Summary at start plus
Conclusions at section 4

Treasury Chambers, Parliament Street, SW1P 3AG
01-233 3000

8 December 1983

Janet Lewis-Jones
Private Secretary to the
Lord President

Dear Janet,

CHANGING EMPLOYMENT PATTERNS: NEDC PAPER

The Chancellor has suggested that the attached paper, discussed in NEDC yesterday, might be of interest to his Cabinet colleagues generally, as well as to those who attend NEDC. I am accordingly circulating copies of this letter and its enclosure to the Private Secretaries of all members of Cabinet, as well as to Andrew Turnbull at No 10, Henry Steel in the Law Officers Department, Murdo MacLean at No 12 and Richard Hatfield at the Cabinet Office.

Yours ever,

John Kerr.

J O KERR
Principal Private Secretary

National Economic Development Council

CHANGING EMPLOYMENT PATTERNS: WHERE WILL THE NEW JOBS BE?

NEDC(83)58
28 November 1983

Memorandum by the Chancellor of the Exchequer

Summary

Employment patterns in this country are constantly changing, as they have in the past, and as they are doing in other developed countries.

2. The process of change is something to welcome. Throughout history, individuals, firms and economies have shown a remarkable ability to adapt to changing conditions - to the growth of new industries and the decline of old, to the discovery of new markets, new methods and new techniques, and to new demands. It is through such adaptation that it has been possible to satisfy the growth in people's aspirations for better living standards.

3. Changes taking place in employment patterns today are part of this continuous process. The growth in manufacturing employment following industrialisation may now be over. The numbers in manufacturing seem to have peaked in 1966, since when they have steadily declined. In contrast, employment in services has continued to grow; the number of jobs has risen by some 1¾ million in the last 10 years. Within that broad shift, other important changes have taken place in employment patterns between types of industry, types of firm and types of occupation.

4. They reflect many factors: changing relative costs and prices; productivity; technological change; higher real incomes and people's changing tastes.

5. The benefits of rising prosperity have been taken partly in higher money incomes and partly in shorter working hours, longer holidays and more leisure. Average annual hours worked per employed member of the population have halved in the last hundred years or so and fallen by a fifth since the last war. However, if competitiveness is to be assured, the benefits of economic growth cannot be taken twice over - in higher incomes and then again in lower hours; choices have to be made.

6. Over the last 10 years the number of part-time employees has risen by about a fifth. The trend seems also to be towards more self-employment and for more people to be employed by smaller firms.

7. The United Kingdom's experience is not unique. Many of the same employment trends can be seen elsewhere. In all the 7 major OECD countries, there has been an increase in the share of services in total employment and a reduction in the share of manufacturing. US experience shows that it is possible to achieve a rapid growth in service employment, along with relatively better employment in manufacturing than in this country. Labour mobility

appears to be substantially higher in the US than here, and real wages seem more responsive to conditions in labour markets.

8. Experience here and in other countries underlines the importance of structural and occupational changes to the process of economic growth. Attempts to protect existing employment patterns by slowing down change are unlikely to succeed. Rather it is better to concentrate on identifying and removing impediments to new jobs, and ensuring conditions necessary for their increase.

9. A number of considerations stand out:

- There must be a readiness and ability to adapt to change on the part of managements and workforce.
- There is a need to embrace productivity and technological change. Far from representing a threat to jobs, experience shows that they can support a high level of employment, and that the real danger lies in failing to match the productivity levels and technological advance of our competitors.
- Productivity levels in British manufacturing are a third below average European levels and further behind Japanese levels. The more recent relatively rapid growth in manufacturing productivity in this country offers grounds for hope that this gap may be narrowed. But if British firms are slow to introduce new technology or improve productivity, markets here and abroad - and hence jobs - are at risk of being lost.
- At the same time, continuing attention must be paid to costs if the recent reversal of the long term decline in profitability of British industry is to be sustained.
- Job prospects will increase to the extent that businesses can respond quickly and flexibly to the needs of consumers. The government can improve the business environment by reducing the size of the public sector, stimulating greater competition, freeing markets from unnecessary regulation, curbing monopolies, by tax changes and through the progressive dismantling of controls and restrictions. Success will depend on the extent to which businesses respond to the challenge of this new and more open environment, and the opportunities it brings.
- To convert these opportunities into new jobs requires labour markets which are flexible and responsive to change. Training and education play an important part in achieving this greater flexibility. So too may action to reduce impediments to labour mobility (eg in the fields of housing and occupational pensions), and to

remove restrictive practices. Some of the latter are deeply entrenched, and call for urgent attention by unions and management.

10. Success in achieving substantial future growth in jobs requires effective contributions from management, workers and government. Each of the parties represented on the NEDC has an integral part to play in speeding the process of adjustment, in easing the inevitable frictional problems, and in seizing opportunities for new employment which can be expected to arise.

11. The government is playing its part by

- establishing sound non-inflationary conditions for sustainable growth in output;
- encouraging firms to expand and diversify in markets freed from unnecessary restrictions;
- pursuing policies aimed at lower taxes and interest rates, to encourage hard work, enterprise and initiative; and
- providing opportunities for training and work experience, especially for young people.

12. Governments can provide the right policy framework, but they do not determine the process of change or where and when new jobs occur. That depends on how all of us - employers and employees, producers and consumers - respond to the opportunities which change presents.

CHANGING EMPLOYMENT PATTERNS: WHERE WILL THE NEW JOBS BE?

INTRODUCTION

This paper arises from a discussion at the August Council meeting about the prospects for new jobs. It is in four parts. It begins by examining what has happened to employment patterns in Great Britain over the last thirty years or so. This part of the paper also looks at changing occupational patterns and work patterns. As a basis for comparison, the paper then goes on to look at changing employment patterns in the United States. In the third section, the paper considers a range of actual, or potential, impediments to the emergence of new jobs in a world of continuing technological change and what needs to be done to overcome them. The final section of the paper draws some tentative conclusions about future employment patterns; discusses the role of government and others in securing a supply of new jobs; and suggests some issues for further consideration by the Council.

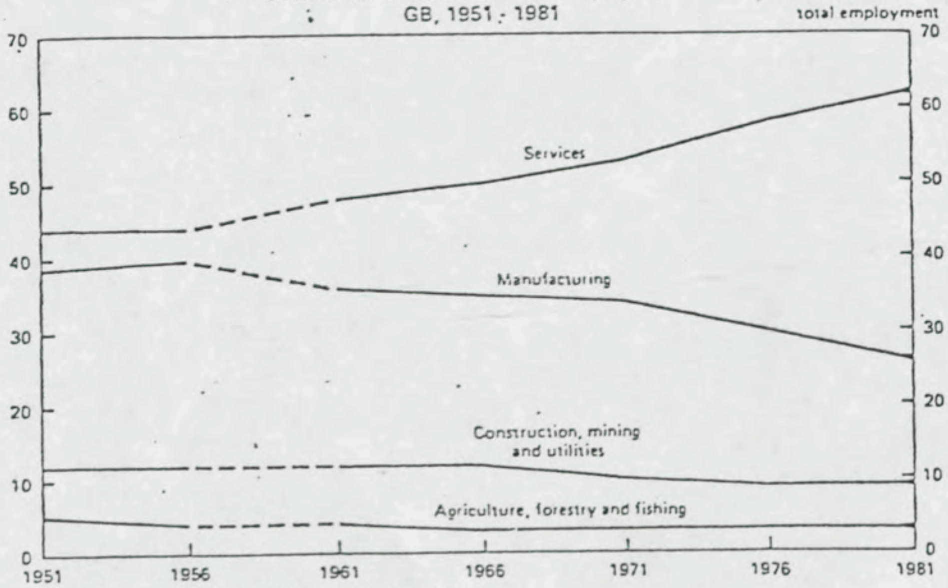
1. CHANGES IN THE PATTERN OF EMPLOYMENT IN GREAT BRITAIN

1.1 At a time of high unemployment, it is natural to ask where new jobs will come from. But economies are not static: jobs are disappearing all the time and others are being created. About 350,000 people enter and leave unemployment each month and quite small shifts in the balance of job gains and losses in different sectors of the economy, if they persist, change employment patterns significantly over a period of years.

