extent of this is not entirely clear. As reported in our discussion of Japan, the largest 100 non-financial corporations controlled 40 per cent of total corporate assets in 1970, or 48.9 per cent if their ownership of affiliates is included, i.e. the largest one hundred in Japan controlled as large a proportion of assets as the largest two hundred in the United States, even before ownership of affiliates is included. In manufacturing alone the same disparity between the United States and Japan seems to emerge. The largest 100 quoted manufacturing companies in the UK are reported as controlling 63.7 per cent of total net manufacturing assets in 1968 (compared with 46.5 per cent in 1948 and 60.7 per cent in 1957). Thus again it would appear that, as with Japan, the largest one hundred in the United Kingdom control as large a proportion of assets as the largest two hundred in the United States.

Concentration in assets is paralleled by concentration in net output (value added), in sales and in profits. The largest 100 United States manufacturing companies accounted for 33 per cent of manufacturing value added in 1972, compared with 41 per cent in the United Kingdom and only 24 per cent in the Federal Republic of Germany, although this last figure cannot be directly compared because it refers to all industry and to sales, not value added.

Comparison with Japan is difficult because of data discrepancies. While, as reported earlier, the largest 100 non-financial corporations in Japan accounted in 1964 for 39.0 per cent of paid in capital, they accounted for only 28.7 per cent of operating profit and only 21.3 per cent of value added. It is hard to see why companies controlling nearly 40 per cent of the assets should contribute only about 20 per cent of the value added, unless capital per unit of value added is more than two-and-a-half-times greater among the top 100 companies than among the smaller companies. The question whether the largest companies in the United States are more concentrated than in Japan, in terms of their contribution to net output, therefore remains open.
Concentration in product markets

Large United States companies are typically highly diversified and hence their size alone need not entail dominance in particular product markets. Overall product market concentration in the United States has been fairly static, as the country study remarks. The four-firm concentration ratio averaged across 154 market sectors in the United States was 41.5 per cent in 1972, having increased by only 1.71 percentage points since 1947. This means that, on average, the four largest-selling companies in any market sector accounted for 41.5 per cent of total sales. The four-firm concentration ratio for the US may be compared quite directly with that for Japan. Against a figure of 40.9 per cent for the US for 1963 may be set the figure of 35.4 per cent for Japan. Thus product market concentration appears to be somewhat lower in Japan (though given the difference in the underlying data no firm conclusions can be drawn) but interestingly and perhaps not unexpectedly concentration ratios in particular markets appear to vary more in Japan than in the United States, so that in Japan one finds more particular product markets with very low or very high degrees of seller concentration.

Market concentration, vertical integration and diversification

Growth of a company may extend in one or more of three possible directions, each of which has different implications for competition. It may grow simply by increasing its share of sales in its existing markets, either by straightforward expansion or by merging with or acquiring rival companies. Growth of this kind has not been of major proportions in the United States, since we have already seen that company growth and the merger wave of the late 1960s have not resulted in greatly increased market concentration at the top end at least. Growth by acquisition of competing companies, a form of growth which is perhaps the most obviously damaging for competition, has probably been discouraged by United States anti-monopoly legislation, in particular the Cellar-Kefauver Act of 1950 which tightened legal restrictions on "horizontal" mergers.

A second form of growth for a company is to expand its productive activities by producing components and semi-finished products which it previously bought from other companies ("backward integration") or by
productive activities carried on by companies to which it previously sold ("forward integration"). This too has certain implications for competition because it becomes more difficult for new entrants to break into a market if potential suppliers or buyers of components are owned by competitors. On the other hand it has to be recognised that forward and backward integration are legitimate activities of a vigorous and dynamic company and in many occasions have been the means whereby productive efficiency has been raised.

A third form of company growth takes the form of diversification — either by new ventures, by merger or by acquisitions the company moves into new and unrelated product lines. Data for 1967-72 suggest that diversification was proceeding quite rapidly in the United States, though admittedly this period coincided with a wave of merger activity and was therefore probably atypical. Roughly one-third of United States companies during this period were affected by the diversification process to the extent that either by merger or takeover or by changing the composition of their output they became re-classified to another industry. Most large American companies are highly diversified.42

Collusive and rivalrous behaviour in the United States

Given that market concentration in the United States seems to be about the same or possibly slightly lower than in the Federal Republic of Germany and Japan, recognition of mutual dependence between companies and consequent behaviour patterns which we dubbed "rivalrous" rather that competitive might be expected to be similar. If this were correct, we could not readily explain differences between the countries in enterprise performance in terms of these factors.

However there are a number of factors which might lead us to believe that collusive or quasi-collusive behaviour may be somewhat more difficult for companies to achieve in the United States (though without ruling it out in the more highly concentrated sectors such as steel and automobiles). One factor is the large absolute size of the United States economy. This may make collusion more difficult because any form of price-fixing and market-sharing must cover a large geographical area with many sub-markets. Also large geographical size makes for greater difficulty in communication between producers since they are less likely to meet regularly, share the same clubs, etc. Complementing this is the fact that the financial as well as the
business community is less tightly-knit than in the other countries under review, as well as the fact that ownership itself is less concentrated.

It is also probably more difficult for the benefits of collusive behaviour, once achieved, to be sustained. Large conglomerate companies will embark relatively readily on a new venture into a new market and to this extent barriers to entry are perhaps somewhat weakened in the United States. We made a similar point about large companies and groups in Japan, but the effect there may be reduced by the fact that the large Japanese company groupings do not have anything like the same degree of integration and unity of purpose as the United States conglomerate, and are also more product-oriented which discourages ventures into new product areas. The large absolute size of the United States market also facilitates new entrance into particular markets because with even a small market share it is more likely that the necessary size to permit economies of scale will be achieved.

Against this though it must be remembered that international trade is much less important to the United States economy than to any of the other countries studied. This means that United States producers compete against one another, to a much greater extent, and in only a single market. This is a quite different situation from that of British, German or Japanese producers who are likely to be facing one another not only at home (in competition also with imports) but in a dozen different export markets throughout the world, where they are also of course competing against producers in other countries. Thus United States producers in the main compete in a single market, largely free of foreign competition until recent years; this market is highly homogeneous in language, consumer tastes and culture. This not only promotes collusion but also raises entry barriers because a homogeneous market is more easily captured and retained by advertising.

Balancing out these various arguments one cannot conclude that market concentration and ease of entry into markets are such as to make United States enterprise behaviour substantially more or less competitive (as opposed to rivalrous or collusive) than in the other countries. Furthermore, as we have shown (and as reported in the case study) industrial concentration has changed relatively little in the United States in recent decades whether measured in terms of assets or market shares, and therefore cannot readily account for the recent deterioration in United States enterprise performance in certain important dimensions.
How then are we to explain this deterioration? There are two main arguments. The first is that the increasing volume of imports has exposed United States producers to far stronger competitive pressures than they have ever experienced before. This factor of course is not revealed at least in its early stages in conventional statistical data on market concentration which typically report the market share of only the largest domestic companies. This could be an important factor explaining the deteriorating profit performance of United States companies and would imply that previous profit levels contained a "monopoly" element which in recent years has been eroded by foreign competition. In this sense, the United States economy could be considered as becoming more like those of the European countries studied where foreign trade - whether imports, exports or both - has always been of great importance.

The second argument concerns company objectives in the United States. Given the concentration in ownership of assets and in market shares and the complexities of the many interdependent dimensions of company behaviour in the modern world, it is undoubtedly the case that in the United States, as in other countries, those who control large companies have considerable discretion in the balance of strategic goals which they select and the means whereby they are pursued. Differences in these respects seem to emerge from these studies as the most striking differences in enterprises in the different countries. To summarise crudely the argument developed earlier, it is the emphasis on short-term financial goals corresponding to a changing organisational and control pattern which differentiates United States companies at least from those in Japan and the Federal Republic of Germany and which may explain much of the deterioration in performance.

THE NETHERLANDS

It is not easy to apply the same framework of analysis to the Netherlands that we have used for the other countries studied. One immediate and practical reason for this is that the necessary data on such questions as product market concentration and forms of company finance do not exist, or at least have not been published in sufficiently comprehensive and accessible form to make such an analysis possible. More fundamentally, however, the Netherlands possesses a number of special characteristics which might lead one to question whether such an analytical framework can be validly employed.
One important characteristic is the very highly open nature of the economy. Even allowing for re-exports, the ratio of trade to GNP is one of the highest of any industrialised nation, a fact which immediately calls into question the relevance of domestic market concentration data as an indicator of possible patterns of company behaviour. The openness of the economy moreover also manifests itself in other ways which may be considered to be equally or even more important. One such is the highly multinational character of many of the largest Netherlands companies both in manufacturing and services; the latter consisting principally of trading, insurance, banking and finance activities. This internationalisation, which is documented in more detail in the country study must have a very profound influence in company behaviour and therefore an overall economic performance, though this of course is difficult to pin down with any precision. Though the growing internationalisation of production is a world-wide feature, to the extent that there must be now few companies of any significant size anywhere whose activities are exclusively confined to one country, it remains true that partly as a result of past history and partly as a result of the Netherlands' size and geographical position, this process has proceeded much further than in other advanced countries with the possible exception of Canada. In general terms, the effect of this is that it becomes rather difficult to define a "Netherlands company" in quite the same way that one may speak of, say, a Japanese or United States company, and therefore correspondingly difficult to identify a distinctive pattern of Netherlands company behaviour.

Such data as exist tend to show that the Netherlands is broadly comparable with the United Kingdom and the Federal Republic of Germany in terms of the size-distribution of companies at the top end of the distribution provided adjustment is made for the small absolute size of the country; and relative to country size the Netherlands has substantially more large companies than France or Italy. Similarly at the bottom end of the size distribution, in the proportion of small companies (with less than 10 workers), the Netherlands appears to be middle ranked, the proportion being much higher than in the United Kingdom or the United States, somewhat higher than in Germany, but considerably lower than in France or Italy. The picture is not entirely clear cut because the Netherlands has both industrial sectors which are more concentrated, and sectors which are less concentrated than other industrialised countries, which is probably accounted for by the
importance of multinationals and the openness of the economy in the trading sense. Some data suggest that the Netherlands is apparently not at such a disadvantage in plant size as might be expected from the data on company size.

But it is very important to note that these data in the main relate to the size distribution of enterprises in terms of total assets or employment rather than domestic employment or market share. In the presence of multinationals there is likely to be an important difference between the two: for example, as the Netherlands case study points out, only one-third of the employment of 100 largest companies is actually located in the Netherlands. Not only therefore may these data mislead as to the importance of concentration in local production, but equally as to the importance in local sales. For example it has been pointed out that in a number of industries in the 1960s (e.g. bicycles), defensive mergers were being undertaken due to growing import penetration, with the net effect that the largest firms increased their share of domestic production but experienced a decrease in their share of domestic sales.

This indeed is an important general conclusion - that although in many sectors production has become increasingly concentrated in a smaller number of large companies as a result of mergers and takeovers in the 1960s and 1970s, the motivation for this has been largely defensive in order to fight back against growing international competition. So it seems safe to conclude that while in broad terms the degree of concentration in assets and employment of Netherlands companies is not dissimilar from other industrialised countries, it would not appear for the reasons discussed, that opportunities for collusion are very great except in those cases such as petro-chemicals where the market itself is an international one. Doubtless in sectors such as textiles too, where the degree of concentration of local firms has increased markedly, the motive was precisely to inhibit competition in the domestic market between domestic producers, but again this was largely defensive in the face of ecnornously increased competition from abroad.

Ownership and control

In the absence of any comprehensive data regarding the pattern of share ownership in the Netherlands, it is difficult to derive any firm conclusions
regarding the extent to which companies are controlled by their managers or their shareholders. It is clear, however, that the stock exchange plays a relatively minor role in the financial sector, and many quite large companies are unquoted. This would suggest that share ownership is not widely diffused, and this is corroborated by the importance of family-controlled firms in the Netherlands in which blocks of shares are owned by members of the same family who presumably are able to act in some degree of concert and hence to exercise control. These of course in the main are small- and medium-sized companies; at the other extreme the shares of the large multinationals are widely diffused throughout the world, and these companies may therefore be considered to be controlled by their managers though subject to influence from major institutional shareholders in the parent company.

Part of the explanation for the relative unimportance of the stock market is that equity itself is a relatively minor source of finance for companies. Traditionally, internally generated funds (i.e. retained profits) have been the major source of finance. The precise degree of self-financing can only be estimated because the published data include housing finance along with company finance, but it has been suggested that self-financing accounted for as much as 75 per cent of industrialised and commercial companies' fixed investment in the first half of the 1970s. Loans provide most of the balance of financing, and the most important means of raising loans is by issuing debt certificates which are taken up by the banks and, to a lesser extent, by the other financial institutions. These institutions command considerable funds because of the importance of contractual savings in the Netherlands, but they are not correspondingly active in investment markets largely because they channel much of the lending into the public sector and into housing; the latter taking a very large slice of total investible funds in the Netherlands.

The banking sector itself is highly concentrated, with the "big three" accounting for three-quarters of total lending. The influence of the banks on the non-bank corporate sector, however, is much weaker than this figure might at first sight seem to imply. For one thing, almost one-third of the big three's lending is to other banks, especially foreign banks; only about 22 per cent of their lending is to manufacturing companies, and a further 20 per cent to the commercial service sector. Second, as already noted, the main instrument for raising loans is by means of debt certificates. Although these
are not readily negotiable and no organised resale market exists, a bank which lends to a company by taking up part of an issue of debt certificates probably does not become "locked in" to the company to the extent that it would if it made a direct loan, and hence does not acquire the same degree of influence nor the same incentive to exercise influence.

Furthermore the banks in the Netherlands do not themselves hold substantial amounts of equity in non-financial companies, or exercise any degree of formal shareholder control; in fact they are forbidden by law from holding more than 5 per cent of the equity of any non-financial company without the special permission of the central bank. This is an important point of contrast with the role of the banks in the Federal Republic of Germany where, as we have seen, the banks own about 8 per cent of the equity of non-financial companies, and in addition enjoy additional powers by virtue of the proxy voting rights assigned to them by customers. Nevertheless it is not uncommon for banks in the Netherlands to have representatives on the supervisory boards of companies, and the banks are continuously active as advisers in mergers, new ventures, re-organisation and restructuring of companies as well as assessing and exploring market prospects etc. The extent of this is increasing and a degree of industry specialisation by banks is evident. In the present economic environment the banks (as in other countries) are being drawn into a more active role because to an increasing extent it is market prospects and the assessment of management skills, rather than past performance and the state of the balance sheet, which determine the viability of a loan. Notwithstanding these trends, the form of loan financing via share certificates and the absence of significant equity holding suggest that, although the banks are doubtless highly influential in Netherlands company affairs, the degree of this is not on a par with that exercised by the banks in the Federal Republic of Germany.

To summarise, the picture of industrial concentration, ownership and control in the Netherlands which seems to emerge is as follows. First we have the large multinationals whose field of operations in production location and marketing decisions ranges over the whole world. These companies operate in the main in highly concentrated markets where the degree of oligopolitic interdependence between companies is great. These companies are controlled by their top management, and therefore pursue "managerial" objectives which may be broadly characterised as stability and growth. The future of these
companies is tied to the Netherlands only to the extent that the Netherlands offers a decisive locational advantage, and indeed there has already been evident for the last 10 years or so a strong tendency for many of these companies to respond to the deteriorating international competitive position of the Netherlands by locating new investment abroad.

Next come the medium-sized companies which finance their growth primarily by means of loans and retained profits. Because of the relative unimportance of equity and the dispersal of share ownership, these companies too are largely controlled by their managers. Finally we have a proliferation of small, family-controlled companies which are very highly geared and whose access to the external capital market is very limited. The environment for these companies is very different from that of the large multinationals. Most obviously they are much more closely tied to the Netherlands as a production location and hence have been unable to react to the pressure of foreign competition in home and foreign markets by relocating abroad. Instead, they have been forced to pursue increased productivity by rationalisation and merger. Mergers and takeovers have also increased the degree of concentration of production and contributed to a comparatively high degree of cartelisation in Netherlands industry. As has been argued elsewhere, cartelisation may be seen as one response of many branches of the Netherlands industry for the structural problem arising from declining international competitiveness.45 This is, of course, a classic response to such a situation and one which has occurred in many countries in similar situations, its most obvious counterpart elsewhere being the Japanese "anti recession" cartels discussed elsewhere in this study. But as we have already remarked, the benefit to the domestic producer of reduced competition with other domestic producers must be of very limited value in an economy such as the Netherlands where foreign competition is of such paramount importance in both home and foreign markets. The squeeze on profits of rising international labour costs has therefore been alleviated to only a limited and progressively diminishing extent by mergers, rationalisation and reduced internal competition and the small- and medium-sized companies in the Netherlands have found themselves with few alternative avenues of escape.

Although the Netherlands is well endowed with scientifically and technologically qualified manpower, product and process innovation is not a promising answer to the problems of the small- and medium-sized companies
because of the overwhelming advantages of large scale at all stages of the innovation process. The same is true of other forms of competitive response such as identification and penetration of new markets, advertising and so on.

The squeeze on profits has been particularly serious in view of the importance of internal funds for financing investment. The business sector's fixed investment has exhibited a declining trend since the early 1970s, falling particularly sharply in 1980-81 and reaching a historical low of 12.5 per cent of GDP in 1982. It is not only declining profits as source of investible funds which is important here: in addition, declining profitability greatly increases the subjective risk of loan-financed investment in the eyes of both lender and borrower. In the Federal Republic of Germany and Japan, as we have seen, loan financing is also the major source of investment funds. But we have argued that in both countries the relationship between borrower and lender and inter-company linkages via the banks, are far stronger than they appear to be in the Netherlands. Both these factors help to reduce risk, as does the greater degree of product market concentration deriving from the fact that these economies are less open to foreign competition (particularly of course Japan). Lacking this network of influence, the Netherlands banks have chosen to exercise the other option open to them, that of lending abroad. In short, much of the Netherlands' industry is now trapped in a vicious circle of low profitability and low investment which closely parallels the situation in the United Kingdom. However, this vicious circle will be more difficult to break out of mainly because of the disadvantages of small scale in the Netherlands, but also because of apparently greater real wage and real exchange rate rigidity.

Notes:

2. The main data source for this and the following paragraphs was: The British and German Banking System: A comparative study (London Anglo-German Foundation for the Study of Industrial Society, 1981).


5. See: The British and German Banking System, op. cit.


10. S.J. Prais: The Evolution of Giant Firms in Britain, op. cit.


12. K. George and ... Ward, op. cit.


14. The British and German Banking System, op. cit.


19. See the Report of the Finneston Committee.


24. R. Caves and M. Uekusa: "Industrial Organisation", in Patrick and Rosovsky, op. cit.


31. Merton Peck and Shuji Tamura: "Technology", in Patrick and Rosovsky, op. cit.


36. Of the top 100 companies, 70 per cent in Britain, 40 per cent in the Federal Republic of Germany and 43 per cent in France are reported as being organised on M-form lines in 1970. (See G.P. Dyas and H.T. Thanheiser: *The Emerging European Enterprise* (London, MacMillan, 1976), Ch. I, p. 30. This
compares with 80 per cent of the largest 500 companies in the United States organised in this way. See K.G. Cowlings: *Monopoly Capitalism* (London, Macmillan, 1982.)


41. R. Caves and M. Uekusa: *Industrial Organisation in Japan*, op. cit., Table 2-2.

42. R. Caves and M. Uekusa: *Industrial Organisation in Japan*, op. cit., Table 2-2.


CHAPTER 4

WORKERS AND LABOUR MARKETS
INTRODUCTION

In the context of adjustment behaviour and structural change, the problem in the labour market has in the past been typically seen as consisting in unacceptably high unemployment levels for certain categories of worker and certain geographical regions. In a context of overall full (or even "over-full") employment such as existed in the 1960s, these "pockets" of unemployment could be seen as reflecting imperfections in the labour market, the most obvious imperfection being lack of information about job availabilities, lack of geographical mobility which was due to economic as well as purely social and behavioural factors, and lack of opportunity to transfer from one occupational group to another. These could all be seen as "market failures" which provided an intellectual justification for vigorous state activity to overcome them, a justification which won over all but the most doctrinaire enemies of state activity. The argument then was not one of principle, but concerned the magnitude and the modalities of government intervention.

With the advent of high and continuing general unemployment in the industrialised countries, this intellectual framework has become increasingly untenable. There is clearly little point in measures to encourage geographical and interoccupational mobility if there is high unemployment in all occupations everywhere. This inconsistency in traditional approaches to labour market adjustment is apparent to many observers. On perceiving the inconsistency, there are several types of reaction. The first is to try to ignore it, so that one observes government-sponsored schemes in which people acquire new skills and then return to the ranks of the unemployed. A second is to abandon economic logic and respond to the social and political pressures of high unemployment, leading to the job creation and job subsidy programmes which simply substitute disguised unemployment for open unemployment. A third reaction is to recognise that the nature of the labour market problem is fundamentally different in the presence of generalised unemployment and calls for a different analytical framework and different policy responses. As has already been made abundantly clear in the preceding discussion, this is the reaction which underlies this report and which is reflected in this chapter.

In this chapter therefore we shall adopt an approach to the question of unemployment and labour market efficiency which is much more broadly based.
that which prevailed in the 1960s, whatever the validity of the latter approach at that time. In addressing the question of adjustment efficiency in the labour markets of our countries, we shall not be asking: "Which country has dealt best with its unemployment problem?". To ask such a question is to address oneself to symptoms rather than causes. Rather, in this study we are asking, in general, "Which country has been most successful in preventing unemployment from arising and how has this success been achieved?". In this chapter, more specifically, we are asking what differences are there, in our countries, in the functioning of their labour markets, and what bearing these differences have on their success in adjusting and hence containing generalised unemployment.

First we shall consider the meaning of "the labour market" and its importance to this study. In general terms, the labour market is the places or procedures whereby potential employees and employers meet for the purpose of striking a bargain. One thinks immediately of the initial hiring (and firing) of workers by firms and the search process of workers and recruitment efforts of enterprises as constituting the labour market. But the economic performance of a country does not just depend on the efficiency with which vacancies and unemployment are matched. We need to look more broadly at the whole process whereby, on the supply side workers make their participation decisions, and on the demand side how companies' labour requirements and use are qualitatively and quantitatively determined. This requires us to examine the external labour market but also the labour market which is internal to the company. Through the external labour market, workers are re-allocated between companies, a process which may or may not involve them in a spell of unemployment. The internal labour market, on the other hand, consists of the mechanisms and procedures both economic and social which determine the allocation of labour within companies, the rewards which workers receive, the organisation of work, promotion procedures and criteria, training and so on.

In the first half of this chapter we concentrate on the role of the labour market as a determinant of a country's productivity performance. We shall place considerable emphasis on the question of labour force quality. Such an emphasis is somewhat unconventional because overall labour force quality is not usually seen as a factor which greatly influences (or is influenced by) the operation of market mechanisms. Yet in a broader context the relationship between labour force quality and labour market efficiency is
fundamental. The labour market cannot be said to be functioning efficiently unless it provides the individual worker with the opportunity and the incentive to develop his productive capabilities to the full, nor if companies' ability to innovate and improve production methods are constrained by an insufficiently educated and trained workforce. Thus an inefficient labour market results in social and economic losses which are liable to manifest themselves in social discontent and problems of adjusting to a changing economic environment.

Labour force quality is not just a matter of education and training. Labour force quality and the organisation of production clearly interact in a very important way. Put at its simplest, the organisation of production (and indeed what is produced) is constrained by labour force quality, yet at the same time the ability and incentive to acquire skills and experience (both on and off the job) is a function of the way in which the workplace is organised. Furthermore, this is not just a question of the quality of workers, but also quality of the management component of the labour force which is discussed in Chapter 3. Hence these latter questions will also be discussed in this chapter and we will try to bring the points from Chapter 3 into our conclusions. It hardly needs to be said that both static and dynamic efficiency are involved here, particularly as regards the ability to achieve "incremental change".

In considering labour force quality, it is necessary to examine such questions as the educational attainment of workers, how skills are acquired, whether skills are formally recognised, and what degree of flexibility exists in terms of opportunities for broadening and developing skills during the course of the individual's working life. We shall now look at these questions in the countries studied, making comparisons as the discussion proceeds.
UNITED STATES
Quality of the United States workforce

There is surprisingly little detailed research work carried out on either supply of or demand for "vocationally" qualified manpower in the United States.\(^1\) The lack of data is partly due to the federal system and partly to the heterogeneous ways in which vocational qualifications are acquired. There is a tendency to measure labour force quality in terms of years of full-time education because these are the only data available, but to do so involves the implicit assumption that the usefulness of education may be measured by its duration.

Considerable attention has been given to graduate unemployment in the 1970s — possibly again without analysing this in terms of educational content but only in terms of numbers. There has been no apparent consideration of the problem that an expansion of numbers in university-level education might mean a corresponding drop in the number at the intermediate level and that, therefore, there was a cost to be set against the benefit.\(^2\) Great attention has also been given in research and policy-making to disadvantaged groups in the social and economic sense (blacks, women and unemployed).\(^3\)

What studies have been done on the changing composition of the labour force have not clearly separated supply and demand and have considered only broad categories. These are based on census data which is less concerned with economic function than with social status classification. Lack of concern about overall supply/demand balance for particular skills and skill content, reflects the United States propensity to rely on market mechanisms to sort these things out. But there are weaknesses in this approach. First the stock of skills cannot be changed quickly, hence there is need for more forward-looking planning than the market can provide if deficiency or redundancy of skills is to be avoided. Second, as is well known, there is the "free rider" problem in terms of the private supply of training. Of course this is recognised in the fact that the bulk of training is provided by public authorities (State and Federal), but there has been little comprehensive planning or evaluation of the overall impact of this on labour force quality.

As in all countries, there is an inherent tension in the education system between vocational and more general "academic" criteria. But this tension is
particularly acute in the United States because of the length of the secondary or high school course. An American pupil "graduates" from high school at 18, and anyone who leaves earlier is considered a "drop-out". With 18 as the age at which it is normal to leave school, the United States is very similar to Japan, but by other Western standards this is a high leaving age. For those proceeding to higher education of course this is quite satisfactory, but for those proceeding to intermediate qualifications, the content of the last 2-3 years in high school becomes very important. Here the tension appears because, on the one hand, given the social pressure towards "college" education, there has been some resistance towards providing many vocational and technical courses in schools, and on the other hand, reluctance to encourage individuals to close off the possibility of college by specialising in these subjects. In practice, the amount of vocational training offered in high school varies widely from state to state and from school to school. No comprehensive picture seems to exist. What happens to vocationally oriented students after leaving high school is also difficult to establish clearly, because any post-18 educational or training establishment is referred to as a "college" so that the distinction between "higher" or university-degree courses and intermediate level courses is blurred.

There are a number of routes for the acquisition of vocational skills. The main way in which the government encourages vocational education is by financial assistance to approved courses, both at the secondary and post-secondary level. One firm (though dated) statistic is that in 1969 eight million people were enrolled in such federally-assisted programmes which ranged from the highly specific (e.g. dental assistant) to the more general (e.g. machine-shop and blueprint reading). In additional another one-and-a-half million were enrolled in privately-financed vocational schools. 4

A second way of acquiring vocational training is through an apprenticeship programme. But formal apprenticeship is of minor importance as a training method in the United States. It has been estimated that only one-tenth of the economy's requirements of craft workers are met in this way, the more important source being the large but unknown volume of employer training which is mostly informal and which obviously is highly variable. Training received in the armed forces has been an important source of trained
manpower in the United States economy, as far as the existing stock is concerned, by virtue of World War II, the Korean War, and the Vietnam War.

In the field of education and training, the main policy tool in the United States Federal Government's hand is the funding of vocational training at the secondary and, more importantly, the post-secondary levels. But this can only influence matters to a limited extent, since the availability of funds cannot in itself guarantee that they will be taken up or that they will be put to the best possible use. These are defects which are largely inherent in the Federal system. A related defect is that there are no nationally recognised qualifications and that such qualifications as are awarded are highly variable in level and content. Similarly, on-the-job training is more important than one might expect in such an advanced economy, and to an outsider this seems rather unsatisfactory in view of its inherent defects. The most important defect of on-the-job training in a period of rapid technological change are its inherent conservatism (since only existing practices will be taught, and taught in the main by older workers) and its weakness in providing the theoretical underpinnings necessary to even the most mundane skills. It also reduces inter-company and inter-sectoral labour mobility since skills acquired "on-the-job" cannot be readily marketed or transferred. As a matter of politics there seems to have been considerably more interest and activity in general manpower affairs (as opposed to the problems of disadvantaged groups) by the Federal Government in the 1960s, especially under the Kennedy administration, than in more recent years.

