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To: Members of the Executive Board
From: The Secretary
Subject: United Kingdom - Selected Background Issues

This paper provides background information to the staff report on the 1992 Article IV consultation discussions with the United Kingdom, which was circulated as SM/93/14 on January 21, 1993.

Mr. Lachman (ext. 36223) or Mr. Corker (ext. 37304) is available to answer technical or factual questions relating to this paper prior to the Board discussion.

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INTERNATIONAL MONETARY FUND

UNITED KINGDOM

Selected Background Issues

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Approved by the European I Department

January 27, 1993

	<u>Contents</u>	<u>Page</u>
I.	<u>Overview and Summary</u>	1
II.	<u>The U.K. Recession</u>	2
	1. Background to the recession	2
	2. Output, employment and productivity	4
	3. Expenditure	6
	a. Personal sector balance sheet correction	6
	b. Investment and the corporate sector	8
	4. Wages and prices	10
III.	<u>Balance of Payments</u>	12
	1. Visible trade balance	13
	a. Non-oil trade	13
	b. Oil trade	15
	2. Invisible earnings	15
	3. Competitiveness	16
	4. Capital account developments	17
	<u>Annex I</u> Estimating the Cyclically Adjusted Current Account Deficit	22
IV.	<u>Fiscal Policy and Developments</u>	25
	1. Recent fiscal developments	25
	a. Revenue	27
	b. Expenditures	28
	2. The 1992 Autumn Statement	30
	a. Measures to revive confidence	30
	b. Revised spending plans	31
	3. Medium-term fiscal outlook	32

	<u>Contents</u>	<u>Page</u>
V.	<u>Monetary Policy and Developments</u>	35
	1. The events surrounding sterling's withdrawal from the ERM	35
	2. The new monetary policy framework	37
	3. Developments in monetary policy indicators	39
	<u>Annex II</u> The Financial Position of the Financial Intermediaries in the United Kingdom	42
VI.	<u>Labor Market Performance and Policies</u>	45
	1. The labor market reforms of the 1980s	45
	2. Wages and productivity trends since 1980	48
	3. Empirical evidence on wage flexibility	51
	<u>Annex III</u> The Wage-Price Model	55
 <u>Charts</u>		
	1. Output, Unemployment and Inflation	2a
	2. GDP and Sectoral Output During Recessions	4a
	3. Employment and Unemployment During Recessions	4b
	4. Productivity During Recessions	6a
	5. Components of Demand During Recessions	6b
	6. Personal Sector Saving and Wealth	8a
	7. Corporate Sector Investment	10a
	8. Manufacturing Earnings During Recessions	12a
	9. Unit Labor Costs During Recessions	12b
	10. External Balances and the Economic Cycle	14a
	11. Export Market Share and Import Penetration	14b
	12. Competitiveness	16a
	13. Government Balance	26a
	14. General Government Revenue	28a
	15. General Government Expenditure	28b
	16. Exchange Rate and Interest Rates with Regard to Germany	36a
	17. Money Velocities	40a
	18. Monetary Growth	40b
	19. House Prices	40c
	20. Recent Developments in Earnings, Prices, and Unemployment	48a
	21. Average Earnings in Selected OECD Countries	48b
	22. Productivity Trends, 1960-1992	48c

<u>Contents</u>	<u>Page</u>
 <u>Statistical Appendix</u>	
1. Real Output and its Major Components at Constant Factor Cost	57
2. Labor Market Indicators	58
3. Selected National Accounts Aggregates at 1985 Market Prices	59
4. Selected Personal Sector Data	60
5. Components of Personal Income	61
6. Selected Financial Statistics--Industrial and Commercial Companies	62
7. Selected Indicators of Investment Activity	63
8. Selected Indicators of Wage Developments	64
9. Selected Indicators of Price Developments	65
10. Selected Balance of Payments Indicators	66
11. Merchandise Trade Indicators	67
12. Exports by Commodity--Volume Indices	68
13. Direction of Trade	69
14. Imports by Commodity--Volume Indices	70
15. Nonfactor Services	71
16. Capital Account	72
17. General Government Accounts	73
18. Central Government Accounts	74
19. The 1992 Budget Measures	75
20. General Government Expenditure--Plans and Outturn	76
21. The New Control Total and General Government Expenditure	77
22. Government Expenditure Plans--Main Departments	78
23. Nominal Exchange Rates	79
24. Interest Rates	80
25. Growth Rates of Selected Monetary Aggregates	81
26. Contributions of Asset Counterparts to Growth in Broad Money Stock M-4	82
27. Bank Profitability in Selected Countries	83



I. Overview and Summary

This background paper for the 1992 Article IV consultation examines a number of key recent developments in the United Kingdom's economy and in the setting of macroeconomic policy. These developments include the prolonged domestic recession, the cyclical behavior of the external current account, the shift of the fiscal position into substantial deficit, the new monetary policy regime following withdrawal from the ERM, and the effects of labor market reforms on wage flexibility during the recession.

The chapter on the U.K. recession notes that the current recession is now the longest since the second world war and, in terms of severity, the fall in output has almost matched that of the 1980-81 downturn. The recession's composition, however, differs importantly in a number of respects from that of the earlier downturn. In particular, the current recession has been more evenly distributed over different sectors and regions of the country and has involved a much greater decline in private consumption. The longevity of the current recession is traced to the unusually steep run up in private sector indebtedness during the 1980s expansion phase that was coupled with an asset price bubble. The subsequent collapse of asset prices and increase in income gearing that accompanied the tightening of monetary policy beginning in mid-1988, ushered in an era of prolonged consumer and business retrenchment.

The chapter on the external balance of payments focuses on the cyclical pattern of the current account balance. In contrast to the 1980-81 recession, the current account balance has remained in sizable deficit in recent years, despite the relative weakness of the domestic economy. A decline in the oil export surplus and a steady erosion of earnings from net external assets over the second half of the 1980s explain part of the difference in current account performance between the recessions. However, import penetration has also been a key factor behind the shift to persistent current account deficits. The chapter also includes a description and analysis of recent external capital flows.

The chapter on recent fiscal developments documents the large shift in the public accounts from surplus at the end of the 1980s to sizable deficit in the current fiscal year. In large measure, the swing to deficit is a cyclical phenomenon that has reflected the full recourse to the automatic stabilizers during the recession. However, it would also reflect an earlier erosion of the tax base and persistent expenditure overruns. The latter, which has involved real expenditure rises in several non-cyclical areas such as health, education and transport, coupled with the effects of the cycle, raised the ratio of expenditure to GDP to around 45 percent by 1992/93. The staff analysis suggests that on present spending plans and tax rates, the fiscal accounts would remain in sizable deficit over the next several years even were the economy to grow for a number of years at above potential.

The circumstances surrounding sterling's withdrawal from the ERM in September 1992 are described in the chapter on monetary policy and

developments. This chapter notes that monetary conditions in the United Kingdom had become very tight in mid-1992 in relation to the cyclical position of the domestic economy, thereby making sterling particularly vulnerable to the turbulence in foreign exchange markets that occurred in the second half of the year. This chapter also describes the authorities' new monetary policy framework, evaluates the recent behavior of the monetary aggregates and asset prices that are given prominence in the framework, and assesses the health of the financial system.

The final chapter presents an analysis of labor market performance and policies and their consequences for wage flexibility. Labor market reforms were a cornerstone of structural policies in the 1980s and focused on decentralizing the wage bargaining process. The chapter notes that the reforms clearly had a beneficial effect on industrial relations and on productivity growth, but concludes that the effects on wage flexibility are less apparent. The chapter contains an analysis of a wage and price model, estimated by the staff, that suggests that there is little evidence of increased wage flexibility either during the course of the 1980s in general, or during the period of ERM membership in particular.

Table references in the text refer to data in the Statistical Appendix.

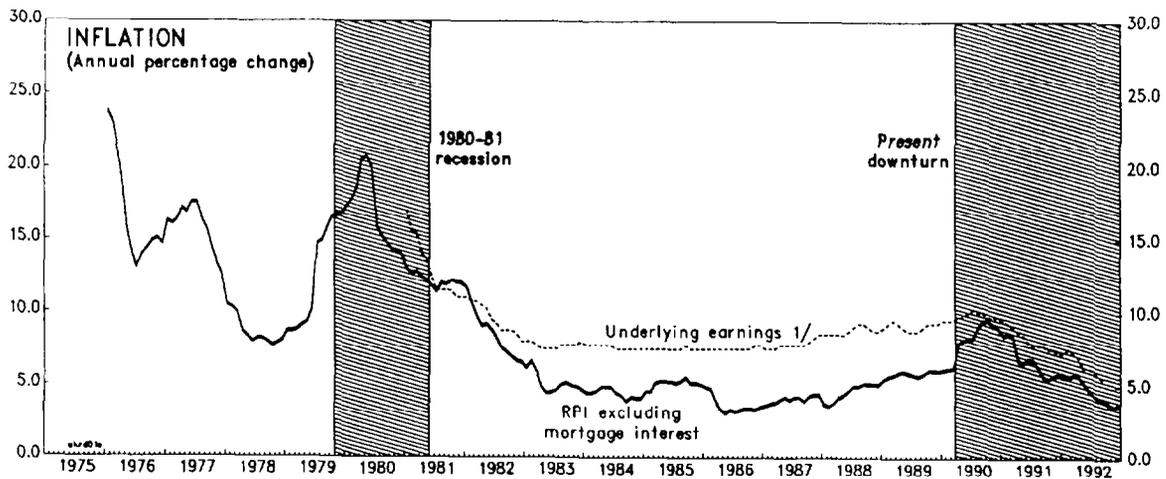
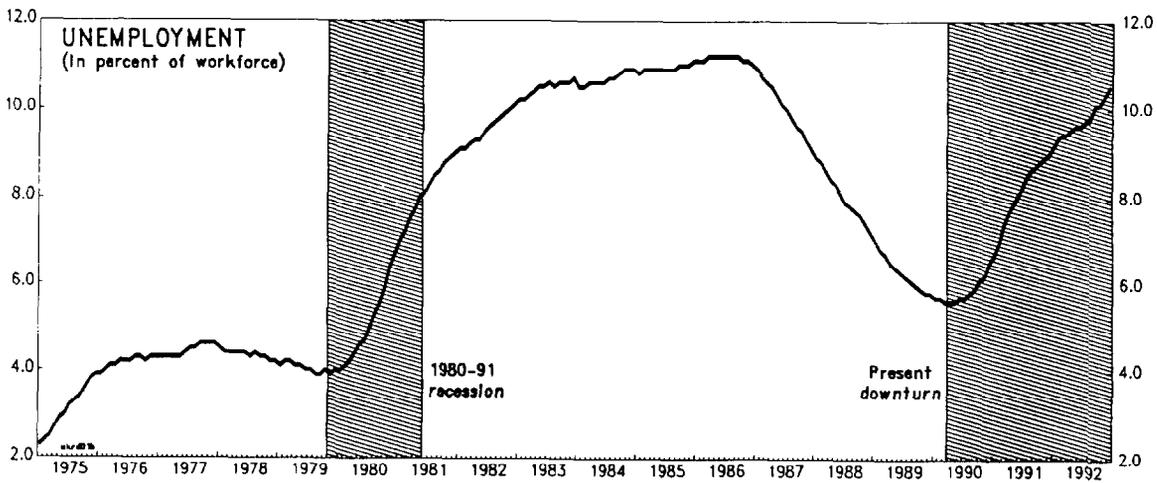
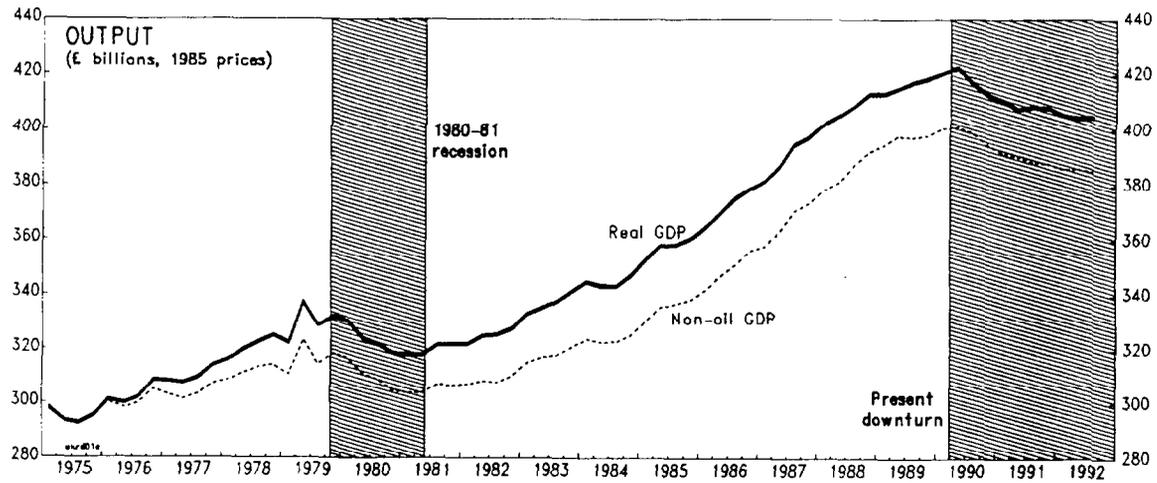
II. The U.K. Recession

The current U.K. economic recession, which began in the middle of 1990, has been the longest in post-war history, although by the third quarter of 1992, the fall in output had yet to match that of the deep 1980-81 recession. The longevity of the recession reflects to a large extent the unwinding of distortions to private sector balance sheets that had cumulated during the process of financial deregulation. The slow process of balance sheet correction to date has given the current economic recession a number of distinct features when compared to the last major downturn in 1980-81. In particular, the fall in output has been much more regionally and sectorally dispersed, while consumption has been more severely depressed. However, while inflation has fallen markedly, the decline has been no greater than might have been expected on the basis of past behavior. The remainder of this chapter contains a description and analysis of the 1990-92 recession, comparing and contrasting it where pertinent with the recession of 1980-81.