Industrial changes

1.2 The shares of the main industrial sectors in total employment have continued to change in line with trends established for over a century. Total employment in services already exceeded employment in manufacturing more than 60 years ago. Since the mid-1950s, the share of service employment in the total has been rising steadily and the share of manufacturing employment has been falling. Total employment in manufacturing has been falling in absolute terms since 1966. The fall in the share of employment taken by agriculture, which started two hundred years ago, has now stopped. But the share taken by the remaining sectors - construction, mining and utilities - has fallen steadily since the mid-1960s.

Chart 1 Sectors' shares of total civilian employment GB, 1951 - 1981



Note: The figures for 1951 and 1956 are based on the 1948 Standard Industrial Classification (SIC), the other figures are based on the 1968 SIC

1.3 The processes of change operate first and foremost at the company level. Observed employment shifts are the result of the balance between a multitude of small changes. New jobs are continuously created throughout the economy - in firms operating in sectors seen to be in decline, as well as in those which are expected to grow. But analysis has to be conducted at the industry, not the company level. Table 1 below shows the industries which today have 10,000 more employees than they did 10 years ago.

TABLE 1

INDUSTRIES WITH OVER 10,000 MORE EMPLOYEES IN 1983 THAN IN 1973

Production industries	Increase (000s)	Service industries	Increase (000s)
Radio, radar and electronic goods	25	Medical and dental services	291
Petroleum and natural gas	24	"Other" miscellaneous services (includes photography, welfare and charitable services, trade associations, window cleaning)	212
Water supply	23	Educational services	120
Electronic computers	12	"Other" business services (includes typewriting, copying, employment agencies, computer services)	106
		Banking and bill discounting	88
		"Other" professional and scientific services (including accountancy and legal services)	61
		Sport and other recreations	50
		Miscellaneous transport services and storage	48
		Property owning and managing, etc	42
		Clubs	37
		Dealing in industrial materials and machinery (other than fuels, builders materials and agricultural supplies)	37
		"Other" financial institutions (includes building societies, stockbrokers)	31
		Insurance	28
		Hotels and other residential establishments	28
		Public houses	26
		Restaurants, cafes, snack bars	15
		Catering contractors	14
		Advertising and market research	11

Source: Annex Tables A3-A6

Notes: 1. The categories are those used in the 1968 Standard Industrial Classification

2. The two years do not represent equivalent points in the economic cycle (1973 was a cyclical peak). Tables A3 and A5 in the Annex show growth between comparable years.

1.4 The long perceived shift from employment in production industries to employment in services has accelerated over the last decade (though recent figures also reflect the impact of the recession). The state of the manufacturing and service sectors is, of course, linked in so far as some services are essential to the success of manufacturing output as well as vice versa. Furthermore, in recent years there has been some tendency for jobs to move from the manufacturing to the service sector simply because firms have substituted contract for in-house work. But the huge structural changes have been the result of wider and more fundamental economic and social changes: the nature of technical change has reduced the labour needed per unit of manufacturing output compared with that needed per unit of service output; there has been increased competition in world markets and greater pressure on UK tradeable goods as the inevitable consequence of the exploitation of North Sea oil (though tradeable services have also been affected); finally there is the familiar point that as individual incomes rise, consumers spend a greater proportion of those incomes on services.

1.5 Total service employment (including the self employed as well as employees) is over $1\frac{1}{4}$ million greater in 1983 than it was in 1973, and is now estimated to be at an all time peak. The period from 1973 to 1981 saw 0.5 million additional jobs created in professional and scientific services, 0.4 million in miscellaneous services and 0.3 million in insurance, banking, finance and business services (a breakdown of the number of self-employed in service industries is not available after 1981).

1.6 Very many service industries showed higher employment in 1983 than in 1973 (See Table 1). The list reflects a variety of influences:

(a) the continuing growth in incomes in most years raising the demand for personal, financial and leisure services - of which a good example is the growth of jobs in sport and clubs;

(b) changes in consumers' tastes - eg a greater readiness to have bank accounts;

(c) wider social and economic changes -eg the greater demand for solicitors and estate agents' services as a result of the spread of home ownership;

(d) increased foreign demand - eg for the services of the various tourist industries including airlines, restaurants and hotels, and for some financial and business services;

(e) changes in technology - eg the growth in "other business services" which include computer services;

(f) the tendency for firms to buy in services which would previously have been done in-house, so effectively re-classifying manufacturing jobs as service jobs (this effect may be seen in the growth of jobs in, for example, advertising and market research, and in "other business services" like document copying);

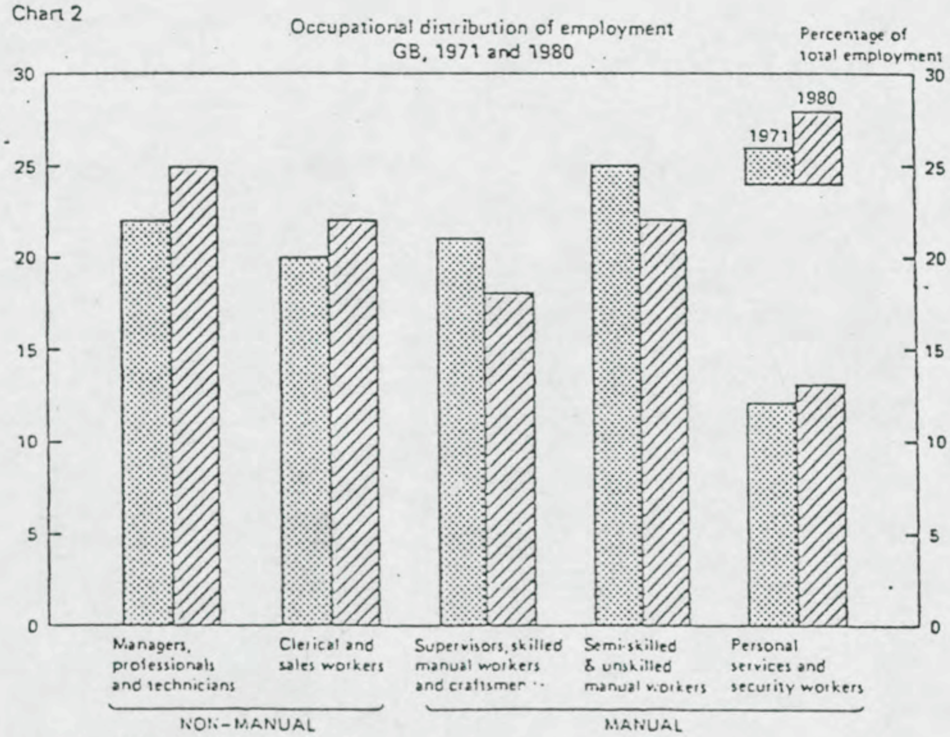
(g) finally, demographic pressures, which help to explain the increased employment in medical services.

1.7 The growth of service industries is now contributing to an improvement in the overall employment position. Allowing for a quarterly increase of 25,000 in self-employment (the Department of Employment working asumption) the estimated total of those in work - employees and the self-employed together - rose in the second quarter of this year for the first time since the recession began. The number of people working short-time is less than one-quarter of the figure two years ago. Vacancies have increased by 50 per cent in the last year.

<u>Occupational changes</u>

1.8 The relative importance of different occupations has also changed considerably over time. Chart 2 shows the main changes in occupational employment between 1971 and 1980, especially the shift from manual to non-manual jobs. This is the continuation of a longer term trend: in 1911 approaching three-quarters of the employed population worked in manual occupations, compared to not much more than half today.

Chart 2



Source: Annex Table A7

1.9 Part of the occupational shift reflects changes in industrial structure. The large shift towards service employment, together with the larger absolute decline in employment in production or manufacturing industries, has contributed to the rise in importance of non-manual occupations relative to manual occupations. There have also been substantial shifts away from manual work within individual industries. Employment of managers, administrators and clerical workers has grown in response to the increasing specialisation in every sector of the economy. The number of engineers, scientists, technicians and draughtsmen has increased as a result of the growing technological complexity of products and production methods.

1.10 Among manual occupations the only major groups to see a rapid growth in employment have been personal service and security occupations. The main groups to lose ground have been craftsmen (particularly those with industry-specific skills), and supervisors and foremen, skilled and semi-skilled operatives and general labourers. Overall there was an estimated 15 per cent increase in non-manual employment between 1971 and 1980, and a 6 per cent decline in manual employment.