All these factors have implications not only for the size and quality of the stock of trained workers (and therefore for the level of output they are capable of producing); but also for structural change. Reliance on on-the-job training and lack of national standards in qualifications (to say nothing of whether their content is appropriate) are damaging to workers faced with either redundancy or the need to acquire new skills, or both. They are damaging also to enterprises who may find it difficult or even impossible to take advantage of possibilities for improving product and process technology. Worse still, they may not even perceive the possibilities for improvement. Lack of concern over this question may reflect a view that management-level, highly qualified people identify the possibilities, and technicians or secondary level people merely implement them.
On-the-job training

It is impossible to discuss questions of labour force quality and how skills are acquired without becoming involved extensively in questions of on-the-job training. In turn, this cannot sensibly be discussed without getting into wider questions of workplace organisation and the industrial relations system in so far as these impinge on it.

On-the-job training is acquired only to a limited extent incidentally. For the most part, it requires an employment system within the enterprise in which management identifies workers with training potential and makes it available within a systematic, if informal, training programme. This must necessarily be accompanied by a career structure for those acquiring skills if they are not to take these skills elsewhere (the classic "free-rider" problem in training).

The attitudes and behaviour of trade unions may facilitate or obstruct developing such an employment system. Inevitably, an employee development programme involves elements of competition and selection among workers which may not be congruent with the trade unions' egalitarian instincts and may appear to weaken their influence on work arrangements and manpower deployment, and generally to extend management prerogatives. On the other hand, trade union members, and particularly active members, are inclined to take more of a "lifetime" view of their jobs and to welcome the opportunities for the development of the individual's talents which an on-the-job training programme provides. Thus there are forces pushing trade unions in both directions.

There is no evidence, however, that the organisation and behaviour of trade unions in the United States have acted as a barrier to improving labour force quality or, more generally, to productivity growth. Such evidence as exists points in the opposite direction. First, there has been considerable emphasis on "job enrichment" as a major trade union objective in the last decade or two, in which individual progress through skills acquisition has been an important part. Further, trade union membership is stronger among older workers, and labour turnover is lower among older workers and among trade union members - turnover being an important indicator of job satisfaction. It is also significant that the earnings differential between younger and older workers has been increasing. These turnover and earnings
data suggest, admittedly in a very indirect way, that older workers have benefited significantly from on-the-job training, that their extra skills and knowledge are being rewarded, and that they are deriving additional job satisfaction which is reflected in lower turnover. As argued below, the situation in many non-union enterprises may be very similar—we might call them "quasi-unionised".

Question of turnover and mobility are thus ambiguous. If the alternative to on-the-job training is no training, then clearly one would opt for the former even though it reduces mobility. The evidence suggests that a considerable amount of reasonably efficient on-the-job training occurs in the United States. But as remarked above, this may not be very helpful from the structural change point of view because it reduces mobility and may also inhibit the achievement of non-marginal technical change (though a rather different conclusion on this latter question is reached in our discussion of Japan, below). As far as the external labour market is concerned, we have already argued that lack of formal, national or regional qualifications at below graduate level is a handicap to mobility which must reduce the efficiency with which the labour force is deployed and act as a disincentive to the acquisition of skills too. To this must be added, as the United States country study makes clear, the absence of any national employment service. This handicaps adjustment by unskilled workers too, for whom the questions of on-the-job versus formal qualification is irrelevant.

The United States industrial relations system

The starting point for any discussion of the United States industrial relations system must be the low and declining proportion of the workforce which is unionised. The basic facts are fully presented in the United States country study (p. 33). As is indicated there, the legislative framework has played some considerable part in the decline of trade union membership. A union wins the right to organise by means of a referendum of workers, supervised by the National Labor Relations Board. Similarly the employer, by means of a referendum, can achieve the withdrawal from a union of the right to organise workers. Unions' rate of success in winning the right to organise in such elections has decreased from more than 65 per cent in 1955 to about 45 per cent in 1979, the lowest in the 44 years' history of these elections. At the same time, in 75 per cent of the 777 "decertification" elections in 1979, unions lost the right to organise.
In large part, this decline is explained by the overt hostility of United States management to unionisation which has led to the development of an active consultancy business which specialises in advising management on how to "keep the union out", an activity which again is assisted by the legal framework. In addition, the movement of economic activity towards the "sun belt" has been motivated in part by the desire to escape from trade union influence by relocation in states where legislation makes organisation difficult.

As in most countries, media publicity is not very favourable towards trade unions, and this has undoubtedly contributed to the somewhat adverse public image of trade unions in the United States - an image which reflects the deep-seated belief in the efficiency and equity of unconstrained market forces. The image of trade unionism in the United States, of course, has not been helped by a few notorious cases of corruption in particular trade unions.

For the purposes of this study, the key question is what effect this trend towards checking trade union power, both in terms of "bread and butter" issues and on broader political and social issues, is having and will have on industrial efficiency. In order to answer this question, it is necessary to look more broadly at the industrial relations system in the United States (in which trade unions are embedded) and ask whether it is socially efficient.

The standard argument against trade unions (in the United States and elsewhere) is that they introduce rigidities at all levels in the determination of wages and conditions of work. Within the company this is said to be damaging to efficiency because it becomes more difficult for the firm to reward the effort and skill of individual workers, and more difficult to introduce changes in working arrangements, even if workers in aggregate share in the benefits of resulting efficiency gains.

The underlying assumptions here are that management of firms are competing against one another for the available supply of labour. Any worker who is "exploited" by his employer by being paid less than his value to the firm will be tempted to go elsewhere where his value will be rewarded. It is also assumed that any firms which fail to organise production at peak efficiency will be uncompetitive in the market place, which will ultimately bring pressure to bear on management to mend its ways. In such a competitive
model, unions are at best redundant and at worst damaging, in so far as they have any effect at all.

We have already argued that in the real world, neither the product market nor the labour market actually function in accordance with the competitive model. Nonetheless, it is entirely possible, in principle, for trade unions to have the damaging effects suggested above, and one can find concrete individual cases where they do. But if this were generally true in the United States, we would expect there to be some systematic difference between the performance of unionised and non-unionised enterprises which could be uncovered by statistical studies.

Studies of comparative labour productivity in unionised and non-unionised plants (which have allowed for such factors as differences between plants in their capital equipment) have, in fact, shown a tendency for productivity in unionised plants to be higher than in non-unionised, rather than lower as the "competitive" model would imply. This is clearly very damaging to the intellectual justification of the widespread anti-union view which exists in the United States and elsewhere.

In broad terms there seem to be two main explanations for this. First, unionisation improves the quality of the labour supply. It does that partly by reducing labour turnover, for high turnover is particularly damaging to productivity in a country such as the United States where on-the-job training is relatively important. The other fact increasing the quality of the labour supply is greater job satisfaction which increases work effort, and which in turn partly explains the lower labour turnover.

Second, unionisation reduces managerial discretion. Given the general weakness of competitive pressure both in the product and labour markets (for reasons already elaborated), managers are not obliged to use their workers in the most efficient way. Instead, organisation theory suggests that they will aim at satisfactory rather than optimal labour utilisation, attempting to improve on this only when some new source of pressure to do so arises. Unionisation is just such a pressure, which is exerted not only by forcing the enterprise to pay higher wages (and therefore to pay more attention to productivity if profits are not to suffer), but also by challenging existing working arrangements. Thus unions have important influences on the internal
organisation of companies. In many ways they serve as a surrogate means of producing the benefits of competition which they are often alleged by their critics to undermine.

Furthermore, as Dunlop has suggested, the effects of unions may far outweigh their numerical strength. Many of the effects of unions described above are also to be found, paradoxically, in non-union firms. An analysis of the characteristics of large non-union firms shows that, in order to "head off" the threat of unionisation, "many companies, especially large ones, have learned to manage their human resources very effectively ... . Some of the large non-union companies studied, resembled the large unionised companies. Some, moreover, imposed upon themselves policies that are more restrictive than those that may emerge or be imposed under unions' contractual arrangements. This is true not only with respect to pay and benefits, but more importantly, with respect to the plant's operating rules."9

**Strikes**

Strictly speaking, strikes are only legal in the United States when the contract is up for renewal. This is not to say that strikes on other occasions may not and do not occur, for the law is not particularly easy to enforce. Disputes which arise during the terms of a contract may be settled by appeal to the court (which typically appoints arbitrators to settle the issue), or by an arbitration procedure which is built into the contract itself. However, in the nature of things the contract cannot cover the minutiae of day-to-day working arrangements where minor disputes continually arise. In this context, whether unions have the power to veto changes in working arrangements (manning, track speed, etc.) and how they use that power is crucial for "incremental change". Although detailed case studies are hard to find, it does not appear that United States unions have such power, at least not on a scale comparable with the United Kingdom - a country which provided perhaps a polar example, at least until recently. This is not because the United States unions are highly centralised and weak at the plant level, as in the Federal Republic of Germany. On the contrary, since plant bargaining is the norm, unions are potentially powerful at the shop-floor level. Union representatives would appear to be continuously involved on a day-to-day basis in the detail of running plants. But such day-to-day friction does not appear, from the strike statistics, to lead to many
stoppages of work. One is forced to conclude either that unions "give in" most of the time (a hypothesis which is perhaps consistent with declining union membership, but is somewhat inconsistent with unions as democratic organisations), or that most minor disputes are resolved by compromise acceptable to both parties.

JAPAN

The Japanese labour market has three central features which distinguish it sharply from those of the other industrialised market economies: first, the "lifetime" employment system; second, the NENKO (reward by length of service) wage system; and third, enterprise trade unionism. These general characteristics are now well known to Western observers, but their significance and relevance as a model for other countries is not always well understood. On the one hand, some observers have concluded that these characteristics are deeply rooted in the peculiar history and culture of Japan, and that it is neither possible nor desirable to attempt to replicate any features of the Japanese model in other countries however well it may work in Japan. On the other hand, at least one authority has concluded that, far from the West learning lessons from Japan, Japan has much to gain from moving more towards the Western pattern of employment and industrial relations. Still others have disputed that, in fact, the functioning of the Japanese system is as radically different from other industrialised countries as may appear at first sight.

Let us accept for the moment that the three features listed above are, in fact, the rule rather than the exception in the Japanese labour market (although we shall examine more closely the factual basis of this assumption below). What are the implications for the purposes of this study?

First we shall consider the quality of the labour force and how this is "revealed" in productivity. Using education as the measure of labour force quality (and in this context we are referring to the blue-collar labour force), Japanese labour force quality is high and has grown rapidly over the past three decades. Virtually everyone (93.5 per cent in 1978 - up from 42.5 per cent in 1950) remains in full-time education until the age of 18, and beyond this point nearly half go on to further full-time education in universities and other institutions taking courses lasting for at least two years but more typically for four or more years.
Thus the Japanese labour force clocks up a large number of years of full-time education. But if we leave aside the university educated, we find relatively little emphasis on formal vocational training in industrial skills. Only one-third of 15-18 year olds take vocationally-oriented courses and the majority of these take commercial courses or courses such as home economics and welfare, so that we can reckon than only 10 per cent or so of the school population receives any vocational preparation for work in industry. Vocational education beyond 18 is provided by numerous private, specialised educational establishments and by technical colleges, but the numerical importance of these is quite small.10

In these respects, there are quite close similarities between the United States and the Japanese education systems, more specifically in the proportions who stay at school until 18 and who go on to universities, in the provision of rather general vocational courses from 15-18 and after for those who do not go on to university, and in the comparative absence of any national vocational educational or training schemes or qualifications. Both countries rely on individual incentives and a variety of educational establishments, many of them private, for the provision of vocational training and skills acquisition after leaving school.

Correspondingly, both countries rely heavily on on-the-job training, not leading to formal or "marketable" qualifications, for the training of their "intermediate" labour force. It is at this point that the special features of the Japanese labour market become important. The lifetime employment system means that there is heavy emphasis on recruitment of school leavers (with strong competition on both sides of the market). Having recruited the "cream of the crop", the Japanese firm then finds it worth while to engage in extensive on-the-job training which appears, notwithstanding its inherent informality, to be lengthy and thorough. The essential point is that the lifetime employment convention affects both employer and employee behaviour. The employer escapes the "free rider" trap which is elsewhere such a disincentive to providing training. The employee equally takes a long view and is willing to move around within his organisation to build up a stock of knowledge of all kinds which he knows will serve him in good stead later. Here we have a clear contrast with the modalities elsewhere. In general, neither the employer-incentive nor the employee-incentive can operate as strongly elsewhere where mutual attachment between employer and employee is
weaker. In the Federal Republic of Germany and the United Kingdom (as we shall see below) this is offset by a stronger system of formal training leading to marketable qualifications, but this does not exist in the United States.

The quality and quantity of on-the-job training is, by its very nature, impossible to assess except by means of case studies which appear to be few and far between. However, the evidence which exists suggests that considerable attention is played by the employer to the development of the individual's productivity as his career progresses, so as to ensure that his productivity keeps pace with the progression of earnings which goes hand in hand with lifetime employment. But unlike other countries, because of the relatively low degree of inter-firm mobility, it is not strictly necessary that pay and productivity remain closely in step: it is only necessary that (discounted) lifetime's earnings match lifetime (discounted) productivity. It has been argued that the underlying rationale of this system is not, as is frequently assumed, employer paternalism. Therefore the system is not uniquely rooted in Japanese culture, but rather is based on perfectly rational profit maximising behaviour of employers, and as such is fully compatible with the "human capital" approach to education and training which has been developed by Western economists in recent years. The difference is that in the Western labour market model, workers have an incentive to acquire formal qualifications which they can sell in the external labour market. Skills acquired informally through on-the-job training are a much less liquid asset and can only be sold, in the main, to one's current employer. This generates demands, via trade unions, for security and for length of service (both proxies for skills acquired on the job) to be rewarded by the pay structure. In the Japanese model, employees have less incentive to acquire formal qualifications because the internal labour market dominates the external labour market. The other more crucial difference is that employers have far more incentive to provide on-the-job training because there is much less of a "free rider" problem, as remarked earlier. "Training is closely integrated with other sub-systems such as rank and job status, work organisation, allocation of workforce, promotion, wages and other internal rewards, etc."

Another advantage (or at least effect) of lifetime employment and the NENKO system is the much reduced employee resistance to being moved around within the firm. Of course, some of these moves are motivated by the desire to develop the employee's skills, but doubtless many of them are purely for
the convenience of the firm (particularly in recession). Second, as far as competition between workers is concerned, an older worker need have relatively little to fear from teaching all he knows to a younger worker.

One would imagine that security of tenure and the strong relation between earnings and seniority or length of service would be detrimental to individual incentives. In fact, the reverse seems to be the case: Japanese workers at all levels are renowned for their dedication (arriving early, not taking all holidays, etc.). Again this phenom is widely attributed to socio-cultural factors, but again while not discounting this entirely, it seems that more conventional economic incentives are present. First, "wage-for-age" operates only in undiluted form in the worker's early career (up to the age of about 35). Thereafter merit-based promotion becomes increasingly important. However, merit is difficult to assess, especially in a system where there are social pressures towards group responsibility and presumably, in the absence of payment by results, little direct monitoring of the individual's output. Hence the worker must demonstrate his merit in "visible" ways — arriving early, not taking holidays, attending innumerable meetings of "quality circles", etc. An undesirable feature which has been pointed out is that the worker has an incentive to ingratiate himself with his superiors as a means to advancement.

The role of trade unions

All the evidence suggests that unions in Japan play a very limited role in influencing the micro-economics of either the internal and external labour market. Like unions in the United States they are organised on an enterprise basis, but at this level they are so closely integrated with the company itself that they are often described as "company unions". With all it pejorative overtones to western ears, this is a description which Japanese labour economists are often at pains to rebut. Most firms practise a good deal of employee consultation, and in larger firms this is often quite highly formalised, consisting of structured meetings at which all aspects of working arrangements and manpower deployment are discussed.

The general view of observers is that these consultations have, for better or worse, undermined the emergence of autonomous unions in the workplace, to the extent that it is often difficult to know where bargaining
This contrasts very strongly with western practice, where the distinction between bargaining and consultation is regarded at least in the United Kingdom and the United States as a crucial issue of principle and is usually insisted upon. Indeed it is by no means unknown for workers in the United Kingdom to refuse to engage in consultation on the grounds that it might undermine their bargaining position. Further, a continuous objective in the United Kingdom is to extend the definition of which is "bargainable" into areas which management would prefer to remain purely consultative. This is the perfect opposite of the Japanese situation.

The weakness of Japanese unions on the shop floor stems from a weakness of independent organisation. Where, for example, in the United Kingdom the shop steward (an unpaid part-time union official) stands between the worker and his foreman and other superiors, in a Japanese factory the workers' union representative may well be his foreman. The weakness is not just one of organisation, though, but of mentality; Japanese workers seem to have little concept of individual solidarity or standing up for their rights. Formal grievance procedures are very little used and strikes over "victimisation" of individuals unknown. The historical origins of these phenomena are doubtless social and cultural, but the institutional structures which have developed help to perpetuate them.

In fact unions both at enterprise and national level have been overwhelmingly concerned with wages; in 1981, 86 per cent of industrial disputes were over wages and allowances. This picture has been changing with the advent of the world recession, however: the percentage fell steadily through the 1970s, although the "other" category is the only one showing an increase.

THE UNITED KINGDOM AND THE FEDERAL REPUBLIC OF GERMANY

Workforce quality

Due to the fact that the minimum school-leaving age was, until recently, comparatively low, and more importantly to the small numbers who stay on at school beyond this point, the United Kingdom labour force is the least educated of any of the countries studied. Whereas in Japan as long ago as 1970, 35 per cent of the male workforce had completed 12 years schooling or
more, the United Kingdom figure is in the range 10—15 per cent. In terms of current flows, only about 20 per cent of each cohort remain at school until 18, compared with the figure of 94 per cent for Japan quoted earlier, and nearly 80 per cent in the Federal Republic of Germany.

When we look at the proportion of the workforce with university degrees or their equivalent, the difference is not spectacular — 7.1 per cent in the Federal Republic of Germany, 5.5 per cent in the United Kingdom. But the more striking difference between the United Kingdom and the Federal Republic of Germany has been in the proportions with intermediate-level vocational qualifications. Because the Federal Republic of Germany and the United Kingdom have a relatively formalised national system of vocational qualifications (compared with Japan and the United States), the level of qualifications can be examined more easily than in the latter two countries. A careful and detailed comparison has recently been carried out by Prais. He reported that nearly two-thirds of the United Kingdom labour force was without vocational qualifications — defined to include "time-served" qualifications — of any kind, and this remarkably high figure was obtained despite the fact that the criterion of "qualification" was set extremely low. (The corresponding figure for the Federal Republic of Germany was one-third.) Admittedly, the "unqualified" category includes those who have academic but not vocational qualifications, but even if these are treated as qualified it remains true that half of the United Kingdom labour force is without any academic or vocational qualification whatsoever. Of course, the poor state of the stock of manpower is a legacy of inadequate training and educational provision in the past. If this had subsequently been remedied, one might feel more optimistic about the future. But the Prais study also reveals that the current flow of qualifications being achieved by young people will not result in any significant improvement in the quality of the labour force as a whole in the foreseeable future.

The responsibility for the low level of education and training in the United Kingdom must, of course, rest with successive governments. There have in fact been several major government initiatives to increase the provision of education and training in the past 20 years. First, higher education was expanded considerably in the 1960s. Second, the Industrial Training Boards were set up in 1964. In a laudable attempt to overcome the "free rider" problem in the provision of training by private firms, a "training levy" was
exacted from firms to finance training at the industry level, with provision for refund of the levy to firms carrying out their own approved training programmes. Finally, in 1972 the minimum school leaving age was raised from 15 to 16, and this was followed in the mid-70s by the abolition of selection by competitive examination in secondary education; a system which was eventually generally recognised as leading to considerable under-achievement.

None of these measures, however, has been on a scale sufficient to permit Britain to catch up with other industrialised countries. Where Japan and the United States send 33 per cent of each cohort to universities, and the Federal Republic of Germany 21 per cent, Britain sends only 12 per cent. Similarly, the contribution of the Training Boards and other initiatives in vocational training have apparently added very little to the flow of those acquiring intermediate qualifications. Prais notes caustically that awareness of the shortcomings of the present situation has not yet reached the point of collecting any comprehensive data on the numbers reaching certain specified levels of competence, but the fragmentary data available gives no comfort. Finally, while the reforms in secondary education have increased the numbers leaving school with at least some formal academic or vocational qualification, it remains true that half of the population leave school in the United Kingdom at the age of 16 and 60 per cent of these have passed no vocational examinations whatever.

As if this picture were not extremely sufficiently bleak, the situation is currently deteriorating. The raising of the school-leaving age and the re-organisation of secondary education on a less elitist basis took place in a context of declining financial provision, in real terms. Since the beginning of the 1980s, funding has declined even more sharply and the higher education sector has also been drastically cut, with the heaviest proportionate cuts falling on some of the more technologically and vocationally-oriented universities. The future of the Industrial Training Boards is highly uncertain, while as a result of the recession the number of new apprenticeship places offered by firms has diminished to a trickle.

It might be asked why this apparent grave deficiency in the supply of qualified manpower does not manifest itself in shortages and consequently bidding up of rewards of those with qualifications which are scarcer. This question underlay much of the discussion of the Finniston Committee report on
the supply and demand for qualified engineers.\textsuperscript{18} The paradox for the
engineer, which is part of a wider paradox relating to most skills and
qualifications, is that by all objective standards there is a massive
shortage, yet no apparent tendency for market forces to work in the
appropriate way, bidding up rewards and thereby attracting new entrants. Even
if a shortage did result in higher relative rewards, of course, this would not
in itself be enough because it would still be necessary for the authorities to
make available the necessary educational facilities to permit individuals to
acquire the qualifications and skills which were at a premium. Furthermore,
we would not expect increased numbers to appear overnight. But within the
system there are few, if any, indications of shortage (and even less so since
the onset of the depression); the only evidence is that provided by
international comparison.

Part of the explanation of this paradox is provided by the United Kingdom
case study's illuminating discussion of the social and cultural factors
influencing the structure of education and training in Britain, and more
generally attitudes towards industry. Some of these factors and their effects
have already been examined in the previous chapter in relation to managerial
quality and behaviour, and there will be a further comparative discussion
below in the section on the Federal Republic of Germany.

Another explanation is that market forces can only be expected to respond
to the marginal imbalances between supply and demand, not to "global"
shortages. The shortage is after all hypothetical, i.e. it exists only in
comparison with other countries. As far as the industrial system of the
United Kingdom is concerned, the structure of production has adjusted to
correspond to the manpower which is available. Consequently there is no
shortage. There is a fair amount of evidence that many sectors of British
industry are only successful in products for which requirements of skilled
manpower at all levels are relatively modest. Consequently, Britain is in the
process of being "squeezed" by competitive pressure coming on the one side
from developing countries where wage rates are lower, and on the other side
from other industrial countries where the labour force (at all levels) is
better qualified and more competent.

Another related explanation is that there is a shortage of people who are
capable of perceiving the shortage, i.e. good managers. This results in a
vicious circle, and it is interesting that this type of explanation has also been put forward to explain another paradox relating to R and D and investment. Put crudely, the argument in that context was that there was no perceived need to spend more on R and D because the investment opportunities in which R and D "output" could be embodied were themselves not perceived. Consequently, stimulus to R and D spending by various government actions would not in itself achieve very much. This line of reasoning implies that the vicious circle cannot be broken until the quality of management has been raised to the point where the need for a better qualified labour force is recognised.

On-the-job training and the industrial relations system

So far we have discussed the stocks and flows of qualified and unqualified workers. Now we want to examine the way in which these workers are used. In the case of Japan, we argued that there was a lack of formal qualifications in vocational training, but that this was more than compensated for by extensive, if informal, on-the-job training and by freedom to deploy the labour force and to organise production in such a way as to achieve high productivity and efficient on-the-job training simultaneously. If such characteristics were to be found in Britain, this might similarly offset the paucity of numbers acquiring formal qualifications.

Unfortunately, the reverse seems to be true. The industrial relations system, the way in which work is organised, and the qualifications and skills of the workforce, appear to interact in Britain in a peculiarly unfavourable way. This interaction appears to be detrimental to both static and dynamic efficiency, not only directly but also via some indirect effects such as reduced job-satisfaction, increase in petty disputes, work stoppages, etc. These points will now be elaborated.

The importance of the industrial relations system is brought out very clearly in the United Kingdom country study. The first salient feature is that British unions are organised to a far greater extent than in any other country on an occupational basis, rather than in terms of companies or industrial sectors. Historically this is because skilled workers organised themselves at a comparatively early stage in Britain's industrial history, in order to protect the premium which their skills commanded; unions for
unskilled workers came half a century later. One of the ways in which skill premia were (and still are) protected was by the system of apprenticeship by which trainees qualify by "serving time" working alongside qualified workers; though such a system of course is not unique to Britain, its rigidity in Britain serves as a major bottleneck to increasing the stock of skilled workers. Though employers, of course, recruit apprentices and finance their training (to the extent that it does not finance itself through low wages), trade unions have considerable influence on numbers and the content and duration of the apprenticeship period.

The second, and more important feature of the British scene, is that skills (at least in engineering sectors) attach more strongly to jobs than to people. In other words, the skill of an individual (and hence his status and rewards) are defined more strongly than elsewhere in terms of the content of his job. Not unnaturally, workers and their unions are extremely concerned about the content of their work and any tendency for the content to be diluted, downgraded, or taken away from them is quite correctly seen as a threat to their position in the occupational and earnings hierarchy. Unions have succeeded in making job content (and therefore demarcation) a bargainable issue to a very great extent. This in part is a result of the more general fact that there exists no general legal framework laying down the means and content of collective bargaining; unions and management simply bargain over whatever they agree to bargain about. It is also a consequence (but also a cause) of the greater strength of the United Kingdom's unions at the plant and workshop level.

A certain set of tasks constitutes a job-territory, and because the skills attach to the set of tasks rather than to the workers, changes in these tasks are bound to generate considerable friction between unions in the workshop or enterprise, as well as between workers and management. This has been well documented in a number of studies, as has its damaging effects on productivity both in terms of current levels of productive efficiency and in terms of the ability to secure "incremental change" and hence growth of productive efficiency.

One comparative case study of particular engineering plants in Britain and the Federal Republic of Germany showed very clearly how, in the United Kingdom, the relatively small number of skilled workers, low general levels of
skills and their narrow base, the extent to which job content was protected by trade unions, and the resulting organisation of production, all contributed interactively to low efficiency levels. The system also results in a narrowing of work and career horizons, reduced job satisfaction, and greater need for supervisors to perform integrative functions. Supervisors have difficult, unpopular and frustrating jobs, and their lives are not made easier by the fact that they too, being products of the system, are relatively poorly trained.

Change in working methods is resisted because in the main the training of British workers is too specific to particular tasks and does not give them the generalised skills which can be applied in new situations; because the system does not facilitate the acquisition of new skills; and because, from the trade union's point of view, change may benefit some of its members but will be harmful to others. Any change which alters significantly the content of any particular job will therefore be resisted, and this has been reflected in the frequency of demarcation disputes or strikes about 'who does what' which foreign observers have found so incomprehensible and perverse.

A consequence of this state of affairs, which has proved very damaging to productivity (and more generally to job satisfaction) is that it discourages consultation. Because job content and work organisation are highly sensitive bargaining issues, neither trade unions nor management are particularly enthusiastic about consulting with one another over these issues for fear of undermining future bargaining strength. Consequently, various types of approach to implementing change have been employed by management. One has been described as the "marketing approach" in which management presents an attractive package of proposals, hoping that they will win ready acceptance and that snags will show up only later. Another technique identified by some observers is to inform workers of proposed changes at a very late stage, often in the form of a fait accompli. This behaviour may be held to reflect the fact that "many companies in Britain are run in non-participative, autocratic and paternalistic styles of management, limited in personnel terms only by the unions' bargaining power." But equally such behaviour may be seen more charitably as simply a response to the situation. Just as important perhaps is an alternative response by management which has not been well documented but which would appear widespread; confronted with the difficulties of achieving change, to do nothing. This reaction may help
to explain low investment, and the difficulties of achieving, without many compromises, the necessary reorganisation of work may help to explain the disappointingly low returns on such investment as has been carried out.

In sum, it is clear from the evidence that the British "production system" - the outcome of education, training, recruitment and promotion; the organisation of production; and the industrial relations system - is characterised by gross systemic faults. Since at this stage we are concerned not to prescribe but to describe, analyse and compare, discussion of policy responses is postponed.