1. Background to the recession

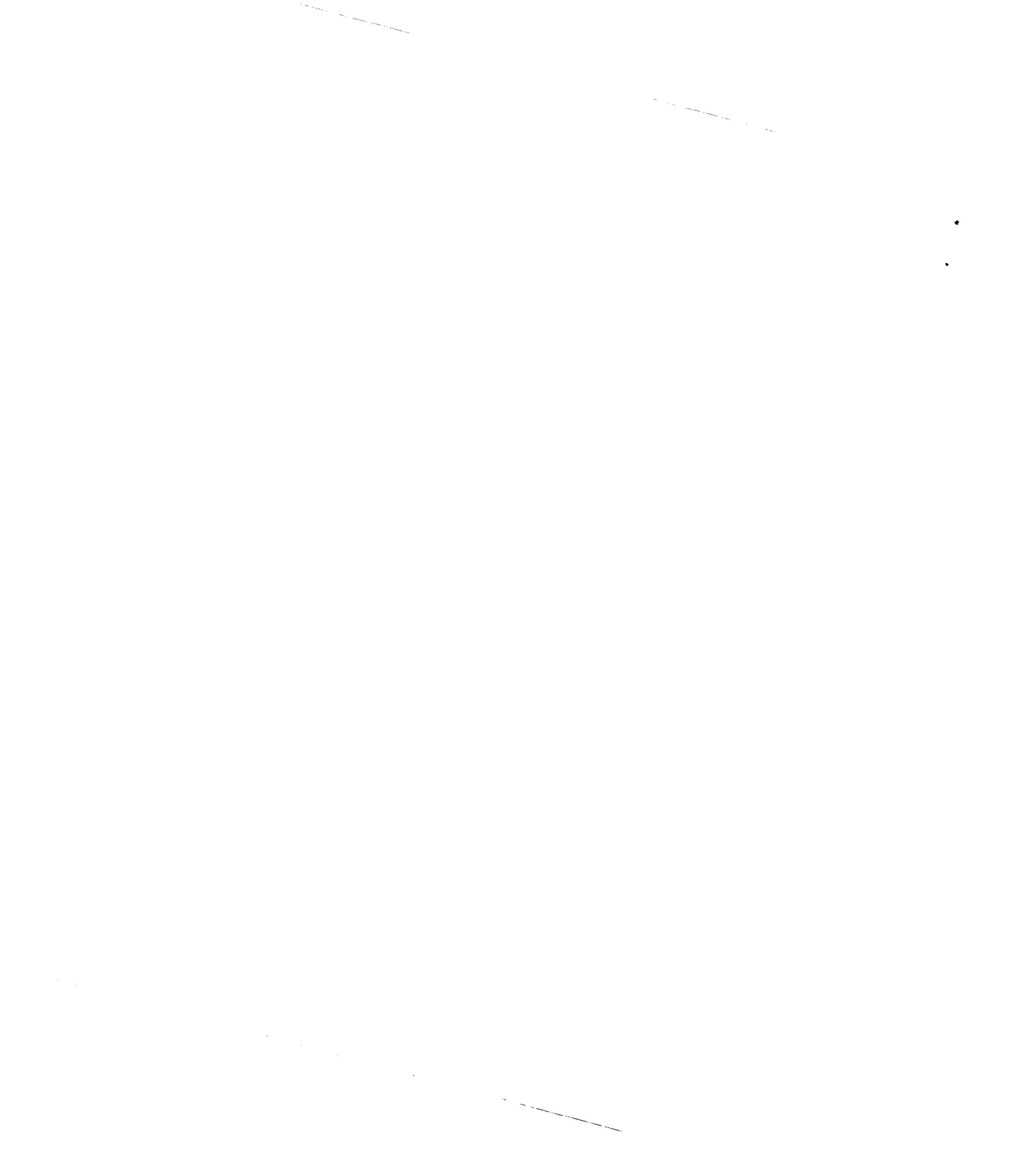
Following the end of recession in 1981, the U.K. economy enjoyed an unusually long period of expansion, in which inflation remained at a relatively low level by the standards of the 1970s. However, it was only subsequent to 1986, on the basis of a domestic demand induced acceleration of GDP growth to the 4-5 percent range, that unemployment began a steep decline (see tabulation below and Chart 1). GDP growth over this period far

CHART 1
UNITED KINGDOM
OUTPUT, UNEMPLOYMENT, AND INFLATION



Source: CSO, Economic Trends.

1/ Earnings adjusted for temporary factors including payments of arrears and the timing of settlements.



exceeded estimates of potential and the economy quickly became overheated. Although inflation remained below 5 percent by mid-1988, it was clearly on a rising trend, while unemployment had fallen to around 8 percent, or close to estimates of the NAIRU at that date. 1/

Output, Unemployment and Inflation

(in percent)

	<u>Real GDP growth</u>	<u>Domestic demand growth</u>	<u>Average unemployment rate</u>	<u>Average price <u>2/</u> inflation</u>
1985	3.8	2.9	10.9	5.2
1986	4.1	4.7	11.2	3.6
1987	4.8	5.5	10.0	4.1
1988	4.4	8.0	8.1	4.6
1989	2.1	3.3	6.3	5.9
1990	0.5	-0.5	5.8	8.1
1991	-2.2	-3.2	8.1	6.8
1992 <u>3/</u>	-1.0	0.1	9.8	4.7

The tightening of monetary policy that began in mid-1988 helped to slow the pace of expansion. Base interest rates were raised steeply from 7½ percent in mid-1988 to 13 percent by end-1988 and by a further 2 percentage points in two stages to a peak of 15 percent in October 1989. They remained at this level for around one year, until they were lowered by 1 percentage point upon entry into the ERM in October 1990. Nevertheless, the economy continued to expand in 1989, albeit moderately, while the unemployment rate continued to fall to around 5½ percent by the first half of 1990 or to almost half of its peak level.

It was only by mid-1990 that the full force of the tightening of monetary policy was felt and the economy entered into recession. By this stage, real short-term interest rates had been in the 7-9 percent range for nearly two years. During the period of ERM membership, from October 1990 to September 1992, base interest rates were lowered gradually to 10 percent, although with falling inflation, real short-term interest rates remained in the 4-5 percent range and long-term rates in the 2-4 percent range. This

1/ See United Kingdom--Selected Background Issues (SM/92/22), February 1992, for a summary of estimates and developments in the NAIRU.

2/ Retail prices, excluding mortgage interest.

3/ For GDP and domestic demand, average of first three quarters over corresponding period of 1991.

contrasts markedly with the 1980-81 recession when real interest rates were negative. 1/

2. Output, employment and productivity

Non-oil GDP declined in every quarter but one from the second quarter of 1990 to the third quarter of 1992, making the recession the longest in post-war history. 2/ By the third quarter of 1992, the fall in non-oil GDP amounted to 4 percent and, adding the effects of supply problems in the North Sea sector, the fall in total GDP amounted to 4½ percent. The fall in non-oil GDP was only slightly less than the decline experienced in the deepest post-war recession between end-1979 and mid-1981. However, with trend GDP growth of 2-2½ percent a year in the 1980s, the fall in output relative to trend in the current recession would be greater than that in 1980-81.

In contrast to the 1980-81 recession, the fall in output since 1990 has been more widely spread across different sectors of the economy. As was the case in 1980-81, the hardest hit sector has been manufacturing, in which sector output has declined by about 8 percent (Table 1 and Chart 2). However, this decline was only about half that suffered by the manufacturing sector in 1980-81, which because of its greater exposure to the external sector, was particularly vulnerable to the considerable overshooting of sterling that predated that recession. As to the service sector--which accounts for about two thirds of total GDP--there had been a steady decline during the current recession in contrast to the rather short-lived declines suffered in 1980-81. Reflecting in part the greater losses in the service sector, which is dominated by small businesses, company insolvencies have averaged around 20,000 per year in the current downturn, or more than twice the rate in 1980-81.

Accompanying the fall in output during the current recession has been a rapid shakeout of labor and a steep rise in unemployment (Table 2). The speed at which labor has been shed has been as rapid as it was during the 1980-81 recession, and, in the service sectors, the shakeout occurred significantly earlier (Chart 3). 3/ The labor market reforms of the 1980s may have contributed to relatively less labor hoarding in the latest recession.

1/ Since withdrawing from the ERM on September 16, 1992, short-term interest rates have been reduced by 4 percentage points, which together with a 15 percentage point depreciation of the currency has constituted a substantial loosening in monetary conditions.

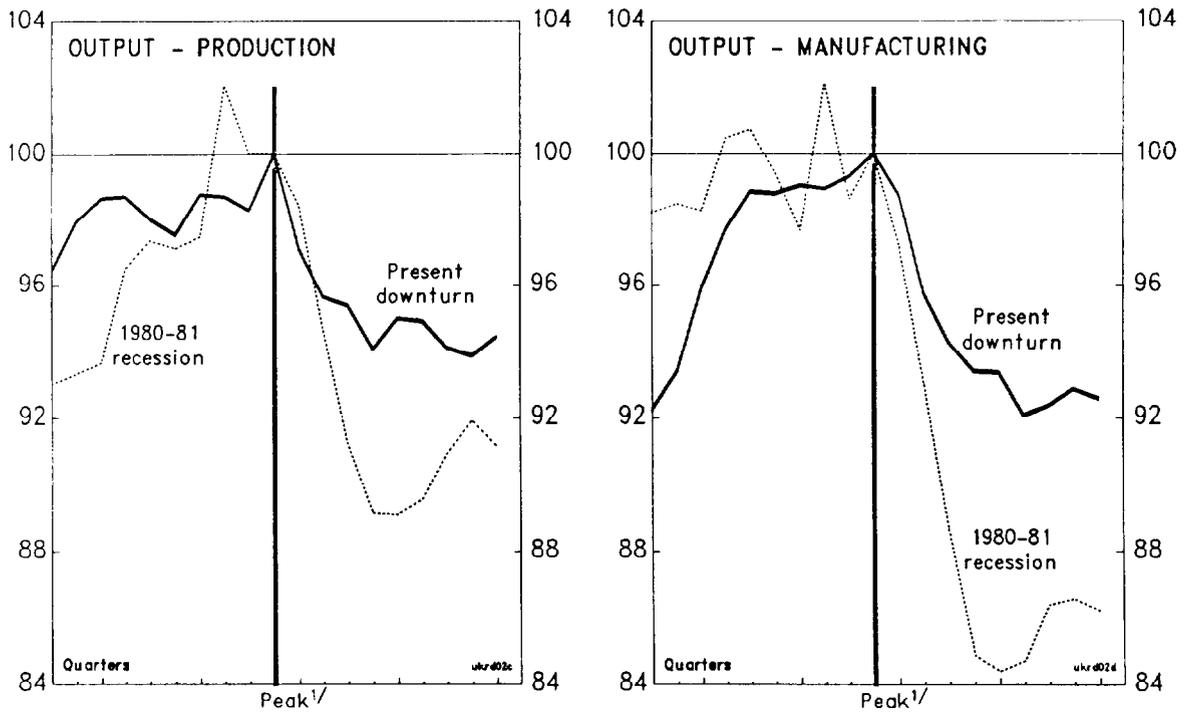
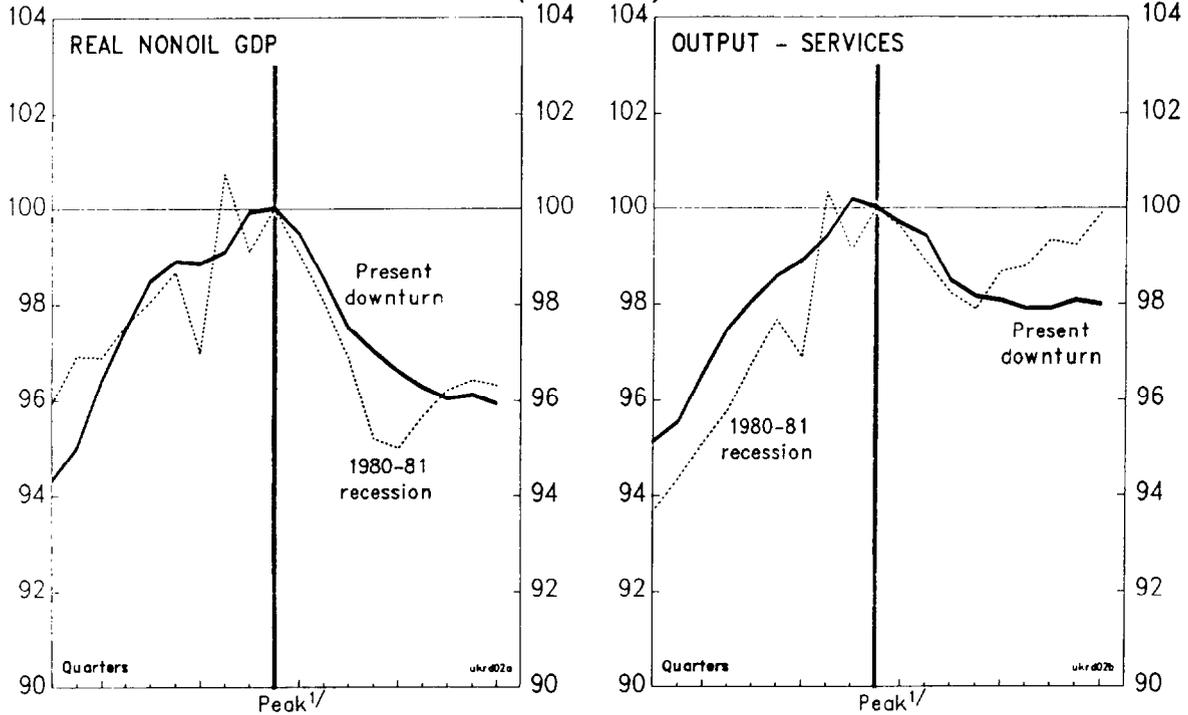
2/ In the second quarter of 1992, non-oil GDP increased by 0.1 percent but fell back 0.3 percent the following quarter.

3/ Comparisons with the 1980-81 recession are made difficult by the uneven pattern of growth during 1979. In this chapter, the 1980-81 recession is judged to have begun after the fourth quarter of 1979, although non-oil GDP had been at a higher level in the second quarter of that year.

CHART 2
UNITED KINGDOM

GDP AND SECTORAL OUTPUT
DURING RECESSIONS

(Peak=100)



Sources: CSO tape; and staff estimates.