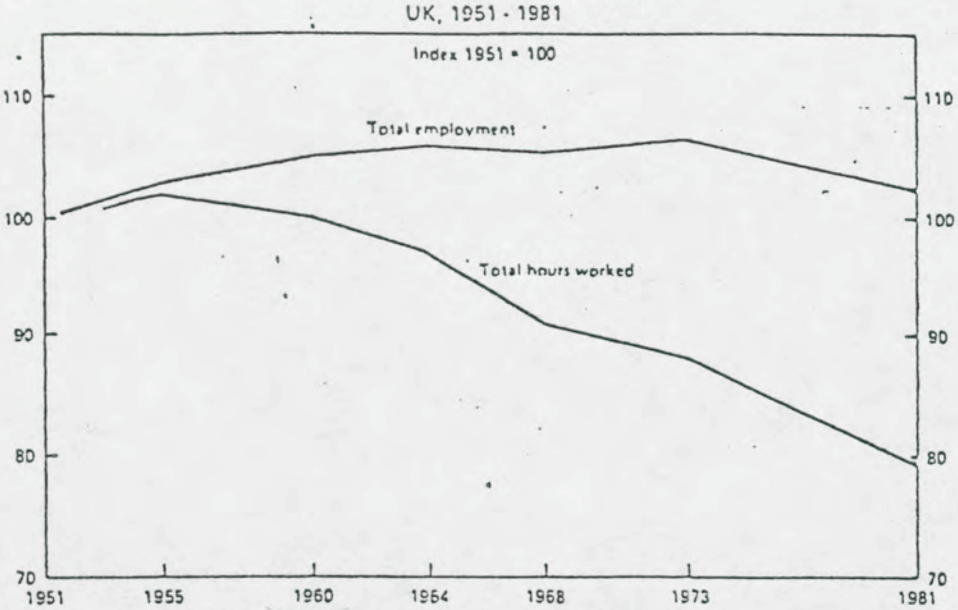
Changes in work patterns

1.11 Just as there have been great changes in the industries in which people work, so there have been great changes in how they work. The most striking change in work patterns over the past century or so has been the reduction in the number of hours worked per employed person per year, which halved over the last 100 years or so and has fallen by over a fifth since the war. This reflects the shortening of the working week, the rise in the proportion of people (mostly women) working part-time, and an increase in the length of holidays.

1.12 Total hours worked by the labour force as a whole have fallen by about 20 per cent since the war, although total employment has barely changed (Chart 3). The growth of output per man hour over the period 1951-81 has enabled people to increase both their leisure (reduce their hours) and their incomes:-

Growth of output per man hour	3% pa
Growth of income per worker	2% pa
Reduction in annual hours per worker	1% pa

Total employment and total hours worked
UK, 1951 - 1981



Source: Total employment – Department of Employment continuous series
Total Hours worked – "British Economic Growth 1856 - 1973"
(R C O Matthews, C H Feinstein and J C Odling-Smee) updated to 1981

1.13 Although there are some 6 million job changes every year, a significant feature of working practices is that people have tended generally to stay with the same employer. In the 1970s, men could expect to spend an average of 20 years with the same employer and women 12 years. However, there are signs of increasing pressure for greater job mobility, both between and within firms, and also for more flexible use of manpower. Indeed, it is important that employers should be more responsive to market pressures if unemployment is to be lower. There are a number of ways in which greater flexibility may come about: by more flexible working hours; by more job changes within firms; by greater use of temporary or casual employment; and by sub-contracting work customarily done in-house to other companies.

1.14 One recent tendency towards more flexible use of manpower can be seen in the growth in part-time workers. Between June 1973 and June 1983 the number of part-time employees rose by 800,000, while full-time employment fell by 2½ million. The proportion of part-time workers in the total rose from 17 per cent to 23 per cent. There has been a similar tendency for part-time employment to grow in importance in nearly all other OECD countries. For example, in Europe as a whole, one out of every two jobs created since 1973 has been a part-time job.

1.15 Most part-time workers are women. So, as Table 2 below shows, the growing importance of part-time work has also been associated with a significant shift in the balance between employment of men and women in the past few years. Female employment is now some 80,000 more than it was 10 years ago, and women now represent 44 per cent of all employees compared to 39 per cent in 1973. A larger proportion of women work in Britain than in the other major European countries.

TABLE 2

NUMBER OF MALE AND FEMALE EMPLOYEES, GB, JUNE 1973 AND JUNE 1983

			Millions
		1973	1983
Male	Full-time	12.8	10.8
	Part-time*	0.7	0.7
	Total	13.5	11.5
Female	Full-time	5.5	5.0
	Part-time*	3.2	3.9
	Total	8.7	8.9

*actual number, not full-time equivalents

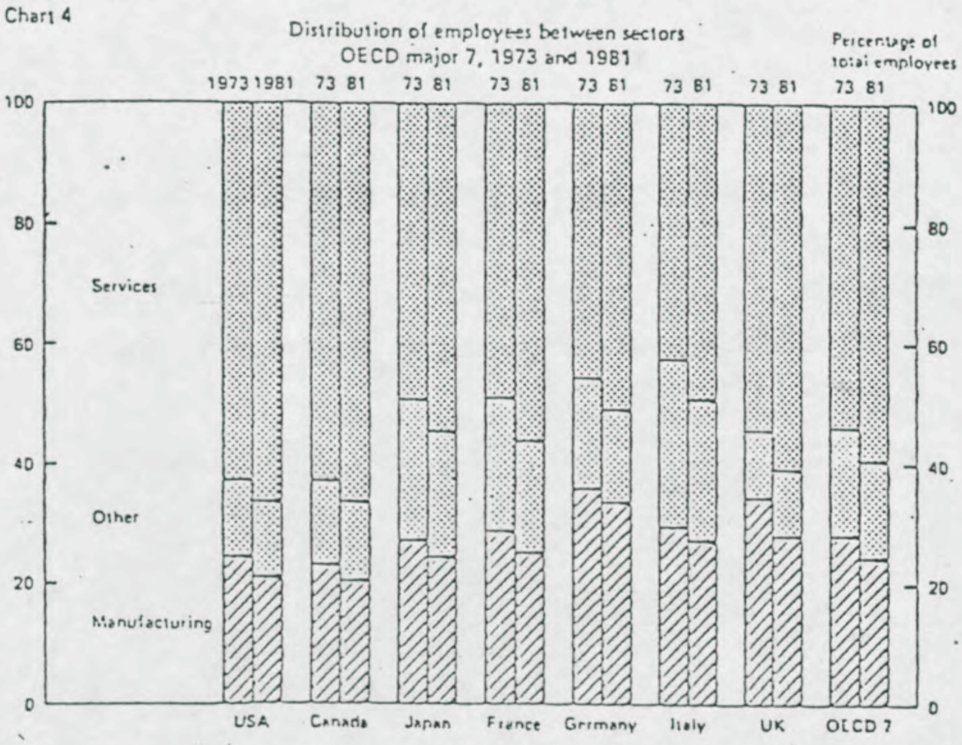
1.16 This brief survey would be incomplete without mention of two other ways in which the economy is becoming better able to cope with structural change - the growing role of smaller firms and the growth of self-employment. Thus, although very recent figures are not available, employment in small establishments (employing less than 200 employees) accounted for 34 per cent of the manufacturing workforce in 1981 compared to 27 per cent in 1973. Unfortunately equivalent figures are not available for employment in small service establishments where most of the growth would have been expected.

1.17 Self-employment also appears to be rising again. There were fewer self employed in 1979 than in 1973 (1.8 million compared to nearly 2 million). Between 1979 and 1981, however, the number of self-employed rose by over 10 per cent to more than 2 million. The Department of Employment's working assumption is that this trend is likely to have continued, so that the number of self-employed may now total about 2¼ million -over 400,000 up on the figure in 1979. Two thirds of the self-employed work in service industries.

2. RECENT DEVELOPMENTS IN THE UNITED STATES

Sectoral changes in employment

2.1 There are some broad similarities between recent changes in employment patterns in the UK and in the other major OECD countries: in all cases the share of services in total employment has risen and the share of manufacturing has fallen (Chart 4).