When we turn to examine the same phenomena in the Federal Republic of Germany, we find that the picture is in every way radically different. We began this section by contrasting the low levels of vocational qualification of the United Kingdom with those of the Federal Republic of Germany. The underlying reason for this difference, which emerges from a study of training policies in the two countries, is that in the Federal Republic of Germany education and training are much more closely linked. There exists a highly organised and long established system of general training for school leavers, supported by schools, employers' associations and trade unions and centrally co-ordinated by a Ministry of Vocational Training. All 15-18 year olds who are no longer in full-time education are required to undergo a course of training involving attendance one day a week at a vocational training school, and may only be employed by companies having approved training facilities. Only one-tenth of school leavers escape this requirement in one way or another, in contrast to the situation in the United Kingdom where a 1973 survey revealed that only 26 per cent of 16-19 year olds were still in full-time education, and more than 80 per cent of the remainder were undertaking no form of further education whatsoever. 21

Thus it may be seen that virtually every school leaver in the Federal Republic of Germany receives a relatively formal training in his or her initial choice of occupation, whether it be florist, plumber, sales assistant or office clerk - whereas in Britain such training would be quite exceptional. Of more interest to the present study, however, is the question of numbers and training methods for those acquiring craft skills in the area of manufacturing. Such a comparative study of the machine tool sectors in Britain and the Federal Republic of Germany has been carried out. At first
sight, the differences between two countries in occupational structure appeared relatively small (see Table 4.1). But to a large extent, of course, this occupational classification merely reflects the common underlying technical requirements of the productive processes in the sector in question. The real difference lies not in the job structure but in the qualities of skill and experience possessed by those performing them, which in turn is largely a function of the training they have received.

The difference here between the two countries lies first in the fact that the Federal Republic of Germany's system for training skilled workers lays greater emphasis on attendance at technical college and on passing examinations which include both written and practical works. In Britain, achieving craftsman status in engineering is almost entirely a matter of serving out the time-period of apprenticeship: there is no requirement to pass any examination, written or otherwise. As one would imagine, this is believed to undermine incentives on the part of both the trainee and his employer. As remarked earlier, some marginal efforts over the past 20 years have been made by the government to improve this situation (discussed more fully in Chapter 5), but against a background of rapidly declining manufacturing employment, the number of apprentices has fallen even more rapidly while no tangible improvement in training methods has occurred.

A second difference between Britain and Germany in the training of skilled engineering workers is that the acquisition of a qualification may well serve as a stepping stone in career advancement. Having qualified as a skilled worker (Facharbeiter), a young worker may then proceed to prepare for the foreman's qualification (Meister) by means of a study programme which is generally recognised to be substantial and demanding. Compared with Britain, a foreman in the Federal Republic of Germany enjoys considerable status and, more important, appears to take responsibilities which in Britain would be borne by the notoriously harassed production manager. The foreman's role is very different in Britain where he is very often "the man in the middle", occupying an uneasy no-man's land between workers and management and possibly enjoying the respect of neither. For these reasons, a foreman is often chosen more for his personal qualities than for his technical competence.

As the previous paragraph implies, the quality of qualifications and way in which they are acquired by workers also influences interactively the way in
Table 4.1  Broad occupational groups of employees in the metal-working machine-tool industry, United Kingdom and the Federal Republic of Germany.

<table>
<thead>
<tr>
<th></th>
<th>United Kingdom (%)</th>
<th>Federal Republic of Germany (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative, technical and clerical</td>
<td>27</td>
<td>28</td>
</tr>
<tr>
<td>Skilled operatives</td>
<td>36</td>
<td>42</td>
</tr>
<tr>
<td>Other workers</td>
<td>29</td>
<td>23</td>
</tr>
<tr>
<td>Industrial apprentices</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Other trainees</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>All employees</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

which those workers are employed within the company and the standing which they enjoy. In the Federal Republic of Germany there is a great respect for practical knowledge, and a great respect for qualifications; and therefore a redoubled respect for those who have acquired practical qualifications. The acquisition of competence (as evidenced by qualifications) is therefore intimately linked with promotion, which motives individuals while simultaneously ensuring that as far as possible the individual will be able to respect those above him in the hierarchy. In Britain, a worker's status and function in the factory is comparatively little determined by his secondary education or by his vocational or academic qualifications.

A similar difference is detectable in the management system as was discussed in Chapter 3. Formal qualifications are much rarer in British management (according to one study, 40 per cent of managers were without formal qualifications in Britain, compared with 3 per cent in the Federal Republic of Germany); and formal qualifications are often only considered remotely relevant for promotion. Academic qualifications tend to be used only as an initial "screen" in the selection of management trainees who are therefore frequently completely lacking in practical experience or qualifications when first appointed. This must contribute to the divisions and distrust between workers and management in the United Kingdom (although one would not wish to argue that these characteristics are entirely absent from worker/management relations in the Federal Republic of Germany).

All these questions — qualifications, promotion, status — affect the efficiency of production. Because emphasis on training and the acquisition of recognised qualifications pervades the industrial system in the Federal Republic of Germany, mobility of workers between jobs within the factory is greater, and the departmental and functional differentiation of tasks is smaller. In particular, the boundary separating maintenance and production workers in the Federal Republic of Germany is more flexible. Because skilled workers are a rarer sight in British factories, they have to be kept in reserve; if a technical problem develops on the factory floor, production will stop until the appropriate specialist (or more likely, specialists) can be brought to the spot. Because of all these differences, British factories tend to be at a substantial productivity disadvantage, most particularly in complex products requiring a high degree of organisation and skill to produce.
The remaining element to be brought into this comparison is the industrial relations system. We have already examined how the prevalence of craft unions in Britain affects productive efficiency, both in the sense of current methods and the ability to improve them. How does this picture compare with that in the Federal Republic of Germany?

The two most important features of the industrial relations system in the Federal Republic of Germany—features which differentiate the system there very sharply from that of the United Kingdom—are first the fact that trade unions are organised on the basis of industrial sectors rather than occupations or skills, and second the provision of statutory works councils which guarantee workers in the Federal Republic of Germany certain rights of consultation and participation at the factory level. As is detailed in the case study and elsewhere, the effect of these two features is that trade unions' power is exercised mainly at the sectoral and regional levels, their influence of the plant or enterprise level being relatively attenuated. This, of course, is almost exactly the reverse of the situation in manufacturing industry in the United Kingdom.

The elected works council has a statutory right to be consulted by management on matters relating to the deployment of the workforce including Manning levels, promotions, recruitment and dismissals. The works councils have no statutory power of negotiation over wages and related matters, although in practice they play some part in fleshing out the detailed application of wage settlements negotiated in broad terms by the trade unions at the sectoral level.

The works council is required to respect the interests of the company and has no right to call for a stoppage of work. Its formal powers of redress lie through the courts in the case of breach of agreement or failure to observe procedure; informally, its influence over company decisions appears to derive partly from the fact that difficult and unpopular policies will be carried out through more easily with works council endorsement, and partly from the fact that, using procedural devices, the works council can slow down considerably the implementation of company policy. Both these factors give management an incentive to make tactical concessions to works councils and hence give them (not very sharp) teeth.
At the plant level, the counterpart of the British shop steward is the works council representative, with the difference that the latter is elected for a longer term of office and by a broader-based electorate. Because of these differences and because the works council representative occupies a position in a formal structure with clearly defined rights and obligations, he is inclined to take a broader view of his objectives (in particular, to be more aware of company interests and the interests of the workforce as a whole, rather than of any skill or other sectional group); and to fulfill his functions somewhat more dispassionately — some would say bureaucratically.

In such a system the trade unions are left with little role to play at the plant or company level. Whether this is a matter for regret depends on whether one takes the view that, given the opportunity, trade unions could promote workers' interests more successfully than do the works councils. This is a largely hypothetical question and requires us to define "workers' interests", so we shall not attempt to answer it here. A question with more direct bearing on the present study, and one with a better chance of being answered objectively, is what effect the Federal Republic of Germany's peculiar industrial system has on industrial efficiency.

It does seem clear that the works councils fulfill an important integrative function in the factory by promoting compromises between workers and management over issues which in another institutional environment (specifically that of the United Kingdom) would probably become adversarial. The system encouraged the large engineering companies at least to look to the long-term interests of their workers by providing security and career opportunities, achieved by avoiding both redundancies and recruitment, and instead promoting and upgrading workers within the company. In conjunction with the differences in training and work organisation already discussed, this inhibits sectional rivalry between groups of workers and encouraged workers to think in terms of the interests of workers as a whole — which under most circumstances is probably a good approximation to the company's interests. Consequently, manning was not, in the 60s and early 70s at least, a major issue between management and labour. When manning was an issue, workers' representatives on works councils tended to concentrate on securing compensation for the "losers" rather than fighting to preserve jobs.
It would be a mistake though to ascribe overwhelming importance, in explaining the Federal Republic of Germany's superior productivity performance and freedom from industrial disputes, to the purely institutional differences between the two countries in terms of trade union organisation and works councils. Shop stewards in Britain acquired power because pay, skills, status and security attached to certain sets of tasks thereby forcing individuals to defend their right to go on performing those tasks. By its very nature, this power could only be used defensively. Workers in the Federal Republic of Germany enjoyed greater security because their skills were formally recognised, were more readily transferable both within and between companies, and were recognised by their employers as an asset. These factors, as well as the institutional fact of the works councils, meant that workers used their influence in a positive way to shape and influence change rather than resisting it. These differences are probably more fundamental.

THE NETHERLANDS

In terms of educational attainment, the Netherlands labour force is of high and increasing quality, with two-thirds of the working population possessing intermediate or higher level qualifications, according to the Netherlands case study. However, as in other countries experiencing structural unemployment problems, such as the United Kingdom, concern has been expressed in the Netherlands that the education system is insufficiently vocationally oriented and perhaps more fundamentally the values of the education system together with the values and aspirations of society at large conspire to orient school leavers towards white collar and particularly public sector occupations, with industrial occupations enjoying low social standing. The Netherlands country study also cites data which suggest that industry's requirements for educated workers are not being uniformly upgraded. Rather the skill requirements of blue collar jobs are declining rather than increasing, presumably reflecting the phenomenon of "de-skilling" resulting from increased automation. In white-collar occupations something rather similar is occurring, reflecting presumably the automation of the office; jobs with a low-skill content and a high-skill content are both increasing in number, while "intermediate" jobs are declining. Though we cannot draw any firm conclusions from this evidence alone, and in particular we cannot separate out the extent to which this is due to shifts in the demand for different skills and shifts in supply, it would appear that some mismatching of supply and demand for educated and trained manpower is occurring.
Vocational training is provided to a large extent "on the job" in the larger companies. The Netherlands case study points out that this has given the labour market a somewhat "segmented" character in which a proportion of the labour force enjoys secure employment with relatively good prospects in the large and generally multinational companies, while the remainder find themselves in relatively unfavourable job situations and with fewer opportunities to acquire the skills or experience which would improve their prospects. We have already remarked that this dualism is present to a greater or less degree in a number of countries. But this does not mean it must be accepted as a fact of life: rather it is an outcome of the operation of the industrial system and one which, as we have already argued has considerable adverse social and economic effects.

As far as the organisation of production is concerned, the trade union movement in the Netherlands is highly centralised and until recently was very weak at the shop floor level. To fill this gap, legislation was enacted providing for works councils as a forum of debate and negotiation over manning and work organisation, and following rapid implementation in the 1970s works councils have now been instituted in more than two-thirds of industrial establishments employing more than 100 workers. It is impossible to say, without the necessary detailed research, what influence the works councils have had for better or for worse on industrial efficiency. It is unfortunate, however, that the system was introduced during a period when substantial labour-shedding by companies was occurring, since one would imagine that inevitably in such an environment the workers' voice on the works councils has been resistant towards rationalisation.

The highly centralised character of the Netherlands' trade union organisation has until recently devoted its energies to striking correspondingly highly centralised wage bargains which, as the Netherlands case study reports, have been highly successful in minimising inter-sectoral and inter-occupational variations in earnings, thereby contributing to the high degree of income equality in the Netherlands. The rigidity introduced into the labour market by this pursuit of equality was a price which a rapidly growing economy could perhaps afford to pay, but in recent years the pressures from all directions towards more sectoral bargaining has resulted in greater decentralisation to both the sectoral and enterprise and even shop floor levels, though this has led to many new tensions and conflicts in the
bargaining system with little payoff as yet in terms of wage settlements which better reflect the market situation.

Such movement towards greater decentralisation as occurred should not be taken as indicating a greater acceptance, in principle, by trade unions that wage rates should be determined by market forces. Decentralisation was, to a great extent, dictated by the pressure of events — particularly increasing disparities in bargaining power in different sectors. At the same time the trade union movement began to attempt to establish a framework in which employment levels as well as earnings would be a bargainable issue, and this was another factor which necessitated greater decentralisation in bargaining. However, although the right to include employment levels (including questions such as work-sharing, shorter hours, etc.) in collective agreements has been established, the Netherlands case study argues that there has been little de facto shift away from the traditional centralisation of negotiations and therefore that the power of trade unions to influence company affairs (other than by influencing the setting of broad parameters at national level) remains very slight. The Netherlands study ascribed this, in part, to the lack of accountability of the central leadership of the trade union movement to its members, but also recognises that it is also part of the price which must be paid for an industrial relations system in which the pursuit of harmony is an overriding goal.

A final and important feature of the Netherlands industrial system which must be examined is the fact that the level and composition of state welfare benefits and contributions have formed an integral part of national tripartite negotiations. In this respect the Netherlands is unique among the countries studied. On its face value this might appear an eminently rational way for a nation to organise its affairs on grounds of both equity and efficiency. After all, it could be argued that welfare recipients cannot themselves in the nature of things exercise bargaining power and are therefore always likely to be neglected unless some other group bargains on their behalf. At the same time, it can be argued that since the real burden of financing welfare benefits is ultimately borne by industry, it is right that both sides of industry should have a voice in determining benefit levels.

As long as productivity continued its strong upward trend and full employment was broadly maintained, the distributional conflicts inherent in
such an approach were resoluble. The burgeoning flow of natural gas also played a vital role in painlessly enlarging the national cake, and in particular, financing the welfare state without unacceptable tax increases. But the deteriorating economic situation has enforced a progressive downward revision of trade union targets with respect to both real wage growth and the linking of real wages and the real value of social benefits. The trade unions first, in 1976, relinquished the rights they had previously enjoyed to a guaranteed growth of real wages (i.e. wage increases which exceeded the inflation rate). However, at this stage the level of real wages was still protected by means of government-guaranteed price indexation, and in addition the government agreed to protect the post-tax purchasing power of wages also, by undertaking that the real burden of taxation would not be increased. This latter was seen as feasible because it was anticipated that restraint on real wage growth and the associated transfer of income to profits would increase the buoyancy of the economy and thereby generate additional tax revenues to finance the welfare state. As was described in Chapter 2, this proved an over-optimistic expectation and both elements of this package - stabilisation of real post-tax wages while maintaining the real value of welfare benefits - have perforce been abandoned. Instead, public sector salaries and welfare benefits have been reduced in the early 1980s, and at the beginning of 1983 inflation-indexation of wages was weakened.

The macro-economic effects of these policy developments have been examined in Chapter 2 and will be considered further in Chapter 5. Our interest here lies in their implications for the workings of the labour market and the industrial system generally. As remarked above, the high degree of centralised tripartite consultation over wages and labour conditions in the Netherlands - summarised as the "harmony" model - offers potential benefits as a system of collective choice between competing objectives compared with the decentralised and sometimes chaotic systems of many other countries. Two fundamental questions could be asked about such a system, however: whether it could survive the stresses of the Netherlands' sharply deteriorating economic prospects in the 1970s and 1980s, or whether on the other hand, it was a system which worked only in the exceptionally favourably circumstances of the 1960s; and, more fundamentally, whether the system had itself contributed to the deterioration in economic prospects by building such rigidities into the economy as to be ultimately self-defeating.
The answer to the first question is that, to the accompanyment of considerable stresses and strains and after an initial period of uncertainty, the "harmony model" has indeed survived and adapted to the new economic environment. The harmony has been preserved, somewhat bruised but still basically intact, principally by virtue of the fact that workers have been persuaded to modify their real wage aspirations in line with reduced growth prospects. Correspondingly, sufficient grass roots support has been generated to give the government the necessary resolve to carry through a programme for containing and even reversing the growth of the welfare system. One might well point out that these two forms of macro-economic adjustment to the recession are no different from those of other industrialised countries, and therefore that the Netherlands is not looking for a different way out of its problems. This is of course correct, but what is distinctively different about the Netherlands is the means, rather than the ends of adjustment. In other countries real wage adjustment and public expenditure retrenchment has been largely imposed by governments by means of restrictive monetary and fiscal policies. The precise incidence of the burden of adjustment on individuals has therefore been random and uneven and determined in the main, directly or indirectly, by market forces. In addition, the policy-induced unemployment necessary to enforce moderation in real demands constitutes a heavy deadweight loss for society. These costs are at least, in principle, avoided in the harmony model (although this is not to suggest that the actual outcome in the Netherlands has not contained considerable elements of "rough justice" for individuals).

The more fundamental question is whether the harmony model has, in fact, contributed to the economic problems of the Netherlands. At the aggregate level it could be argued that by relating real wage settlements almost entirely to the forecast growth of labour productivity (forecasts which moreover proved excessively optimistic from the early 1970s onwards), international competitiveness was progressively undermined and the creeping paralysis of "de-industrialisation" was enabled to become established. This could be backed up by the additional argument that the slowing of productivity growth was itself the result of rigities in wage differentials between sectors, occupations, and skills and of the inflexibility in manning levels resulting from legislation to protect workers against dismissal. As has recently been argued by the OECD, effective inter-sectoral adjustment requires that either a reasonable degree of inter-sectoral labour mobility or
reasonable flexibility in relative wages and preferably both of these things. The charge against the harmony model would then be that it vitiated both these means of adjustment in the Netherlands. 23

Undoubtedly a strong a priori case can be made along these lines. Our ultimate verdict, however, depends on our assessment of the quantitative significance of these rigidities and for operational purposes this can only be measured against some relevant alternative system. Here comparisons with the other countries which we have studied are of interest. As we have seen, the United States has a highly decentralised and strongly market-oriented system of wage bargaining. Equally one could compare the evolution of taxation and welfare spending in the United States and the Netherlands, and the differing social and institutional mechanisms for determining these in the two countries. By the standard of the Netherlands, welfare benefits, safeguards against dismissal and so on, can best be described as vestigial. But these very substantial differences between the two countries have not been associated with correspondingly large differences in economic performance. As we have discussed elsewhere, the United States has suffered from real wages tending to run ahead of productivity growth, both in aggregate and at the sectoral level; from declining international competitiveness; from structural unemployment problems and from a tendency for public expenditure to grow faster than the public's willingness to pay for it. On the whole it is not clear that the heavy reliance on market forces to achieve labour market adjustment in the United States, in contrast to their almost complete suppression in the Netherlands, has actually lead to superior adjustment performance, especially if in making such a comparison reasonable allowance is made for the more intractable nature of the adjustment problem in the Netherlands by virtue of that country's extreme openness and small scale.

THE EXTERNAL LABOUR MARKET

The preceding discussion has addressed itself to a broadly-defined concept of labour market efficiency, conceived in terms of the efficiency of utilisation of the employed labour force. As such the discussion was concerned with whether workers had opportunities to acquire education and training to enable them to develop their potential to the full and whether the skills and knowledge acquired were effectively used in the workplace. This reflected our belief that economic performance — whether conceived statically
in terms of productivity levels, or dynamically as the ability to achieve
growth and adaptation to necessary structural change — depends heavily on
these characteristics.

This discussion concentrated necessarily on the internal labour market —
on the use which companies made of their workers, etc. The external labour
market comes into play only as it were at the margin where the company makes
decisions about recruitment and discharges, and when workers make decisions
about changing their employer.

From the point of view of the priorities of social and economic policy,
however, it is the external labour market which attracts more attention.
After all, the most painful and visible sign of inefficiency in the labour
market as a whole is surely the fact that workers or potential workers are
unable to find jobs. Many would feel therefore that any comparative study of
labour markets in different industrialised countries should focus intensively
on the explanation of different experiences in terms of levels of
unemployment, particularly since the onset of the recession.

Our reason for concentrating initially in this chapter on the internal
labour market was not simply because it is primarily events within enterprises
which determine economic performance. It was also because we cannot expect to
be able to explain unemployment (in both its quantitative and qualitative
characteristics) without looking at the labour market as a whole. This is
because the internal and external labour markets interest and the outcome of
that interaction are levels of unemployment in the external labour market and
levels of productive efficiency, job satisfaction and so on in the internal
labour market. This interaction and its outcomes are ultimately what this
chapter is seeking to explain.

There is a rather fundamental methodological point which needs to be made
at this stage. It is that the labour market is itself embedded in an over-all
economic system with which it interacts. Thus in analysing the labour market,
it is not really satisfactory to simply take events in the rest of economy as
given. In particular, it is not correct to assume that changes in product
demand give rise to changes in employment and that no causal links run in the
opposite direction.
This is not just an academic point, but one which is of the utmost importance for economic policy. Professional economists — and hence the policy makers whom they advise — are deeply divided over the fundamental question of the extent to which changes in the supply and demand for labour and associated changes in earnings in both real and monetary terms are outcomes of the recession and structural change, or whether they are to a significant extent the causes of these latter phenomena. It is clearly beyond the scope of these studies to attack such a complex issue directly, but the reader should note that it is inevitably a question underlying the studies as a whole, and upon which it is hoped that they will shed a few shafts of light. Specifically, one question which it is hoped to illuminate somewhat is the question whether important "rigidities" have developed in the labour markets of the industrialised countries in recent years — rigidities of a social and economic nature relating to employment decisions and wage determination — which may be blamed for the difficulties which these countries find themselves in now. But by and large we have perforce to take the existence of the recession as given in order to keep the discussion manageable.

By definition, the state of the external labour market reflects the balance between the supply of labour by households and the demand for it by companies. Both depend on many complex and inter-connected factors. We can think of the supply of labour — those entering the external labour market in search of jobs — as consisting of new entrants and re-entrants to the labour force, together with those who are voluntarily or involuntarily changing jobs. The level and composition of the flow of new entrants and re-entrants to the external labour market depends on the demographic characteristics of the country concerned, participation decisions, and the education and acquired skills and experience of the individuals concerned. Turnover of the existing labour force depends on decisions by workers to quit their jobs and decisions by their employers to discharge them.

Workers are taken out of the external labour market, of course, by the hiring decisions of private companies and public sector institutions. These hiring decisions (and also the decisions to discharge workers referred to in the preceding paragraph) occur when the level and composition of the company's workforce is out of line with its requirements. This in turn depends on cyclical and trend factors in demand for the company's products, the changing technological requirements of production and the associated investment and capacity utilisation factors.
Underlying all these influences on supply and demand decisions of individuals and companies are the price incentives which drive the market economies. Most obviously company decisions to hire or discharge workers are influenced by labour and capital costs and by the company's price competitiveness in the market place; but participation, quitting and search decisions by workers are also affected by the rewards of working in various occupations as well as the reward of not working. In the labour market, however, the extent to which price incentives are effective is questionable. The reasons for this have, in past, to do with the nature of the transaction which occurs when a worker is hired by a company. Labour is not a commodity which is bought and sold; rather, a contract is entered into by employer and employee which binds both of them in the future to a greater or lesser degree depending on the country and industry context. For these reasons both wage rates and employment levels respond only sluggishly to changes in the underlying balance of supply and demand in the labour market. This tendency is of course re-inforced by the activities of trade unions, since historically their very raison d'être has been the protection of workers from the insecurity which the unimpeded operation of market forces might threaten.

Finally, the influence of government in the various countries on the functioning of the labour market should not be neglected. In general, government policies and programmes have two distinct thrusts. One is legislation relating to minimum wage rates, social security provisions and jobs security legislation, legislation which is motivated by social considerations but which has undeniable economic repercussions. The second thrust is towards promoting the economic efficiency of the labour market by measures to upgrade labour force quality, removal of barriers to worker mobility, etc.

In the previous few paragraphs, we have identified a fairly substantial list of factors influencing the apparent efficiency of the external labour market, and in particular levels of recorded or measured unemployment. Let us attempt to assess the importance of some of these factors in the countries which we have examined.

If we look first at factors influencing the supply of labour, it is apparent first of all that the natural growth of the labour force, due to birth rates and more importantly increased female participation has, to a
greater or lesser degree in all the countries studied, added to pressure on the external labour market. Since the onset of the recession, however, and particularly in the past few years, this has been off-set by reduced participation rates due to what is known rather crudely as the "discouraged worker" effect. This term is misleading because it implies that all changes in participation are endogenous, i.e. they occur in response to the difficulty or ease of finding a job. Although this is self-evidently an exaggeration, we have no means of reliably estimating the discouraged worker effect. The best we can do is to look at changes in participation and compare them with changes in population of working age and in actual employment, from which certain conditional or hypothetical statements can be made which, although not "proving" anything, are at least interesting and suggestive.

For example, if we compare the United Kingdom and the Federal Republic of Germany, we see that in 1973–1980 both experienced identical growth in population of working age and in actual employment (see Table 4.2). Their experience with respect to participation, however, was very different: −3.5 per cent in the Federal Republic of Germany, and +0.8 per cent in the United Kingdom. So we can say that if the United Kingdom had experienced the same fall in participation as was experienced in the Federal Republic of Germany, unemployment would be 4.3 percentage points lower, which translates into over 1 million workers. Alternatively, if we choose to regard the fall in participation in the Federal Republic of Germany as entirely induced by the recession (i.e. entirely due to a "discouraged worker" effect), then we could say that "true" unemployment in the Federal Republic of Germany is 3.5 percentage points higher than recorded unemployment, which translates into close to an additional one million workers. Similar observations are suggested by the large fall in participation in the Netherlands and the large increase in the United States.

It has been suggested that governments' social security systems have an important influence on the levels of recorded unemployment, partly by influencing participation decisions and partly by encouraging workers to spend longer on "job search" and hence to remain longer on the unemployment register. A third effect could also arise if both employers and employees were more willing to contemplate redundancies during a recession, because of the existence of relatively generous social security provisions.
Table 4.2 Decomposition of total labour force growth, 1973-80 (1973-1980) (percentages)

<table>
<thead>
<tr>
<th></th>
<th>Contributions of:</th>
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<tbody>
<tr>
<td></td>
<td>Rate of growth</td>
<td>Working age population</td>
<td>Participation rate</td>
</tr>
<tr>
<td></td>
<td>of total labour</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>force</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal Republic of</td>
<td>-1.1</td>
<td>2.4</td>
<td>-3.5</td>
</tr>
<tr>
<td>Germany</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>6.1</td>
<td>6.0</td>
<td>0.1</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>4.1</td>
<td>9.8</td>
<td>-5.7</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>3.2</td>
<td>2.4</td>
<td>0.8</td>
</tr>
<tr>
<td>United States</td>
<td>17.3</td>
<td>11.1</td>
<td>6.2</td>
</tr>
<tr>
<td>Weighted average for all</td>
<td>9.4</td>
<td>8.1</td>
<td>1.3</td>
</tr>
<tr>
<td>OECD countries</td>
<td></td>
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</tbody>
</table>

To consider fully the evidence for and against these hypotheses would take us well beyond the confines of this study, but it should be noted that an OECD study found some statistical support for all three, though in all cases the effects were quantitatively small and by no stretch of the imagination can "explain" more than a minute fraction of the rise in unemployment in recent years in any of the countries studied. Furthermore, it should be noted that such effects as do exist do not necessarily imply any losses in economic efficiency, for several reasons. First, because some of the effects are simply to increase recorded unemployment without increasing "true" unemployment. Second, because to the extent that social security provisions permit workers to spend more time on job search (and hence to remain longer on the unemployment register) there may well be a gain in economic efficiency since they eventually find a job for which they are better suited. Finally, something which has so far attracted little attention, but which is of increasing importance as the recession continues, is the fact that unemployment benefits are of limited duration. Once the right to unemployment benefit expires (e.g. after six months in the United Kingdom), a worker has less incentive to remain on the unemployment register, and this therefore may well tend to reduce registered unemployment as time passes.

Before leaving the question of the impact of social security benefits on unemployment levels, we should mention that a possible linkage may exist via the inflation process. The suggestion here is that the level of these benefits is an important reference point in wage negotiations, particularly for the low paid. Any increase in social security benefits will therefore tend to produce a corresponding increase in wage rates for unskilled workers, which in turn feeds through to higher paid workers, because both employers and employees wish to see skill premia maintained. Thus "cost-push" inflation ensues.