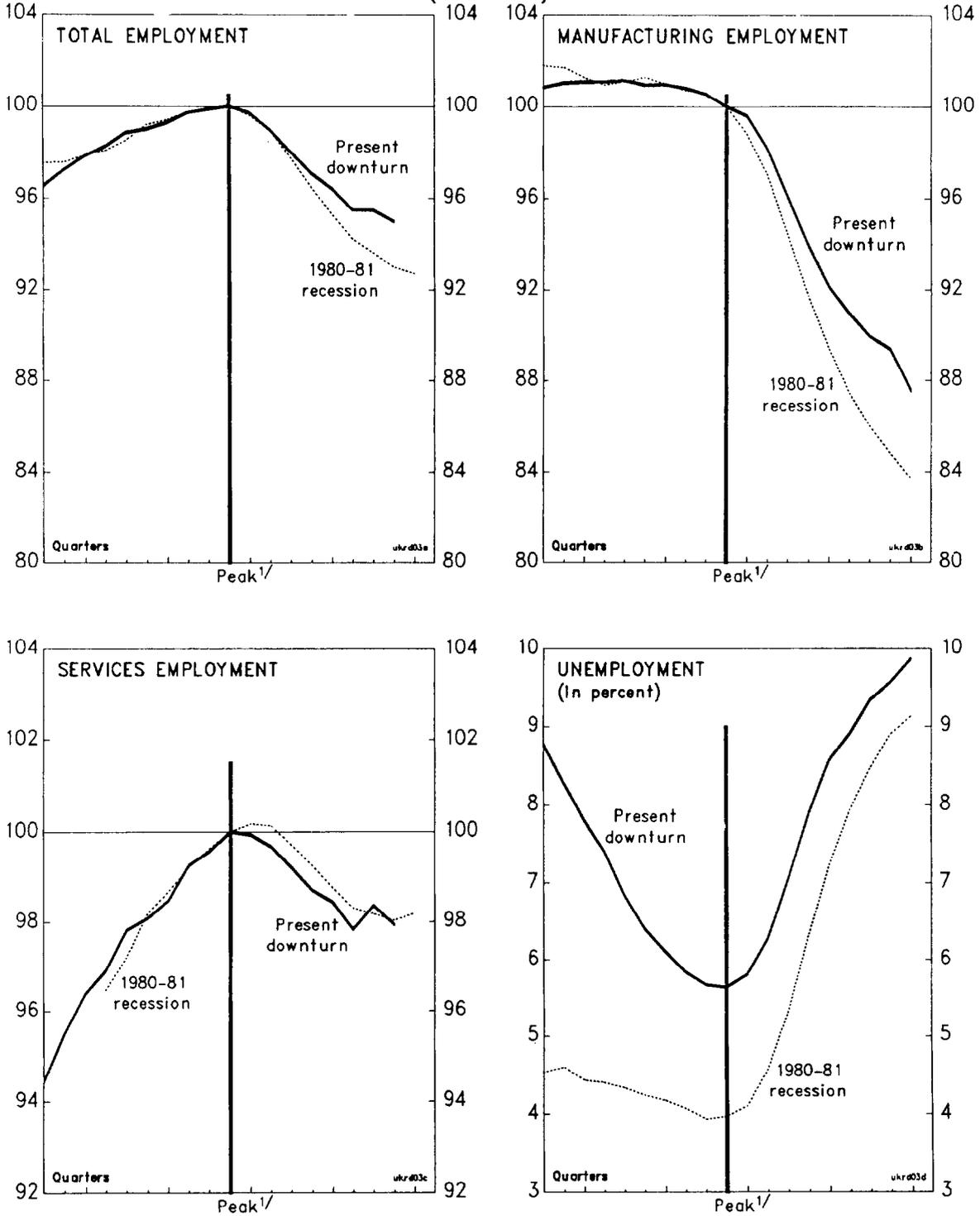
1/ 1979 quarter four for 1980-81 recession; 1990 quarter two for present downturn.



CHART 3
UNITED KINGDOM

EMPLOYMENT AND UNEMPLOYMENT DURING RECESSIONS

(Peak=100)



Sources: CSD tape; and staff estimates.

1/ 1979 quarter four for 1980-81 recession; 1990 quarter two for present downturn.

The rapid shakeout in labor facilitated a rather better productivity performance in the early part of the current recession than in 1980-81. Thus, during 1990 and 1991, there was both a shallower fall in whole economy output per man employed and an earlier upturn in productivity (Chart 4). The difference in the productivity performance of the manufacturing sectors between recessions is even more marked. In the latest recession, manufacturing productivity declined for only two quarters before resuming its upward trend, whereas in the 1980-81 recession, falls in productivity only began to be reversed when output was close to its trough. ^{1/} However, once output stopped declining around the middle of 1981, the recovery in manufacturing productivity was at a more rapid pace than anything yet seen in the current economic cycle.

The increase in unemployment during the latest recession has almost matched that in the 1980-81 recession and by end-1992, the unemployment rate was 10½ percent or close to its mid-1980s peak. Reflecting the more sectorally balanced nature of output losses, the regional composition of the rise in unemployment during the latest recession has been more evenly spread than in 1980-81. Thus, in the latest recession, unemployment has risen much more markedly in the south east of England, where the economy is dominated by service industries, in contrast to the 1980-81 recession, when the rise in unemployment was concentrated in the largely industrial northern and midland regions of Britain (see tabulation below).

Regional unemployment rates

(in percent)

	<u>1979:Q4</u>	<u>1981:Q2</u>	<u>1990:Q2</u>	<u>1992:Q3</u>
Southeast England	2.4	5.3	3.7	9.5
West Midlands	4.0	9.8	5.7	10.8
North	6.2	11.1	8.5	11.4
North West	5.1	10.2	7.5	10.6
Yorkshire and Humberside	3.9	8.7	6.5	10.0
U.K. average	4.0	7.7	5.6	10.1

^{1/} For more details and analysis of U.K. productivity trends see United Kingdom-Selected Background Issues (SM/92/22), February, 1992. The performance of productivity in the current recession provides some indication that the rather better trend in U.K. productivity (at least in the manufacturing sector) that occurred in the 1980s has continued into the early part of the 1990s. Assuming that the U.K. economy was close to a trough in the third quarter of 1992, trough-to-trough manufacturing productivity growth since the beginning of 1981 would be 4.3 percent a year compared with only 2 percent a year in the 1970s.

3. Expenditure

The latest recession has been notable for a fall in consumption considerably in excess of that which occurred in 1980-81 (Table 3 and Chart 5). The weakness of consumption has reflected the rebuilding of personal saving rates from historically low levels at a time when severe asset price deflation has sharply reduced personal wealth. Investment declines have also been considerable as corporations too have attempted to correct their balance sheet positions. However, the aggregate level of investment remains significantly above that in 1980-81. Finally, imports have fallen to a much lesser extent than they did in 1980-81, while export demand has held up somewhat better. 1/ The exceptional strength of imports accounted for the prolongation of the recession in 1992, when domestic demand began to turn up.

Expenditure by Main Category During the Recession

(Percentage change from peak) 2/

	<u>1990:Q4</u>	<u>1991:Q4</u>	<u>1992:Q3</u>
Private consumption	-1.0	-3.0	-2.7
Fixed investment	-7.5	-12.7	-12.5
Exports of goods and services	-2.3	-0.1	0.5
Imports of goods and services	-3.9	-3.7	1.1
GDP (average measure)	-2.3	-3.4	-4.2

a. Personal sector balance sheet correction 3/

The origins of consumer retrenchment in the current recession can be traced to an unprecedented run up in personal sector debt during the long expansion period of the 1980s. The debt build up took place in a more deregulated financial environment that allowed households greater access to credit. 4/ Against this background, house and other asset prices increased rapidly with house affordability, as indicated by the ratio of house prices to average annual earnings, reaching a historical low in 1989 (see tabulation). Moreover, asset price inflation helped to raise personal

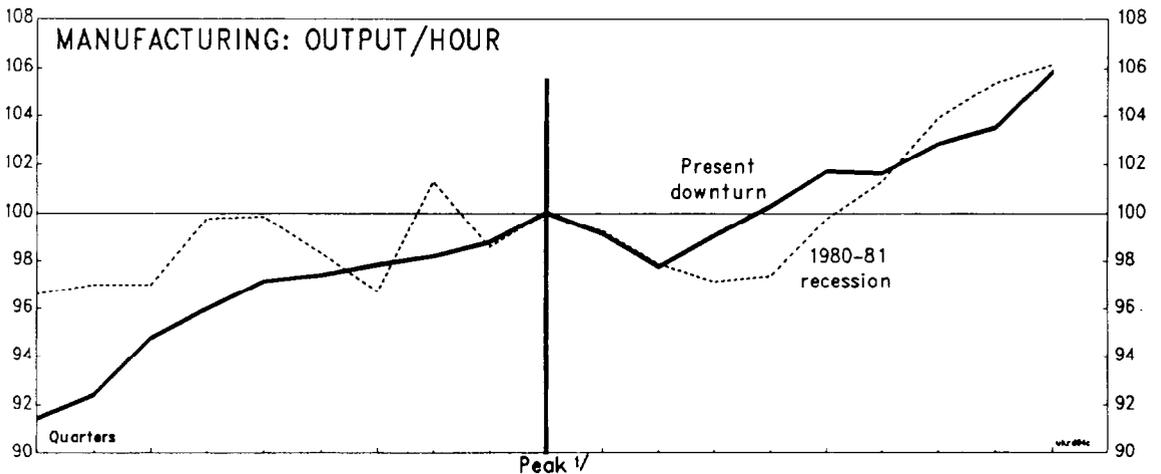
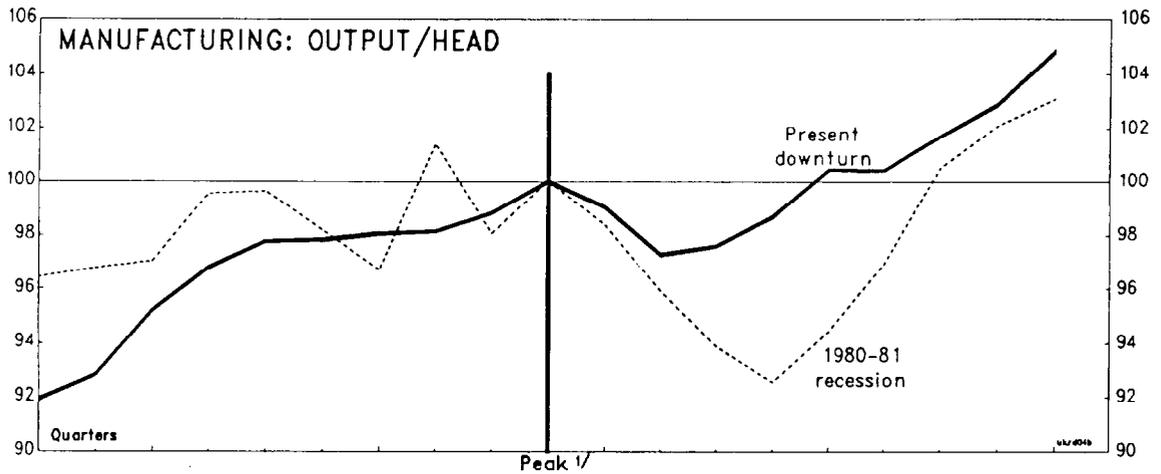
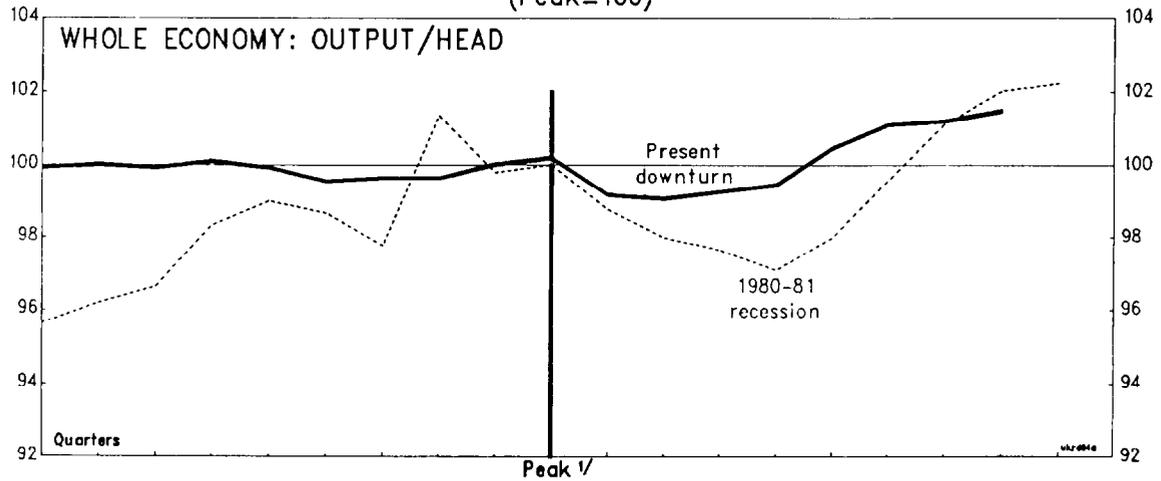
1/ See Chapter III for a more detailed description of recent developments in external demand.

2/ Peak in output defined as 1990:Q2.

3/ See Annex I of the World Economic Outlook, October 1992 for an international comparison of private sector balance sheet problems in the last few years.

4/ In particular, households were allowed to borrow more easily against home equity and, with greater competition among mortgage lenders, households could finance a larger proportion of home purchase costs through borrowing.

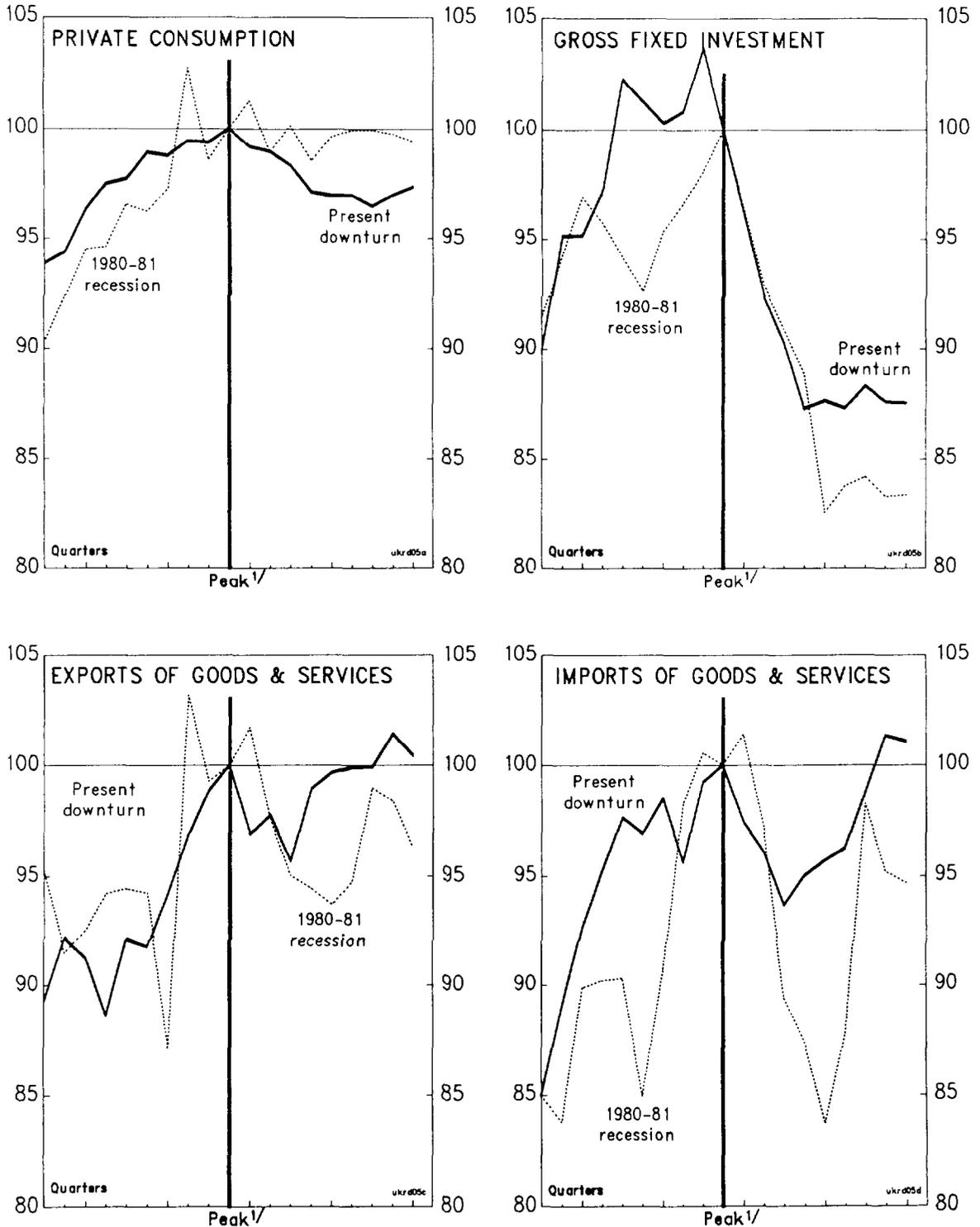
CHART 4
UNITED KINGDOM
PRODUCTIVITY
DURING RECESSIONS
(Peak=100)



Sources: CSO tape; and staff estimates.