2.2 The experience of the USA, which often foreshadows developments in this country, is of particular interest: the shift towards services has gone furthest there; output per head is far above the British level; and there has been a marked growth in total employment. In the USA the number of jobs rose by 13 million between 1973 and 1983 as shown in Table 3 below. 10 million of these jobs have gone to women. Most of this growth took place in services, but, in contrast to the experience of the UK, employment in manufacturing was fairly stable over that period ; it peaked in 1979, but after a sharp fall in 1981 and 1982 has now begun to recover somewhat. The general expectation in the US is that in the medium term employment in manufacturing will begin again to rise gradually or, at worst, remain flat. Manufacturing investment has grown rapidly in real terms over the last decade or so.

TABLE 3

RECENT TRENDS IN EMPLOYMENT IN THE UNITED STATES

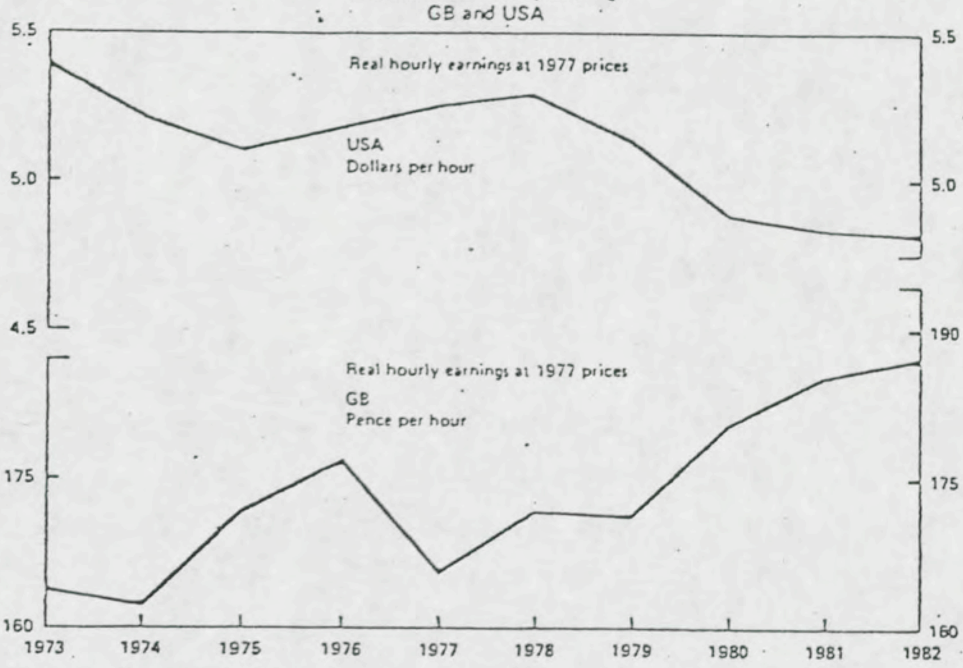
	Employment (millions) 1973	Employment (millions) 1983	Change 1973-83 (millions)	Proportion of total % 1973	Proportion of total % 1983
Total non-agricultural	75.4	88.2	+12.8	100	100
of which:					
Manufacturing	19.8	18.2	-1.6	26	21
Mining and construction	4.3	4.4	+0.1	6	5
Services	51.2	65.6	+14.3	68	74

Note: more detailed figures are given in Annex Tables A8 to A11

2.3 One frequently heard argument is that the relative success of the US in creating jobs over the last decade can be traced to the greater flexibility of its labour markets. One manifestation of this is the responsiveness of wages to market conditions. In contrast to experience in this country, US hourly earnings have fallen in recent years (Chart 5).

Chart 5

Trends in real hourly earnings
GB and USA



Sources: GB all industries and services series;
USA production and non-supervisory workers series.

2.4 Within manufacturing a number of industries have shown major gains in employment. The output of computer equipment has grown faster than that for any other product and largely explains the employment growth in the two industries (non-electrical machinery and electrical equipment) most closely associated with it. A third durable-goods industry to experience significant growth has been the instruments industry which has benefited from the increasing demand for medical and optical instruments as health services have expanded. Among the industries producing non-durable goods, the major increases have been in printing (mainly lithographic commercial printing) and chemicals, where the rise in employment has largely been in drug manufacturing. American industry has moved rapidly into areas of high technology and the growth of employment in these new industries has broadly offset reductions in manufacturing employment elsewhere.

2.5 Within the service industries, employment has grown significantly in all major areas except for transport and public utilities. Nearly 95 per cent of the overall gain in employment between 1973 and 1983 was accounted for by three main service groups: wholesale and retail trading; finance, insurance and real estate; and a category of services that roughly corresponds to those of professional and scientific services and miscellaneous services in this country. The first and the last of these groups made the largest contributions.

2.6 Behind the very rapid growth of service employment has been the same wide range of influences as has been evident in Britain. In particular, changing demand patterns, and the limited scope for productivity improvements in many service activities, have stimulated job creation in services. While productivity in manufacturing rose by some 2 per cent a year between 1973 and 1982 (compared with 1½ per cent in the UK), productivity growth in financial services rose by 1 per cent a year, and remained constant in wholesaling, retailing and the residual services category. Compared to Britain, a much higher proportion of the increase in demand for services fed straight through into an increase in employment.

2.7 Changes in relative wages have also played some part in the growth of services in the US. Workers in service industries (with some exceptions, like financial services etc) tend to be paid less than those in manufacturing. Furthermore, wages in service industries have grown more slowly than those in manufacturing. This fact, which partly reflects the greater flexibility of labour markets in the service industries in the face of increasing labour supply, seems to have contributed to the growth of employment in those industries.

2.8 The US experience shows the kind of effects which such influences can produce. For example:

- There has been a rapid rise in employment in banking and other financial services throughout the last decade, even though in 1973 the proportion of the US population using banking services was higher than it was in Britain in 1983.
- Employment in health services grew by 65 per cent, contributing more than 2 million new jobs, and in business services by 80 per cent, contributing 1½ million jobs.

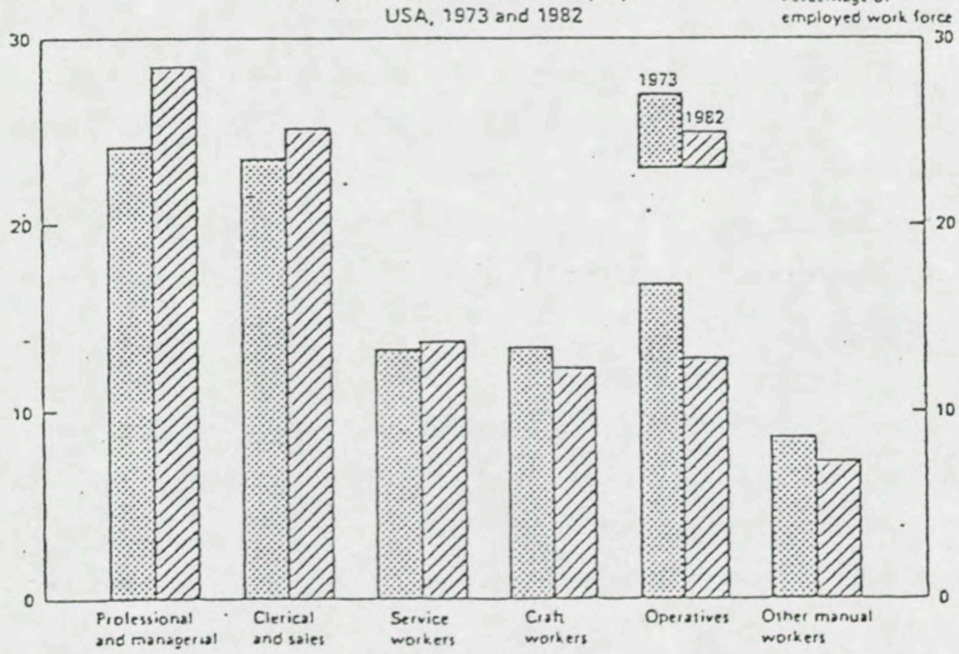
- Major elements in the rise in employment in US wholesaling and retailing have been the increase of 1¾ million jobs in "eating and drinking places", and of 600,000 jobs in the wholesaling of durables including computers and copiers.