The analytical issues raised here are very large ones requiring an adjudication between a number of hypotheses concerning the inflationary process itself, as well as the question of the relationship between inflation and unemployment. These essentially macro-economic issues cannot be addressed here. As usual what is at stake is the question of causation which could not be settled merely by looking at the facts, even if the necessary facts were available.
We now turn to the demand for labour, i.e. the propensity of employers to hire labour from the external labour market. One preliminary point which should be made is that, of course there is in all countries a very substantial turnover in employment, most of which is completely unrecorded in unemployment statistics because most workers who change jobs do so voluntarily and without becoming registered as unemployed en route. Data and commentary relating to involuntary job changes and the associated spells of unemployment therefore understate the true efficiency of the external labour market as a mechanism for allocating workers between employers — a point stressed in the study of the Federal Republic of Germany (p. 213), where it is pointed out that the turnover in the German labour force is of the order of 20-25 per cent per year, of which only about one-third passes through government employment offices. The picture in the other countries is doubtless similar.

Some space has already been devoted to examining the internal labour markets which exist particularly in the larger companies in the countries studied. We discussed briefly some of the complex interactions between on-the-job training, pay and promotion structures and industrial relations system which give rise to an internal labour market within the company. Added impetus to the development of a relatively self-containing internal labour market has resulted from legislation and collective agreements relating to job security which have made it more difficult and more costly for companies to discharge workers. One consequence which is important for the present discussion is that (as has been pointed out elsewhere) the existence of well-developed internal labour markets creates a barrier to movement — in either direction — between the internal and the external labour market. As long as he or she is employed, the worker's security and employment opportunities are enhanced by the existence of an internal labour market. The employer (with a greater or lesser degree of pressure from the trade union) will attempt to avoid making the worker redundant by shifting him or her between jobs and between plants, undertaking the necessary re-training in order to permit this, and if necessary keeping him or her on the payroll, at least for a while, when this may not be strictly necessary for the company's operations. The worker is thus, to an extent, insulated from competition from the unemployed who are looking for jobs in the external labour market. But once having been discharged and finding him or herself in the external labour market, these same factors then operate to the worker's disadvantage.
This situation is of course not new, for the unemployed worker has always been at a serious disadvantage in finding new employment, simply by virtue of being unemployed. But it has become more acute in the present recession. Its practical effect has been that overwhelmingly the rise in unemployment in recent years has resulted from a substantial reduction — indeed in some countries, particularly in the United Kingdom, a cessation — in recruitment. With a continuing inflow of discharged workers onto the external labour market and a drying up of the outflow, not only has the level of unemployment risen but perhaps more seriously the average duration of unemployment has risen sharply and continues to rise as the recession continues. (For example, the average expected duration of a spell of unemployment by a male in the United Kingdom in mid-1983 was about 8 months and more than one-third of the unemployed, or 4 per cent of the workforce, had been unemployed for more than a year.) The economic and social implications of this are grave. The attractiveness in the eyes of an employer of a worker who has been unemployed for a lengthy period is slight, particularly in a period in which technology and work practices are changing rapidly. Since many companies now find it difficult and costly, for the reasons discussed earlier, to discharge workers, they will be reluctant to increase recruitment significantly unless they are confident that a sustained recovery lies ahead. This implies that in the absence of a marked up-turn in the overall demand for labour, a large proportion of those currently unemployed in all the countries will remain so indefinitely. Their skills and general employability will decay and they may be permanently lost from the effective labour force of the countries concerned. This has already presumably happened to some degree.

Governments have recognised this problem and have attempted to alleviate it by various schemes for re-training and generally up-grading the qualifications of the unemployed. Figures for the subsequent placement of workers who have benefited from such schemes are moderately encouraging. However it cannot be overemphasised that as a matter of arithmetic, in a situation of stagnant overall demand for labour these unemployed workers can only be placed if a corresponding number of employed workers are simultaneously displaced. This seems to have happened to some extent, as is suggested by the figures for labour turnover to which the Federal Republic of Germany study refers, from which it may be inferred that companies are taking advantage of the recession to up-grade their labour force quality. Thus government training schemes for the unemployed do not reduce the level of
unemployment, but only increase labour turnover and reduce the average duration of unemployment. Of course, social and economic gains result from this, but the core of the problem - high levels of unemployment - remains intact. And the greater the degree of isolation of the internal labour market from the external - something which varies from country to country - the smaller is the scope for placing the unemployed, however much re-training they receive.

The analysis of the preceding paragraphs applies to a greater or lesser degree in all the countries examined. But it is instructive to try to identify some of the differences between the countries in the extent to which they apply, and the reasons for these differences.

The country with the most highly developed internal labour market is, of course, Japan. This immediately gives us one reason why Japan has experienced the smallest increase in recorded unemployment during the recession; it is because problems of excess capacity, whether relating to capital or labour, are seen as being primarily the responsibility of the employer. This contrasts with the viewpoint of the Western industrialised countries where, according to the conventional market ethic, the company is allowed and even encouraged to dispense with the services of workers who are surplus to its immediate requirements. The large companies in Japan discharge their responsibility partly, as described earlier, by actively re-deploying workers within the organisation (both geographically and functionally) and partly by continuing to assist workers whom they have been forced to dispense with to find re-employment (see the case study of Japan, p. 85). Thus not only is the number of redundancies and hence flows onto the external labour market held down, but the duration of unemployment is reduced too.

These responsibilities, of course, to not hold right across the board in the Japanese economy. Only about 35 per cent even of male workers benefit from the "lifetime employment" principle, which in any case has no formal basis and only extends to age 55. Consequently the external labour market contains a higher proportion than in other countries of women and older workers, as well as workers made redundant by the smaller companies. These workers constitute a secondary labour force characterised by lower wages and greater employment instability. This dichotomisation of the labour force into a relatively secure and well-paid "primary" labour force and an insecure
low-paid "secondary" labour force is a logical counterpart of the relative isolation of the internal from the external labour market, and both are most pronounced in Japan, though evident elsewhere in other countries too.

Although, like much in Japan, this behaviour by the large companies appears to violate the profit-maximising rules of the competitive market, the productivity record of the companies concerned does not suggest that any efficiency losses result - if anything, the reverse. From the standpoint of social welfare, however, it is clear that the burden of open unemployment is borne disproportionately by particular groups in the community. The secondary labour market is obviously fairly fluid and thus tends to re-absorb workers from the "pool" of unemployment, roughly as rapidly as it releases them. In addition, self-employment and employment "within the family" are important means of escape for the unemployed. Despite these two factors, however, the case study of Japan suggests that a substantial minority of the unemployed remain so for periods of well over 12 months (p. 87), and eventually may well leave the labour force.

Government policies in Japan have attempted to encourage more companies to take a greater responsibility for the workers; in effect, to bring them up to the "best practice" standards of the larger companies, with the emphasis on the re-employment of older workers which is a problem of growing importance in view of the ageing of the Japanese labour force. In the late 1970s, the government also introduced subsidies to companies particularly hit by the recession in order to encourage them to retain workers. It is noteworthy that these subsidies were more generous towards smaller companies and thus may have helped to reduce the disproportionate impact of the recession on the employees of smaller companies. As is detailed in the case study of Japan (pp. 96-97) these subsidies were part of a broad programme by the government for assisting workers in sectors suffering from cyclical recession and from structural decline. Any company in the designated sectors which proposed redundancies was required to present a plan to the local employment office detailing the efforts it proposed to make to find its workers alternative jobs. Those who were not taken care of in this way were entitled to special counselling and training, and to a special allowance; and companies which did re-employ them received a special wage subsidy. Finally, it is noteworthy that the government has shown some awareness that the emphasis on on-the-job training contributes to the dichotomisation of the internal and external labour markets by introducing a national system of skill certification.
In contrast to Japan, in the United States relationships between employer and employee are not constrained to a comparable extent by a sense of mutual obligation. Given that trade union membership and power in manufacturing is declining, it is not surprising that companies in the United States are relatively unconstrained in their freedom to release workers made superfluous either by generalised recession or by structural decline. Equally of course and for the same reasons United States companies will re-hire workers more readily during a recovery phase, so it is no surprise to find that unemployment rates in the United States are considerably more volatile than those in other countries, particularly Japan. Thus we may say that a worker in the United States will both lose his job and find another one more readily than his counterpart in other industrialised countries - though there is considerable over-simplification in this remark because its validity is much more limited in the case of disadvantaged groups in the United States labour force.

Nonetheless, the barriers between the internal and external labour markets are somewhat weaker in the United States than elsewhere (particularly Japan), and the external labour market therefore plays a larger role in re-allocating labour than it does elsewhere. This being so, there would appear to be considerable social and economic costs resulting from the apparent lack of interest on the part of government, trade unions or employers in increasing the efficiency of the external labour market. As the United States study points out (p. 105), there is no national policy on redundancy pay, this being left to bargaining in individual industries. Due presumably to mounting unemployment and declining trade union strength, redundancy payments have not kept pace with inflation. Nor is there any nationwide requirement that workers be given notice of the permanent close of a plant. "In the United States today the decision to reduce a company's workforce remains at the discretion of the employer just as it was 100 years ago."

The external labour market is necessarily put under heavier strain if workers are released on to it by employers in an unconstrained fashion and if workers severance pay is parsimonious. It is sometimes argued that unemployed American workers enjoy a compensating advantage in that their job search is, in principle, conducted over a very large area by virtue of the immense size (both geographic and economic) of the United States economy. This is something of an illusion in practice, as the United States study points out
Yet the United States government has not been particularly active in attempting to overcome the barriers to geographical mobility of which the most important, the United States study argues, is sheer ignorance of job availabilities. Government policies towards the labour market, in fact, are distinguished by a diffusion of energy and resources in a multiplicity of programmes directed towards particular minority groups and "problem areas". Though selectivity is of course inevitable when resources are limited, this contrasts markedly with the clear and comprehensive response of the Japanese government to the recession described earlier. As the United States study suggests, "this laissez-faire attitude may have been quite adequate for times when the required rate of adjustment was smaller", but its adequacy in the 1980s is questionable, to say the least. The study sees the rising tide of protectionism in the American public at large as a consequence of the human stresses and strains which have resulted.

In the Federal Republic of Germany, the most striking feature of the response to the post-1973 recession has been, as mentioned earlier, the substantial decline in labour force participation. This decline has been particularly pronounced among teenagers and older workers, with less than 40 per cent of males over the age of 50 now being in the labour force - a figure which is lower even than Japan with its early retirement age. Clearly, therefore, the quantitative impact of the recession on employment has been considerably greater than the official unemployment statistics would suggest, and the distribution of the impact on particular groups of workers has been uneven.

The case study of the Federal Republic of Germany concludes that companies have taken advantage of the recession to up-grade the quality of their labour forces by releasing older and less skilled workers and replacing them with those younger and better qualified. Consequently, unemployment (including those who have withdrawn from the labour force due to the "discouraged worker" effect) has come increasingly to consist of workers who are relatively unattractive to employers. The uneven sectoral impact of the recession and accompanying structural shifts have accentuated this tendency.

That this should have occurred is something of a surprise in view of our earlier analysis which emphasised the growing importance of the internal labour market and its segregation from the external labour market, because the
essence of the internal labour market is that companies up-grade their labour forces by training existing employees rather than by releasing them onto the external labour market and recruiting better qualified replacements.

It is also surprising in view of the apparent protection against redundancy which German workers enjoy through the Works Constitution Act and the Protection Against Dismissal Act. Under the former, workers, while having no right of co-determination on employment levels, do have the right through the Works Council to insist that the company formulate a "social plan" when contemnplating redundancies. This requirement and its associated costs (in the form principally of redundancy payments) might be expected to encourage the company to re-deploy and re-train workers in order to avoid redundancies much in the way that Japanese companies do. Similarly a company may find itself required, under the Protection Against Dismissal Act, to justify its proposed redundancies before a Labour Court, and here it is noteworthy that the Federal Court has ruled (1978) that to justify redundancies the company is required to demonstrate that there is actually no work for the workers to do, rather than merely that the retention of the workers by the company is inconsistent with profit maximisation.27

One study has concluded that notwithstanding these apparent constraints on the company to declare redundancies, "the employer retains to a large extent discretionary authority in manpower policy at the company and plant levels"28, and therefore, as the Federal Republic of Germany study suggests, companies have not been effectively constrained from taking advantage of the recession to upgrade their labour forces. Another important pointer is the extent to which overtime working has continued at high levels in the face of the recession: averaged over the economy, overtime hours worked were equivalent to 1.9 million jobs in 1977.29. A general tendency towards dualism in the labour market has been noted, with companies tending to employ an unstable reserve (Randbelegshaft) carrying most of the burden of fluctuations in the demand for labour as well as enjoying lower wages. There is a clear parallel here with Japan.

All this is consistent with an underlying situation in which the better-qualified and better-organised members of the labour force enjoy relative job security, opportunities for overtime and presumably high wages, and are effectively protected against competition from the ranks of the
unemployed. Less qualified and less organised elements of the labour force are more liable to face redundancy (and many have experienced it during the recession) and, once unemployed, find difficulties in finding secure re-employment for reasons which are partly objective but which have partly to do with the effective "property rights" in their jobs which more secure workers possess.

The government of the Federal Republic of Germany has been fairly active in trying to deal with the development of "hard core" unemployment among older and unskilled workers which has occurred for the reasons indicated above. Since 1974 the Federal Employment Institute has financed vocational training of the unemployed, contributing to direct training costs, travel and other expenses incurred and also towards loss of income during training for those still in employment. It also assists in job search and contributes towards disturbance costs which may arise in taking up new employment. Employers are also eligible for job-creation subsidies and may receive financial support for setting up or expanding their training programmes. In their general character, these measures are similar to those found in Japan and the United Kingdom, but we do not have sufficient data to make a comparison of the quantitative magnitudes in the various countries.

The public authorities in the Federal Republic of Germany embarked upon these programmes in 1974 with what appears to have been a certain degree of cautious optimism, based on the view that sufficient energy directed towards training and encouraging mobility would largely solve the unemployment problem once the recession receded. With the passage of time, a greater pessimism has set in. Most obviously this was because aggregate demand, whether from domestic or foreign customers for German products, has not recovered sufficiently to off-set the labour-saving improvements in production methods undertaken in response to the recession. Consequently, the overall demand for labour has been static or declining. Both the Federal Employment Institute and the Council of Economic Advisers have drawn attention to the fact that in such a situation unemployment becomes a zero-sum game; an unemployed worker can only find re-employment by displacing an existing job-holder. An unemployed worker who, as a result of retraining, is able to find a job, simply drives onto the job market another worker less qualified than himself who then has to be re-trained. There can only be a net reduction in unemployment if the re-training process, continued for long enough, eventually
stimulates a net increase in the demand for labour. This might occur if re-training of unemployed workers eventually raised labour productivity and lowered wage costs per unit of output by enough to increase German competitiveness on world markets and to increase the profitability of labour-using investment by German companies. This seems a weak and indirect mechanism and hence we may justifiably conclude that labour market policies undertaken by the government of the Federal Republic of Germany are not likely in themselves to lead to any significant reduction in overall unemployment.

Finally we shall comment on some special features of the workings of the labour market in the United Kingdom since the beginning of the recession. As is well known and was elaborated in Chapter 2, the United Kingdom has suffered a far more dramatic increase in unemployment than any other industrialised country, particularly since 1974. This makes qualitative comparisons with other countries difficult. Given the much heavier burdens which have been placed upon it, it is extremely difficult to assess whether the United Kingdom labour market has functioned relatively more or less efficiently than those of other countries.

The first point to be noted about the United Kingdom situation is that the growth of unemployment is predominantly attributable to a fall in the demand for labour rather than an increase in supply. Both the population of working age and the participation rate increased only a little in the period 1973-1980, so that the supply of labour rose at only about one half percent per annum. Compared with most other industrialised countries this was a modest rate, and it would have required only modest growth of GDP to absorb such an increase, particularly in view of Britain's low trend rate of growth of labour productivity. Instead, the demand for labour (i.e. employment) fell at an average rate of one-and-half percent a year, 1973-1980.

The second point to be noted is that the United Kingdom has experienced a crisis in youth unemployment (i.e. age 16-24) which is exceeded in magnitude only by that of Italy among large industrial nations. The most interesting and relevant comparison to be made here is that between the United Kingdom and Germany. Both experienced exactly the same growth (2.4 per cent) in population of working age 1973-1980. If we look at the graphs of birth rates in the 1960s for these two countries, we see that both experienced a "baby-boom" which peaked in virtually the same year, although that of the
Federal Republic of Germany was greater in magnitude. Hence, of the two countries, it was actually the Federal Republic of Germany which had to absorb a potentially greater flood of young new entrants into the labour market in the 1970s. Yet the Federal Republic of Germany, in 1980, had a youth unemployment only one-and-a-half times the adult rate, whereas in the United Kingdom it was three-and-a-half times as high. 31

This difference, which is of the utmost social significance, may be explained by a number of factors, factors which shed some interesting light on the adjustment process in the two countries. First, lower youth unemployment in the Federal Republic of Germany is explained to a considerable extent by a much lower participation rate by teenagers. For example, over 60 per cent of male teenagers in the United Kingdom were in the labour force in 1980, compared with less than 40 per cent in the Federal Republic of Germany. Of course, we might attribute this to a "discouraged worker" effect which operated more strongly in the Federal Republic of Germany than in the United Kingdom, but this is implausible having regard to the overall states of the labour markets of the two countries. It seems clear that the true explanation is that young people in Germany were taking advantage of the superior education and training opportunities there to upgrade their qualifications, and hence enhance their ultimate employment prospects. Unfortunately the United Kingdom government has observed this difference somewhat belatedly and does not yet appear to have drawn the appropriate conclusions in terms of the policies required. As we pointed out earlier, education spending in the United Kingdom has been cut in recent years by a larger proportion than any other government budgetary heading and a much-needed radical new approach to vocational training is not yet in prospect. Instead, the government has come forward with a largely cosmetic scheme for 16 year olds, the Youth Training Scheme, which began only in 1983 and which few independent experts expect to contribute significantly, if at all, to the employability of young school-leavers in Britain.

A second factor in explaining the United Kingdom's crisis in youth unemployment is that the recession has led to a virtual cessation of recruitment by United Kingdom companies. Unlike companies in the Federal Republic of Germany, which the country study argues have taken advantage of the recession to up-grade their labour forces, United Kingdom companies have been concerned to achieve absolute reductions in employment, the magnitude of
which in many cases has been remarkable. In the 1960s, companies were believed to indulge in "labour hoarding" encouraged partly by the prospect of a fresh up-turn in the stop-go cycle, partly by government promises that faster growth was just round the corner, and partly by trade union pressure. The prolonged recession, and in particular the catastrophic experience of 1980-81 when manufacturing output fell by more than 15 per cent, burst this bubble of optimism and large-scale labour shedding has occurred.

Moreover, to the extent that companies have recruited labour, they have not found young and relatively ill-educated and trained workers attractive, particularly since wage rates for young workers rose 50 per cent faster than those of adults in the United Kingdom, 1970-1981. Apprentices in the United Kingdom are paid 60-75 per cent of the adult rate, compared with 20-30 per cent in the Federal Republic of Germany, and their relative productivity may well be lower. Not surprisingly in all the circumstances, the number of apprenticeship places offered is now a small fraction of what was already an inadequate number. The United Kingdom employed labour force is thus ageing, and the stock of skills and experience decaying.

It has been suggested that companies are deterred from recruitment by the cost of redundancy payments and statutory protection of workers against dismissal. One independent research study has thrown considerable doubt on this view, which is in any case rendered implausible by an examination of the facts. Up to the age of 40, workers enjoy a statutory entitlement on redundancy to one week's pay for each year of service with the company, and to one-and-a-half weeks' pay for each year above that age. On average, having regard to the fact that workers change jobs and hence lose entitlement, and the fact that 40 per cent of statutory redundancy payments are met from a central fund rather than by the individual employer, these costs are unlikely to deter redundancy decisions and certainly not to deter recruitment for fear of later redundancy payments - two years' service being in any case the threshold at which entitlement begins. In most cases of redundancy, the statutory entitlement serves only as a point of departure for a bargaining process between the company and its workers.

As far as non-financial constraints on a company's ability to implement redundancies are concerned, statutory protection is minimal and consists merely in the requirement that the company notify and explain (but not
justify) to the trade unions and the government of its intentions "as early as possible". This requirement is clearly weaker than the corresponding requirements in the Federal Republic of Germany (though of course stronger than in the United States). The main factor which in the United Kingdom context might inhibit a company from implementing redundancies is the bargaining strength of trade unions. In practice, although — as argued earlier — United Kingdom trade unions have considerable power in relation to organisation of work and systems of payment, their power to resist the massive decline in employment levels in the United Kingdom companies in recent years, has proved to be slight. In crude terms, this reflects the fact that ultimately a strike threat is ineffective against a company which faces bankruptcy. More generally, the multiplicity of trade unions in a single plant or company, and their strength of individual unions at plant level but their comparative weakness at higher levels, have made it difficult for them to formulate and implement coherent alternatives to redundancy proposals by companies. Finally, far from redundancy payments acting as a disincentive to redundancy proposals, there is considerable evidence (though it has not been sifted or evaluated comprehensively) that companies have been willing to "buy off" worker resistance to redundancies by offering generous severance payments, particularly to older workers. In the United Kingdom, the alternatives to redundancy — suspension of recruitment, re-deployment and re-training — have been relatively ineffective because of the magnitude of the employment reductions dictated by the severity of the recession and the "dis-hoarding" of surplus labour.

If we finally look at government policies aimed at promoting re-employment, we find a pattern of response broadly similar to the other countries studied — a network of employment offices, assistance to encourage mobility, and government training schemes administered by the Manpower Services Commission. As in the Federal Republic of Germany and the United States, the lack of quantitative impact of mobility and re-training policies stems from the fact that the Commission has been engaged in a zero-sum game. A particular difficulty in the United Kingdom, however, has been the difficulty in securing acceptance of workers trained in government schemes as "properly qualified" because of conservatism and professional jealousy (founded ultimately, no doubt, on insecurity) among the workforce.
Notes:


2. The existence of such a cost if indicated both by the problem of graduate unemployment and by the emergence of an increased earnings differential in favour of older workers—the latter presumably possessing more skills acquired through on-the-job training. See Richard B. Freeman: "The Evolution of the American Labour Market 1948–80", in Martin Feldstein (ed.): *The American Economy in Transition*, op. cit.


5. One study has shown that the comparatively high turnover of workers in the United States is accounted for entirely by the young. Of men aged 25 and over, the proportions who had worked for their current employer for 10 or more years were as high as those in Japan. See Robert Evans Jr.: *The Labor Economies of Japan and the United States* (New York, Praeger, 1971).


9. TO FOLLOW.


12. This case is argued in Harno Shimada: *The Japanese Employment System* (Japan Institute of Labour, Japanese Employment System (Japan Institute of Labour, Japanese Industrial Relations Series, 1980).


14. See, for example, Shimada: op. cit.


29. Werner Sengenberger: op. cit. See also: OECD, The Challenge of Unemployment, op. cit.


31. The data in this and the following paragraph are taken from OECD: The Challenge of Unemployment, op. cit.

32. "Economist".

CHAPTER 5

THE ROLE OF GOVERNMENT
In the two previous chapters we have tried to gain some insight into the workings of the industrial economies of our countries by looking at the forces which shape the behaviour of the main groups of economic agents - shareholders and creditors, managers, and workers. To gain such insight is important for the light it sheds on the reasons why a country's economic performance is good, bad or indifferent.

But we now come to what is perhaps the most important stage of our study: the examination of the impact of government on industrial performance in the countries studied. Clearly their wide-ranging powers give the governments of these countries considerable influence, for good or ill, on the workings of their respective economies. The way in which these powers are used is of concern not only to the citizens of the countries concerned, but to citizens in other countries too. For anything which significantly influences the economy of any one of these countries will produce ripples which will be felt throughout the world. Major policy shifts, such as have occurred in some countries in recent years, will indeed produce not ripples but a storm.

In trying to identify the impact of government, we immediately face the problem that in today's industrialised economies government is all-pervasive. Almost every policy measure or law framed by any government in any field will have some impact - direct or indirect, intended or unintended - on the workings of the industrial system. Even if we decided to confine the discussion to areas of government policy where the impact on the industries system is relatively large and direct, we would still face a herculean task. As an indication of the size of the problem, the following list gives the main headings under which government legislation and policies may be considered to have a major industrial impact:

1. Fiscal, monetary and other macro-economic measures (including exchange-rate policy) which influence aggregate expenditure and thereby industrial output and employment and the balance of trade and payments.

2. Government procurement, i.e. the role of government as a buyer of industry's output.

3. Public enterprise, i.e. the role of government as a supplier of goods and services both marketed and non-marketed.
4. The structure of personal and corporate income tax and the social security system.

5. Environmental, safety and consumer protection legislation.

6. Legislation which regulates and promotes competition.

7. Legislation and policies in the field of employment and labour relations.

8. Education and industrial training and placement law and policy.

9. Policies for the promotion of productivity growth, technological advance and other aspects of industrial efficiency.

10. Policies towards particular regions, sectors and companies.

A discussion in any reasonable depth across such a broad front is clearly beyond the reach of any one study, and some further selection is therefore necessary. The role of macro-economic policy has already been examined in the context of our performance review (Chapter 2) and no further discussion in detail is necessary. No comprehensive treatment will be attempted of the impact of government as a buyer of industry's output and equally as a supplier of goods and services through public enterprise, though some reference will be made in particular contexts. Taxation and the social security system will similarly be treated only in passing, as will environmental, safety and consumer protection legislation. This leaves the last five headings on the list as constituting the "hard core" of what may be called industrial policy.

The distinctive feature of policies under these five headings is that they all have a direct and intended effect on the workings of the industrial system. At the same time though it must immediately be recognised that a direct or immediate effect on the workings of the industrial system is a characteristic of many other policies: for example, policy with respect to public enterprise. Thus in terms of its objectives, industrial policy may be defined as that collection of policies aimed at influencing either generally or selectively industrial output, exports and imports, employment, wages, working conditions, costs and prices, and production techniques and productivity.
In terms of its instruments, a very wide range of means of intervention is employed but the distinctive feature is that industrial policy is inherently more selective than the fiscal, monetary and other measures discussed earlier. In terms of motivation too there are many disparate and sometimes confusing elements underlying government behaviour. In the broadest terms, intervention is justified by the desire to correct a divergence between social objectives and the outcome of market processes. This may arise in three broad ways. First, the operation of markets may impose unreasonable costs on individuals — for example, those who lose their jobs as the result of technological progress from which the community as a whole benefits — and this may be considered to justify special assistance. We shall call this the distributional or social motive for intervention. Second, markets may operate inefficiently — for example, managers may fail to foresee or adapt to changes in technology — and intervention to reduce such inefficiencies may occur. We shall call this the efficiency motive for intervention. Finally, there are some community goals which cannot, by their very nature, be catered for by market forces, or at best are catered for imperfectly. The most obvious of these is national defence, but broader and more diffuse considerations connected with national security and prestige may be held to imply that certain sectors such as agriculture, shipping and indigenous energy sources be maintained at high levels of output than market forces alone would dictate. We shall call these the security and structural preference motives for intervention. Our main interest in these studies lies with the second of these three broad motives, but any overall evaluation of industrial policy must necessarily encompass all three motives and the way in which they impinge on the workings of the industrial system.

In all these respects, both the similarities and the differences between the industrial policies of the countries studied are illuminating. As we have already argued, in all these market economies there is a continuous underlying tension between, on the one hand the desire of governments to leave it to market forces to determine industrial performance (a desire based on a mixture of ideology and pragmatism), and on the other hand an uncomfortable awareness that in the modern economy "laisser-faire" is no longer an available policy option and that in practical terms it is the means and extent of intervention rather than the principle itself which is at issue.
In abstract it is quite easy to set up examples in which the outcome of market processes is sub-optimal from society's point of view and to design ideal systems of taxation, subsidies and other regulations and incentives which correct the situation. In practice, given the political and social constraints within which governments must operate, and their highly imperfect understanding of the economic mechanisms and behavioural responses, the choice between intervention and non-intervention is inherently a choice between two "second-best" outcomes; intervention may improve the working of the economy in some respects, while worsening it in others. Thus governments have to live with the fact that the cures which they propose may have side effects which are worse than the disease.