1/ 1979 quarter four for 1980-81 recession; 1990 quarter two for present downturn.

CHART 5
UNITED KINGDOM
COMPONENTS OF DEMAND DURING RECESSIONS
(Peak=100)



Sources: CSO tape; and staff estimates.

1/ 1979 quarter four for 1980-81 recession; 1990 quarter two for present downturn.

sector wealth to historically high levels in relation to disposable income (Chart 6).

Selected Personal Sector Data

(In percent of disposable income)

	1980-81 recession				1990-92 recession			
	1978	1979	1980	1981	1989	1990	1991	1992 ^{1/}
Personal saving	10.8	12.0	13.3	12.6	6.7	8.3	9.9	11.4
Financial balance	4.9	5.2	7.3	6.8	-1.8	1.1	4.3	5.7
Net wealth (end period)	422	444	429	411	617	563	554	...
Borrowing	41.8	41.6	41.6	46.5	95.3	99.8	99.8	98.1
Gross interest payments	4.2	5.0	6.2	6.4	12.5	14.0	12.6	...
<u>Memorandum item:</u>								
House affordability ^{2/}	4.8	5.3	5.2	4.8	6.8	6.6	5.8	5.4

In the mid-to-late 1980s, with consumers feeling wealthy and house prices seemingly on a continuous rising trend, households went on a consumption binge. The saving rate fell to 5 percent in early 1988, or to about half its long-term average level, as consumption growth averaged 6½ percent a year between 1986 and 1988. Low savings, together with a high rate of housing investment, plunged the personal sector into financial deficit during 1987-89 for the first time on a sustained basis in the post-war period (Table 4). Moreover, much of the borrowing to finance consumption and house purchases carried a floating interest rate charge.

The increase in interest rates since 1988 caused a substantial deterioration in personal income gearing and helped to puncture the house price bubble. In this environment, households sought to rebuild savings and reduce indebtedness. From its trough of 5 percent at the beginning of 1988, the saving rate more than doubled to about 11½ percent in 1992. Correspondingly, as real income growth slowed during the recession, consumption declined (Table 5).

The recent fall in consumption has been greater than in 1980-81, when a stronger financial position allowed households to smooth the effects of declining income. Particularly hard hit in the current recession has been demand for consumer durable items, which declined by nearly 10 percent in the 2 years to mid-1992. During the course of 1992, consumption levels stabilized and, in recent months, retail sales have exhibited a rising trend. However, consumer confidence surveys point to continued consumer uncertainty.

^{1/} First half of year.

^{2/} Ratio of new house prices (mortgage approved) to average earnings.

As yet, it is unclear to what extent the process of balance sheet correction has run its course. Although the personal sector returned to financial surplus in the second half of 1990, its gross debt/income ratio continued to rise into early 1991. The debt/income ratio has subsequently declined modestly as the financial surplus has grown, but at nearly 100 percent it remains more than twice as high as in the 1970s. 1/ At the same time, falling interest rates in 1991-92 have helped to reduce personal income gearing ratios considerably with further falls in prospect following the post-ERM cuts in interest rates.

On the asset side, house prices continued to fall in the third and fourth quarters of 1992, pushing their ratio to average earnings to around 5, which would be just below the longer-term trend level. However, according to Bank of England estimates, the collapse in house prices has left more than a million households with negative home equity that might further restrain the pace of any rebound in consumption in the near term. 2/ The staff estimates that the fall in house prices implies a drop in the ratio of net personal wealth to income from 5½ in 1991 to below 5 in 1992. However, the end-1992 ratio would still be at a high level by historical standards.

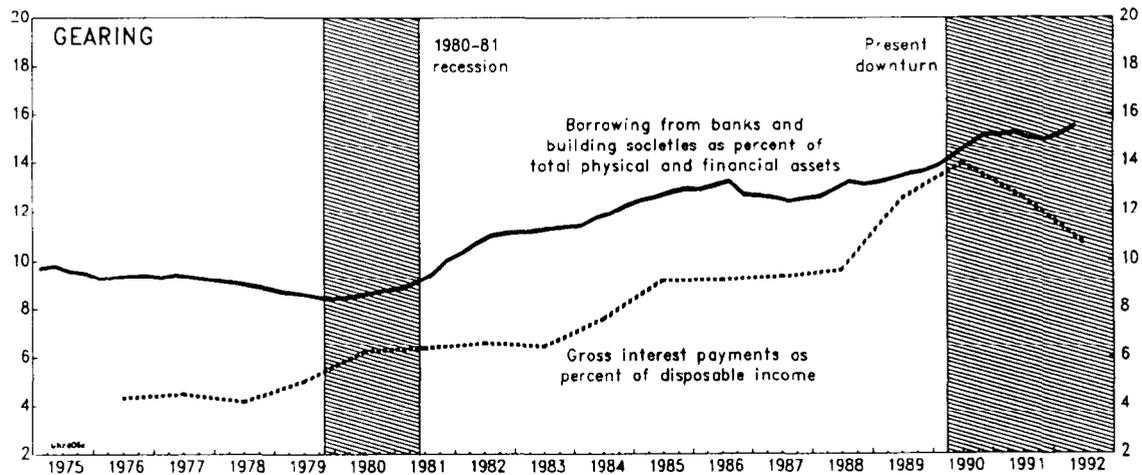
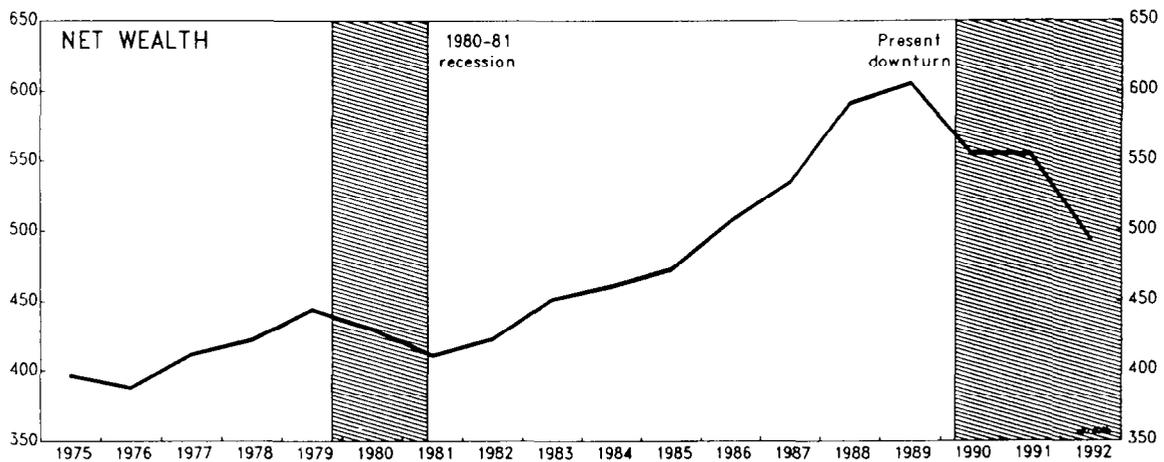
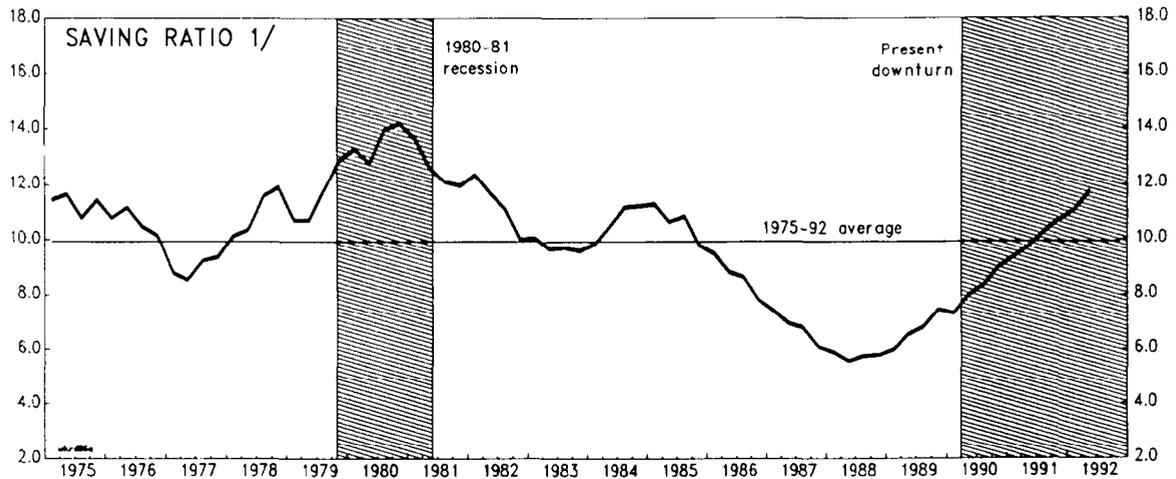
b. Investment and the corporate sector

The sharp fall in business fixed investment during the present recession followed a strong investment boom in the second half of the 1980s. This boom was supported by a significant improvement in corporate profitability, by an increase in inward foreign direct investment ahead of the creation of the EC single market, and by restructuring investment of newly privatized industries. However, while corporate profitability was substantially better than in the 1970s, high tax and dividend payments limited retained earnings. As a consequence, a large part of the investment boom was financed through borrowing and the corporate sector as a whole registered unprecedentedly large financial deficits in the period 1987-90 (see tabulation below and Table 6).

1/ Some increase in debt ratios would be expected after financial deregulation but there is little empirical guidance as to what the new desired range for the ratio might be. Staff estimates suggest that, with GDP growth at potential and inflation contained in the 2-4 percent range, the ratio of outstanding borrowing to disposable income would remain above the mid-1980s level for an extended period even if the saving rate were to remain at close to current levels.

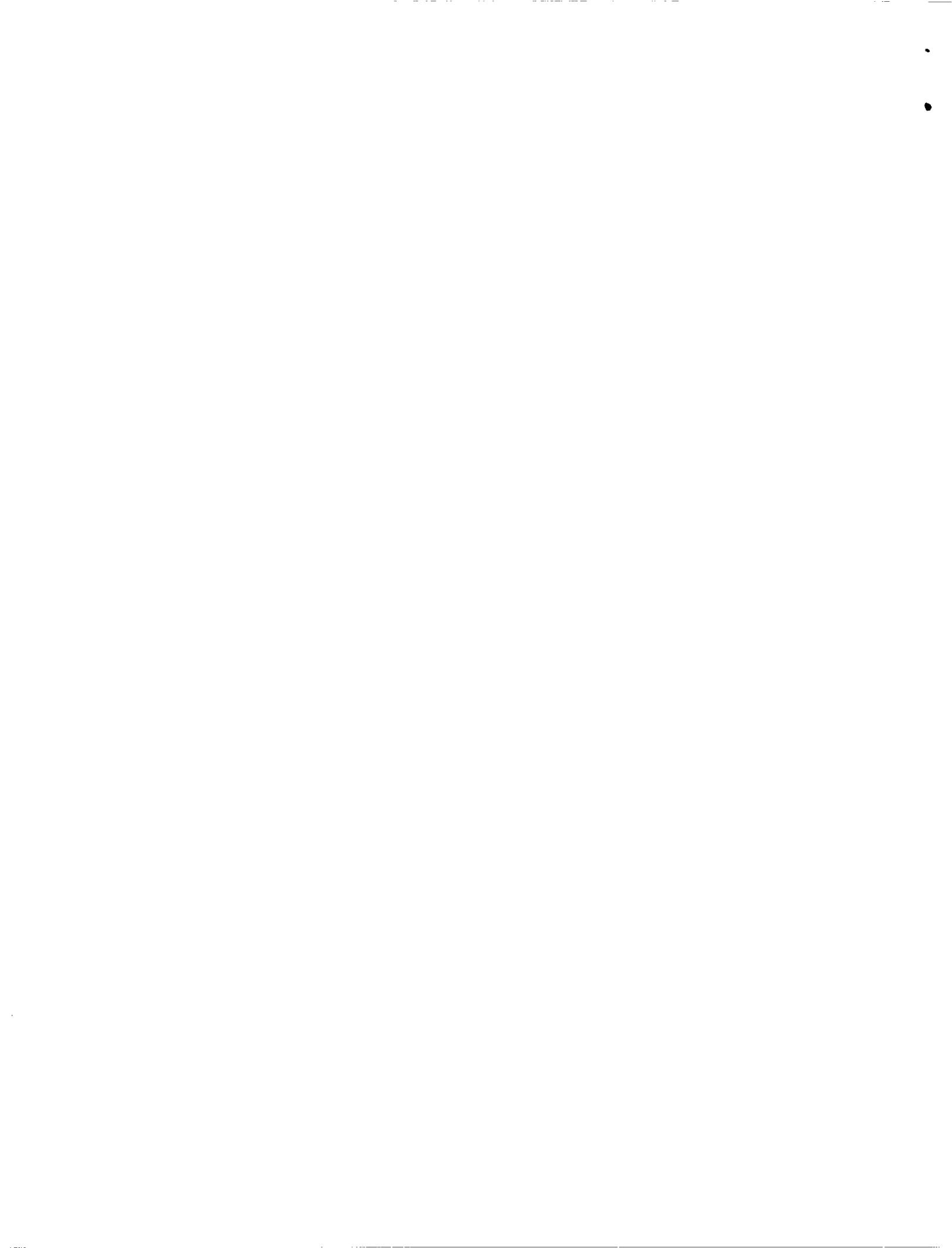
2/ See Bank of England Quarterly Bulletin, August 1992. House repossessions also reached record proportions in 1991, although they leveled off in 1992.