Occupational Changes

2.9. Occupational changes have been similar to those in Britain. "White-collar" occupations became increasingly important as a source of US employment between 1973 and 1982. Professional and managerial, sales and clerical occupations markedly increased as a percentage of total employment. But although the proportion of "blue collar" workers fell, the total number employed remained broadly constant. Within this total, the number of craft and manual workers rose and the number of operatives fell.

Chart 6

Occupational distribution of employment USA, 1973 and 1982



Source: Annex Table A12

2.10 The more detailed occupational figures partly reflect the major trends in the industry figures. For example, they show the continued increase in demand for specialised financial and business services in the USA: the number of lawyers, accountants and real estate agents and brokers have grown significantly. They also mirror both the expansion of health services (where there have been very large increases in the employment of registered nurses and health technologists and technicians) and the continued growth of the catering industry (reflected in increased numbers of cooks, waitresses and restaurant managers). But the occupational changes also reflect the demand for higher levels of skill across many industries and services. In eight years the numbers of computer specialists and computer operators have both more than doubled. There have also been large increases in the numbers of engineers and engineering and science technicians.

Changes in Work Patterns

2.11 The striking feature in comparisons of work patterns is the difference in the degree of mobility in the two countries. Labour mobility, in all its forms, is more pronounced in the US than in Britain. Although the rate of job changing in the US appears to have been at an historically low level in recent years, it is still more than twice the rate found in Britain.

Conclusions

2.12 US experience of creating new jobs is a generally encouraging one for prospects in Britain. Many of the same trends can be seen in the changing employment patterns in both countries, and if the pace of change seems to have been faster in the US, and the capacity there to adapt that much greater, it is all the more important to try to identify factors impeding change in this country and what can be done to reduce them. The following section addresses those questions.

3. OBSTACLES TO NEW JOBS - AND OVERCOMING THEM

3.1 One thing emerges clearly from this brief review. It is the extent to which people in all developed countries have successfully adapted to dramatic changes in technology and patterns of employment and to changes in taste and fashion, which have continued even in the past decade of relatively slow growth. Structural and occupational change clearly is an essential part of the whole process of economic growth. The implication is that attempts to slow down change, especially by protecting existing employment patterns, will prove counter-productive. By the same token, we have to look to remove obstacles to the creation of jobs in new areas.

Adaptability

3.2 Future success will depend on a readiness and ability to adapt to change. The changes that others are making cannot be ignored if we are to secure a proper share of world markets, and compete successfully in our own domestic market. The demand is there - but we have to adapt to meet it. For management this means a willingness to move into new areas of business, to take risks, to ensure that investment is directed towards areas with the best growth potential. For employees, this means being ready to learn new skills, to adapt to new working patterns and, where necessary, to move from places where jobs are being lost to those where they are on the increase. For Government this means ensuring that the ability to change is not hindered by unnecessary controls which stifle initiative. Together there is a need to be able to adapt to new working patterns. Nor is it simply a matter of adapting to changing conditions. We have also to search out those key areas where we can hope to gain or regain the kind of world leadership we have enjoyed in the past.

Productivity and technological change

3.3 The history of economic change in all countries shows the central role played by productivity growth and the major contribution of technological change in the whole growth process. It is this that has enabled people to raise their standards of living many times over - in the UK by 4½ times since the middle of the nineteenth century and nearly twice since 1951.

3.4 Looking back, history shows that productivity growth and technological change do not reduce employment. Employment has generally grown at the same rate as the working population, although there have, of course, been fluctuations around the trend. This was true even in periods of rapid growth in the working population as between the wars when both employment and the working population increased by 1.2 per cent a year (over 3 million in total) from 1924 to 1937.

3.5 The anxieties that people have had, that the next wave of technological change - the movement to factory production in the nineteenth century, automation some decades ago, and now micro-electronics - would create permanent unemployment on a large scale have not been borne out in practice. Even in recent years, a difficult time for all countries, Japan and the US have shown how rapid technological change can be combined with continued employment growth.

3.6 Productivity growth and technological change can however greatly alter the pattern of employment. Jobs may be lost in the industries experiencing the greatest productivity advances, and gained elsewhere in the economy as the higher incomes that come from higher productivity are spent. Whether this brings a net decline in jobs in the dynamic industries depends on how the gains from that higher productivity are distributed. If they are mostly passed on in lower prices enough extra demand may be stimulated to prevent any net loss of jobs at all. And the higher real incomes that come when prices fall will lead to increased demand for other goods and services too.

3.7 The international dimension is very important here. If a larger share of the world market can be captured as a result of the lower prices, higher quality and new products made possible by technological change, output and employment in the UK will clearly benefit. Conversely, if British companies are slow to introduce new technology or otherwise to improve productivity, they risk losing their markets here and abroad to more progressive foreign competitors.

3.8 Unfortunately we have been falling behind our competitors in this respect for a very long time, especially in manufacturing. An earlier NEDC paper (NEDC(81)6, discussed in February 1981) noted, for example, that Germany had tended to move faster into industries with high unit value. Productivity levels in British manufacturing industries are often a third below average European levels and further behind Japanese levels. The relatively rapid growth in manufacturing productivity in recent years gives some grounds for optimism that the historic trends can be reversed, and that British manufacturing will begin at least to hold its own in world markets. This would slow down and could even reverse the shift of employment from manufacturing to services, and it would also, of course, raise real living standards.

Responsiveness to demand

3.9 A striking aspect of life particularly in the US is the way in which the market-place responds quickly and flexibly to the needs of consumers. That kind of flexibility is clearly one of the foundations of prosperity and sustainable jobs, and it is something which we must match in this country.

3.10 One limitation on such flexibility is the existence of a large public sector. The nationalised industries often find it difficult to respond quickly to changes in the market. They are constrained by their statutes, by the requirements of public sector financial control, by their sheer size and, in some important cases, by substantial elements of monopoly. Through its privatisation programme, and notably by introducing greater competition the Government's aim is to make these industries both more efficient and more responsive to their customers. In the non-trading public services the Government is also seeking to promote greater efficiency (including the use of contracting-out where appropriate) so that the needs of consumers of such services can be met as economically and effectively as possible. As incomes rise, there may be scope for increases in particular services which are perceived as of high priority, but only to the extent that this can be done consistently with the overall financial strategy. The number of jobs in the public services is constrained by the overriding need to hold down the tax burden, so as to provide the right climate for growth in industries producing traded goods and services - and hence in the economy as a whole. In general, we must expect the continuing flow of new jobs in the future to come predominantly from the private sector - including industries that have passed to the private sector from state ownership.

3.11 The Government has a role to play in freeing markets from unnecessary regulations and thus allowing suppliers to respond to consumer choice. It also has a role in curbing monopolies, whether in the public or the private sectors, for monopolies stifle innovation and the creation of new products and in doing so distort and restrict patterns of demand: the demand for new telecoms products since liberalisation demonstrates the point. The environment for business in this country has been improved by tax changes and through the progressive dismantling of controls and restrictions - exchange controls, hire purchase controls, price and dividend controls, and unnecessary planning constraints. Action is also being taken to open up overseas markets to British companies: for example, negotiations with Japan on the removal of non-tariff barriers, and with our European Community partners on access to the European insurance market.

3.12 It is for business to respond to the challenge of this new and more open environment - and the opportunities that go with it - as many firms are beginning to do. The requirements are very familiar to Council: a sound financial base, well-directed investment, good service to the customer and all those other things which enable companies and their employees to succeed in meeting competition. Only if these things are right can we be sure that people will continue in the future to want to buy what we produce, at a price they can afford.

3.13 The central need is to improve profitability. Profits are picking up as companies manage their costs more effectively. But the long term decline in profits will have to be reversed if investment is to be encouraged on a scale that can take the country back to acceptable levels of employment.

Making the labour market work

3.14 The extent and speed of future job creation - and the costs of achieving necessary changes - will depend on the flexibility and adaptability of the labour market and on how the skills and experience required by the new and growing occupations are acquired.

3.15 Education and training are a vital aspect of this latter process. An education system responsive to the needs of industry and commerce is of first importance. So too is the need to ensure that the size, quality and effectiveness of our training system is best attuned to future needs. The Government can make a major contribution through relevant education and training measures. For example, the Technical and Vocational Education Initiative promotes experiment in schools. And, as noted at the October NEDC meeting, the Government welcomes progress being made towards the three objectives of the New Training Initiative: the reform of skill training, in particular replacing time-serving by standards; the transition from school to work, and, in particular, the Youth Training Scheme; and the opening up of training opportunities for adults. All concerned - employers, unions, Government, further education colleges, and others providing training -need to co-operate in this endeavour.