The objective basis for apparently differing ideological standpoints on the question of intervention is therefore judgemental, involving both political and economic judgements as to whether on balance intervention does more harm than good. To be in favour of a high degree of government intervention, one must be persuaded that the shortcomings of the market economy are substantial, and at the same time that government can interpret society's wishes faithfully and can also design instruments of intervention which achieve the necessary correction or modification without excessively adverse side effects.

Non-interventionists on the other hand are simultaneously a good deal more optimistic about the ability of the market to satisfy society's needs and a good deal more pessimistic about the possibility of beneficial government intervention. On this view a government is possessed of no special insight into the needs of society or the shortcomings of the market economy in meeting these needs or indeed the means whereby these shortcomings may be reduced. Rather, a democratically elected government is seen as responding by its very nature to the pressures which are brought to bear on it by various organised interest groups and by "public opinion" in general. Interest groups are by definition self-interested and do not speak for society as a whole. Typically they seek some kind of preferential treatment which would shield them from the disciplines of market forces. Since market forces in the main work to the benefit of society as a whole, these pressures should be resisted. Equally, "public opinion" is liable to be ill-informed about the causes and possible cures for the problems which concern it, and therefore the pressure of public opinion in favour of government intervention in the economy should also be
resisted. Hence it is difficult politically for government to form an opinion about whether intervention is justified from society's point of view. It is also difficult economically because it is difficult to analyse the nature of the problem and the effect which intervention might have. This analysis leads to the view that governments should be extremely cautious about intervening in the economy, and should do so only to promote the workings of market forces where these have become damned up (or where "market failure" is clearly evident).

One or other of these two views, held with varying degrees of clarity and conviction, underlies almost every discussion of the role of government in the economy. In particular countries, the resolution of the underlying tension between those opposing views is determined by the interaction of many complex opposing forces. One important general observation should be made at this stage, however, which is implicit in the argument of the previous paragraphs. The reader who expects a clear-cut causal relationship to emerge between the extent of government intervention and a country's industrial performance will be disappointed. There are two underlying reasons for the absence of any such clear relationship. One is that "intervention" has many dimensions both qualitative and quantitative and hence measurement of the extent of intervention is to say the least ambiguous. Second, there is the fundamental methodological problem in disentangling cause and effect. For example, the United Kingdom is characterised by considerable government intervention and poor industrial performance. But it is by no means obvious that the latter is caused by the former. Rather, causal links run in both directions, and disentangling them can only be achieved by patient and determined examination of the facts.

It is not our intention to take sides in this on-going debate nor to attempt to adjudicate between the two views in any general or definitive fashion. To attempt to do so would imply a misunderstanding of the nature of the problem. Rather we shall adopt an entirely pragmatic approach, seeking to report only what we see and allowing the nature of any conclusions which may be drawn to be dictated solely by the weight of the evidence.

We argued above that the "hard core" of industrial policy has five main components:
1. Legislation which regulates and promotes competition.

2. Legislation and policies in the field of employment and labour relations.

3. Education and industrial training and placement law and policy.

4. Policies for the promotion of productivity growth, technological advance and other aspects of industrial efficiency.

5. Policies towards particular regions, sectors and companies.

The similarities and differences between the countries under all these headings are interesting and important, but space does not permit us to examine each of them in the necessary depth. The first three have already been touched upon in preceding chapters, so the remainder of this chapter will be devoted to an examination of the policies of the countries studied under the last two headings. These two areas of policy are necessarily somewhat overlapping and, because policy in these areas is necessarily more selective, they tend to be more controversial than some of the other areas of industrial policy.

Some general considerations

Policies towards declining sectors

The case for and against government intervention to assist industrial sectors which are experiencing major and possibly long-term decline in demand has been extensively aired elsewhere and only the main points will be recalled here. If we assume for the moment that the decline is dictated by market forces - i.e. is the result of changes in demand or in real costs of production at home or abroad - then depending on the speed and scale of the decline there may be a case for intervention on grounds of both equity and efficiency. The equity argument is quite straightforward: it is simply that those who suffer hardships through structural change should be compensated out of the benefits conferred on the rest of the community. The efficiency argument is more complex because it has two components which are often
insufficiently distinguished. First is the argument for slowing down decline (without attempting to influence its ultimate extent) on the grounds that the economic costs will be reduced if adjustment is spread over a longer period—most obviously, because the labour market is unable to deal with sudden large surges of redundancies, resulting in avoidable unemployment and associated losses of output. Again this is relatively uncontroversial, at least as a principle.

The second element of the efficiency argument is more controversial, however. It is that there may be a case for assistance to a declining or "threatened" sector which is aimed at preventing decline and thus, in contrast to the two previous policy motives, produces an eventual outcome which is different from that which market forces alone would have produced. The case for such policies rests on the belief that market forces alone will allow decline to go, in some sense, "too far", so that what is sometimes called "over-adjustment" occurs. Assistance in the right form and at the right time can restore to viability companies which otherwise have been forced to withdraw from the sector.

Let us briefly review the arguments for and against an approach of this kind. Against, it may be argued that government is unlikely to be able to "outguess the market"; if private enterprise sees no prospect of commercial viability, the government is unlikely to possess superior commercial judgement. Therefore at best what may be expected to happen is that apparent viability will be restored but only by the injection of financial resources by the government which although nominally in the form of loans will in fact never be recovered. At worst, the injections may continue indefinitely because governments cannot face the loss of political standing which would follow if they were to pull out.

Putting the case even more strongly against any measures either to slow down or arrest sectoral decline, it may be argued that such measures are likely to do more harm than good. Since it is difficult for government to discriminate between companies, assistance is likely slow down the exit of the least efficient, thereby making it more difficult for the more efficient to survive. In this way, policies aimed at slowing down decline may come into sharp conflict with policies to arrest decline. Also, unless assistance measures are tightly linked to improvements in productivity, assistance may
permit firms to avoid the painful reappraisal and reform of their operations which is necessary to restore viability. This is often held to apply particularly to employment practices and wage rates; by strengthening the demand for labour, government assistance may undermine the market pressure which would have provided the impersonal, exogenous discipline necessary to bring about the necessary changes.

The case for such intervention is basically that sectoral (and similarly, regional or even national) decline may become self-perpetuating once it has been underway for some time. Companies become trapped in a vicious circle of declining demand, low profitability, low investment and technological stagnation. Similarly, stagnating wages and lack of recruitment tend to reduce the quality of the labour force at all levels. What is supposed to happen under these circumstances according to the folklore of the competitive market is that those enterprises with a strong survival instinct fight back against the threat of extinction and make the necessary changes in products, processes and working methods to restore competitiveness. In practice, the vicious circle is difficult to break out of. It is difficult to re-organise production more efficiently in the face of falling demand because the benefits of scale economies are lost. The attitude of workers also is important. They are placed in the difficult position of having to decide which is the lesser of two evils; to co-operate in measures to raise labour productivity which, in the face of stagnant sales, will mean job losses; or not to co-operate which will also lead to job losses. In any case, it is difficult to achieve a significant increase in productivity without increased investment because new plant and equipment is often, in practice, necessary to permit working methods to be re-organised; yet investment in a declining sector is inherently very risky without some form of government backing. For these reasons the decline quickly becomes irreversible as skills are lost, excess capacity becomes endemic and the massive disadvantages of small-scale production are felt.

Which side of this argument is the stronger cannot be settled a priori; one can only look at individual cases. But there are some general observations which may be made about how governments may try to avoid the many pitfalls in intervention to arrest the decline of a "threatened" sector.

Clearly the government must make an accurate and realistic assessment as to what proportion of the sector and which companies can be restored to
viability. This is difficult, but not intrinsically impossible; though admittedly it involves "outguessing the market", the market does not have access to as much information and expertise as is available, in principle, to government, nor does it have the same capacity for initiating and co-ordinating remedial action - for example, through re-grouping of companies, overcoming bottlenecks, improving management and worker skills etc.

The government must also face the task, which is both politically unpopular and administratively difficult, of discriminating between companies, by means of aids which are strongly linked to improved economic efficiency, in order to avoid helping those which are beyond redemption. Finally and most difficult, government must not give in to pressures for sustained assistance purely to maintain employment, since this is a slippery slope leading to unreasonable burdens on the remainder of the economy. To avoid all these pitfalls requires the appropriate institutional machinery to foster constructive collaboration between government and the social partners.

Policies to promote sectoral productivity growth

The logical obverse of policies for slowing down or arresting the contraction of declining sectors consists of policies for promoting activities which are believed to enjoy strong growth potential. Because the concern here is with innovation and productivity growth across the board, the thrust of policy is less sector-specific. For example, governments are universally concerned, in recent years, with micro-processor technology, but their concern is divided (in varying proportions in different countries) between manufacture of the various devices and their application right across the board in industry. Concern with sectors is thus somewhat incidental.

Failure of private initiative fully to exploit growth potential at the entreprise or sectoral level is likely to occur for a number of reasons. It may be simply due to a lack of entrepreneurial dynamism; in the domestic market, companies compete only against one another so that entrepreneurial sluggishness may persist as a national characteristic unless the economy is very open to international trade. There may be a resistance to change on the part of workers (and management, at intermediate and lower levels) which retards the introduction of new working methods and the development of new products. Resistance to change, together with an inability to perceive the
need and potential for change, may stem from inadequacy in training and qualifications at all levels which market forces, however vigorous, can do little to correct. More fundamentally, industrial structure - in the sense of the size and other size-related characteristics of companies - may inhibit change. We have argued in an earlier chapter that the domination of many product markets by a small number of large companies is ambiguous in its effects on competitive behaviour. While size confers the ability to take the risks and incur the heavy long-term investment outlays necessary for technological change and productivity growth, the very fact of size also undermines the incentive to do so and may introduce organisational rigidities which are enemies of innovation.

There are two other important factors which may inhibit innovation in modern industrialised markets. The first arises from the fact that successful innovation by the company will sooner or later be copied by competitors. From society's viewpoint this is all to the good, but from the point of view of the profit-seeking innovator it is a disincentive because the additional profits to be gained from innovation are merely transitory. Thus there arises the much-discussed divergence between the private and social return from R and D activities which is typically invoked to justify government assisting private R and D and undertaking R and D on its own account. This divergence is not only a disincentive to R and D but also influences its form because the private company will be seeking innovation which cannot readily be copied and may also wish to build up a "shelf" of unexploited R and D findings which may be used as an insurance against intensification of competition in the future.

The second reason for government intervention to achieve innovation has to do with the large scale and inter-sectoral interdependence of many investment decisions. Here industrial policy broadens out to encompass the wider questions of the future size and structural composition of the economy's industrial capability, and therefore goes beyond questions relating to individual sectors and sub-sectors considered in isolation.

This point is perhaps best illustrated by some examples. One concerns the relationship between the textile sector and that part of the machine-tool industry which manufactures textile machinery. It has been argued that whatever the strength of the argument that comparative advantage in textiles has in the main shifted from industrialised to developing countries, this has
an important spillover effect on the viability of textile machinery manufacture which now in many industrialised countries faces a shrinking market and finds itself remote from growing markets in the developing world.

Another example concerns the relationship between the steel industry and important steel users such as motor vehicles and shipbuilding. Investment in modern steel plants needs to be in such large units with such long gestation periods that rational decisions by steel companies (whether publicly or privately owned) cannot be made without forming some view about the growth of these large customers. These in turn cannot supply useful information or formulate their own plans for the future without reference to government since the latter controls or influences so many crucial parameters influencing their future.

A final example concerns the use of industrial robots in motor-vehicle manufacture. In a country such as the United Kingdom, companies in the electronics sector contemplating developing these somewhat specialised robots cannot proceed without knowing whether the decline in vehicle manufacture is to continue; yet at the same time, whether this decline is to continue must depend, in large part, on whether successful robots are developed and applied locally. This kind of interdependence is not readily dealt with - at least to society's satisfaction - by market forces.

Whether they wish it or not therefore governments find themselves being drawn more and more into the arena of industrial planning and forecasting to generate information, set important parameters for the future and to coordinate the activities of individual companies and sectors in a way which the market cannot be expected to. As we shall see in more detail below, attempts by governments in the United States and the United Kingdom to withdraw from the arena have, to a considerable extent, been forced into reverse by these harsh realities.

In discussing policies towards sectoral growth and the development of improved products and processes, there are a number of elements in governments' motivation which should be noted. Governments, for a mixture of political and economic motives (some of which can be more readily justified than others) are not indifferent as to the sectoral composition of national production; i.e. they have "structural preferences". Most obviously in
the case of the United States and the United Kingdom among the countries studied, they are concerned at maintaining industrial sectors and activities which have a direct or indirect bearing in national defence capability. This affects the aircraft sector, electronics, and shipbuilding directly, and also is reflected in the high military emphasis in government-sponsored R and D activities. More generally, security considerations as well as considerations of national prestige may promote the desire to retain lines of economic activity at higher levels than market forces alone would dictate—in shipping, for example, and in certain specialised products such as ball bearings and special steels.

Another important factor influencing government behaviour is the increasing awareness that as industrial competition between nations intensifies, so governments themselves are being increasingly drawn into competition with one another with respect to their industrial policies. For example, support for shipbuilding in the Federal Republic of Germany is explicitly held to be justified by the fact that shipbuilding enjoys government support in all major competing nations. Competition between governments in industrialised countries influences not only policy towards sectors suffering from excess capacity at the world level, such as shipbuilding and steel, but also the growth sectors—micro-electronics and its applications to manufacturing processes and information technology. Clearly, the pace of technological change and innovation is being, so to speak, "forced" by this process of inter-governmental competition, and this is a race which no individual nation can easily retire from. Governments are increasingly conscious of the conflict which may arise between maintaining employment in the face of a world depression and this international competition in both declining and growth sectors. This may fairly be described as the central dilemma of national economic policy in industrialised countries in the 1980s, and we return to a further discussion below.

We have discussed in general terms the main areas of intervention in the industrial arena and their motivation. Now let us examine how these general considerations have been translated into particular policies, and with what effect, in the countries studied.
THE UNITED KINGDOM AND THE FEDERAL REPUBLIC OF GERMANY

Sectoral Policies

Textiles and clothing

A declining sector which is quantitatively important in employment terms in the United Kingdom and the Federal Republic of Germany is textiles and clothing. Government policies in both countries towards these two closely related sectors have been examined in an earlier ILO study, and the experience of the United Kingdom is further considered in the country study. Only the main features will be reviewed here.

The United Kingdom

The United Kingdom, like most of the advanced industrialised countries, has relied heavily on import restrictions introduced within the framework of the Multi-Fibre Arrangement to protect its domestic producers from competition from developing and newly-industrialising countries. In terms of the typology of government motives for intervention discussed at the beginning of this chapter, this could be justified on a temporary basis on the grounds that it slows down the rate of domestic decline and also provides a breathing space during which competitiveness can be restored and decline arrested. But with the further renewal of the MFA in 1982, it has become clear that protection against development countries and NICs is to continue indefinitely. Thus the United Kingdom government, in common with the other importing country signatories of the MFA, has exhibited a "structural preference" for maintaining a larger domestic textiles and clothing sector than market forces would dictate.

On the other hand, the United Kingdom is constrained by its membership of the European communities from protecting the domestic industry against competition from other EC members, and to a lesser extent by GATT obligations in relation to other industrialised countries. Thus the only hope of retaining competitiveness vis-à-vis these countries is by means of domestic policies which contribute to increased productive efficiency. Under the Industry Act 1972, textiles and clothing have received financial assistance linked to proposals for mergers and other forms of re-organisation aimed at improving productivity, though the amounts of money have been relatively
modest in relation to the number of jobs at stake. As the studies referred to above make clear, however, the major impetus to structural change in the two sectors appears to have come from the massive appreciation of sterling and the coincident world recession between 1979 and 1981. These factors, together with the sharp rise in imports from the United States (related to artificially low-energy prices there), have resulted in a drastic slimming down of United Kingdom operations by the major textile producers. Similarly, the larger companies in the clothing sector now appear to have the necessary flexibility and dynamism to compete with other industrialised country producers. Many of the small companies which survive in these sectors are still in great difficulties, however, but in relation to overall employment losses in the United Kingdom's manufacturing industry, the decline in employment in the 1980s has been less than catastrophic.

Two general conclusions seem to emerge from the United Kingdom's experience in textiles and clothing. One is that where the bulk of employment is concentrated in a large number of small companies, there is very little scope for selective assistance, because government is simply overwhelmed by the problem of selection, with the result that only the minority of large companies benefit. In any case, where the problem of lack of competitiveness is largely inherent, in that most companies are small and undercapitalised, there is very little that selective assistance could do to prevent the closure of many (if not most) companies, even if it could be accurately "targeted".

Second, it appears that while the attempts to halt decline in the 1970s may have encouraged marginal companies to continue in business in the hope that better times were round the next corner, the very sharp deterioration in international competitiveness in 1979-1981 and the aggressively "hands-off" stance of the Conservative government, elected in 1979, may have enforced a fundamental re-appraisal by many companies, as a result of which they decided that they must either "get on or get out". The fact that this has led to a slimmer but more competitive textiles and clothing industry may appear paradoxical in the light of our earlier remarks about the desirability of slowing down adjustment. But the earlier discussion did warn of the danger that slowing down decline in an undiscriminating fashion might, in fact, make it more difficult for potentially viable companies to survive. Additionally, of course, it must be remembered that while the sector in question may benefit from a short, sharp shock, this increases the adjustment burden in the rest of the economy.
The Federal Republic of Germany

There are two main differences between the United Kingdom and the Federal Republic of Germany's policies towards textiles and clothing. The most important difference is that the Federal Republic of Germany (like the Netherlands) has not taken advantage of the MFA to restrict imports from developing countries and NICs, and indeed with the Netherlands has been a consistently hostile voice in Brussels towards the formulation of a common, restrictive policy on the part of the EC. The practical reason for this stance was that already by the middle 1970s, companies in the Federal Republic of Germany and the Netherlands had relocated the more labour-intensive parts of their textile and clothing sectors in countries with lower wage costs - the phenomenon of "outward processing" - and hence many producers stood to lose rather than to gain from import restrictions. By thus swimming as it were with the tide in the changing international division of labour rather than against it, the Federal Republic of Germany has remained internationally competitive and indeed among industrialised countries is the world's largest clothing exporter, despite wage costs which were double those of the United Kingdom in the 1970s.

The second difference is that the Federal Republic of Germany has not employed any sector-specific policies towards textiles and clothing, although this apparent difference is weakened by the fact that much assistance in the Federal Republic of Germany has occurred within the framework of regional policies and of labour market policies. These facts, taken at their face value, therefore would appear to vindicate for these sectors at least the view that market forces are best left to work unimpeded, though a more detailed examination of the adjustment process in the Federal Republic of Germany is undoubtedly required.

Steel

In broad terms, the magnitude and nature of the problems facing the steel industry throughout the world are well known and do not require extensive recapitulation here. The major problem facing established steel producing countries, up to 1974, was in adjusting to the emergence of Japan as a major producer and keeping pace with the rapid technological change which accompanied this intensification of competition. Since 1974, the problem has been massive excess capacity throughout the world resulting from the world recession and long-term shifts in consumption patterns.
Policy formulation by national governments is made more difficult by a number of factors. First, most governments exhibit strong "structural preferences" with respect to steel; they are not prepared to allow the size of their respective steel industries to be determined in the market place. Second, partly as a result of intervention by governments, the world market for steel is riddled with distortions so that the ability of a particular nation's producers to sell in world markets is only weakly related to their true underlying cost competitiveness. Third, it is difficult to assess whether the world steel industry is merely suffering from a temporary, if protracted, recession (a magnification of the general world recession), or whether the decline in demand reflects a structural and therefore largely irreversible shift in the demand for steel. Against this background, our interest here lies in the differential policy responses of governments in the countries studied.

The United Kingdom

The United Kingdom steel industry was, of course, taken into public ownership in 1967. In principle, public ownership internalises within a single organisational unit the process of planning and installing new capacity and eliminating outdated plants, a process which would otherwise be the outcome of a lengthy and possibly inconclusive struggle between competing companies in the market place. In practice, public ownership has led, until recently, to an increased "politicisation" of policies in the sector. Neither the government nor the industry in the 1970s were willing to face the likely magnitude of the plant closures and employment losses necessary to restore competitiveness. Instead they undertook a heavy investment programme based on assumptions about world steel output, and the United Kingdom's share of it, which were criticised at the time and which in the event proved wildly optimistic. A complete reversal of strategy took place at the end of the 1970s, however, which gained momentum following the change of government in 1979 and consequent change in leadership of the industry. By 1983 more than one-third of capacity (and jobs) had been eliminated. Such manpower reductions would have been unthinkable in the 1970s, but worker resistance has been undermined partly by the resolution of government and industry leaders, partly (and paradoxically) by the general employment crisis in the United Kingdom which has habituated public opinion to massive redundancies, and partly by the generous redundancy compensation paid. This process would indeed have
gone even further if the government had not reined in the admirable efficiency with which the British Steel Corporation's chairman, Ian McGregor, closed down excess capacity - some of which was of quite recent vintage.

The underlying reason why the British Government called a halt to the contraction of the United Kingdom steel sector (apart from the obvious employment considerations) may be that there began to develop a very genuine doubt as to whether Britain had not perhaps directly contributed, in some sense, more than its "fair share" to the elimination of European and World excess capacity. Within the framework of the joint policies towards steel adopted by the EC members, revision of a country's production quotas is, in principle, linked to its progress in reducing capacity, but in the EC negotiations, Britain has not so far been rewarded for its rapid capacity reductions by a corresponding increase in its allotted share of EC steel production.

The Federal Republic of Germany

The picture in the Federal Republic of Germany steel sector is very different. The industry is only 10 per cent publicly owned (as against 90 per cent in the United Kingdom). Compared with other EEC countries, it is less heavily concentrated in depressed regions. German steel producers are more diversified into "downstream" activities such as engineering, shipbuilding and construction. This diversification was, in part, an early adjustment response which has increased the ability of producers to ride out the crisis, in contrast to the publicly-owned component of the British steel industry which is heavily concentrated at the basic and "heavy" end of steel-making and processing activities. Output adjustment in the Federal Republic of Germany in the face of the recession has been faster, and the industry drew extensively in the late 1970s on government compensation funds for short-time working. Restructuring has been planned and implemented by collaboration between the main producers, no doubt facilitated by the long history of cartelisation in the German steel industry (and which is echoed in the Japanese "recession cartels" which we shall examine below). In the Saarland, where steel was a major employer, restructuring was assisted by government loan guarantees to the principal producers and by general regional and social policy assistance.
Because the Federal Republic of Germany steel producers are the most efficient in Europe and the nearest to financial viability, they accepted the EC programme of minimum prices and production quotas only with reluctance. Naturally they wish to see the allocation of quotas between countries related to marginal production costs rather than to capacity utilisation, and this brings them into conflict with, among others, the British.

From this necessarily brief discussion, two broad conclusions may perhaps be drawn. The first is that the refusal in the United Kingdom to realistically face up to the size of the adjustment problem in the 1970s and earlier, and the wishful thinking in policy formulation to which this led, ultimately increased the costs of adjustment in the 1980s because very rapid decline in capacity and employment had to be compressed into a short time interval. In contrast, German producers reacted early and quickly to the objective needs of the emerging adjustment problem which consequently has never accumulated in such a way as to assume crisis proportions.

This difference, however, does not vindicate the view that private ownership is superior to public ownership, nor that non-intervention is superior to intervention. Extensive restructuring of concentrated and capital-intensive sectors, such as steel, requires extensive collaboration between producers and must also involve government, if national objectives are also to be given due weight. As already remarked, public ownership provides a framework which, in organisational terms, is ideally suited to achieving this. Unfortunately this framework in the British steel industry was, until recently at least, utilised to pursue other political objectives, a pursuit which ultimately foundered on the rock of economic reality.

The second conclusion is that, as indicated earlier, it is extremely difficult for any country to formulate a coherent policy towards its steel sector, given the global interdependencies and the extent to which "structural preference" objectives are being pursued in individual countries. Current prices, costs and market shares are extremely unreliable indicators upon which to base production and investment decisions, and the future is shrouded in uncertainty. The problem is particularly acute for Britain, since its own economic future is so uncertain. Thus the view of some critics that there is a danger of "overadjustment" in the British steel sector is not entirely without foundation.
Shipbuilding

The governments of both the United Kingdom and the Federal Republic of Germany assist their shipbuilding and shipping industries, but the motives, methods and results have been rather different. These similarities and differences serve in many ways to illustrate in microcosm the differences between the industrial policies of the two countries.

Shipbuilding, as recently as the late 1960s, was a much larger employer in the United Kingdom than in the Federal Republic of Germany, with employment heavily localised in areas suffering from general industrial decline. Although the period 1960-1975 was one of very rapid growth of world output of ships, the United Kingdom's share of world production declined rapidly. A government-appointed committee in 1966 explained this in terms of weakness right across the board in United Kingdom management in the area of marketing, planning, purchasing, design, labour relations and the size and organisation of companies, yet concluded that the output could be doubled if these deficiencies could be rectified. This report became the basis of government policy.

Government assistance is difficult to quantify and assess in total because it took many forms and was channelled through many agencies, but one independent study suggests that the total value was about £300 million in 1965-1976. The bulk of the assistance came via the medium first of the Shipbuilding Industry Board (1967-1972), subsequently via the Industry Act 1972, and finally in 1977 through outright public ownership. Assistance was selective and took the form of grants, loans and share participation by the government to encourage re-equipment and re-organisation. In addition, after 1977, special ad hoc assistance was given to permit British shipyards to tender competitively against foreign shipbuilders, and credit assistance was also given to buyers of British-built ships. Public ownership, when it came in 1977, was a logical extension of the trend of policy and gave the government, in principle, the opportunity to influence more directly the re-organisation of management, the improvement of industrial relations, and improved co-operation between shipyards over research, design and purchasing.

In terms of the number of companies, considerable rationalisation was achieved; the number of major independent producers was reduced from 28 in
1965 to 6 at the time of nationalisation in 1977. Yet the problems identified in the government report of 1966 remained; labour productivity in the Federal Republic of Germany in the 1970s was about three times higher than in the United Kingdom, while in 1979 some British yards were considered, in an official report, to be among the least productive in the world. In the 1970s the Federal Republic of Germany produced about 50 per cent more output tonnage with about half the labour force.

The reason for this failure was that the stated objectives of modernising and re-equipping yards were not, in practice, pursued. The bulk of the capital funds provided were used to cover operating losses and to provide working capital; in other words, to permit existing yards to go on building ships in much the same way they had done in the past. Re-organisation appears to have been largely cosmetic, and most of the assistance went to the least efficient who had greatest immediate need. The effect was "to preserve almost intact the size, structure and distribution" of physical capacity, and management and labour relations practices likewise remained relatively unchanged. In a nutshell, the government was caught between the immediacy of threats to employment and a lack of the means and knowledge of how to achieve more fundamental improvement.

Following nationalisation a drastic survival plan was drawn up and until the collapse of world shipping orders at the beginning of the 1980s it appeared that considerable progress in restructuring was being made. In financial terms, British Ship Builders exceeded the targets which had been set by the government; labour productivity rose sharply, with employment declining 25 per cent in five years; and there was considerable innovation (for example, in the adoption of computer-aided design). But by 1983 the United Kingdom shipbuilding sector faced extinction with a declining order book and no hope of winning new orders against shipbuilders in the Republic of Korea who were quoting prices which would barely cover the cost of bought-in materials in the United Kingdom. Not surprisingly, pressure within the sector has arisen for increased assistance in the form of more generous credit to buyers of British ships (though this in fact is regulated under the terms of an OECD agreement) and for action by the EC to limit the Republic of Korea's share of shipping orders.6

Shipbuilding in the Federal Republic of Germany has had to contend, of course, with exactly the same world environment as that of the British. Its
only advantages were that when first Japan and later the Republic of Korea and other newly industrialising countries began to emerge as major competitors, the Federal Republic of Germany's industry was not handicapped by such an initially weak structural base. The main justifications for government assistance were seen as being the handicap of an over-valued DM exchange rate and the fact that governments elsewhere were subsidising their shipbuilders, forcing the government of the Federal Republic of Germany to do likewise.

Despite much higher labour costs than the United Kingdom, shipbuilding in the Federal Republic of Germany remained relatively competitive, at least until the collapse of world demand and world prices in the 1980s. This higher competitiveness was largely the result of more competent management which led the sector in the direction of producing specialised ships, where quality of construction, technical expertise and high capital-intensity could pay off. The Federal Republic of Germany's shipbuilders thus avoided a direct confrontation with Japanese and the Republic of Korea producers in building general cargo and large bulk carriers, where the latter countries had the greatest competitive advantage.