CHART 6
UNITED KINGDOM
PERSONAL SECTOR SAVING AND WEALTH
(In percent of disposable income)



Sources: CSO tape; and staff estimates.

1/ Three-period centered moving average.



Selected Industrial and Commercial Sector Data

(In percent of GDP)

	1980-81 recession				1990-92 recession			
	1978	1979	1980	1981	1989	1990	1991	1992 ^{1/}
Gross profits ^{2/}	12.8	12.4	11.6	11.4	14.5	14.1	13.5	13.1
Financial balance	0.6	-0.7	-0.1	0.6	-4.4	-3.6	-1.9	-1.3
Financial liabilities (end period)	97	95	94	97	182	169	182	...
Income gearing ^{3/}	14.7	18.3	27.3	23.7	24.5	26.2	26.2	24.1

The raising of interest rates in 1988 worked quickly to stem the investment boom, which flattened out in 1989 well ahead of the peak in activity (Table 7). The subsequent collapse of investment during 1990-92 mirrored that in the 1980-81 recession, although as a ratio to GDP, business investment remained considerably higher than in 1980-81 (Chart 7). The higher level of investment reflected, in part, a shift to significantly higher profitability levels in the 1980s, compared to the 1970s, that may be related to labor market reforms and the improved industrial relations climate.

Over the past two years, the corporate sector has also undertaken destocking to alleviate pressures on cash flow. This destocking accounted for about one third of the decline in overall domestic expenditures between mid-1990 and mid-1992. However, in the current downturn, the stock to sales ratio has fallen only slightly compared to the sharp downturn in 1980-81, due to past technological changes in inventory control that have damped the importance of the stock cycle.

The lowering of interest rates since October 1990 has helped to ease corporate liquidity gearing ratios substantially. At the same time, the reductions in fixed and inventory investment, as well as an easing of wage and intermediate input cost inflation, have helped to strengthen corporate financial positions during the course of the recession. In the first three quarters of 1992, the corporate financial deficit was about 10 percent below its level in the corresponding period of 1991 and, at just over 1½ percent of GDP, it was considerably below its peak of 4½ percent of GDP in 1989. Gross corporate profits (excluding stock appreciation) had declined to just over 13 percent of GDP by mid-1992, but profits were still proportionately higher than in 1981.

^{1/} First three quarters, except income gearing where data is for first two quarters.

^{2/} Excluding stock appreciation.

^{3/} Ratio of interest payments to post-tax income.

Housing investment has contracted much more sharply in the current recession than in 1980-81, reflecting the unusually sharp correction of house prices. From its peak in early 1989, housing investment has declined by about 40 percent or by nearly twice as much as in 1980-81. However, reflecting the strength of the prior housing boom, the level of housing investment has remained at around the 1980-81 level in the latest recession as has the number of new housing starts and completions.

4. Wages and prices

During the course of the present recession, inflation has fallen sharply in response to a slowdown in earnings growth and the effects of declining import prices. While direct comparisons with earlier recessions are difficult, it appears that the rate of decline of wage and price inflation has been broadly consistent with historical behavior given the depth of the recession. As such, there is no clear evidence of an "ERM effect" on labor markets during the last two years. 1/

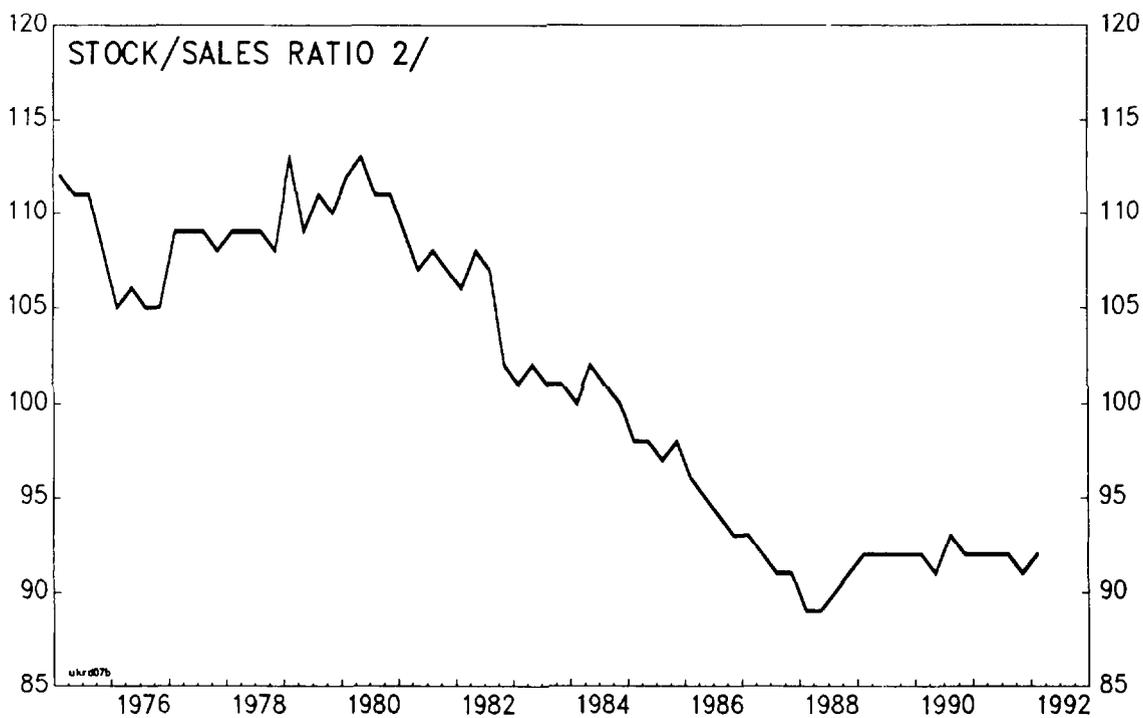
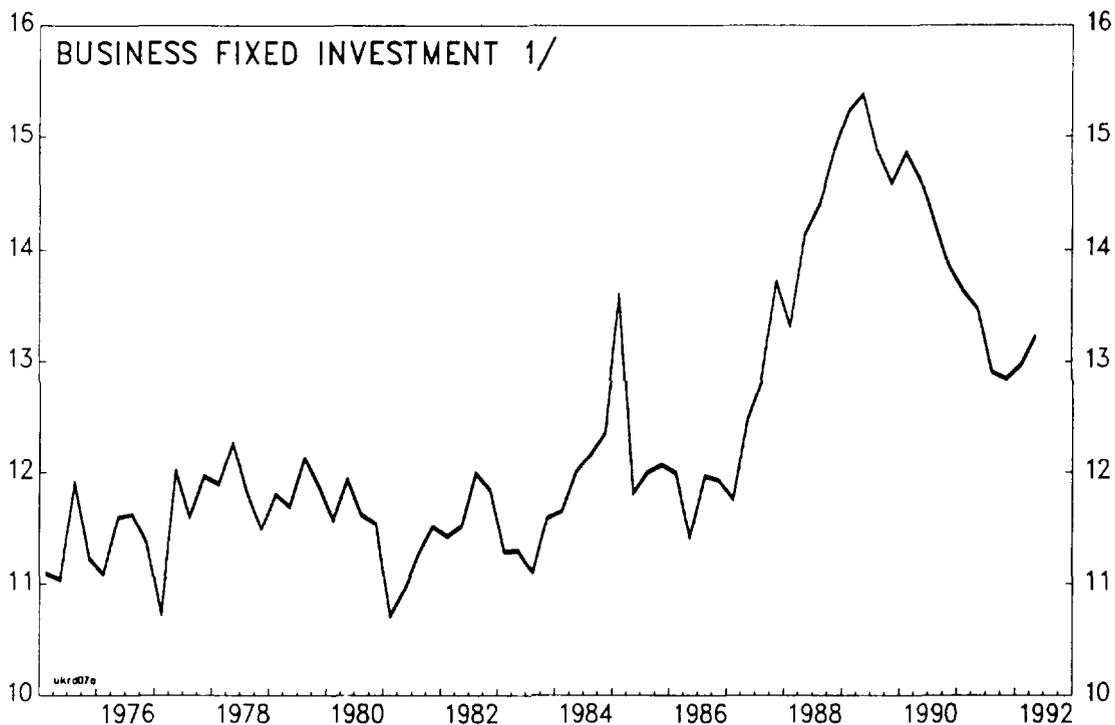
Average earnings growth reached a peak of about 10 percent in the middle of 1990, when the economy was close to its turning point. Thereafter, as unemployment increased, earnings growth began to moderate slowly (Table 8). However, after stagnating in the 7-8 percent range from mid-1991 to April 1992, the rate of decline steepened and by October 1992, underlying earnings growth had fallen to 5½ percent. At this rate, earnings growth was significantly lower than at any time since the 1960s, but in real terms earnings have still continued to increase despite the high level of unemployment.

The initial sluggishness of the response of earnings growth to the recession partly reflects the delay before lower wage settlements are passed through. By the middle of 1992, these settlements had fallen to 4 percent suggesting further near term declines in average earnings. 2/ Since then, however, settlements appear to have stagnated around that level in the second half of the year (see tabulation below). The pattern of wages and earnings growth has been fairly similar across different sectors of the private sector during the recession. In 1992, however, a number of settlements in the public sector significantly exceeded the going rate in the private sector.

1/ A more detailed analysis of wage responsiveness to labor market conditions in the current recession is provided in Chapter VI of this report.

2/ There are no official data on wage settlements. The evidence here is taken from surveys conducted by the Confederation of British Industry (CBI) and Incomes Data Services (IDS).

CHART 7
UNITED KINGDOM
CORPORATE SECTOR INVESTMENT
(In percent of GDP)



Sources: CSO, Economic Trends.

1/ Investments by private non-residential plus public corporations at 1985 prices.

2/ Total stocks to GDP (expenditure basis), measured at 1985 prices; end-December 1984=100.



Wages and Earnings in the Recession

(Percentage change from a year earlier)

	<u>Average earnings</u>		<u>Wage settlements</u> 1/		<u>RPI inflation</u>
	total	manuf- acturing	total	private sector	
<u>1990:</u> quarter 2	9.8	9.4	9.1	9.2	9.7
quarter 3	10.1	9.5	8.9	8.9	10.4
quarter 4	9.8	9.4	9.5	10.3	10.0
<u>1991:</u> quarter 1	9.3	8.8	9.3	9.0	8.7
quarter 2	8.4	8.5	8.4	8.3	6.0
quarter 3	7.8	8.1	7.0	6.7	4.8
quarter 4	7.4	7.9	6.5	6.4	4.2
<u>1992:</u> quarter 1	7.3	7.9	5.9	4.8	4.1
quarter 2	6.5	6.7	4.7	4.3	4.2
quarter 3	5.8	6.2	4.0	3.4	3.6
quarter 4	..	..	4.1	3.7	3.1

Source: Incomes Data Services, reproduced from S.G. Warburg, U.K. Economic Briefing.

Comparisons of the behavior of earnings in the current recession with that in 1980-81 are difficult because nominal increases in that earlier period started from a considerably higher level and were distorted by the effects of incomes policy and VAT changes. However, in real terms, the deceleration in earnings growth has not been significantly different from that during the 1980-81 recession for a similar rise in unemployment (Chart 8). More formal econometric analysis would also fail to find much evidence that wages have responded more flexibly in the last two years. 2/

The fall in earnings growth, coupled with improved productivity, has resulted in the growth of whole economy unit labor costs falling from about 10 percent in 1990 to about 4 percent in mid-1992. Over the same period, the increase in unit labor costs in manufacturing decelerated more rapidly from 8½ percent to under 2 percent. In real terms, unit labor cost growth has been slower in the current recession when compared to that of 1980-81 (Chart 9).

Lower unit labor cost growth underpinned a fall in retail price inflation from a peak of 9 percent (excluding mortgage interest) in October 1990 to 3½ percent by end-1992 (Table 9). Including the effects of interest

1/ Pay deals by announcement date.

2/ See Chapter VI below.

rate cuts, "headline" inflation fell from over 10 percent to under 3 percent in the same period. The fall in inflation was aided by weak import prices that fell by 4-5 percent during 1991 and the first half of 1992, owing to an effective appreciation of sterling and to low world inflation. 1/ The fall in inflation was led by a steep decline in goods price inflation while services price inflation has eased only moderately.

III. Balance of Payments

The United Kingdom's balance of payments position has undergone substantial changes over the past 12 years. In the early 1980s, the current account recorded large surpluses supported by sizable oil export earnings and contributions from service and income flows (see tabulation below). After reaching a surplus of around 2 percent of GDP in 1981, the current account balance began to narrow in 1983, primarily as the non-oil trade deficit widened, and it reached approximate balance by 1986. Thereafter, as the economy overheated, the current account moved into deficit, which peaked at more than 4 percent of GDP in 1989 (Table 10). The deficit subsequently narrowed to about 1 percent of GDP in 1991 as the economy moved into recession, but has since widened to 1½ percent of GDP in the first three quarters of 1992 as the modest recovery in domestic demand has been accompanied by a significant increase in import penetration.