3.16 There is also a need to challenge impediments to development of skills and their use wherever they occur: artificial barriers of entry to growing professions and skilled trades, age restrictions which hinder access to training and retraining, outdated demarcation lines between skills, unhelpful restrictive practices, and so on. Many of the impediments which are the most deeply entrenched call for the urgent attention of employers and unions.

3.17 Flexibility of course is not solely a question of education and training. For labour markets to work efficiently there needs to be a ready flow of information, and mechanisms for bringing employers and employees together. This is the role of the MSC Job Centres.

3.18 Greater adaptability in the labour market also requires wider acceptance of more flexible working hours and new forms of employment contracts. As well as part time work, there needs to be more experimentation with annual hours contracts, seven day working and multi-shift working. Employment contracts need to recognise the importance of flexibility between occupations and skills. And there may be a greater role for self-employment, including opportunities for some of the unemployed, as the Government's Enterprise Allowance Scheme recognises.

3.19 Mobility between jobs could be encouraged by an improvement in the way occupational pension schemes treat those who leave such schemes, as a consequence of a change of employer. The Government has recently announced its intention to legislate to require all schemes to revalue leavers' preserved rights by 5 per cent per annum, or by the rise in prices if less. Furthermore, the Inquiry to be chaired by the Secretary of State for Social Services will take an early look at the case for completely 'portable' pensions.

3.20 There are also a number of features of the housing market which impede mobility between regions. Council tenants may not find it easy to find another council house in the area to which they wish to move. The National Mobility and Tenants Exchange Schemes help ease this problem and the Government have announced that they intend to give tenants a right to exchange their houses. Owner occupiers may face substantial costs in stamp duty, conveyancing and estate agents fees. The Government have issued a consultative document on Stamp Duty. Potentially a major contribution to improving mobility in the housing market could be made by the private rented sector which could provide a ready stock of suitable houses for people moving to a new area without the costs in moving or restrictions of the other sectors.

3.21 Mobility and change will be assisted if earnings can become more responsive to changes in labour market conditions. If employers are to have sufficient incentive to engage in training, trainee wages may have to be set at more realistic levels compared to those of other workers. The wider use of bonus systems and other performance related methods of pay could help make labour costs more flexible. Changes in occupational patterns, and especially the shift towards more skilled jobs within manual occupations may mean reversing the strong trend in the 1970s towards narrower wage differentials between skilled and unskilled manual workers.

3.22 Appropriate pay levels can also help directly towards higher employment. The exceptionally rapid growth of employment in US services in the 1970s is almost certainly partly related to trends in US labour costs. Over the 1970s, hourly earnings in service industries in the US fell significantly compared to average manufacturing earnings. In some cases the fall was nearly 10 per cent. This will have helped to reduce the relative price of services, compared with manufactured goods and thereby stimulated demand for and employment in services. It may also have led to the adoption of more labour-intensive techniques of production and hence also more employment through that route.

Areas for growth

3.23 Potential impediments to new jobs are always easier to identify than the source of new ones. This is not really surprising: past attempts to predict the future have usually been falsified by events. But the trends described in the earlier parts of this paper do suggest some possible future developments.

3.24 First, manufacturing. The historical picture here is admittedly not reassuring. Although there is nothing inherent in modern economies which requires this to be so, the changing pattern of demand and the impact of new technology may continue to put pressure on jobs in many types of manufacturing. Yet other countries, even at a much higher level of income, have shown that it is possible to be more successful in maintaining employment in manufacturing. And the recent rapid advance in productivity in manufacturing in this country suggests that some long overdue fundamental changes have been occurring which may offer better prospects for employment in the future. Nonetheless, it seems more likely that the extra jobs, in all developed countries, will mostly arise outside manufacturing.

3.25 We have been notably more successful as a producer of services, with 1¼ million new jobs created in the past decade, an increase of 10 per cent. Fifty years ago, even ten, it would have been difficult to foresee precisely how this would come about. Few, for example, would have predicted that the UK would provide a larger and faster growing market for home entertainment and personal computers and their host of support services than any other major European country. Even with our relatively low income growth, the number of building society accounts has risen from 13 million to 37 million. Over the same decade the proportion of people with telephones nearly doubled from two in five to nearly four in five. The growth in the demand for services, as incomes rise with increasing productivity and output, is a consistent trend throughout the developed world which seems likely to continue.

3.26 Recent experience here and overseas shows no slowing in the appearance of new needs or better ways of meeting old ones. Examples range from sheltered retirement homes to fast food restaurants; from energy conservation to security services; from food processors to garden centres. The record of predicting these changes is poor and the effect on jobs may not always be obvious as they happen. Many new activities are classified anonymously in employment statistics under "miscellaneous" and "other" headings. Yet one quarter of the growth of service jobs in the last decade fell under "other miscellaneous services" and another tenth was clasified as "other business services". Significantly, computer services are one of the activities buried in "other business services".

3.27 The pattern of occupational change is bound to continue to reflect the changing character of output and consumer needs, with more people required with technical and scientific skills, and, more skilled management to manage the changes that will be needed. It seems likely that non-manual occupations will continue to expand both absolutely and relative to manual occupations -reflecting also the higher levels of skill and training provided by the education system. At the same time, many of the growing service industries will continue to provide occupations for those with lesser skills and there is no reason why the numbers of jobs for those with manual experience should decline, though the character of those jobs may change.

3.28 The growth in numbers of small firms and of the self-employed, the increasing role of part-time work, the spread of flexible working hours are all ways in which the labour market is becoming more responsive, creating the conditions for growth in employment. These trends can be expected to continue.

4. CONCLUSIONS

4.1 Economic change is a fact of life. Throughout history individuals, firms and economies have shown a remarkable ability to adapt to changing conditions - to the growth of new industries and the decline of old, to the discovery of new markets, new methods and new techniques, to new demands, and, above all, to the inexorable growth in people's aspirations for better living standards.

4.2 To try to predict the precise path of economic change is fraught with difficulty. So too with attempts to predict the future pattern of jobs. What can be said, in the light of experience, is that the process of change will continue, that although jobs will cease new ones will be created, and that opportunities will be greatest where goods and services best meet consumer demands, and are priced competitively in national and world markets. Ultimately success depends on the skill, enterprise and foresight of management and workforce in many hundreds of thousands of individual firms.

4.3 Some broad trends are there to be seen already. Employment is more likely to grow rapidly in private services, including information and entertainment services and leisure activities. Employment in manufacturing may continue to decline relative to that in services, though not universally across the whole field. The process of occupational change will reflect a similar pattern. Occupations in, for example, computer and micro-electronics-based activities can be expected to grow. Technological advance will continue to require more engineers and other skilled technical staff, freeing those with lesser skills to meet rising demand for people in the new expanding service trades. For individuals the future is likely to bring even greater flexibility in work patterns: more frequent job changes, more flexible hours of work and leisure, and, almost certainly, increasing moves towards more part-time work, for men and for women. However, if competitiveness is to be assured, the benefits of economic growth cannot be taken twice over - in higher incomes and then again in lower hours; choices have to be made.

4.4 We cannot expect the process of structural change to be completely painless. It never has been, and it never will be. The disappearance of jobs in declining industries is rarely followed as quickly as we would all like by the creation of new jobs in industries that are expanding and rarely are they in the same place. The solution to this, and the route to more rapid employment in the future, lies in greater flexibility and a readiness to adapt to changing conditions - by managements, unions and individual workers.

4.5 Each of the parties represented on the NEDC has an integral part to play in speeding this process of adjustment, in easing the frictional problems that are bound to occur, and in seizing the new opportunities which we can confidently expect to appear.

4.6 The Government can help, and is helping, in a number of ways. First, by continuing to bear down on inflation, Government policies are helping to create the only sound conditions for sustained growth in output and employment, without fear that expansion will be brought to a premature halt by unaccetapble rates of inflation. Second, freeing markets from unnecessary restrictions will encourage firms more readily to expand and move into new lines of activity to meet the ever changing pattern of consumer needs, with greater confidence of success. Third, by providing conditions for lower taxes and interest rates, the Government can give greater encouragement for hard work, enterprise and individual initiative; increase the confidence of businessmen to invest in new and more efficient plant; and secure an environment in which private sector firms can plan ahead with greater assurance. Lastly, by continuing to provide opportunities for training and work experience, the Government can help those who are not able to find new jobs quickly, especially young people.