In the 1970s government assistance played only a marginal financial role and no explicit organisational role. The major form of direct assistance was for investment, which thus contributed to re-equipment and modernisation. This contrasts with the British experience where, as we have seen, it was mainly working capital and operating subsidies which in practice were provided. Assistance was also given to German ship buyers (and in practice, almost always for the purchase of German-built ships). This policy reflected the "structural preference" of the government of the Federal Republic of Germany in favour of enlarging the national merchant fleet which, for historical reasons, is comparatively small; but this obviously benefited the shipbuilding sector too.

The clear difference between government policies in the two countries is thus that in Britain the government has progressively involved itself more and more closely in the sector's problems, with public ownership as the natural culmination of this. In the Federal Republic of Germany, on the other hand, the government has assisted the sector, but in ways which enabled the government to remain at arm's length. In view of the very limited efficiency gains which were made in British shipbuilding during the ten years of
government involvement, 1967-1977, the British approach would appear, at best, to have contributed nothing and, at worst, to have postponed necessary changes by shielding the sector from the full blast of market forces. However it is not clear that the more "hands off" approach adopted in the Federal Republic of Germany was ever a feasible option in the United Kingdom. Arguably, the German approach was made possible by the fact that German shipbuilding management perceived and responded to the needs of the situation. British management did not (and, to be fair, faced a much bigger restructuring job because of the need to wind down an industry which had once dominated the world market). The success of public ownership in rationalising capacity, improving design and production and injecting a new realism into labour relations under a tough chief executive brought in from the outside, suggests that the right solution to the British shipbuilding problem was belatedly found.

**Innovation policies:**

**The United Kingdom and the Federal Republic of Germany**

Until the beginning of the 1970s, the United Kingdom spent a relatively large proportion of its national income on R and D and taken in conjunction with United Kingdom economic sluggishness, this appeared to lend support to the view that R and D was not a decisive factor in economic performance. Of course it was well known that the United Kingdom R and D contained a very large defence-related element, but even as late as 1975, "civilian" R and D as a proportion of GNP was larger in the United Kingdom than in the Federal Republic of Germany, France, Sweden, Canada or Italy (though smaller than that of the Netherlands or Japan).

But aggregate figures of this kind can be very misleading. The total R and D effort is a complex amalgam of many disparate components, with many different motives and sources of finance, and carried out in many different places. While it is beyond the scope of the present study to pursue the R and D question to the appropriate degree of disaggregation, nonetheless some general conclusions about the role of government may be drawn by looking at the main aggregates and the main features of private enterprise behaviour and public policy.
The first striking feature (which of course is well known in general terms) is that the role of government in R and D financing is far larger in the United States and the United Kingdom than in other countries (with only France of major industrialised countries approaching the two leaders). In the United States and the United Kingdom, more than 30 per cent of all R and D carried out since the end of World War II has been financed by the government. Comparable figures for other countries are 20–30 per cent for France and Norway; 10–20 per cent for Canada, Germany, Italy and Sweden; and under 5 per cent for the Netherlands, Japan and Switzerland.

In the case of the United Kingdom (and also of France) this high proportion of government financing of R and D goes hand in hand with a large proportion of R and D which is explicitly for military purposes. In Britain, more than half (and in France nearly one third) of government R and D expenditure was on defence; in Britain the government financed in 1978 ten times as much military as industrial R and D. Relative to GDP, this military R and D financed by government was more than four times as large in the United Kingdom as in the Federal Republic of Germany. The trend of government-financed R and D in the United Kingdom in the period 1971–1977 showed military R and D remaining roughly constant in real terms, while civilian-related government-financed R and D was approximately halved.

The military orientation of the United Kingdom's R and D is, in fact, even stronger than these figures would suggest, for two reasons. First, because some unknown proportion of privately financed R and D is also carried on by companies interested in securing government contracts for the supply of military equipment, particularly in aircraft, electronics and shipbuilding. Second, because if we look at government assistance to industrial R and D (rather than explicitly military R and D), we find that it was heavily biased towards weapons-related industries, principally aerospace, electronics and nuclear power.

Thus it is clear that partly through its own R and D activities and partly through its influence as a customer on the R and D carried out by private enterprises, the British government has substantially influenced both the level and the composition of R and D in the United Kingdom. As far as the strictly military component is concerned, it is of course impossible to appraise its desirability by reference to economic criteria, although we can
report that the allegedly favourable "spin-offs" or indirect effects of military R and D and military production have been shown for the United Kingdom to be something of an illusion. Some go even further and argue that general industrial capability has been undermined by the diversion of resources—particularly intellectual resources—into weapons-related R and D.

The other component of the government of the United Kingdom's policy noted above was the emphasis on "high technology" activities: aircraft, electronics and nuclear power. Leaving aside their military significance, what can be said about the desirability of such emphasis?

First we can say that this general objective of government R and D support—promoting high technology—is common to a number of countries. As the study of the Federal Republic of Germany points out, the sectors singled out for special R and D support there (computer electronics, energy, and transport) are basically similar to those which the United Kingdom has emphasised. What is perhaps different is that the British government committed itself very heavily, and very early, to certain specific technologies and products (in aircraft, to Concorde and in nuclear power, to the Advanced Gas Cooled Reactor). In the electronics field, the commitment was not so much to a technology as to a company (ICL), with the object of maintaining a presence in computer manufacture. In contrast, the Federal Republic of Germany's commitment is somewhat broader and consequently less vulnerable to the ever-present danger that the government's own prestige will become bound up in the success or failure of a particular project.

With the costly failure of Concorde and the AGR nuclear power technology, and the declining importance of mainframe computer manufacture within the over-all context of the micro-electronic revolution, the British government has in recent years developed a more generalised and more selective approach to promoting innovation. In effect, it seems to have realised that there is little to be gained from maintaining, possibly at enormous cost, production capability in highly technology-intensive areas such as aircraft manufacture. The dilemma in these areas which faced all the major industrial activities alike, but which was felt most acutely by the weaker brethren such as the United Kingdom and France, was that they stood little chance of keeping up with the world leaders (principally, of course, the United States, but also Japan), yet were reluctant to opt out of the race entirely. This reluctance
was (and is, for the dilemma remains) partly a matter of national prestige, but was also based on firmer economic criteria. For if a nation withdraws consciously and deliberately from first one technologically advanced product area and then another, it is natural to ask where the process will end and whether such an action would be to condemn that nation to industrial decline.

On the other hand, all countries—even including Japan and the United States—faced destructive competition, fuelled by government support, if too many countries were determined to maintain a presence in, for example, aircraft manufacture. This was realised at the European level when co-operation replaced competition in the Airbus consortium. There is a good prospect that similarly collaboration at the world level will replace cut-throat competition in the next generation of aircraft and aero-engines, with collaboration between the major producing nations.

By the 1960s the United Kingdom government was acutely conscious of the nation's technological backwardness in many sectors, and aware that a GNP which was absolutely quite small and growing only slowly imposed a constraint on Britain's ability to mount a major research effort across a wide front. The policy response was to attempt to take advantage of Britain's apparently strong endowment of creative talent to develop a number of advanced technologies and thereby "leapfrog" ahead of foreign competition in certain fields. We have already mentioned Concorde and the AGR nuclear reactor. Another prominent example is the "System X" electronic telephone exchange which was a clear generation ahead of the rest of the world when first developed; Britain also enjoyed an early lead in industrial robotics, and in the use of carbon-fibres in the Rolls-Royce RB 211 engine.

These attempts at "leapfrogging" have almost all failed for one of two reasons. Either the wrong technology was chosen—Concorde, the AGR—or else the technology failed in its application, for a mixture of technological or commercial reasons, and it was left to other countries to make a success of it. Britain appears to have concluded from these mistakes that it is much more important, from the point of view of general industrial regeneration and recovery in employment levels, that new technologies and product and process improvements, whether developed indigenously or not, should be applied across the board in British industry as quickly as possible. It is much more important, for example, that industrial robots should be used in British
manufacturing as widely and as quickly as possible, than that the robots themselves should be manufactured in Britain.

The first step in the United Kingdom in this direction was the Product and Process Development Scheme, which meets up to 25 per cent of the cost of designing, developing and marketing new products and processes, introduced in 1978. Since then the list of support schemes, which are specialised in their objectives but not in the particular hardware or companies to which they apply, has escalated. Though the predominance of aerospace and nuclear research within the government's R and D budget remains, the United Kingdom study notes that the proportion devoted to general industry R and D increased from 22 per cent in 1975-76 to 41 per cent in 1981-82. The government's organisational and administrative framework has helped; previously, by supporting specific sectors for research, the sponsoring government ministry tended to become an advocate for the sector concerned. The more generalised pattern of support is now under the advice of a committee of top scientists reporting directly to the Cabinet Office.

How successful will recent R and D in the United Kingdom's policies be? Involving as they appear to a shift of emphasis towards adoption and application of existing technologies and ideas, Britain seems to have recognised its national backwardness and in that sense perhaps sees itself as in some ways like Japan in the 1950s and 1960s when there was little emphasis on basic research but intense concern to catch up with other industrial countries by applying ideas and techniques imported from abroad. But as Pavitt argues, the low capacity to introduce new techniques in Britain reflects a general inability to respond to signals of all kinds - a generalised myopia and inertia. It seems unlikely that policy on one front alone can change this.

We do not apparently find in the Federal Republic of Germany any parallel with the selective supports for development and application of new technologies in industry generally which have developed since the late 1970s in the United Kingdom. The only comparable initiative in the Federal Republic of Germany seems to be the general support since 1979 for R and D personnel in the private sector, amounting to about 3.5 thousand million DM. Presumably this is because there is no perception of a lack of eagerness on the part of private enterprise in the Federal Republic of Germany to seek out and apply new techniques.
However, it is clear from the figures cited by the study of the Federal Republic of Germany that the government funds private sector R and D on a large scale (e.g. DM 2 thousand million in 1980). Most of this is concentrated on a few large projects in a few large enterprises, the main fields being computing, energy (both nuclear and coal) and transport. Funding of research in the computer sector in the Federal Republic of Germany has been heavy since the late 1960s and reflects a determination by the government to remain in the "big league" (along with the United States and Japan) which Britain, despite a relatively strong position in the earlier 1970s, now appears to have opted out of. This support may be viewed as reflecting a "structural preference" on the part of the government of the Federal Republic of Germany, but it may also be seen as intervention to correct a "market failure" - the failure in this case arising from the fact that only companies of very large absolute size can support the necessary research effort, a fact which if market forces alone ruled throughout the world would probably imply the elimination of all of Texas Instruments' and IBM's competitors. Funding of energy reflects the Federal Republic of Germany's poor endowment of indigenous energy sources, while assistance to transport presumably reflects energy consciousness and the fierce world competition in the car industry.

JAPAN

It is difficult to break down Japanese industrial policy into a number of clearly delineated objectives and policy instruments. The objectives of policy tend to be defined in somewhat broad terms and there are many means of varying degrees of formality whereby private sector decision-taking and implementation is nudged in the desired direction. As a general statement one may say that the concerns of industrial policy compared with those of the other countries studied have been somewhat similar to the Federal Republic of Germany but very different from those of the United Kingdom. In contrast to the United Kingdom it has not been necessary to promote investment, entrepreneurship or productive efficiency. Rather the concern has been to coordinate the abundant energies and talents of the Japanese people and to harness them to pull as far as possible in the same direction. Except inevitably at the margin there has been relatively little conflict between private and social objectives or values. The role of government is seen as that of compensating for the inherent deficiencies of decentralised decision-taking, deficiencies which are inherent in the market economy. An
awareness of the need for government to play this role is to be found in all advanced industrialised countries but in Japan this role is played with a surer touch and has been less inhibited by the belief that government intervention in the economy threatens to subvert the principles of the market economy. As the Japanese study remarks, this is doubtless because the Japanese have not absorbed the teachings of Adam Smith. One could perhaps say that Japanese industrial policy has reflected an intuitive belief that the big decisions in the economy cannot be sensibly made by individual companies with information derived from the market place as their only input, but that once these decisions have been made their detailed implementation can be safely left to the competitive process though one should add that this process is by and large one of competition between oligopolistic companies, as Chapter 3 has made clear.

As in most other industrialised countries the Japanese Government has always had a relatively clear set of national economic objectives. The difference is that it has managed to define these objectives with sufficient content to make them operationally useful without on the other hand falling into the trap of attempting to specify objectives for companies or sectors in too much detail.

As is described in the Japanese country study a sense of overall direction to the evolution of the economy has been provided by the annual economic white papers of the Economic Planning Agency with their thematic titles and by the forward looks or visions published every two or three years by the Ministry for International Trade and Industry, via the Industrial Structure Council. The priorities set out in these documents reflect an emerging consensus which also contributes to the further hardening of consensus. In practical terms these documents provide criteria or orientation against which countless individual decisions by private and public officials can be tested and hence given order and coherence which could otherwise only be achieved by a much higher degree of centralisation.

Means of achieving objectives

Establishing a consensus is not enough. To achieve the objectives a government needs teeth. As explained in the country study, there is less need in Japan for the carrots of financial assistance since there are many sticks
The main means for government to get its way is by licensing controls over investment or, where licensing is not required, administrative guidance, a powerful tool in a country where there is no future for a company which has irrevocably lost the government's goodwill. The second major stick consists of tax incentives and the lending policies of major state banks. The third is direct intervention to regulate competition and promote rationalisation. The discussion in the Japanese country study implies that the Japanese government enforces competition policy in a selective way so that it acts as an industrial incentive, in particular by means of the recession cartel and the rationalisation cartel, and also by informal arrangements with companies which have a similar effect. In effect companies are encouraged to collude in the pursuance of, or as a reward for pursuing, the government's objectives and presumably their reward comes in the form of monopoly profits. The discussion of enterprise behaviour in Chapter 3 leads one to imagine that something similar may also happen more informally in the Federal Republic of Germany.

**Policy objectives**

In the period up to the early 1970s the overriding objective of industrial policy was catching up with the Western industrialised countries in technology and productivity. It was not necessary to promote growth but only to steer it. One of the main instruments at MITI's disposal was its control over imports of technology achieved through licensing which was used in such a way as to give privileged companies an advantage over their competitors and hence substantial profits, at least initially. In turn this gave competing companies an incentive to engage in their own R & D of an emulative character. Because R & D in this period was concerned with applying and later improving on existing imported technology it was by nature rather heavily downstream, i.e. it had to be carried out at or close to the source of productive processes themselves. In deciding which companies were to be allowed to exploit which technologies MITI would naturally be looking for evidence of companies' ability to take full advantage of any opportunities and R & D efforts by companies was necessary to this end, both in practical and political terms.

In this framework there was little role for the government in R and D, and its expenditures in 1972 were only about 3 per cent of industrial R and
D. However, given private industry's profit orientation and the availability of rapid returns from immediate application and marginal improvements of existing technologies, a danger was recognised by the early 1970s that certain research areas likely to prove important to the economy in the longer term might be neglected. Research in these areas was government-funded and carried on in universities, government research institutes (in particular the Agency for Industry, Science and Technology under MITI) and in some cases certain private companies. Well before the world energy crisis in 1973, Japan, as the most energy-deficient industrialised country, was turning its government-sponsored research in this direction. Also, in common with the United Kingdom and the Federal Republic of Germany, Japan was active in the early 1970s in promoting the computer industry—all three countries, of course, being concerned about the possibility of a United States (particularly IBM) monopoly in a field which was already recognised as a vital component of the future industrial base. Under firm government guidance the industry was urged to regroup into a smaller number of companies and there was a substantial injection of public money to finance advanced new products. Particular urgency was added by the fact that Japan was at this time liberalising its imports (including computer imports) as a result of pressure from other industrial countries, but the six Japanese manufacturers of main-frame computers have so far resisted pressure from MITI to merge.

In more recent years, Japan has become concerned with making the transition from catching up to moving ahead of its industrial competitors. Given private industry's financial emphasis on incremental improvements with immediate application rather than fundamental research with long gestation periods, this was seen as requiring a more active role by government in setting priorities and cajoling private industry into co-ordinated action. This is a dilemma which indeed confronts all the industrial nations which are already at the frontier of technical possibilities—where to go next and how to organise the necessary large-scale, longer-term and highly risky investment efforts which the technologies of the 1990s and beyond will require. The Japanese case study suggests that both culturally and in terms of institutions, Japan is particularly well placed to mount such a co-ordinated effort, and these factors one might surmise will prove sufficient to outweigh the sometimes alleged but by no means proven lack of creative originality of the Japanese mind.
The process of identifying national priorities and building consensual support for them is discussed in the case study. The crucial questions seem to be first the ability of the government to form its own analysis of the needs of the situation (rather than merely responding to the many conflicting arguments which different sections of industry are likely to present to it); and second, the nature of the interface between government and industry, the channels of communication, the incentives which each side has to offer the other, and so on. There are many channels of communication between, on the one hand, the government (principally MITI and EPA) and industry which is represented by the trade associations as well as by companies. These channels are both informal and formal, public and private. Each side speaks the same language and shares the same basic assumptions, values and objectives. Each side knows when the other's promises and threats will be delivered. These qualities are lacking to a greater or lesser degree in all the other countries, and the degree to which they are lacking is closely correlated with a corresponding lack of success in industrial performance and policy. In this way, as the Japanese study spells out, a consensus has been established about future growth areas which will serve as a guide to investment by companies as well as justifying and guiding future government industrial policy. Concretely, both private and public spending on R and D have increased since 1970 considerably faster than GNP and have been concentrated in electronics, bio-technology, energy, and to a lesser extent, aerospace. Emphasis has shifted away from relatively immediate and concrete products and towards developing materials and processes which might bear fruit over the next decade or two. Interestingly, it would appear that in the last decade Japan and the United Kingdom have, in a sense, "changed places" in terms of their research and innovation priorities.

The shift towards knowledge-intensive activities reflects a two-fold view. First that a high-wage economy can only compete with the growing number of NICs by achieving very high levels of productivity in traditional assembly-line manufacturing operations. This requires a very high degree of automation and in turn requires a large share of world markets if a large labour force is to be employed using highly labour-saving techniques. The other refuge from the NICs and other low-wage countries lies in the development of new products which again requires massive, very forward-looking and very knowledge-intensive investment. 12
In this connection the massive output of science and engineering graduates, and the good use which is made of them by companies, must be considered an essential factor in Japan's success, though the government's role in creating this situation has not been decisive. Indeed the "mass production" approach which the education system has adopted is now proving a handicap because of the relative scarcity of original thinkers; Japan's universities have the highest ratio of students to teaching staff of any industrial country.

Excess capacity problems

The Japanese have been particularly energetic in dealing with problems resulting from the world recession and growing competition from the NICs — particularly the Republic of Korea, as the Japanese study explains. The textile sector has fought back against NIC competition, but this has been balanced by capacity reduction achieved through exit compensation. Protection under the MFA has not been invoked.

The means whereby capacity reductions have been achieved deserve examination. Under the 1978 law to deal with "particularly depressed industries", a special sub-committee is set up within the Industrial Structure Commission, within which a dialogue between MITI and the relevant industry association takes place, but in which trade unions and representatives of customers or suppliers also participate. Typically a "Recession Cartel" is formed as a holding operation, pending cuts in capacity which are agreed between producers in a "fair" way. This procedure has resulted in cuts in capacity of 40 per cent in shipbuilding, 16 per cent in synthetic fibres, and 45 per cent in aluminium smelting. The government was able to bring pressure on the shipbuilders to reach agreement and to act quickly by virtue of the fact that an investment in shipbuilding and acceptance of orders required government licensing approval. In addition to these potential "sticks" there were also some "carrots". There were preferential loans to buyers of redundant shipyards, and where buyers were lacking, a fund was established to buy surplus yards with the land priced at its market value and equipment at book value. Some government money was provided for this, but most came from the Japan Development Bank and the private banks. They recovered their investment by selling equipment for scrap and by redeveloping the land for other purposes. Interest and the shortfall of capital is to be met by a levy
on future sales of ships so that the whole scheme is, at least, in principle, self-financing. There were special loans to shipbuilding subcontractors and additional unemployment benefits and special placement services for workers. Finally, ship orders were stimulated through subsidised loans to buyers.

Thus it may be seen that what is different about Japanese industrial policy is not so much the magnitude of financial assistance or the institutional arrangements as the decisive way in which government acts and the means at its disposal to ensure that consensus is quickly reached and action taken. Where governments in other countries have to rely on moral suasion ("jaw-boning" as it is known in the United States) backed up by positive financial incentives, the Japanese Government has many powers of control of varying degrees of formality which recalcitrant companies know will be used against them.

THE UNITED STATES

Turning to United States industrial policy, after the picture of active intervention which we find in the United Kingdom, Japan and even (though to a lesser extent) in the Federal Republic of Germany, one may be forgiven for concluding at first sight that the United States Government does not have an industrial policy. This is correct in the sense that the United States has very little in the way of a formal framework of agencies, enabling legislation, and on-going policies with which to pursue its sectoral objectives. The reason for this is that the United States Government does not have any sectoral objectives; as is stressed by the United States study, the United States Government, reflecting the deeply-entrenched and long-standing values of the American public and of the business and political communities, has until now been largely content to rely on market forces to dictate the structure and evolution of the industrial economy.

This is not to say, however, that the operation of market forces is not modified substantially by government activity. We pointed out earlier that in all advanced industrialised economies, the influence of government is pervasive and operates through innumerable channels. The United States is no exception. We may mention in passing the importance of government as a buyer of industry's output, particularly of weapons and related products; its role in education, health and welfare services both in providing these services and
in redistributing income to permit people to buy them; and of course its use of the instruments of macro-economic policy to regulate both the level and the composition of aggregate expenditure and output and to influence the exchange rate and the balance of payments — all of which we have examined or at least drawn attention to elsewhere.

Within the framework of industrial policy, broadly interpreted, perhaps the keystone of government policy is the long-standing legislative framework designed to promote competition — the anti-trust laws. That the anti-trust laws should be so important in United States' industrial policy is illustrative of three features of successive United States Government's approach to industrial policy. First, a faith in competitive markets which is partly intellectually based and partly justified by the more intuitive belief that the American people's interests have been well served in the past by competition between private enterprises, and will be equally well served in future. Second, that in so far as government intervention in the economy is necessary, this is best achieved within a clearly-defined legislative framework in which the application of general principles to particular cases is not entrusted to elected politicians but to semi-independent quasi-judicial bodies. Third, and logically complementing the second, the view that selective intervention by government is unwise since it is likely, and perhaps logically inevitable, that such interventions will result in the interests of sectoral groups being favoured at the expense of those of the public at large. However, we might add a fourth general principle: that the first three principles may all be overridden by considerations of national security. These principles — particularly the third — go a long way towards explaining the relatively limited extent of United States industrial policies, and also the character of such policies as are to be found.

In addition to anti-trust legislation, there are two other forms of government intervention with pervasive economic effects. One is tax incentives for investment in plant and machinery. These incentives are found in all the countries studied, and while their long term effects may well be substantial, it is somewhat beyond the scope of this study to attempt to access them. The second, in which differences between countries are more noticeable in, with perhaps more significance for the purposes of this study, is the government's role in R and D expenditures and innovation.
Turning now to policies towards particular sectors of the United States economy, we may mention immediately three important sets of policies: agriculture support; depletion allowances and other special treatment of domestic oil extraction; and subsidies to the construction and use of ships flying the United States flag. Considerations of national security have historically been invoked to justify intervention in these three sectors. Since our interest lies principally in manufacturing, the first two need not detain us except perhaps to note that, in accordance with the third general principle stated above, these policies despite their long-standing nature, have not ceased to generate political controversy.

Another cluster of sectoral interventions are those which are justified by international trade considerations and may be considered as a by-product of international trade policy - specifically, the Trade Expansion Act 1962, and later the Trade Act of 1974. As is explained in the United States country study, the Act provides for "Trade Adjustment Assistance" (TAA). Workers and companies to whom trade liberalisation (within the Kennedy and Tokyo Rounds) proved to be a major source of injury were eligible for government assistance. In the case of workers, this may take the form of income supplements additional to the normal unemployment insurance benefits, specific inducements to participate in re-training and placement programmes, and relocation grants. In the case of companies, assistance takes the form of low-interest loans, special tax privileges and free technical consultancy services.

There was little use of TAA in the early years, perhaps because its existence derived less from the objective needs of the situation than from the need to persuade a fairly protectionist-minded Congress and public to endorse the liberal stance of the United States Government in GATT negotiations in the 1960s and 1970s. The 1974 Act reduced the importance of "injury" from import penetration in the eligibility criteria and TAA therefore took on a more general character of assistance to those companies and workers affected adversely by structural change. Consequently the programme expanded somewhat, but the amounts disbursed remained small until 1980 when, with the United States economy moving into deep recession and import penetration rising sharply, expenditure rose to $2.8 thousand million with more than half a
million beneficiaries. Where the textile and footwear sector had been the main beneficiaries in the 1970s, the sharp increase in 1980 resulted from payments to workers in the car and steel sectors.13

What have been the effects of TAA? In terms of our analytical framework at the beginning of this chapter, TAA appears to embody all three of the effects which many governments may desire to produce in intervening in the adjustment process. First, there is the purely social, compensatory effect in that displaced workers receive additional payments which reduce the burden of adjustment falling on individuals. Second, the economic costs, measured by output lost as a result of workers being unemployed, is reduced because displaced workers receive help in finding new jobs. These two unfortunately run counter to one another since compensation payments are unconditional and must logically act as some disincentive to job search—though the practical significance of this is unknown. Third, financial assistance to companies reduces the economic and social costs of adjustment by permitting it to be spread over a longer period. Finally, both financial assistance and the consultancy services provided to firms may permit some of them to recover their competitiveness and thus reduce the required contraction of the sectors concerned.

It is really only the first of these effects—the social compensation—which we may be sure is occurring. The size and indeed the very existence of the other effects, in practice, is largely speculative. One is forced to conclude that to rely on sectoral industrial policies within the framework of TAA is to rely on a "scatter gun" approach to the problem. But this loss of control may be viewed as an inevitable price to be paid for operating a "hands off" industrial policy.

If we look at other components of sectoral policy in the United States, we see similar features. Given the desire, for reasons discussed earlier, on the part of the Government not to "take sides" in economic issues, and given also the comparative weakness of the executive branch, at least in recent years, the United States Government has not formed any coherent view of the changes which need to be brought about in the economy, and therefore of where and how it could usefully assist in bringing about these changes. Consequently, it is caught unprepared by difficulties when they arise in particular sectors or in the economy at large, and therefore falls an easy
victim for the very political and sectoral pressures it wished to avoid. Wishing to defuse particularly difficult situations, the government finds protection against imports an attractive response since it permits the government to remain detached from the domestic economic arena and does not, unlike any domestic intervention, propitiate one organised group only to antagonise others. Moreover, because government has tended to react to individual issues without an overall framework, conflicts between domestic policies have been noticeable in recent years.

These general features are well illustrated by sectoral policies towards steel and coal. It is generally accepted that environmental and safety regulations and vacillatory energy policies wreaked havoc in the United States car industry in the 1970s — though this is not to overlook the poor record of domestic producers themselves, both in technological development and in forecasting and reacting to market trends. When the adjustment problems of the car industry came to a head in the form of the financial collapse of Chrysler, the government — after much heart-searching — came forward with the necessary loan guarantees which permitted the company to be saved.

This was a classic "rescue" operation, and similar last-minute operations have occurred in the United Kingdom, the Federal Republic of Germany and elsewhere. How should they be evaluated as a component of industrial policy? Those at the non-interventionist end of the spectrum would argue that governments should certainly stay on the sidelines except in exceptional cases where there is a clear danger that a surge of market pressure will annihilate a company which is capable of being restored to viability with strictly temporary assistance; where, in other words, market forces seem likely to lead to "over-adjustment". Towards the interventionist end of the spectrum, the argument might be voiced that the need for rescue reflected the lack of a systematic industrial policy, that the motivation of the rescue was largely political, and that it contributed to further "politicisation" of economic policy which retarded the development of a coherent policy in the future. This politicisation of industrial policy is something which is conspicuously absent in Japan, but conspicuously present in the United Kingdom where it is both a consequence and also a cause of the acute adjustment problem there. The size of Chrysler (then the sixth largest industrial employer in the United States) and the fact that its demise would have left only two major domestic car producers, suggest to non-interventionists and to interventionists alike that the rescue was justified.
More generally the Reagan administration has taken two steps to assist the car industry. It has concluded a voluntary export restraint agreement with Japan, and it has eased the deadline by which certain pollution standards have to be met. Though protectionism is certainly not part of "Reaganomics", the first of these could perhaps be justified on "breathing space" grounds, though this argument does not justify its discriminatory character. But it could be argued that discrimination against Japan is forced upon the United States by the existence of export restraints imposed upon Japan by most of its other major overseas customers – with the notable exception of the Federal Republic of Germany. The easement of pollution requirements is very much part of the current United States administration's economic philosophy of "de-regulation" upon which we comment more generally below.