Current Account Summary

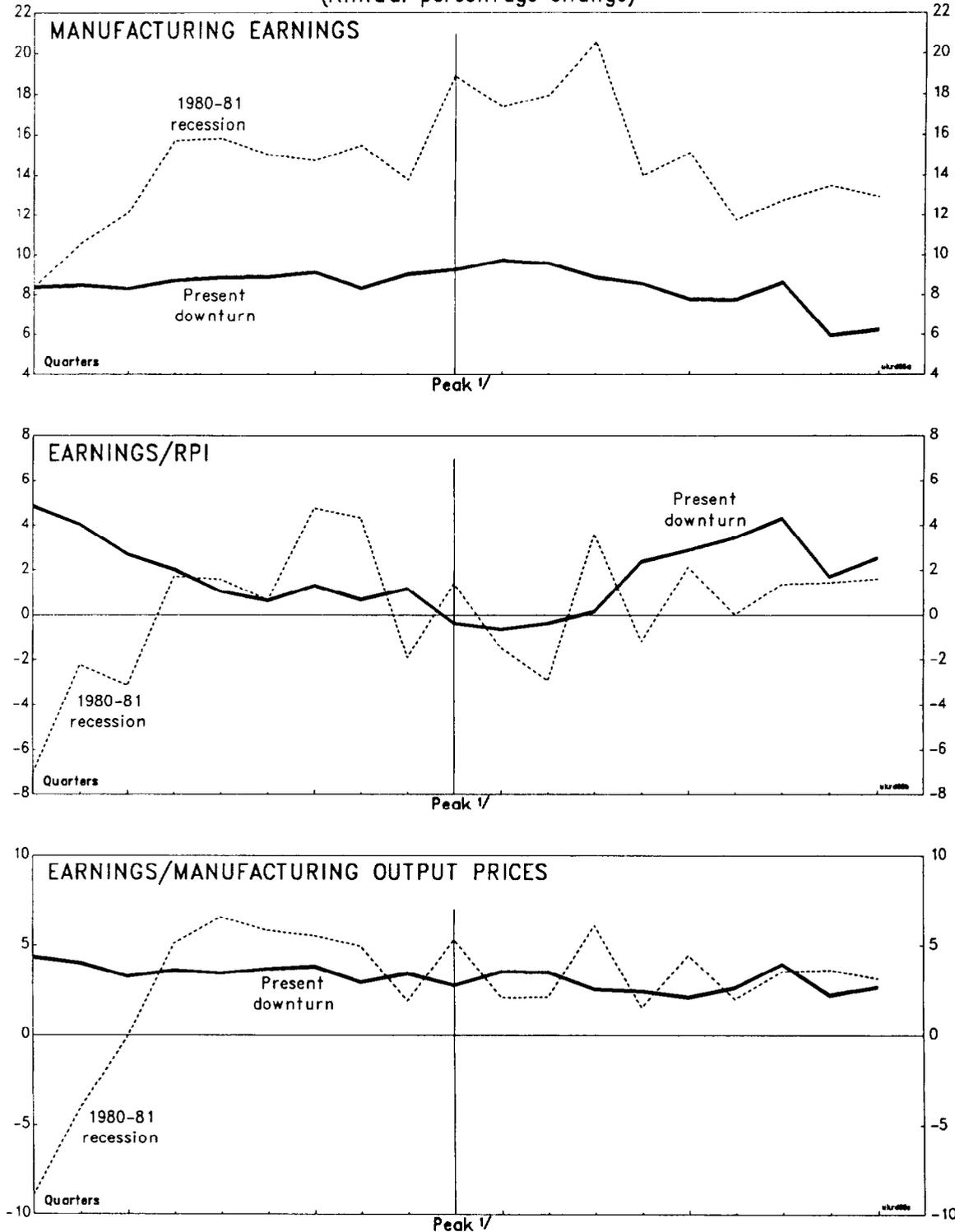
(In millions of pounds sterling)

	1980	1986	1987	1988	1989	1990	1991	1992 <u>2/</u>
Visible trade balance	1,357	-9,563	-11,581	-21,480	-24,684	-18,808	-10,289	-12,641
Non-oil balance	1,049	-13,632	-15,742	-24,230	-25,941	-20,331	-11,491	-14,211
Oil balance	308	4,069	4,161	2,750	1,257	1,522	1,203	1,570
Invisibles balance	1,487	9,625	7,099	5,302	2,956	1,778	3,969	1,786
Current account balance	2,844	62	-4,482	-16,178	-21,728	-17,030	-6,320	-10,855
(In percent of GDP)	(1.2)	(-)	(-1.1)	(-3.4)	(-4.2)	(-3.1)	(-1.1)	(-1.8)

1/ Staff analysis would suggest that lower import prices accounted for as much as 2 percentage points of the decline in retail price inflation. See Chapter VI for more details.

2/ First three quarters at an annual rate.

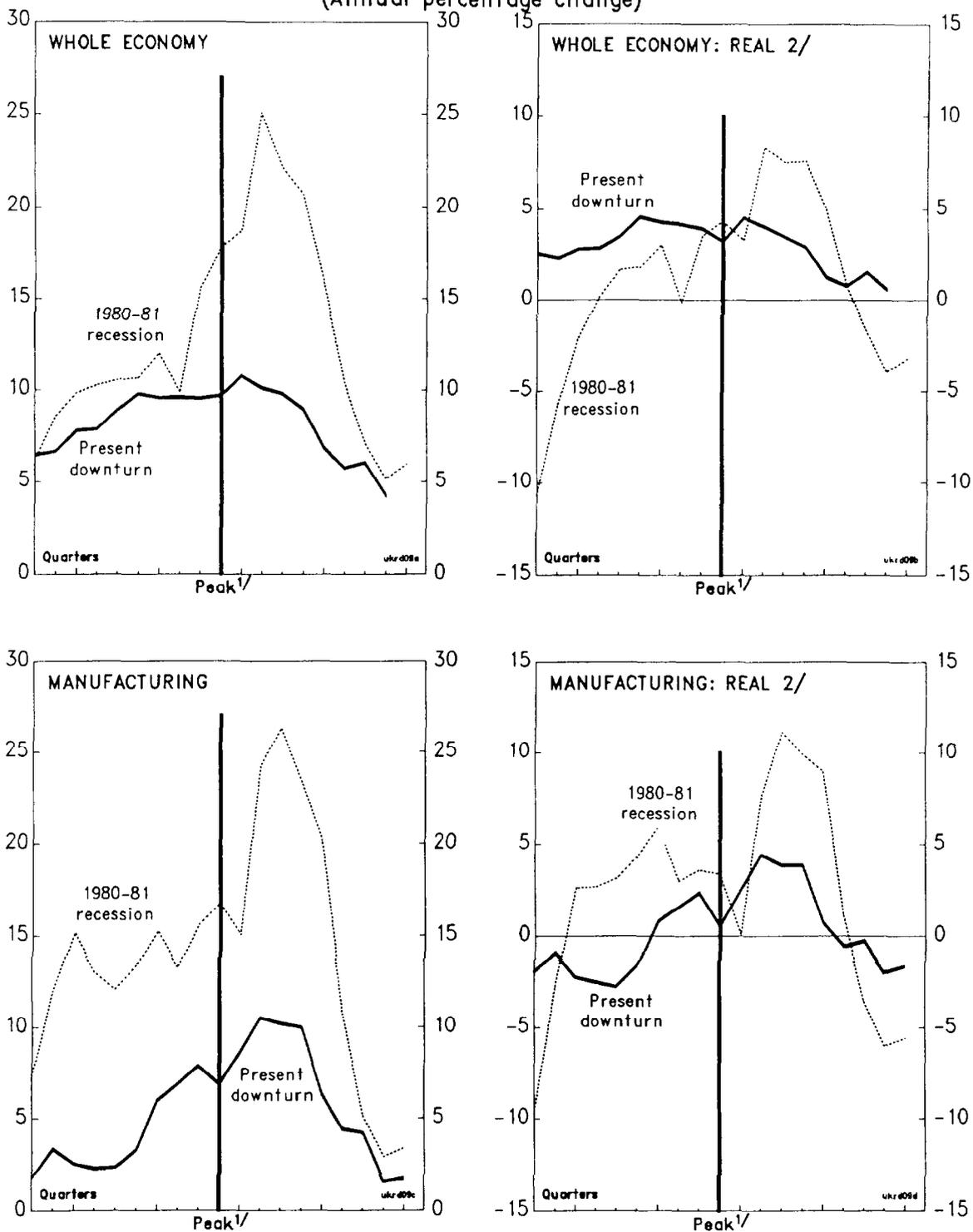
CHART 8
UNITED KINGDOM
MANUFACTURING EARNINGS
DURING RECESSIONS
(Annual percentage change)



Sources: CSO tape; and staff estimates.

1/ 1979 quarter four for 1980-81 recession; 1990 quarter two for present downturn.

CHART 9
UNITED KINGDOM
UNIT LABOR COSTS
DURING RECESSIONS
(Annual percentage change)



Sources: CSO tape; and staff estimates.

1/ 1979 quarter four for 1980-81 recession; 1990 quarter two for present downturn.

2/ Unit labor costs divided by the manufacturing producer price index.

The widening of the current account deficit early in the recovery phase of the economic cycle has been a common feature of most past cycles since 1960 (Chart 10). In the present cycle, however, the deterioration in the external position has preceded the general cyclical upturn by at least 6 quarters compared with an average of $1\frac{1}{2}$ quarters in the recoveries since 1960. 1/ Moreover, in contrast with most previous episodes, the current account has remained significantly in deficit through the present recession. The remainder of this chapter reviews in more detail recent developments in the U.K.'s visible and invisible trade balance, analyses recent trends in competitiveness, and reviews recent developments in the capital account.

1. Visible trade balance

a. Non-oil trade

An important factor in the development of the current account over the past decade has been a trend weakening of non-oil trade. This has reflected both a significant, albeit moderating, loss of export market shares and a steady rise in import penetration. More recently, export performance has strengthened in part reflecting strong inward direct investment in anticipation of the start of the European Single Market (Table 11). However, the trend rise in import penetration has continued even as the economy has moved into recession.

In the 1970s and early 1980s, there was a steep rate of decline in export market share, which reflected in part the sharp rise in the real exchange rate that began in the second half of the 1970s and the subsequent decline in manufacturing supply capacity during the 1980-81 recession (Chart 11). In the second half of the 1980s, the country's export market share largely stabilized, aided in part by the general recovery in competitiveness from 1980 to 1985. In 1987-89, there was a reversion to the trend loss in market share as the economy began to operate closer to potential and as some of the earlier gains in competitiveness were eroded. Over the latter period, U.K. export prices rose more quickly than those of partner countries suggesting a diversion of production to meet domestic consumption needs as the home economy began to overheat.

Over the two years 1989 and 1990, non-oil export volumes rose by more than 17 percent as the domestic economy slowed, and there was a strengthening of demand in partner countries (Table 12). Moreover, U.K. non-oil export volumes held up well into the first half of 1992. The relatively improved performance of U.K. exports since 1989 occurred despite an appreciation of the real exchange rate and appeared to represent a break with past trends. 2/ One possible explanation for this improved

1/ The timing of the cyclical troughs in these calculations is based on the CSO coincident indicator.

2/ Econometric equations, including those of the U.K. Treasury model, generally underpredict the growth of exports since 1989.

performance is the effect of sizable direct foreign investments in the manufacturing sector ahead of European market integration. A well documented example in this area is the greenfield investment in Japanese nameplate auto plants, which is expected ultimately to raise U.K. passenger car production capacity, largely intended for export, by some 40 percent over current levels (see tabulation below). Export strength could also reflect improvements in competitiveness deriving, for example, from improved product quality or delivery service, that are not captured by the real exchange rate. In keeping with past trends, the share of U.K. exports to continental Europe has continued to rise in recent years (Table 13).

Current and Planned Auto Production

(Thousands of units)

	<u>1992</u>	<u>1993</u>	<u>Long-Term</u>
Total domestic production	1,300	...	...
Japanese nameplates	175	270	600
<u>Memorandum item (percent)</u>			
Total domestic production for export	45	...	...

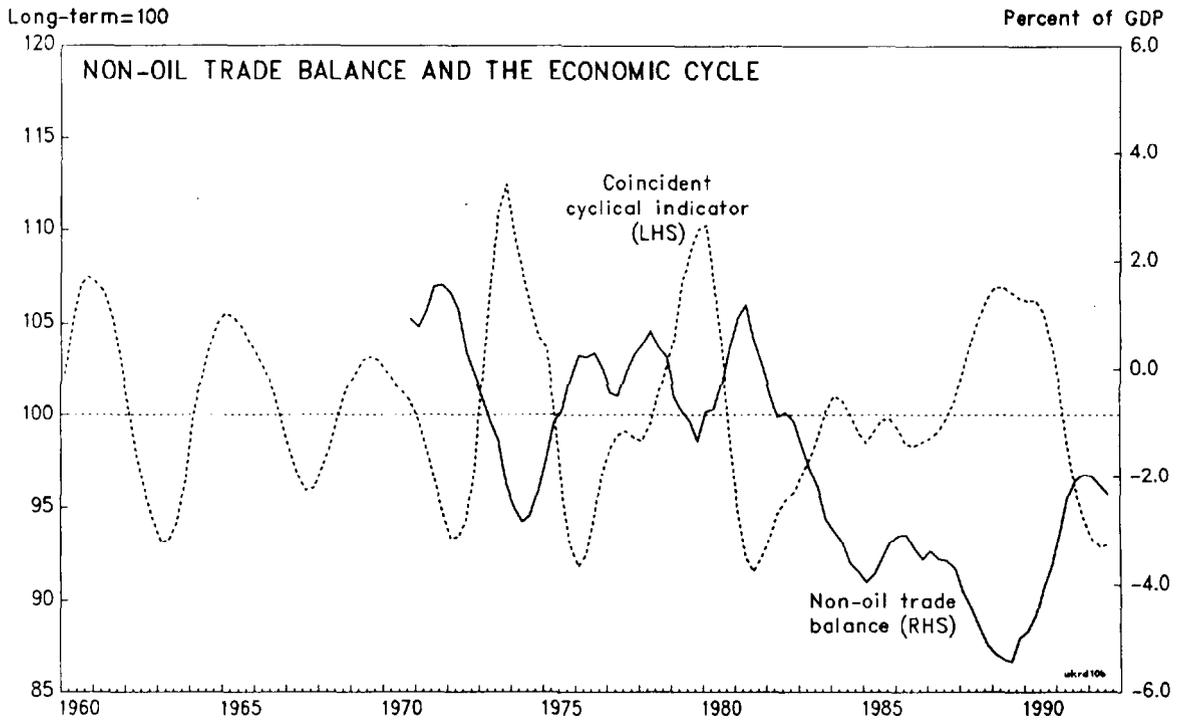
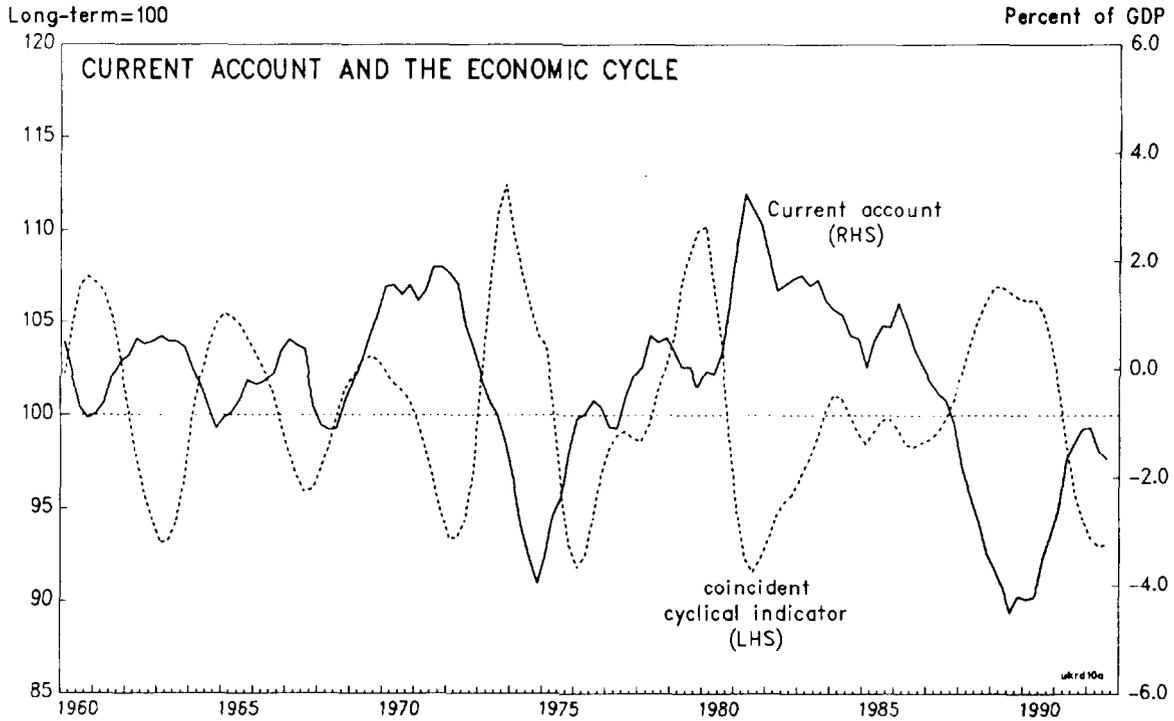
Source: U.K. Treasury.