4.7 But the Government can only provide the right framework of policies within which economic change will take place more smoothly. It cannot determine the process of change, still less the manner or places in which it will happen. Nor can governments, on a lasting basis, themselves determine the number of jobs there will be, whether in the public sector or in the private. At the end of the day that depends on the actions and attitudes of individuals expressing choices, whether as employees, as employers or as customers.

4.8 Many firms have shown considerable flexibility in responding to the difficult conditions of recent years. But we still have some way to go before all come up to the standard of the best and before we match the average productivity levels of our competitors, especially in manufacturing. Everything possible must be done to catch up. Labour markets must become more flexible, so permitting variations in earnings between firms, industries and occupations more readily to reflect changes in consumer demand, technology and overseas competition. Barriers to entry to certain professions and trades create artificial and undesirable rigidities and may need to be questioned for their relevance to today's conditions. Working time must become more flexible and more experiments are needed with new forms of employment contract. We must also look for maximum flexibility and effectiveness in training and retraining schemes and continue to ensure that the education system remains responsive to the needs of industry and commerce.

4.9 These are all matters that have concerned the Council or the EDCs at one time or another. They are essential to an efficient and adaptable economy, to higher living standards and to jobs. They deserve the Council's continuing attention.

4.10 The Council is invited to consider

(i) what useful lessons the UK can learn from the experience of changing employment patterns in other countries;

(ii) the implications for employment of new technology;

(iii) what contribution can be made by education and training;

(iv) how the impediments to new jobs might be removed.

TABLE A1

EMPLOYEES IN EMPLOYMENT, GB, 1973, 1979 AND 1983

	Employees 000s			Change in employment 1973-1983	
	June 1973	June 1979	June 1983	Number 000s	%pa
All industries and services	22,180	22,590	20,460	-1,720	-0.8
Agriculture, forestry and fishing	420	360	340	-80	-2.1
Mining and quarrying	360	350	310	-50	-1.5
Manufacturing	7,660	7,050	5,370	-2,290	-3.5
Construction	1,340	1,250	970	-370	-3.2
Gas, electricity and water	340	340	320	-20	-0.4
Services industries	12,060	13,240	13,150	+1,090	+0.9

Source: Employment Gazette

Notes: The 1983 figures are the Department of Employment's supplementary series which includes an allowance for the probable understatement of the level of employment, particularly in the service industries, in the basic series. The employment series will be subject to revision in the light of the final results of the 1981 Census of Employment.

TABLE A2

GROWTH OF SERVICE EMPLOYMENT, GB, 1973-81

	Employment in June 1981 (employees and self-employed)	Change 1973-81
	millions	millions
All services	14.4	+1.2
of which		
Transport and communications	1.5	-
Distributive trades	3.2	-
Insurance, banking, finance and business services	1.4	+0.3
Professional and scientific services	3.9	+0.5
Miscellaneous services	2.9	+0.4
Public administration	1.5	-

Source: Employment Gazette
Note: Detailed figures of changes in the number of employees in different service industries are given in Tables A5 and A6.

TABLE A3

PRODUCTION INDUSTRIES WITH GROWTH IN EMPLOYEES IN EMPLOYMENT, 1973-1979

	Employees 000s		Increase	
	June 1973	June 1979	Number 000s	%pa
Petroleum and natural gas	3	19	15	33.1
Water supply	43	59	16	5.4
Ordnance and small arms	19	26	7	5.1
Radio, radar and electronic capital goods	80	100	20	3.8
Wheeled tractor manufacturing	28	34	6	3.5
Soap and detergents	15	18	3	3.4
Miscellaneous food industries	32	38	7	3.2
Synthetic resins and rubber and plastics materials	47	55	9	3.0
Industrial engines	27	31	4	2.3
Cans and metal boxes	28	32	4	2.3
Jewellery and precious metal	19	22	3	2.2
"Other" drink industries	31	34	4	2.0
Fertilisers	11	12	1	1.9
Electronic computers	46	51	5	1.7
Construction and earth-moving equipment	37	41	4	1.6
Pumps, valves and compressors	79	87	7	1.5
Locomotives and railway track equipment	16	17	1	1.4
General chemicals	135	146	11	1.3
Railway carriages and wagons and trams	25	26	1	0.9
Surgical instruments and appliances	27	28	1	0.5
Agricultural machinery (except tractors)	28	28	1	0.4
"Other" textile industries	23	23	1	0.4
Overalls, mens' shirts etc	38	39	1	0.4
Insulated wires and cables	42	43	1	0.3
Biscuits	44	45	1	0.3
Electrical machinery	133	135	2	0.3
Cement	14	15	-	0.3
Printing and publishing of newspapers and periodicals	138	141	2	0.3
Engineers' small tools and guages	64	65	1	0.2
Miscellaneous wood and cork manufactures	20	20	-	0.1
Pharmaceutical chemicals and preparations	74	75	-	0.1

Source: Employment Gazette and unpublished Department of Employment statistics.

Note: The period 1973 to 1979 was chosen to represent movement between cyclical peaks.

TABLE A4

PRODUCTION INDUSTRIES WITH GROWTH IN EMPLOYEES IN EMPLOYMENT, 1979-1983

	Employees 000s		Increase	
	June 1979	June 1983	Number 000s	%pa
Petroleum and natural gas	19	27	9	9.8
Electronic computers	51	58	7	3.5
Water supply	59	65	7	2.7
Printing and publishing of newspapers	91	97	5	1.4
Radio, radar and electronic capital goods	100	105	5	1.3

Source: Employment Gazette and unpublished Department of Employment statistics.

Note: (i) The basic series of estimates of employees in employment, which is given above, is thought on the basis of the results of the 1981 Census of Employment to understate employment in 1983, mainly in the service industries.

(ii) The two years do not represent equivalent points in the economic cycle.

TABLE A5

SERVICE INDUSTRIES WITH GROWTH IN EMPLOYEES IN EMPLOYMENT, 1973-1979

	Employees 000s		Increase	
	June 1973	June 1979	Number 000s	%pa
Transport and Communication				
Miscellaneous transport services and storage	135	191	56	5.9
Air transport	77	89	12	2.4
"Other" road haulage	21	22	1	1.0
Distributive trades				
Dealing in "other" industrial materials and machinery	164	201	37	3.4
"Other" wholesale distribution	274	292	18	1.1
Wholesale distribution of food and drink	218	226	8	0.6
"Other" retail distribution	1271	1316	45	0.6
Dealing in fuels, builders materials and agricultural supplies	120	121	1	0.1
Financial and business services				
"Other" business services	206	302	96	6.6
Banking and bill discounting	280	339	59	3.2
Advertising and market research	31	38	6	3.2
Property owning and managing etc	86	101	15	2.8
"Other" financial institutions	109	119	10	1.4
Insurance	259	276	17	1.1
Professional and scientific services				
Research and development services	94	116	22	3.5
Medical and dental services	1104	1305	202	2.8
Educational services	1620	1846	226	2.2
"Other" (includes accountancy and legal)	353	390	37	1.7
Miscellaneous services				
Sports and other recreations	81	121	40	6.9
"Other" services	408	586	178	6.2
Clubs	94	120	25	4.0
Catering contractors	60	75	15	3.7
Public houses	215	258	43	3.1
Hotels and other residential establishments	246	283	37	2.4
Restaurants, cafes, snack bars	168	186	17	1.6
Hairdressing and manicure	96	101	5	0.9
Motor repairers, garages etc	455	480	25	0.9
Betting and gambling	91	96	4	0.8
Cinemas, theatres, radio etc	101	105	4	0.7
Public administration				
National government service	583	610	27	0.8

Source: Employment Gazette and unpublished Department of Employment statistics.

Note: The period 1973 to 1979 was chosen to represent movement between cyclical peaks.