In the steel sector, the United States Government has until recently studiously refrained from any action which would help the sector to overcome its acute structural problem. The reasons for this problem are examined in the United States country study. Briefly, the problem for companies has been the vicious circle of low profitability breeding low investment, in turn leading to further loss of profitability – though this disease was largely self-inflicted by years of complacency and lack of effective competition between domestic producers. Workers too must take their share of the blame by virtue of the fact that earnings growth has persistently run ahead of productivity growth. As a result of this behaviour by workers and enterprises, the United States steel sector is technologically backward and uncompetitive, despite the benefits of unrealistically low United States energy prices.

Since these problems are present, to some degree, in a number of traditional sectors of the United States, government policy is particularly important. Thus it is disappointing to see that the policy response has been one of protection via the "trigger price" and "surge" provisions. Of course, protection may be justified on the grounds that a breathing space is necessary to permit domestic producers to put their house in order, but this argument would carry more weight in the present case if protection were backed by government policies to achieve this and to ensure that protection did not serve as an excuse for postponing the necessary steps. The argument that protection is justified by subsidies to foreign producers would likewise carry more weight if the United States steel producers had not enjoyed their own subsidy in the form of artificially cheap fuel, and if their underlying productivity performance were more respectable.
In fact, there have been some signs of the necessary complementing action by the government. Depreciation allowances for steel producers have been improved, pollution-control laws have been relaxed, and there is special provision for government assistance for R and D in which the industry has such a notable long-standing weakness. A variety of programmes exists for special assistance to individuals and localities affected by steel closures, and indeed much shedding of surplus manpower has already occurred. But even if plans for new investment go ahead as rapidly as intended, much of the sector is likely to remain uncompetitive until well into the 1980s. It therefore seems likely that pressure for protection will remain, and even intensify. Though policy has moved in the right direction, it seems to be a case of "too little, too late".

**United States policies towards innovation and growth sectors**

When we look at the United States Government policy towards innovation and growth sectors, we find first of all that in marked contrast to the other countries, no explicit policies favouring the growth of any particular products, technologies or production sectors exists other than in relation to energy. As long as the United States industry led the world in its capacity for innovation and productivity growth, the absence of such policies was hardly surprising, especially in view of the strong inhibitions towards sectoral intervention to which we have already referred. Equally, as long as other industrialised countries were struggling to emulate American standards of innovatory performance, it was scarcely surprising that governments elsewhere should try to accelerate the catching-up process. Our review of performance in the four countries showed, however, that the United States supremacy in technology and even in productivity levels in certain sectors is increasingly questionable. Both in its over-all performance and in certain key sectors, the United States industry is showing a certain loss of impetus which it would be an exaggeration to characterise as senility, but which perhaps could fairly be considered as analagous to the approach of middle age.

This being so, an examination of government policies towards innovation and growth sectors is called for. As already remarked, there are no explicit policies aimed at promoting particular sectors or technologies such as are found in the other countries. But this is not to say that government policies
do not have a major impact on the pace and direction of technological change in the United States, and thereby on the fortunes of particular companies.

The main vehicle by which this is achieved is the government's finance of R and D. The distinctive features of the United States R and D effort in the 1950s and 1960s were the comparatively large proportion of GNP which was devoted to R and D (nearly 3 per cent in the later 1960s) and the large proportion (about one-half) of these outlays which was financed by the government. But both these statistics are explained by the very large R and D expenditures for military and space-exploration purposes, which accounted for over 80 per cent of government R and D expenditures in this period. Much of this research was carried out by private companies with government financing; over 80 per cent of all R and D was (and still is) carried out in the aircraft and missiles, electrical equipment, chemicals and vehicles and machinery sectors.17

With the ending of the Vietnam war and the Apollo space programme, government-financed R and D declined. At the same time, its composition shifted in the 1970s towards health, energy, environment and communication, reflecting government's new preoccupations and priorities. Private industry's own R and D effort has not increased correspondingly, but rather has remained virtually constant in real terms since the late 1960s. Overall therefore, R and D has fallen from round 3 per cent of GNP to around 2 per cent—a fall of about one-third.

Clearly government funding of R and D has not been aimed at making the United States industry more efficient or more internationally competitive, but rather at achieving technological progress in areas of national concern—defence, the space programme, and later environmental, health and energy problems—which could not safely be left to be dealt with by market mechanisms. The question is whether in view of the relative decline in the private sector's R and D and the contemporaneous decline in productivity growth and international competitiveness, the government should try to stimulate industry's own market-oriented efforts. As we pointed out at the beginning of this chapter, there is some presumption that the social return to R and D and innovation may exceed the private return, and indeed studies in the United States have found this to be the case. Equally important, research studies have found a close relationship in both sectors and industrial companies between R and D outlays and productivity growth.
For the past two decades at least there has in fact been concern in
government circles over this question. As long ago as 1963, the United States
Department of Commerce identified a number of sectors, including textiles,
building and construction, machine tools and metal fabrication, timber, and
foundries and castings, which it regarded as technologically backward, but
proposals for government assistance were opposed both in Congress and by
industry, on the grounds that they would disturb the competitive process.
Since then there have been a series of studies on the impact of government on
innovation in industry and a number of somewhat marginal programmes of action
implemented. One obvious form of incentive, which would permit the government
to remain at arm's length from industry (as both parties so clearly desire),
would be to introduce tax incentives for R and D. This was proposed in the
late 1970s by a government advisory committee, but was not implemented.\(^{18}\)

In explaining why private industry's research has remained relatively
static since the late 1960s, there are two factors of particular relevance to
this study. One is the impact of the government's own environmental, health
and safety regulations in the 1960s and 1970s, an impact which has been
explored in considerable depth by Weidenbaum who cites no less than 42 major
legislative enactments between 1962 and 1976 in these areas.\(^{19}\) Doubtless,
most if not all of these regulations contributed significantly to the
achievement of thoroughly laudable social objectives. That is not the issue.
What is at issue is whether their cumulative effects, not just on industry's
costs but on its behaviour in terms of priorities and objectives, was
adequately foreseen and weighed against the prospective social gains.
Weidenbaum and others argue that the costs, both in a strict financial sense
and in the sense of diversion of resources, was substantial. In the context
of the present discussion, for example, it is suggested that research effort
was diverted from new product and process development towards making existing
products and processes comply with new regulations concerning health, safety,
pollution and consumer protection. Others have argued that on the contrary
the search for new products and processes has been stimulated, in at least
some cases, precisely because existing products and processes could not comply
with the new regulations. No overall verdict on this is possible.

A similarly open verdict must be reached on the question of the effects
on productivity and innovation of government policies in the energy field.
While on the one hand, the government supported a large volume of long-term
research on alternative energy sources in the late 1970s, the opportunity to achieve a more fundamental structural shift towards both conservation and the development of alternative energy sources was undermined by the government's policy of maintaining energy prices at an artificially low level as a counter-inflation device; though both these two elements of energy policy have been reversed in the 1980s.

A second aspect of great interest to our study is the question of the reasons why industry's R and D efforts have slackened. We suggested in Chapter 3 that management objectives in the United States had shifted somewhat towards the pursuit of measurable financial goals which would show up readily in internal accounting and in published company performance data. This shift we suggested to be both a cause and a consequence of changes in organisational structures and in the qualifications and expertise of United States managers. Some evidence of the impact of this hypothesised shift on research activity has been published.²⁰ Compared with the 1950s and 1960s, companies now try to manage and supervise R and D in more detail, emphasising control and formality in R and D project selection and the short-term effects on profits. This has tended to reduce the proportion of R and D expenditures going for risky and "basic" projects. There is also evidence that the rate of diffusion of new techniques has speeded up both nationally and internationally, reducing the profits to be captured by the innovating company and making it easier and more attractive to rely on copying others.

To summarise and conclude, it has been argued that there has been a slackening of R and D effort in the United States industry, and that some sectors—notably steel, cars and some consumer durables—have been noticeably backward technologically in respect of both products and production methods. The United States Government has no broad-based explicit policies for promoting innovation in particular sectors except for technical assistance to companies within the framework of Trade Adjustment Assistance and the special programme for the steel industry. Some relaxation of government regulations has occurred in the 1980s, for example on car exhaust emissions and on pollution by steel plant, which may reduce costs and permit research efforts in these sectors to be re-directed towards "market" requirements. However, we should perhaps be cautious in concluding that greater stimulus in the form of incentives to R and D either generally or selectively, are required, although such stimuli are strongly advocated by a number of economic analysts specialising in this area of research and economic growth.
THE NETHERLANDS

From the middle of the 1950s when the immediate needs of postwar reconstruction had been satisfied until the end of the 1960s, little by way of industrial policy existed in the Netherlands. With output and productivity both growing rapidly there was clearly little need for intervention, and the government saw its role as lying in the provision of a supportive overall economic environment. The means to this end were partly the regulation of aggregate demand by means of fiscal and monetary policies, and more importantly the use by the government of its influence in wage negotiations (and to a limited degree, its power to regulate price increases) in such a way as to maintain the Netherlands' international competitiveness.

From the end of the 1960s there emerged a growing perception that a number of problems were emerging which required greater intervention on the supply side of the economy. The two problems of regional imbalance and the environmental aspects of growth were very much in the forefront of thinking at this time, probably to a greater extent than in any other industrialised country, and only comparatively recently have they been driven into the background by the more pressing problems of unemployment and de-industrialisation. Of more direct concern to the present discussion, the growing problems of a number of sectors, particularly textiles and clothing and shipbuilding suggested that continued painless growth could not indefinitely be taken for granted. Potential problems were foreseen (later becoming actual problems), deriving from the fact that the industrial strength of the Netherlands was rather narrowly based on processing activities with a comparative weakness in finished consumer and capital goods: that exports were correspondingly specialised in terms of both products and destinations; that the dynamism of the company sector rested heavily on a small number of large multinational companies whose futures were not necessarily tied to the Netherlands; and that small size was a handicap to the achievement of minimum efficient scales of production and effective innovation which could not readily be overcome.

One of the unfortunate but inevitable features of economic policy-making in a democracy is the length of time required to build a consensus in favour of a re-orientation of policy and the fact that such consensus building can scarcely begin until the initiating changes in the objective economic
situation have become well established as a trend. In the Netherlands great importance is attached by the government to relatively formal consultation and advice-seeking as a prelude to action and to the implementation of policy within a tripartite framework. As a result, response to the growing structural problem was slow and tended to lag behind the evolving needs of the situation. In 1971 the government announced its intention to provide assistance, where necessary, to companies in "threatened" sectors, aimed at restoring their viability, and set up a tripartite organisation (NEHEM) to advise on and oversee the implementation of assistance schemes. Assistance in a variety of forms was provided, principally to the textiles and clothing, leather and leather goods, and shipbuilding sectors, but in no sense can this phase of industrial policy be considered a success. The reasons for failure were very similar to those found in similar situations in other industrialised countries: the magnitude and urgency of the problem, the reluctance of companies to agree to radical changes, particularly as regards merger and re-organisation, and the friction between the social partners deriving essentially from the inherent conflict between improving profitability and maintaining employment.

In the aftermath of the first oil crisis the attempt to assist "threatened" sectors by a systematic programme endorsed by the NEHEM was overwhelmed by the pressure of events. Using the multiplicity of powers and instruments at its disposal, many of them inherited from the postwar reconstruction period, the government gave considerable financial assistance to companies which had been hard hit by the 1974-75 recession. The unsystematic nature of this assistance and the relative absence of any clear criteria, other than need, was not considered of great consequence since it was envisaged that the need for help would disappear when the recession ended. The extent of the structural weaknesses which were later to be revealed by the prolongation and renewal of the world recession were as yet unforeseen. In this surge of ad hoc assistance the NEHEM was effectively by-passed and was in any case paralysed by disputes between the social partners, disputes which culminated in its demise in 1978.

As is reported in the Netherlands case study, the extent of government assistance to industry in the period 1978-1982 has been evaluated by the Central Planning Bureau, an influential and quasi-autonomous body which has no true counterpart in other countries. The major form of assistance was tax
concessions aimed at combatting the recession and compensating for the decline in investment and profitability; this accounted for roughly two-thirds of the funds disbursed. A further 20 per cent of the funds were used either to bail out companies whose survival was threatened by the recession or to subsidise wages, the shipbuilding sector being a major beneficiary. Only about 10 per cent of the funds were used in a selective fashion to promote innovation, exports or regional balance.

Alongside of this collection of ad hoc responses to the recession, the government launched in 1976 a new initiative in industrial policy by setting up an Investment Fund, the WIR, to stimulate industrial investment both generally and selectively. The general investment subsidy (which in 1978-81 absorbed about four-fifths of the funds) was aimed at combatting the general decline in investment resulting from the recession and the associated collapse in profitability. The sustained fall in investment had evoked fears in the Netherlands (echoed in other countries) that an ageing and stagnating capital stock might make it impossible to fully restore employment levels even when the recession ended. In effect, general investment subsidies were justified in terms of structural policy by the fear of a future structural imbalance between aggregate demand and the ability of the supply side of the economy to meet that demand. The balance of the Investment Fund's disbursements were allocated according to regional/urban and energy conservation criteria and to provide special assistance to investment projects disadvantaged by particularly large or small scale.

The volume of funds allocated by the Investment Fund has been quite substantial. It has been estimated that in 1981-82 they covered 15 per cent of the amount spent on non-residential business fixed investment, were equivalent to the remission of 45 per cent of corporate taxation, and accounted for 4 per cent of central government expenditure. Nonetheless, the Investment Fund's budget was overshadowed by the sums allocated to the ad hoc assistance described above which, including the value of tax concessions, were more than twice as large.

By the beginning of the 1980s there were widespread dissatisfaction with both these two elements of industrial policy in the Netherlands. Given the pressure which was building up, as described earlier, for restraining government expenditure and taxation, there was a growing desire to increase
the cost-effectiveness of industrial policy. While the general investment subsidies could be defended on the grounds that they were at least a more "positive" form of adjustment assistance than the defensive and ad hoc forms of assistance existing alongside them, and were also less discriminating between profitable and unprofitable companies, they could hardly be defended as a permanent feature of a market economy. But in the short term there was little alternative to continuing them in the hope or expectation that real wage restraint and reduced real social benefits would restore company profitability and hence replenish both the means and the incentive to private investment. In the meantime, however, there was a shift of emphasis by the Investment Fund towards encouraging investment in plant rather than building on the grounds that the former had a more direct impact on productivity and productive potential. There was also a reduced willingness to bail out individual companies in financial difficulties. The more successful companies had not unnaturally objected to these rescues on the grounds that they rewarded failure and thereby penalized success, and there was more generally a growing awareness that this was, in any case, an expedient which did not address the underlying problems of the Netherlands' economy. (Notably, however, subsidies to three major companies — RSV in shipbuilding, Fokker in aircraft, and DAF in road vehicles — continued unabated.)

Following an influential report by the Scientific Council for Government Policy (WRR), in 1980, and the report of the Wagner Committee which was asked to translate some of the Scientific Council's ideas into operational form, the underlying structural problems were perhaps for the first time clearly identified and addressed. Though an essential ingredient of the solution was seen as transferring purchasing power from the household and government sector to the business sector, there was no guarantee that this alone would suffice to restore the dynamism of industry. A policy of "re-industrialisation" was therefore proposed in which government would identify "attention areas" which held promise of growth and where government supplementation of private initiative was essential if the necessary momentum were to be achieved. The Wagner report identified thirteen such attention areas, including infrastructure such as transport and dredging operations; the environment; consumer electronics; the agro-industry and chemical engineering, as well as the "new technology" sector — the information and telecommunication sectors, medical technology and production control systems. These activities in aggregate account for about 20 per cent of value-added in the market sector, and 35 per cent of exports.
A good case can be made for singling out every one of these "attention areas", but as the Netherlands case study points out, the selection of projects within these areas has, at the time of writing, yet to be made, and the precise form of government assistance has yet to be determined, so the new strategy has yet to be put to test. It is noteworthy though that the government has resisted the recommendations of the Scientific Council regarding new institutional structures, preferring the Japanese model in which government/industry relations, although close, are characterised by informality. The only new institution is the Industrial Projects Corporation which will provide risk capital on a commercial basis for new ventures. The initial funding of the Corporation in 1982 was modest.

**Labour market policies**

In principle, labour market policies should form an integral part of industrial policy. In the Netherlands, as in other countries, labour market measures adopted in recent years have been predominantly of a "firefighting" character; that is to say they have attempted to alleviate particular employment problems as they have arisen, in ways which provided temporary relief, without to any great extent addressing problems at their source.

Two classical methods whereby governments have traditionally alleviated unemployment are public works programmes and the creation of jobs in the public sector. As is described in the Netherlands country study, both these techniques have been used there. Additional or accelerated public works programmes were utilised during the 1970s to combat unemployment in shipbuilding and construction, but this approach was largely abandoned at the end of the decade as pressure mounted for reducing public expenditure. Expenditure on job creation in the public sector rose more than ten-fold between 1973 and 1981 and became quantitatively quite significant in providing jobs. A third possibility is for government to "create" jobs in the private sector by means of wage subsidies, and to postpone redundancies by the same means. This approach has also been used in the Netherlands.

Education and training policies address the unemployment problem in a more fundamental way, and the Netherlands government has developed a fairly substantial and comprehensive set of training measures for both adults and school-leavers with both full-time and part-time opportunities. Judging by
the relationship between the relatively large number of trainees and the relatively small amounts spent (both figures being reported in the Netherlands case study), most training appears to be of rather short duration. This inevitably evokes the suspicion that (as in other countries) the main purpose is to take people off the unemployment register for cosmetic reasons. The Netherlands case study estimates that only three per cent of those unemployed for more than six months find jobs as a result of the government's labour market policies.

Notes:


2. The term "structural preferences" was coined by Prof. Jacques de Bandt of the University of Nanterre, Paris, France.


5. This section draws upon Alan Peacock et. al.: Structural Economic Policies in West Germany and the United Kingdom (London, the Anglo-German Foundation for the Study of Industrial Society, 1980).


15. Recalling our general discussion in Chapter 3 on the possible effects of high concentration on industrial performance, the poor performances of both the car and the steel sectors in the United States is almost certainly linked with the fact that both sectors are dominated by a small number of very large companies.

16. In 1980 the United Steel Corporation was still making 30% of its steel in the out-moded open-hearth furnace - the same percentage as the EEC figure for 1960.


22. Calculated from data cited in the Netherlands case study.

It is now time to draw together the threads of this discussion and to consider what may be learned from it and from the accompanying country studies. What answers seem to emerge to the questions with which we embarked upon this work?

ORIGINS OF THE CRISIS

The first and most fundamental question concerned the nature of the world economic crisis of the 1980s, its causes and its possible cure. As a general conclusion, as we turn the spotlight on first one country and then another, it is clear that in terms of the way in which the crisis is perceived and the forms in which it manifests itself, the situation of each country is somewhat different. But having said this one is at the same time strongly impressed by the similarities as well as the differences in the problems faced by the five countries. Though inflation rates are now acceptably low and stable compared with the 1970s, unemployment levels in all the countries, with the exception of Japan, remain acceptably high and nowhere can one feel confident (the recent revival notwithstanding) that the employment situation will improve in the remainder of the decade. Given the persistence and the depth of the recession, the conventional distinction between cyclical and structural elements in its causation has become extremely blurred. But it does seem clear that the structural element is now so large that one cannot reasonably expect a cyclical recovery alone (whether spontaneous or policy-induced) to alleviate the unemployment problem significantly.

In the Introduction to this report it was argued that it was necessary to understand the reasons for this common crisis in employment in the industrialised countries in order to attempt a cure. The patient's maladies, after all, must be diagnosed before the correct therapy can be prescribed. Since political economy is not an exact science, there are many competing diagnoses which can be divided into three broad categories:

i) spontaneous evolution of the world economy;

ii) changes in the behaviour of economic agents, interacting with changes in law, economic and social organisation and institutions;

iii) changes in economic policy.
The boundaries between these three categories are inevitably blurred and there are, of course, important interactions between elements of one category and the others. Nonetheless this classification scheme provides a framework which is helpful in organising thought.

In the first category, the most all-embracing explanation which has been proposed is that the crisis of the 1980s is nothing more than the latest downswing in the "long waves" which have characterised world economy activity over the past two centuries. This view may be said to explain everything while explaining nothing, but one may carry the analysis a little further by hypothesising that the post-war boom was fueled by a back-log of investment opportunities resulting from neglect of the world's productive capital stock during the two wars and the inter-war period, and by rapid technological progress and productivity growth in sectors such as chemicals, transport and consumer durables. By about 1970 it is suggested that in many sectors (such as chemicals, construction, shipbuilding and steel) capacity had caught up with demand, while in consumer durables similarly markets were becoming saturated and the scope for further substantial productivity growth had been exhausted. Hence the boom fizzled out.

Other explanations give a heavy weight to the 1973 oil crisis, with the second round of oil price increases in 1974 administering, as it were, the coup de grace. This explanation certainly has the advantage of fitting the timing of events very well and few would deny that the oil price increases played at the very least a major contributory role in the genesis of the current crisis. The direct economic effects of the oil price increases were of two kinds. First there was a massive transfer of income to the oil exporters, income which they could not spend immediately but which they were forced to save, thereby exerting a major drag on world demand for goods and services. Second, world inflation was boosted not only by the direct effects of higher oil prices but by the indirect effects as economic agents - workers and enterprises - throughout the world tried to recoup these higher energy costs in the form of higher wages and prices. More important probably than these direct effects, however, were the indirect effects. The oil price increases and the associated instability in international relations seriously undermined confidence in the stability and progress of the world economy. Investors everywhere were forced to take a harder look into the future, and they did not like much of what they saw. One of the first lessons of
economics is that through these intangible confidence factors, both prosperity and recession feed upon themselves.

These two explanations — the faltering of the post-war boom and the oil crisis — are already sufficient in magnitude and timing to explain plausibly the world recession which gathered momentum in the 1970s and reached crisis proportions in the 1980s. A number of additional factors, some of which are consequential effects, may also be mentioned. As soon as world economic growth faltered, some of the problems which had been building up in the 1960s were thrown into sharper focus. First, western Europe and North America became suddenly and painfully conscious of the growing competitiveness and sheer volume of industrial productive capacity in the NICs as well as Japan. In relation to the levels and likely growth of world demand, there was a sudden realisation that considerable over-investment in capacity had occurred in a number of sectors such as steel, shipbuilding, vehicles and chemicals. Second, an international monetary system, which had been founded upon United States hegemony in the world economy, crumbled away into a non-system.

Moving on to the second and third categories of explanation, developments within individual nations, in terms of both the behaviour of citizens and also the responses of their governments, have also contributed to the crisis. This brings us into an area of explanation of the crisis which is more central to our work and to which many commentators have attached considerable if not overwhelming importance. We are touching on the phenomenon of the so-called "structural rigidities" to which we referred in the Introduction. As we have already remarked, those who use this term seldom define it in any detail. In part, it seems to encompass the increased tendency to build-in inflation expectations to wage and price-setting behaviour together with rising real wage expectations. With hindsight it is clear that the postwar "miracle" of full employment without inflation was made possible by a general failure on the part of economic agents to fully anticipate the inflation which lay ahead, so that while wage demands and price increases sought to compensate for past inflation they did not fully attempt to pre-empt future inflation. This increasingly ceased to be the case as individuals learned from their past mistakes, and the actual inflation rate inevitably accelerated as a result. To this may be added the "revolution of rising expectations" which led workers to expect, as a reasonable objective, that wage increases should run ahead of price increases — something which was only possible, without accelerating inflation, if productivity was rising rapidly.
Another source of structural rigidity is believed to be the growth of the public sector, both as a supplier and a consumer of goods and services, implying that decisions about resource allocation became increasingly determined by reference to political and administrative criteria rather than responding to market signals. The higher levels of provision of state welfare benefits, particularly unemployment benefit, is seen as another important source of rigidity in the system. Despite the fact that statistical evidence is at best inconclusive and frequently points in the opposite direction, there has developed a widespread belief that benefit levels and the taxation necessary to finance them are sufficiently high to undermine the incentive to work. At the same time, legislation on job security and the increased bargaining power of trade unions during the full employment epoch weakened management prerogatives over workforce deployment.

THE RESPONSE OF GOVERNMENTS

In the face of all these developments, which peaked in 1973-74, governments' faith in the feasibility and desirability of pursuing full employment through Keynesian fiscal and monetary policies declined. Short of direct intervention in wage- and price-setting behaviour (which a number of governments experimented with, but quickly abandoned as too costly in political and economic terms), there appeared no alternative but to allow mounting unemployment and excess capacity to squeeze the inflationary momentum out of the industrialised economies. Thus arose the progressive retreat from Keynesian principles of macro-economic management referred to earlier.

Since 1973, and even more since 1979, governments have responded to "stagflation" by pursuing deflationary macro-economic policies - a response which has inevitably prolonged and deepened the recession. Such policies have been held to be justified by two arguments. First, that the very presence of stagflation indicated that inflationary pressures had become deeply rooted in the economies of the industrialised countries, and hence a relatively prolonged period of recession was the inevitable price to be paid in order to squeeze inflation out of the system. Second, that such a policy response did not reflect a shift of priorities away from the pursuit of full employment towards the pursuit of price stability. Rather, continued pursuit of full employment in the face of inflation would ultimately be self-defeating because of the continued acceleration in inflation which such a response would
inevitably engender. Deflationary policies were therefore simply the continued pursuit of full employment by indirect means, and with a medium term rather than a short-term perspective.

In the absence of more direct means of influencing the rate of increase of wages and prices, such a policy response is arguably inevitable. More disturbing, however, is the emergence in recent years of a far more radical re-appraisal of the appropriate role of government in the economy in terms of both the means and the ends of economic policy. One element of this re-appraisal may be described as a renewed devotion to the concept of "sound finance"; the belief that government budget deficits are themselves inflationary, regardless of the state of the economy. Allied to this is the idea that the levels of government expenditure and tax revenue need to be reduced in order to increase incentives and to subject more decision-taking to the pressure of market forces. These beliefs have now become sufficiently strongly entrenched that fiscal contraction is now seen in most countries as an end in itself and hence there is now a danger that deflationary policies will continue even where inflation itself has largely abated.

A second element of this more radical view is the underlying belief that it is neither feasible nor desirable for governments to pursue full employment policies of the kind which reigned in the pre-1973 period. The underlying view is that, apart from being the enemy of price stability, buoyant product markets reduce both the penalties of inefficiency and the rewards of efficiency, and thereby impede growth and structural change. Similarly a strong demand for labour shifts the balance of bargaining power in favour of trade unions which are understandably a conservative force. In short, the pursuit of full employment by conventional macro-economic means weakens the pressure of market forces and is thereby detrimental to efficiency, growth and ultimately, some would argue, to employment itself.2

Though these views by no means command universal acceptance they are strongly entrenched and underlie much current debate on economic policy, and those who find them unpalatable have not mounted much by way of rejoinder. It is therefore important to consider what has been learned from our studies which can shed light on this question.
THE BEHAVIOUR OF ECONOMIC AGENTS

The central question which underlies the concept of increased structural rigidities is whether the behaviour of economic agents — workers, managers, shareholders, lenders — has undergone some changes which have reduced the capacity of the economic system to respond to and anticipate changes in the market environment. In a nutshell, the question is whether the capacity to achieve structural change has diminished at the very moment when the need for structural change has increased.

This question cannot be answered at the level of abstract generality. It can only be answered by looking at the behaviour of particular groups of economic agents in the particular circumstances of time and place in which they find themselves. This is what we have attempted to do in these studies. What conclusions may we draw? Let us look first at the enterprise behaviour.

Enterprise efficiency is extremely difficult to define in a dynamic setting and even more difficult to measure in any direct way. Thus our approach in this report was necessarily indirect, in terms of both causes and effects. We focussed on three sets of factors which may be considered to have an important bearing on enterprise behaviour and therefore on enterprise efficiency. These were the forms of ownership and control; conditions of competition in the market; and the education, skills and values of management. Our general conclusion is that differences between the countries in all these factors are significant and that these differences influence enterprise efficiency substantially. This generalisation will now be elaborated for each country.