Import penetration continued on an upward trend in the 1980s, with non-oil import volume rising from 17 percent of GDP in 1980 to 25½ percent in 1990. Empirical estimates of import demand would explain at least part of this phenomenon as the result of increasing specialization in manufacturing that would be consistent with the historical fact that world trade growth exceeds world output growth. In this context, a trend rise in the import penetration ratio over a long period of time is not necessarily unsustainable. However, if coupled with a tendency to lose export market share, as has been the case in the United Kingdom, a continuous rise in import penetration could result in the emergence of a structural deficit.

In 1990, as the economy and domestic demand weakened, the import penetration ratio fell. This decline, which was to be expected in a recession, was, however, much shallower than in the early phase of the 1980-81 recession. Moreover, import penetration again began to rise in early 1991, at least six quarters before the recession trough, and increased sharply in 1992. One possible explanation for the early pickup in imports is that firms began to increase imports in anticipation of a recovery that failed to materialize. A sharp rise in auto imports in the first part of 1992 (by some 20 percent over 1991 levels) and subsequent decline might be one example of this phenomenon (Table 14). However, for a range of other

CHART 10
UNITED KINGDOM

EXTERNAL BALANCES AND THE ECONOMIC CYCLE 1/

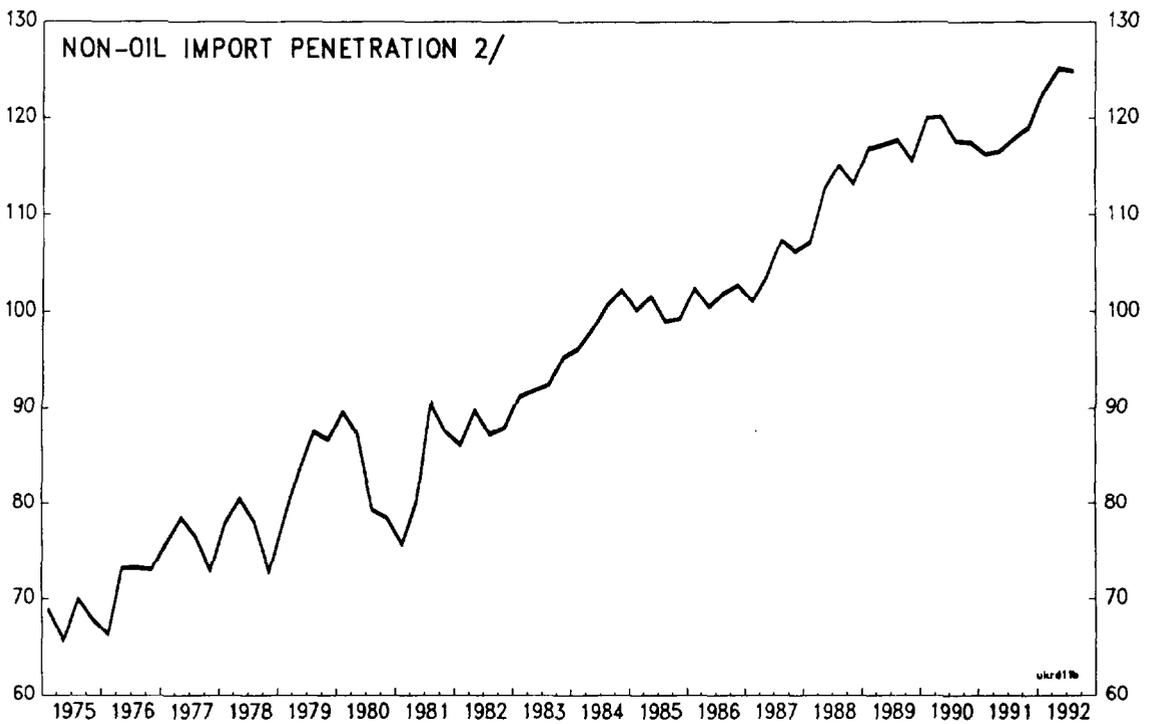
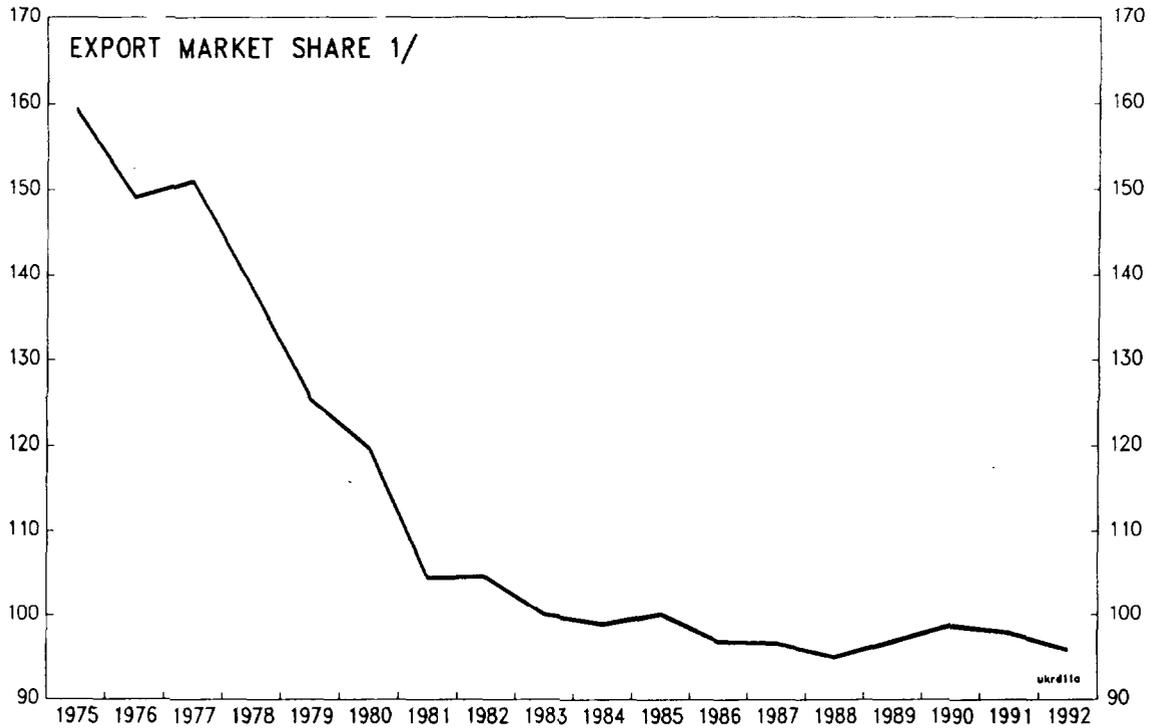


Source: CSO, Economic Trends.

1/ Four-quarter moving averages.

CHART 11
UNITED KINGDOM

EXPORT MARKET SHARE AND IMPORT PENETRATION
(Indices: 1985=100)



Sources: CSO, Economic Trends; IMF, World Economic Outlook.

1/ Ratio of non-oil exports to total world exports excluding the United Kingdom.

2/ Ratio of non-oil imports to final sales.

consumer goods as well as for capital goods and manufactured inputs, import penetration has risen steadily since early 1991.

The early rise in non-oil import volumes may also reflect in part a weakening in the industrial sector in the current cyclical downturn in the context of a relatively high real exchange rate. In this sense, the current cycle could be viewed as similar to the 1980-81 recession, although the present downturn in the manufacturing sector has been significantly less severe. However, in contrast to the situation in the early 1980s when surpluses in oil trade and invisibles contributed to a current account surplus, there is now a greater need for a closer balance in the non-oil sector.

b. Oil trade

The overall trade balance has been distorted since the late 1970s by the coming on stream of North Sea oil production and by large changes in world oil prices. In the mid-1970s, before oil production began, oil imports amounted to between 3 and 4 percent of GDP. By 1980, buoyed by both rising North Sea production and world prices, the United Kingdom became a net exporter of oil and by 1983 this surplus reached 2½ percent of GDP. The oil surplus remained at that level for the next two years, before declining sharply in the second half of the 1980s as production declined and world prices collapsed. In 1990-91, owing partly to safety-related production problems, and despite the recession which reduced domestic consumption, the oil surplus shrank to just ½ percent of GDP. With the completion of some safety-related repairs, oil production rose in 1991-92 and there was a small accompanying rise in export volumes. However, in the face of a weakening in world oil prices, the external oil surplus has remained at about ½ percent of GDP. Production from newly discovered oil fields should boost production in the future.

2. Invisible earnings

The invisibles balance has historically made large contributions to the current account position of the United Kingdom and it reached a peak of almost £10 billion or 2½ percent of GDP in 1986. Since then, the overall invisibles surplus has declined to less than £2 billion in the first three quarters of 1992, owing mainly to a drop-off in net interest, profit, and dividend payments to U.K. residents.

The surplus on service flows declined somewhat over the past six years from £7 billion in 1986 to about £5 billion in 1992. The main factor in this decline has been the travel category, which has seen a rise in the net deficit position by some £2 billion from 1986 to 1991 mainly reflecting an increase in U.K. resident travel abroad (Table 15). In the first three quarters of 1992, foreign travel abroad was estimated at about £1 billion above the 1990-91 level despite the ongoing domestic recession, while visits to the United Kingdom had picked up only slightly. The positive balance on

financial services has remained in the neighborhood of £10 billion over this period.

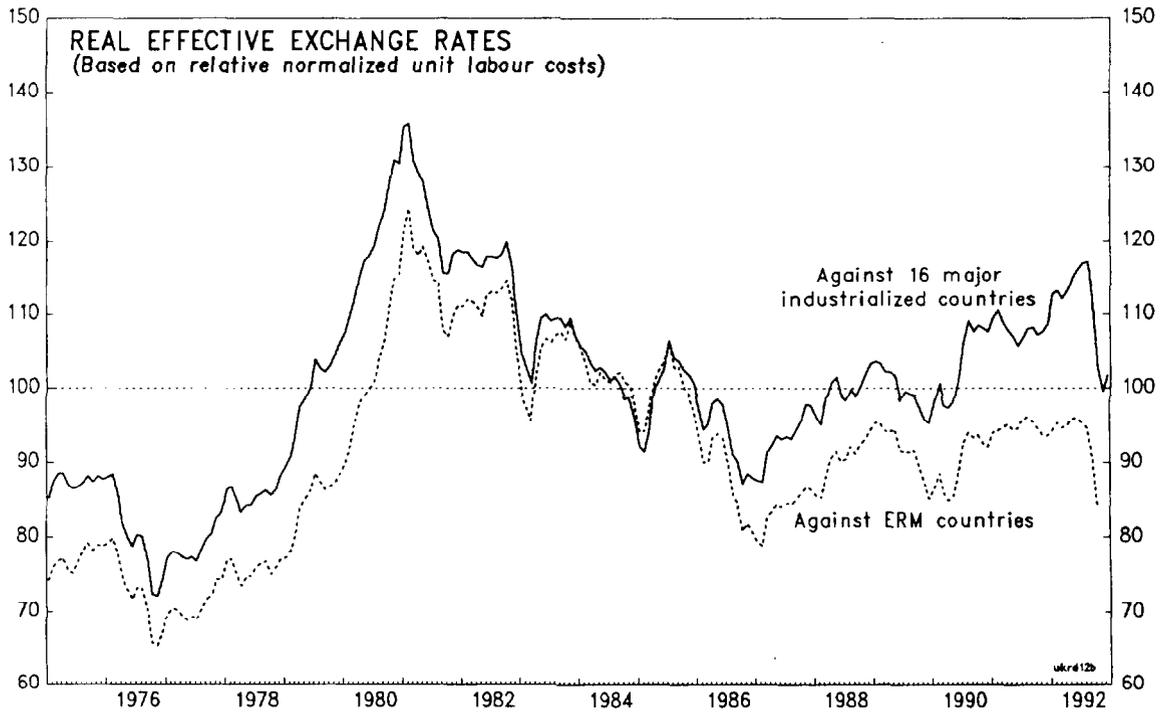
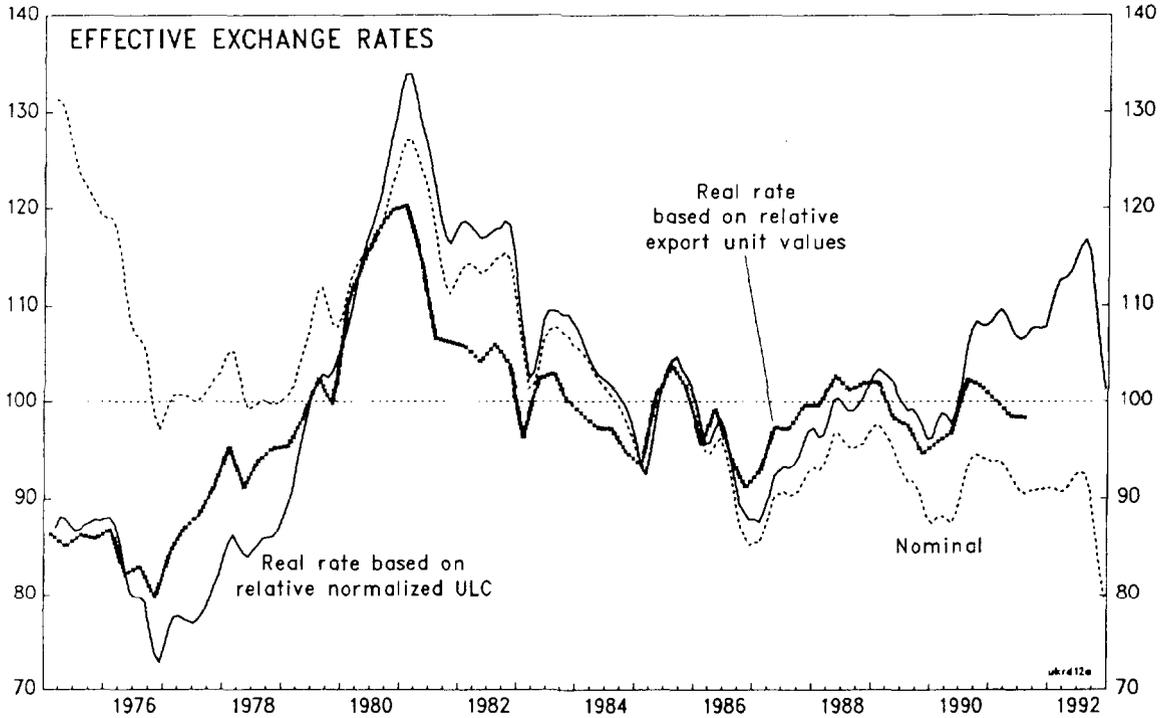
The surplus on the interest, profits, and dividends (IPD) balance has dropped from a peak of £5 billion in 1986 to less than £1 billion in 1991 and the first half of 1991. The underlying factor in this drop-off has been the decline in the recorded net external asset position from £100 billion in 1986 to about £16 billion at the end of 1991 that largely mirrors the cumulative current account deficit over this period (see section 4 below). In 1991, however, changes in the relative rates of return on assets and liabilities accounted for a majority of the drop in net IPD earnings. According to Bank of England estimates, the average rate of return on U.K. foreign assets fell by 1 percentage point in 1991 to 8 percent, while the average return on liabilities fell by $\frac{1}{2}$ percentage point, also to 8 percent. These rates of return do not include estimates of capital gains on the portfolio accounts. Estimates of the average total return, including capital appreciation, would tend to favor U.K. assets because of the greater relative share of portfolio investment on the asset side of the ledger.