TABLE A6

SERVICE INDUSTRIES WITH GROWTH IN EMPLOYEES IN EMPLOYMENT, 1979-1983

	Employees 000s		Increase	
	June 1979	June 1983	Number 000s	%pa
Property owning and managing etc	101	128	27	6.0
"Other" financial institutions	119	140	21	4.2
Advertising and market research	38	42	4	2.8
Clubs	120	132	12	2.4
Banking and bill discounting	339	368	30	2.1
Sports and other recreations	121	130	10	2.0
Medical and dental services	1,305	1,395	89	1.7
"Other" professional and scientific (includes accountancy and legal)	390	413	24	1.5
"Other" miscellaneous services	586	620	34	1.4
Dealing in fuels, builders materials and agricultural supplies	121	126	5	1.0
Insurance	276	287	11	1.0
"Other" business services	302	312	10	0.8
Dealing in "other" industrial materials and machinery	201	201	1	0.1

Source: Employment Gazette and unpublished Department of Employment statistics.

Note: (i) The basic series of estimates of employees in employment, which is given above, is thought on the basis of the results of the 1981 Census of Employment to understate employment in 1983, mainly in the service industries.

(ii) The two years do not represent equivalent points in the economic cycle.

TABLE A7

CHANGES IN OCCUPATIONAL EMPLOYMENT 1971-80

	Warwick Occupational Categories	1980 000s	1971-80 per cent
1.	Managers and administrators	2,129	11.8
2.	Education and professions	984	30.7
3.	Health and professions etc	986	28.6
4.	Other professions	562	21.9
5.	Literary, artistic and sports occupations	447	30.0
6.	Engineers, scientists etc	576	14.6
7.	Technicians, draughtsmen	601	17.3
8.	Clerical occupations	4,056	11.3
9.	Sales occupations	1,417	6.5
10.	Supervisors, foremen[a]	104	-12.2
11.	Engineering craftsmen	2,143	-7.8
12.	Other transferable craftsmen	907	-3.7
13.	Non-transferable craftsmen	675	-34.4
14.	Skilled operatives	622	-16.5
15.	Other operatives	4,712	-5.0
16.	Security occupations	386	26.1
17.	Personal service occupations	2,932	14.6
18.	Other occupations	789	-33.0
1-9	Non-manual occupations	11,755	15.1
10-18	Manual occupations	13,271	-6.3
1-18	All occupations[b]	25,026	2.6

Notes: (a) Because of classification problems this group covers engineering foremen and transport inspectors and supervisors only.
(b) Excluding HM Forces

Source: Review of the Economy and Employment, Summer 1983 (University of Warwick Institute for Employment Research)

TABLE A8

EMPLOYEES IN EMPLOYMENT: USA, 1973, 1979 AND 1983

	Employment 000s			Change in Employment 1973-83	
	March 1973	March 1979	March 1983	Number 000s	%pa
Total, non-agricultural	75422	88654	88172	+12750	+1.6
Manufacturing	19836	20972	18166	-1670	-0.9
Mining	620	928	996	+376	+4.9
Construction	3718	4093	3453	-265	-0.7
Service industries[(a)]	51248	62661	65557	+14309	+2.5
of which:					
Transport and Utilities	4579	5045	4913	+334	+0.7
Wholesale/retail trades	16176	19809	19955	+3779	+2.1
Finance, insurance, real estate	3989	4876	5359	+1370	+3.0
Services[(b)]	12650	16829	19275	+6629	+4.3
Government	13854	16102	16051	+2197	+1.5

Source: US Bureau of Labour Statistics 'Employment and Earnings'

(a) Service industries are refined as transport and utilities, wholesale and retail trades; finance, insurance and real estate; and services.

(b) This category roughly corresponds to the UK "professional and scientific services" and "miscellaneous services".

TABLE A9

EMPLOYMENT IN WHOLESALE AND RETAIL TRADING, DISAGGREGATED DETAIL
USA, 1973, 1979 AND 1983

	Employment 000s			Change in Employment 1973-83	
	March 1973	March 1979	March 1983	Number 000s	%pa
Wholesale/retail trades	16176	19809	19955	+3779	+2.1
Wholesaling	4205	5135	5145	+940	+2.0
of which:					
Durables	2396	3036	3009	+613	+2.3
Non-durables	1809	2099	2136	+327	+1.7
Retailing	11971	14674	14810	+2839	+2.7
of which:					
Building materials/ garden supplies	518	614	574	+56	+1.0
General merchandise stores	2127	2202	2099	-28	-0.1
Food stores	1852	2266	2444	+592	+2.8
Auto dealers and service stations	1778	1865	1580	-198	-1.2
Apparel and accessory stores	773	919	923	+150	+1.8
Furniture stores	527	613	570	+43	+1.3
Eating and drinking places	2888	4346	4724	+1836	+5.0
Miscellaneous retail	1508	1849	1896	+388	+2.3

Source: US Bureau of Labour Statistics 'Employment and Earnings'

TABLE A10

EMPLOYMENT IN FINANCE, INSURANCE AND REAL ESTATE, DISAGGREGATED DETAIL
USA, 1973, 1979 AND 1983

	Employment 000s			Change in Employment 1973-83	
	March 1973	March 1979	March 1983	Number 000s	%pa
Finance, insurance, real estate	3989	4876	5359	+1370	+3.0
of which					
Banking	1154	1472	1649	+495	+3.6
Credit agencies other than banks	410	543	601	+191	+3.9
Security, commodity brokers & services	202	197	294	+92	+3.8
Insurance carriers	1064	1194	1226	+162	+1.4
Insurance agents, brokers & services	308	424	479	+171	+4.5
Real estates	744	914	957	+213	+2.5
Combined real estate, insurance	32	24	17	-15	-6.1
Holding & other investment offices	76	109	136	+60	+6.0

Source: US Bureau of Labour Statistics, 'Employment and Earnings'

TABLE A11

EMPLOYMENT IN PROFESSIONAL AND MISCELLANEOUS SERVICES, DISAGGREGATED DETAIL
USA, 1973, 1979 AND 1983

	Employment 000s			Change in Employment 1973-83	
	March 1973	March 1979	March 1983	Number 000s	%pa
"Services"[(a)]	12650	16829	19279	+6629	+4.3
of which:					
Hotels etc	802	1009	1065	+263	+2.9
Personal services	915	934	965	+50	+0.5
Business services	1893	2790	3403	+1510	+6.0
Auto repairs, garages	422	583	576	+154	+3.2
Miscellaneous repair services	202	280	266	+64	+2.8
Motion pictures	192	222	202	+10	+0.5
Amusement & research services	489	665	752	+263	+4.4
Health services	3573	4906	5894	+2321	+5.1
Legal services	286	445	586	+300	+7.4
Educational services	1035	1151	1300	+265	+2.3
Social services	541	1070	1218	+677	+8.5
Membership organisations	1413	1523	1522	+109	+0.7
Miscellaneous services	673	926	1058	+385	+4.6

Source: US Bureau of Labour Statistics 'Employment and Earnings'

(a) This category roughly corresponds to UK "professional and scientific services" and "miscellaneous services".

TABLE A12

OCCUPATIONS WITH THE LARGEST ABSOLUTE INCREASE IN EMPLOYMENT BETWEEN 1973 AND 1983: USA

	Employment[a] 000s		Change in Employment	
	1973	1982	000s	Per cent
Professional & Technical Workers				
Accountants	750	1193	443	59
Computer Specialists	287	751	464	162
Engineering & Science technicians	850	1114	264	31
Engineers	1094	1574	480	44
Health technologists & technicians	330	657	327	99
Lawyers	344	630	286	83
Physicians, dentists	639	869	230	36
Registered nurses	823	1415	592	72
Managers and administrators				
Bank officials	509	731	222	44
Restaurant, cafe, bar managers	494	768	274	55
Salesworkers				
Sales reps, wholesale	748	1020	272	36
Clerical workers				
Bank tellers	326	561	235	72
Bookkeepers	1661	1968	307	18
Cashiers	1048	1683	635	61
Computer operators	216	588	372	172
Receptionists	445	672	227	51
Secretaries	3066	3847	781	25
Transport equipment operatives				
Truckdrivers	1549	1841	292	19
Non-form labourers				
Stockhandlers	723	972	249	34
Service workers				
Building interior cleaners	660	926	266	40
Cooks	928	1396	468	50
Guards	460	685	225	49
Waiters	1149	1496	347	30

Source: US Bureau of Labour Statistics, 'Employment and Earnings'

[a] Annual averages