The Federal Republic of Germany and Japan

Here the banks (because of the importance of loan financing and proxy shareholding) have both the means and the motivation to exercise considerable strategic influence over company behaviour. Taken in conjunction with a well-educated management and a business culture which attaches high weight to technical and administrative efficiency, high levels of productivity of all inputs result.
Because of the network of inter-company shareholdings (by both banks and families) it is reasonable to infer a considerable degree of inter-company co-ordination, though in the nature of things this cannot be directly observed. These linkages increase the interdependence between companies in the same way that market concentration does and therefore give companies in the Federal Republic of Germany the power to exploit consumers (subject only to the constraint of foreign competition). In fact this power appears to be used in the Federal Republic of Germany not to exploit consumers but to pursue efficiency, exports and growth. One may suggest possible reasons why the collective power of large companies in the Federal Republic of Germany is used to these ends. First, the cultural factor already mentioned: product orientation, respect for efficiency and the desire for security which is seen as achievable by building customer loyalty by emphasis on product quality, reliability, punctual delivery, etc. In addition, these are forms of competition which do not "rock the boat" in the way that price competition does. This also helps to explain the export-orientation of large companies in the Federal Republic of Germany for companies which are actually aware of their interdependence, competing in foreign markets does not have the same "zero-sum" character as competing against each other in the domestic market.

The importance of loan finance and the power of the banks also leads to a concern for generating long-run and secure profits in order to protect highly illiquid investments by banks. Pursuit of short-term profit will benefit shareholders but not banks, and may well threaten long-term security. Hence the banks favour investment in long-term projects and in intangible assets - customer loyalty through product quality and reliability, technical superiority through R & D, and labour force quality and motivation achieved by training, job security, and participation in decision-making via the works council.

The picture is somewhat similar in Japan, although the institutional details differ somewhat. Most of the larger companies are clustered in a small number of affiliate groupings centred around a principal bank lender and loan finance predominates. As in the Federal Republic of Germany, inter-company shareholdings are also prevalent. Thus informed, "insider" supervision or control of management performance is the norm. Again, managers are highly educated and efficiency is highly valued. The peculiarly Japanese features are the strong mutual attachment between the manager and his company
and the way in which loyalty and responsibility which attaches to groups rather than to individuals; these special features modify but do not undermine the underlying points of similarity between the Federal Republic of Germany and Japan.

In these two countries the influence of the pressure of competition as a source of efficiency is more difficult to assess. Conventionally, absence of concentration in market shares or in the ownership of assets is taken as the primary indicator of competitive pressure emanating from the market place. Concentration levels in both countries are high enough to suggest a substantial degree of mutual dependence between companies which is, of course, greatly re-inforced by the interdependence which derives from the importance of the banks as the main source of finance for competing companies. Indeed, inter-company linkages through sources of loan finance are, in principle, more important than interdependence via market shares, because the former provides the means rather than merely the motivation for companies to behave in a concerted fashion and thereby to inhibit competition as that term is commonly understood.

Thus in conventional terms this high degree of interdependence should be expected to result in collusive or at least quasi-collusive behaviour resulting in monopoly profits and the complacency and inertia which is normally considered to accompany a monopolistic situation. The fact that this is manifestly not the case in the Federal Republic of Germany or Japan forces us to re-assess the possible relationship between competitive market structures and company efficiency.

The explanation may be that concentration in financing, control, and in market shares provides both a means and a motivation for companies to pursue any common goals. These common goals might, in some particular place and time, be "easy" profits and a quiet life; but in Japan and the Federal Republic of Germany the value system has created a common desire for efficiency and growth. With concentration in market shares and in ownership and control, price competition tends to become a zero-sum game. But joint profits can still be increased through increasing efficiency and through growth, provided other companies grow too. The structure of company financing and control thus reinforces the desirability of efficiency and growth as objectives. It also permits them to be pursued more effectively. Companies
which are largely loan-financed and controlled by "insiders" can pursue long-term objectives and can invest heavily in intangible assets such as R & D and labour-force quality. The interdependence of companies and the information flows between them via their (common) owners and creditors permit them to avoid "wasteful" competition and reduce the risks of investment and growth strategies where success depends on the behaviour of both "complementary" and competing companies.

The United Kingdom

The situation in the United Kingdom in these important respects is such as to produce almost the mirror image of behaviour in the Federal Republic of Germany and Japan. First and possibly most important, the value system and the education and training of management are not conducive to the pursuit of efficiency and growth. There are deeply seated social and cultural reasons for this, but they have been greatly reinforced by the experience of slow growth in the post-war period and more recently by the experience of stagnation and decline. Second, market concentration is substantially higher (much of it the result of merger activity) which has resulted in a relatively large number of very large companies. The higher degree of market concentration obviously weakens the incentive to engage in price competition. At the same time, however, management have lacked the motivation (at least until recently) to pursue efficiency gains in order to cut costs and thereby increase profits, since neither they nor society at large have valued efficiency gains very highly in relation to the perceived costs of achieving them. The achievement of efficiency gains, even where they are desired, is viewed (probably correctly) by somewhat under-qualified managers, operating in an environment which is hostile to change, as difficult and elusive. Thus British management on the whole have opted consciously or unconsciously in the post-war period for a "quiet life" which among other effects has been reflected in low levels of labour productivity and declining rates of profit. Clearly, these same factors militating against the pursuit of efficiency in terms of current production have also worked even more strongly to discourage innovation and the pursuit of growth.

This pattern of behaviour has been made possible by the absence of capital market sanctions. Although share ownership in aggregate is highly concentrated in the hands of non-bank financial institutions, the institutions
exercise little control over the companies in their portfolios except in emergencies. Equally, the influence of the banks in company affairs is marginal because bank lending is relatively unimportant, being traditionally confined to the provision of short-term loans to finance stockholding and to serve as working capital. Like the other financial institutions the banks prefer to avoid being drawn so heavily into a company's affairs that self-interest forces them to exercise a significant measure of control.

Thus the pressure on companies coming from the capital market is not in the form of "insider" scrutiny and control over management performance. Rather, given the importance of equity finance, company performance will be measured by reference to the balance sheet and conventional financial indicators. This has induced a further bias against innovation and growth, except growth by acquisition which is easily appraised in balance sheet terms. Finally, lacking the network of inter-company connections via share ownership or bank influence, companies in the United Kingdom have lacked both mechanisms and incentives to co-ordinate their investment and product development decisions.

The United States

The United States situation appears to contain some elements of both of the environments described above. Society places a high value on efficiency and growth, though that this will occur is perhaps taken more for granted than in the Federal Republic of Germany or Japan. Managers are well educated, but the large and conglomerate character of companies in the United States leads to emphasis being placed on managerial and financial skills rather than on engineering and technology. Most financing is in the form of equity and although there are large institutional and family shareholdings, most companies are effectively controlled by their top managers who are often also shareholders. Top managers with a shareholder interest may be expected to pursue profit-seeking goals in which the pursuit of growth will be modified by expectations (in fairly concentrated markets) about competitors' likely responses and by a consciousness that unqualified pursuit of growth must be at the expense of profits, especially if it involves heavy investment in intangible assets with a distant and uncertain payoff. This contrasts with the Federal Republic of Germany and Japan where the constant search for improvements in current product specifications, quality and reliability as
well as R & D to develop new products and processes, may all be seen as this kind of investment in intangible assets with a delayed and uncertain payoff. On the other hand, managers in the United States will pursue cost cutting vigorously for its immediate payoff in profits which does not directly disturb relationships with competitors.

The Netherlands

The industrial system of the Netherlands possesses a number of unique characteristics which render comparison with other countries more than usually difficult. There is a rather irregular mixture of large multinational corporations and small family-owned or controlled companies and these companies in these two categories face very different constraints and may be expected to have very different objectives. The rather narrow industrial base of the economy with its high degree of specialisation in processing activities and the importance of commercial services principally shipping, insurance and banking, together with the high degree of international economic integration are also features peculiar to the Netherlands. All these factors have an important bearing on the nature of the employment problem there in comparison with other countries.

In an economy with these characteristics the maintenance of international competitiveness is of paramount importance and any failure to achieve this over a substantial period will lead to rapid "de-industrialisation". The problem for the Netherlands is that many of the factors bearing on international competitiveness are not susceptible of government influence, or at best may be influenced gradually over a long period. The Netherlands' case study documents how because of their geographical and commodity specialisation, exports have been particularly adversely affected by the oil crises and the world recession. At the same time Netherlands' industry is not well placed to achieve much effective import substitution for those products where demand is growing rapidly.

In the face of these developments, the small- and medium-sized companies have simply stagnated in terms of output and investment, and hence reduced employment in proportion to underlying productivity growth. The larger companies (and even many of the smaller ones, as the Netherlands case study points out) have responded by investing abroad. Given the highly
international character of the private banking sector, the shortfall in the demand for loans in the home economy has been offset by lending abroad.

The result could well be prolonged stagnation of the economy because there are no spontaneous forces at work to restore impetus in the absence of a strong recovery in the rest of the world. Even this would not suffice to restore the Netherlands to its previous prosperity and employment levels.

Labour markets

When we examine the labour markets in the countries studied we find that differences here tend to reinforce the differences in enterprise behaviour discussed above. In the Federal Republic of Germany and Japan, the education and the training of the labour force and the industrial relations system both operate in ways which encourage workers to develop their skills and also permit efficient labour force deployment. In the Federal Republic of Germany, the security of skilled workers is enhanced by the more formal training system and by the fact that companies (at least until the recent deep recession) have perceived their self-interest to lie in providing considerable security of employment for their "primary" labour force. These factors, a society which values efficiency and hard work highly, and the institutional fact that working arrangements are settled in the Works Council forum rather than by negotiation with trade unions have all contributed to high productivity levels and to the relative absence of barriers to change.

In Japan, with rather similar effects, workers are well educated and efficiency and hard work are highly valued. A reciprocal sense of commitment and obligation between employer and employee, extensive on-the-job training and the minimal presence of trade unions in the workplace all contribute to unrivalled flexibility of workforce deployment.

Again in almost polar contrast to the Federal Republic of Germany, workers in the United Kingdom are not well educated, and efficiency and hard work are not highly valued in British society as a whole. More importantly, the training system produces workers whose skills are relatively narrow and whose status, rewards and security are tied to the continuance of the particular sets of tasks which define those skills. Not surprisingly, therefore, trade union structures have evolved in a way which reflects the
primacy of the defence of established work practices, with substantial formal and informal powers in the hands of workplace representatives. This syndrome more than any other characteristics of the British industrial system explains low levels of productivity and aversion to change, and it is not a situation that is easily amenable to piecemeal reform.

The United States internal labour market has some of the characteristics of the Federal Republic of Germany and Japan. Efficiency and hard work are respected and bring material rewards, but these goals are pursued in a more individualistic manner in the United States. There is greater reliance on price incentives and competition between individuals to achieve high efficiency, yet the Federal Republic of Germany, and more particularly the Japanese experience shows that differing institutional structures can achieve better results. Most skills are acquired through training on the job, but the extent of this is limited by the lower degree of mutual attachment between employer and employee in the United States. Given the fairly high degree of market concentration in the United States and the limited role of foreign competition, companies have sought incremental improvements in existing production methods, and the training and industrial relations system have facilitated this. But more radical innovation in products and processes has been retarded partly by lack of incentive on the part of management (for reasons already discussed), but also by the fact that the training and industrial relations systems are not particularly well equipped to facilitate or adapt to such changes.

As far as the industrial relations and labour market characteristics of the Netherlands are concerned, the argument that labour market rigidities have contributed to the unemployment problem is perhaps more plausible than in any of the other countries studied, except the United Kingdom. The similarity ends there, however, because whereas in the United Kingdom the problem lies above all in the industrial relations system and acts to impede productivity growth, in the Netherlands the power of trade unions lies at the centre and is exercised in wage bargaining rather than over work organisation. This has undoubtedly divorced both the level and structure of earnings from market forces.
The evidence from our studies suggests thus an economic strategy based on reducing the size of the government sector and toleration of a virtually permanent pool of unemployment — both conceived as means of stimulating competition and efficiency — can at best contribute only marginally to these objectives, and then only at heavy social cost. Our studies indicate that a nation's economic performance is, to a considerable extent, determined by a number of fundamental features which are deeply embedded in the system — forms of ownership and control of enterprises, market concentration, education, training and industrial relations systems, as well as broader social values and goals. This is not to say that a major recession, as a kind of force majeure, may not have a therapeutic value in causing many economic agents to fundamentally re-appraise their value systems and hence their behaviour patterns, resulting in the unblocking of many of the conduits of change in the system. Such a process undoubtedly lies behind the very substantial labour shedding which has taken place in most countries during the recession, with consequent productivity gains. As well as this once-for-all gain, there is likely to be a continuing gain to the extent that basic attitudes and hence resistance to change have been modified.

But this seems a very shaky foundation upon which to build a new industrial strategy. In modifying behaviour of both management and workers, it relies on the entirely negative incentive of increased insecurity. As such it is clearly very much a second best to a situation in which change is embraced for positive reasons — for the tangible benefits to all concerned. Whether at the level of the company or the economy as a whole, lasting and substantial gains in economic efficiency cannot be achieved without the active co-operation of the social partners, yet in a climate of stagnation and mounting job losses, such co-operation can at best be grudgingly achieved, and at the expense of an increase rather than a reduction in underlying worker-management tensions, a tension which is liable to flare up into open hostility when the immediate pressure of the recession is removed. Furthermore, it is not clear that the direction in which structural change will proceed is actually that which is necessary or desirable from the point of view of society as a whole. As far as the strategies of individual companies are concerned, the appropriate course of action in the face of recession and increased pessimism about future growth prospects would appear
to be the elimination of surplus and inefficient capacity and/or relocation of production abroad. This will bring productivity gains but will necessarily perpetuate large-scale unemployment since there will simply be insufficient productive capacity in the economy to employ the available labour force. In another respect too the response of companies may be undesirable, for in order to survive the recession they must concentrate on the pursuit of short-term goals. If trade unions are emasculated by high unemployment and job insecurity, why bother to improve consultative arrangements and foster willing co-operation? If there is a pool of unemployed skilled workers, why bother to train more? If the market is stagnant or declining, why bother to invest or research into new products or processes? If competing companies are in trouble too, why not adopt a "live and let live" approach? There are many analogies between the 1930s and the 1980s in these matters, and many of the problems of the 1950s and 1960s originated in the earlier depression.

The policies described above are an undiscriminating, blunt weapon with many adverse side effects and their overall ultimate effectiveness is dubious. This bluntness is inherent in using demand management to try to improve supply-side performance. But the alternative is not simply reflation, unless it is accompanied by the necessary complementary policies to overcome the problems which we have identified in the industrial systems of the countries studied (and of which variants are to be found in other industrialised countries too).

In broad terms, the policies necessary are those which identify and help to promote the organisational and behavioural changes which are necessary to improve industrial performance - changes which, we have argued, market forces either cannot be expected to bring about or at best can bring about only rather inefficiently in terms of adverse social effects. Beyond this broad generalisation, it is difficult to go further without proceeding on a country-by-country basis.

The United Kingdom

By common consent, this is the country with the most unsatisfactory overall economic performance. Some of the underlying reasons for this have been identified in the United Kingdom country study and in the preceeding chapters of this report, and the arguments will not be repeated here. It is
apparent from that analysis, however, that an immediate and obvious step which the government could take, and which lies largely beyond the powers of economic agents, would be the improvement of provision of vocational education and training at all levels in terms both of content and number of beneficiaries. The major disincentive to such an initiative of course in the eyes of any elected government is that it cannot, in the nature of things, be expected to bear fruit in the short or even medium term. But this is an argument for starting at once, not for postponement or, worse still, half measures.

A second priority area should be the industrial relations system. The present government is already active in this field, its objective being to increase the accountability of trade union leaders to their membership and the accountability of trade unions themselves to the public at large—which means in practice to employers. Steps in this direction may well undermine the ability of trade unions to fulfill their traditional tasks of resisting change which by and large they perceive as being damaging to their members. Taken in conjunction with the inevitable weakening of trade union power resulting from mass unemployment in the United Kingdom, this may well result in worthwhile productivity growth. But this strategy is open to the objection that it does not address the problem directly, the problem being the interaction of an industrial training system and work organisation which, as far as workers are concerned, minimises the benefits and maximises the costs of change. Though mass unemployment and legislation which weakens trade unions may force workers to acquiesce in change, this situation is very much second best compared with one in which they actively embrace it because their training and work organisation guarantee that they will benefit from it not just in aggregate but as individuals.

How might this be achieved? This is not the place to attempt to suggest a detailed programme for industrial relations reform in the United Kingdom. The shortcomings of the present system have already been abundantly documented in the many official and academic studies undertaken in Britain in post-war years, and the nature of the necessary changes, based in part on the lessons to be learned from other countries, have been spelled out. The object may be broadly described as consensus building and the promotion of responsible collaboration between workers and management. The government's role would be to act as midwife in the establishment of the necessary forum or fora at the
enterprise level in which this collaboration could take place, and to lay down the ground rules which might permit traditional distrust and the zealous guarding of prerogatives on both sides to be gradually eroded. (At the national level the necessary forum for consensus building already exists in the form of the National Economic Development Council — a tripartite body which has existed since 1962 — and only the will and initiative to breathe new life into it is lacking.)

As far as company behaviour is concerned, it is clear from our study that a more active role by dominant shareholders and creditors is required in the United Kingdom. The object of this would be not only to increase the accountability of management, but also to shift management objectives towards longer-term objectives. A third objective would be to improve inter-company and inter-sectors co-ordination. This might seem to run counter to the conventional view that increased competition is the means to increased efficiency, but we have argued (and our studies of Japan and the Federal Republic of Germany have reinforced the argument) that companies in the modern world cannot operate efficiently on the basis of information transmitted to them through market signals alone. Again, government has an essential role to play here in providing the framework within which the management of leading companies, together with major institutional shareholders and banks, as well as the government itself can establish the parameters within which consistent corporate planning may occur.

It is not easy to see what means are available to the government to achieve this. Lacking the means to force either the banks or the non-bank financial institutions (which hold the majority of shares in the United Kingdom companies) to change their traditional roles, governments in the United Kingdom in the past have attempted to set up parallel state-sponsored institutions — the Industrial Re-organisation Corporation in the 1960s, and the National Enterprise Board in the 1970s. Both have played a very limited role, and further steps in this direction have not commanded political support. Indeed it may be commented that the "politicisation" of most of the policy issues which we have been examining here has effectively prevented any progress towards their resolution. The problem is that governments' past approaches to the problem of management quality and management objectives have been based on acquiring influence by acquiring control, and this inevitably has proved highly controversial. The experience of Japan, however, shows that
influence may be achieved by other means, though one can only conclude that the United Kingdom Department of Industry would have to acquire considerably more expertise and authority in industrial matters before it could be compared with MITI.

**The United States**

Next to the United Kingdom, the United States is the country where industrial performance gives most cause for concern, though to considerably lesser degree. The United States economy is large, highly decentralised, and the direct role of the State in industrial affairs is small by the standards prevailing in the other countries studied. It is therefore not easy to see how government could greatly shift the emphasis in the workings of the industrial system, even if it should wish to do so. More so than in any other country, the climate of opinion in government and industry circles inclines towards the view that policy should aim to re-invigorate the workings of market forces. Our analysis suggests that there may be some problems which this approach cannot solve, and that some complementary policies are appropriate. In the field of education and training, it may well be argued that the government should take steps towards a greater formalisation of vocational education and training in order to up-grade the labour force and increase its ability to adopt to and initiate technological change. Given that the American tradition of relatively limited mutual attachment between worker and company seems unlikely to be reversed, there is clearly a usefully greater role for government in promoting inter-company and intersectoral mobility in which a more formal qualifications system would play a part. The parallel here is with the Federal Republic of Germany.

As far as managerial behaviour is concerned, our argument has been that the ownership, control and financing relationships and organisational structures have encouraged a preoccupation with short-term financial measures of company performance. Since one cannot envisage the United States government attempting to directly change these factors, we can only advocate that government attempt to modify incentives through the tax system in such a way as to encourage greater investment in innovation and, in general, in activities which contribute intangibly to productivity growth in the long term—by which is meant most obviously investment in labour force quality at the level of the individual enterprise. The parallel here is with Japan.
United States also might consider whether new institutions to improve the
government/industry interface are desirable, though the United Kingdom
experience is not encouraging. The point is that at present if government
wants to influence company behaviour it can do this only indirectly through
tax incentives etc., and by measures which affect the market - a more direct
influence is only possible through institutions which give government a direct
voice.

The Federal Republic of Germany
and Japan

Turning to the Federal Republic of Germany and Japan, it is not
immediately obvious that any new policy initiatives are called for to improve
industrial systems which, though doubtless far from perfect, are from the
supply-side point of view manifestly well able to "deliver the goods", both
literally and metaphorically. We may conclude, however, that this study may
have served to shed some light on the reasons underlying this success and
hence alerted concerned individuals in both countries to possible changes
which may manifest themselves in the future. For example, we have concluded
that the major banks in the Federal Republic of Germany exercise a degree of
coordination and control over company behaviour which has contributed in no
small measure to success. Once this is explicitly recognised, it is natural
to wonder whether the very informality and implicit nature of this influence
might not entail some risk should error of judgement be made by those who
exercise it, and whether greater public accountability is not appropriate. A
similar point may be made in the Japanese context though the dangers appear
smaller because government is more directly "plugged in" to the network of
control and the network itself is more explicitly recognised.

In the context of the labour market and industrial relations systems of
these two countries, we would wish to emphasise the extent to which both depend
for their successful functioning on consensus and goodwill. These are fragile
feelings which are easily abused, vulnerable to progressive erosion and are
hard to rebuild. In the case of the Federal Republic of Germany, one may well
fear that they will be damaged by the continuation of high levels of
unemployment.
Earlier in this chapter it was suggested that the Netherlands was suffering from a structural imbalance which arose in the main from the country's vulnerability to exogenous developments in the world economy — developments which had proved particularly adverse in view of the Netherlands' pattern of international specialisation. Confronted with such an acute problem, there is no question that government must intervene, but the question is what form their intervention should take.

One of the main problems in the Netherlands, apart from its rather narrow and therefore inflexible industrial base, is that product market decisions — pricing, production and investment — are essentially determined by world market forces; yet at the same time the determination of wage rates and other labour market parameters has until recently been determined largely without reference to the market. The first important policy question therefore is whether the greater moderation shown in real wage bargaining in recent years, in terms of both levels and inter-sectoral and inter-occupational differentials, will if pursued sufficiently vigorously restore growth and alleviate the current unacceptably high unemployment. A second question is whether more decentralised wage bargaining arrangements are necessary to achieve this, and therefore whether sufficient emphasis has so far been placed on achieving such decentralisation.

It may be that a sufficiently large fall in the level of real wages (rather than changes in their inter-sectoral structure) could have prevented the loss profitability and international competitiveness which the Netherlands industry has suffered. But the fact that real wages did not fall in this way cannot be laid at the feet of the trade unions, or more generally attributed to the centralised system of wage bargaining in the Netherlands; for as is pointed out in the United States case study, real wages respond very weakly to changes in demand even in a country where market forces are far more powerful than in the Netherlands. If we look at other countries it appears that centralised wage bargaining can facilitate as well as impede real wage adjustments. The United Kingdom has a highly decentralised wage bargaining system which gives very erratic results because of the phenomenon of "leap frogging" in the annual round of wage negotiations. Trade unions which reach a settlement early in the year set a norm which it is then the objective of
later negotiations to surpass, though at the same time later bargaining outcomes are modified by intervening developments in the economy and by government policy actions and propaganda. Real wage movements, both absolutely and relatively, are highly unpredictable and in no way can greater decentralisation be said to lead to more rational or more market-oriented outcomes. In the Federal Republic of Germany and Japan, wage negotiation is at the industry and enterprise levels, respectively, and as such may be considered more decentralised than in the Netherlands. But these bargains are not struck in isolation from one another but are heavily conditioned by a continuing dialogue between the social partners and government at the national levels. Thus while it is clear that greater wage flexibility would make an important contribution to the Netherlands' economic problem, it is not clear that a more decentralised bargaining system would necessarily be a change for the better. Thus it is arguable that the weakness in the Netherlands lies not so much in institutional arrangements as in the rather slow perception by the principal actors that the situation in the Netherlands in relation to the rest of the world was deteriorating rather dramatically.

In any case it is debatable whether any conceivable degree of real wage and employment flexibility can in itself contribute much to the Netherlands' problem. The industrial sectors which contributed most to postwar prosperity are capital and raw material intensive, not labour intensive, and it is doubtful whether these will ever regain their former glory even in the unlikely event that a complete world economy recovery should occur. For its future industrial prosperity the Netherlands must shift the sectoral composition of its output and employment, and it is extremely doubtful whether inter-sectoral real wage flexibility can provide a sufficient incentive in itself for this to be achieved in the necessary time scale. Hence the question arises whether a more active policy for promoting structural change is required.

The Netherlands Scientific Council published in 1980 a detailed and thoughtful study of the problem. It diagnosed an acute problem of structure imbalance in Netherlands industry arising from the decline of the "sensitive" sectors (textiles and clothing, leather, timber and furniture); the stagnation of the intermediate goods sectors (chemicals, basic metals) which had previously been the spearhead of industrial growth; and the weakness and small size of the capital goods and equipment sectors. The Council saw the
prospect of the Netherlands being increasingly "squeezed" between the large, advanced industrialised countries (particularly the Federal Republic of Germany) and the newly industrialised and developing countries. Hence it was necessary, first, to move towards a more diversified industrial structure, and to achieve changes in the product mix. Products would have to be upgraded to escape the growing competition from the NICs, but since a small country such as the Netherlands could not meet head on the price competition of the large industrialised countries, there was a need for more emphasis on non-price factors in competitiveness, achieved by selective innovation and marketing.

The Council doubted whether these complex requirements could be met by the spontaneous regenerative capacity of the industrial system, even if the price and wage incentives operated more unrestrainedly. The main reason for this was that the disruptive effects of the present economic environment had greatly increased the subjective uncertainty of outcome of decisions taken by individuals and institutions, leading to risk avoidance and absence of initiative. This had ossified the system for reasons which were quite distinct from the rigidities resulting from constraints on the operation of price incentives. A primary objective of policy was therefore the lengthening of planning horizons and increasing the willingness to embark on new initiatives. This could be done by specifying the directions in which it was necessary for the economy to evolve, by increasing information flows on questions of technology, market trends and the international division of labour, and by providing a financial and planning framework within which individual initiatives could be assisted and encouraged.

Having identified in these broad terms the need for a structural policy, its objectives and its relationship with the normal competitive processes of a market economy, the Council elaborated at some length the institutional format and the particular policies required. In order to command acceptance in political and social terms, it would be necessary for policy to be supervised by a government-appointed tripartite commission for structure policy. However, in order to avoid politicisation and deadlock, the specific implementation of policy should be in the hands of an independent and professionally staffed National Economic Development Corporation. Policies would be of two broad types: sectoral and "generic". Unlike past policies (which the Council castigates as having probably done more harm than good), sectoral interventions should not be "rescue" operations dictated by the
pressure of immediate events, but should be at the initiative of the government (acting on professional advice) with the government having a free hand in the choice of partners and enterprises themselves being free to decide whether to participate. Generic policies would be aimed at overcoming particular problems such as inefficiencies in the ability of the labour market to re-allocate labour and the problems of small scale and institutional rigidity which made it difficult for small- and medium-sized companies to restructure and to develop and adopt new products and technologies.

The Netherlands Scientific Council's report has been examined at some length in this concluding chapter because it articulates in considerable depth not only the nature of the economic problem in the Netherlands but also the multitude of problems — analytical, organisational, administrative and political — faced by government in searching for ways of contributing to a solution. As such the report is of considerable interest to other countries, such as the United Kingdom, whose position is in many respects parallel to that of the Netherlands. As far as the Netherlands itself is concerned, we noted in the previous chapter that the government had adopted a more cautious approach than that recommended by the Scientific Council. Its strategy relies mainly on the efficacy of real wage restraint and reduced government expenditure in transferring resources to the enterprise sector together with increased availability of venture capital provided jointly by the banks and the government — so far, on a very modest scale.

The government thus appears to agree with the advice offered to it by the Wagner Committee, that regeneration of the economy could and should be left to private initiatives, with the role of government being mainly confined to stabilising the principal economic parameters (such as the level of wage costs) upon which individual decisions were based. However, to an outside observer, it does not appear that these measures in themselves will be sufficient to check the growth of unemployment. While the many pitfalls which lie in the way of a more active structural policy should not be minimised, it would appear that there is no other way forward for countries such as the Netherlands and the United Kingdom which are stuck in a severe structural disequilibrium.
Notes:


2. A sophisticated elaboration of this thesis is to be found in an address by the U.K. Chancellor of the Exchequer, Nigel Lawson (London, The Mais Lecture, June 1984).
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