3. Competitiveness

The U.K.'s estimated competitiveness has been subject to wide swings since the mid-1970s. The discovery of oil and a tightening of monetary policies beginning in the late 1970s contributed to a sharp appreciation of the nominal exchange rate from 1978 to 1981. At the same time, high domestic inflation and weak productivity growth further contributed to a substantial appreciation of the real effective exchange rate over that period (Chart 12). A trend nominal and real depreciation in the first half of the 1980s, contributed to a substantial reversal of the earlier loss of competitiveness that was broadly sustained through the end of the decade. In the run up to ERM membership in October 1990, however, there was again a significant loss of competitiveness, followed by further losses over the next two years. The depreciation following sterling's withdrawal from the ERM in October 1992, coupled with the strengthening of the U.S. dollar relative to European currencies, has restored the U.K.'s competitive position to the average level prevailing in 1985.

Between October 1990 and June 1992, sterling remained basically within the notional narrow $2\frac{1}{2}$ percentage points band of the ERM arrangement. In real effective terms, however, there was a significant appreciation of the real exchange rate in this period, which came on top of a 5 percent effective rise in the run up to ERM membership. Much of the appreciation following ERM entry was due to the sizable improvement in the U.S. competitive position brought on by the weakening of the U.S. dollar and by improved cost performance in the United States (lower panel of Chart 12). When measured against a more narrow basket of ERM member countries, however, the real effective value of sterling was largely unchanged over the two years to September 1992.

CHART 12
UNITED KINGDOM
COMPETITIVENESS
(Indices: 1985=100)



Sources: IMF, International Financial Statistics; staff calculations.

The depreciation that followed the floating of the exchange rate in September 1992 restored the real effective exchange rate measured against European countries to levels observed at the end of 1986, when the current account was last in balance and when the domestic economy was operating close to or perhaps slightly below potential. However, this comparison does not take into consideration the sizable reductions in the oil and invisibles account surpluses since 1986 and therefore should be viewed with caution. Moreover, the more broad measure of the real exchange rate including the U.S. dollar remained at levels above those in 1986.

As a further indicator of competitiveness, the staff has made estimates of the U.K.'s current account deficit corrected for the relative cyclical positions of the United Kingdom and its trading partner countries. ^{1/} These estimates suggest that the cyclically adjusted current account deficit in the third quarter of 1992 was probably in excess of 3 percent of GDP, compared with the actual deficit of 1½ percent of GDP.

4. Capital account developments

Net private capital inflows have generally mirrored the current account balance since it moved into significant deficit in 1987, but there have also been large changes in official assets in some years (see tabulation). Preliminary data for the first three quarters of 1992 show a near absence of identified capital inflows, that would indicate the need for a large balancing item in 1992 as was the case in 1988 and 1990.

Changes In Net External Assets and Liabilities
(In billions of pounds sterling)

	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>2/</u>
Current account balance	0.1	-4.5	-16.2	-21.7	-17.0	-6.3	-10.9	
Net errors and omissions	3.1	0.1	6.8	2.5	5.9	0.6	14.0	
Net identified capital (outflow -)	-3.1	4.3	9.4	19.3	11.1	5.7	0.4	
Of which: Official	-3.2	-11.0	-2.8	7.3	-0.2	-5.9	11.3	
Valuation effects	26.8	-32.4	23.4	2.9	-53.9	18.1	8.5	
Change in external assets	29.9	-36.7	14.0	-16.4	-65.0	12.4	8.1	
Stock of external assets	103.7	67.0	81.0	64.6	-0.4	12.0	18.1	

Source: CSO data tape.

^{1/} The annex to this chapter provides a fuller description of these estimates.

^{2/} First three quarters at an annual rate.

Changes in official assets and liabilities have made up a large share of total flows in some years. In 1987, when the pound was under upward pressure, official reserves increased substantially despite the emergence of a current account deficit. Reserves also rose sharply in 1991, particularly in the first half of the year. Official support for the pound was particularly heavy in the the third quarter of 1992. However, in contrast with earlier periods, much of the intervention reflected an increase in liabilities rather than a rundown in reserves.

Overseas direct and portfolio investment in the U.K. private sector, which averaged about £6 billion from 1980 to 1985, picked up sharply to £17 billion in 1986 and averaged around £27 billion between 1987 and 1990 (Table 16). While a portion of the higher inflow was probably due to the general process of international portfolio diversification, it is also likely that the perceived advantage emanating from progress toward the Single European Market in 1992 played a role. The decline in these inflows in 1991-92 to around £20 billion could be explained by the completion of some projects as the start of the single market approached, but it could also reflect poor business conditions in the United Kingdom and overseas economies.

Foreign Long-Term Investment Inflows into the Private Sector 1/

(In millions of pounds sterling)

	<u>1980</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992 2/</u>
Direct investment inflows							
In non-oil companies	2,541	7,367	8,868	15,156	14,253	8,593	8,090
In oil companies	1,814	2,082	3,138	3,411	4,381	3,391	3,335
Portfolio investment inflows							
In U.K. companies' securities (In ordinary shares)	196 (264)	15,643 (11,888)	14,211 (5,467)	16,958 (6,858)	9,480 (1,480)	8,022 (3,022)	8,430 (5,364)
Total	<u>4,551</u>	<u>25,092</u>	<u>26,217</u>	<u>35,525</u>	<u>28,114</u>	<u>20,006</u>	<u>19,855</u>
Memorandum items:							
Direct investment in financial institutions	221	2,531	2,442	3,773	3,777	402	...
Direct investment in non-oil industrial and commercial companies	2,220	4,373	5,980	10,222	9,114	7,527	...

Source: Central Statistical Office, Economic Trends and United Kingdom Balance of Payments.

On the portfolio account, the increase in inflows in 1986 and 1987 was largely for the purchase of ordinary shares. Over the period 1988-90, however, the inflow in the portfolio account was concentrated in financial instruments other than shares, such as corporate bonds. A possible explanation of this development is the rise in the long-term interest rate differential in favor of paper denominated in pounds sterling coupled with the perceived increase in risk of share investment following the stock market crisis at the end of 1987. In 1990-92, portfolio investment averaged less than £10 billion, perhaps reflecting the narrowing of interest rate differentials and the weakness in the economy. The share of portfolio investment flows in ordinary shares picked up in 1991 and increased further in the first three quarters of 1992, perhaps in response to the rise in share prices over the period.

At the same time as nonresidents were reducing their investments in the United Kingdom in 1991 and 1992, residents also cut back on their purchases of long-term foreign assets (see following tabulation). Direct investment

1/ Excludes miscellaneous property investments.

2/ First three quarters at an annual rate.

outflows averaged less than £6 billion in the first half of the 1980s and picked up sharply after 1986 to average around £20 billion a year between 1987 and 1989, as acquisitions, particularly in the United States, increased. In 1990-91, however, direct foreign investment by U.K. residents averaged about £10 billion. The drop was mainly due to an inflow in inter-company accounts, that would result from the sale of overseas subsidiaries. Unremitted profits which averaged £8 billion in 1987-89 and accounted for about 40 percent of direct investment outflows, have also fallen back over the past two years, perhaps signalling poor economic conditions in partner countries.

Long-Term Private Capital Outflows ^{1/}

(In millions of pounds sterling)

	<u>1980</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u> ^{2/}
Direct investment	-4,867	-19,239	-20,944	-21,515	-9,553	-10,143	-8,698
(Unremitted profits)	(-)	(-7,332)	(-8,239)	(-9,093)	(-8,429)	(-7,015)	(-6,965)
Portfolio investment	-3,310	5,163	-11,239	-35,486	-15,844	-30,847	-15,705
(Other financial institutions)	(-)	(5,991)	(-9,130)	(-30,181)	(-10,550)	(-22,460)	(-16,025)
<u>Total</u>	<u>-8,177</u>	<u>-14,076</u>	<u>-32,183</u>	<u>-57,001</u>	<u>-25,397</u>	<u>-40,990</u>	<u>-24,403</u>

Source: Central Statistical Office, Economic Trends and United Kingdom Balance of Payments.

In contrast to the relatively steady increase in direct investment until 1990, portfolio investment abroad has displayed sharp swings, moving from a £22 billion outflow in 1986 to a £7 billion repatriation in 1987 before moving back sharply to a £35 billion outflow in 1989. As was the case with direct investment, outflows in the portfolio investment category also declined sharply in 1990 but returned to near 1989 levels in 1991. The variability of outflows on the portfolio account has primarily reflected the behavior of nonbank financial institutions. In 1986, nonbanks made sizable overseas purchases of both common stock and bonds. Following the global stock market crash in 1987, the external positions of these institutions were run down, perhaps reflecting the need to bolster their domestic financial position. As the economy successfully weathered the events of October 1987, nonbanks again placed large quantities of funds abroad, particularly purchases of equity in 1989. In 1990, purchases of ordinary shares by nonbank financial institutions fell to £1 billion from more than

^{1/} Excludes miscellaneous property investments.

^{2/} First three quarters at an annual rate.

£16 billion in the previous year but returned to the earlier level in 1991. A possible interpretation of this development is that, as in late 1987 and early 1988, the financial well-being of nonbanks was again under pressure, but in 1990 this was the result of weakness in the domestic property and equity markets.

Since 1986, when net external assets reached a peak of about £100 billion, there has been a nearly £85 billion decline in these assets to an estimated £16 billion by the end of 1991. The decline in these assets over this period can be attributed to two principal factors, the cumulative current account deficit (£50 billion) and valuation effects (£34 billion). In 1991, there was a significant upward revaluation of assets that reflected the relative rise in stock prices and some strengthening of the dollar. Estimates for the first half of 1992 suggest a renewed £14 billion decline in the net asset position, made up largely by valuation effects. However, this latter decline might be more than offset in the second half of 1992 by the decline in the sterling exchange rate in the last half of the year.

Estimating the Cyclically Adjusted Current Account Deficit

This annex develops a stylized model of the external sector that is used to estimate the cyclical and structural components of the present current account deficit. The cyclically adjusted current account balance illustrates what the external position would be in the event that domestic and foreign economies were operating at potential. To do this, import and export volumes are adjusted for the direct effects of output deviations from trend using estimated trade elasticities. However, no allowance is made for cyclically induced changes in real exchange rates or trade prices.

The external sector can be described by the following model:

$$M = M (Y, P_w/P_d) \quad (1)$$

$$X = X (Y_w, RULC) \quad (2)$$

$$B = P_x \cdot X - P_m \cdot M + IPD + \text{transfers} \quad (3)$$

In equations (1) and (2), M and X are volumes of imports and exports of goods and services respectively; Y is a measure of domestic income or demand; Y_w is a measure of world demand or trade; and P_w/P_d and RULC are measures of competitiveness. Equation (3) defines the current balance (B), which includes the net contribution of interest, profits, and dividends (IPD) and transfers. In the model, equation (1) can be thought of as an import demand equation, while equation (2) represents a reduced form solution of a simple export supply and demand model. IPD and transfers are assumed to be independent of domestic and foreign activity.

The cyclical component of the external balance can be derived by rewriting equations (1) to (3) in terms of deviations from trend. For convenience, it is assumed that the price and invisibles variables are not affected by cyclical developments in output.

$$\bar{M} + M_c = M (\bar{Y} + Y_c, P_w/P_d) \quad (1')$$

$$\bar{X} + X_c = X (\bar{Y}_w + Y_{wc}, RULC) \quad (2')$$

$$\bar{B} + B_c = \bar{X} + X_c - (\bar{M} + M_c) + IPD + \text{transfers} \quad (3')$$

In these equations, \bar{M} , \bar{X} , and \bar{B} are the underlying levels of imports, exports, and the current account balance, respectively, when the U.K. and world economics are operating at potential. M_c , X_c , and B_c are the cyclical components of these variables.

The current account can be separated into these two notional components on the assumption that the import and export functions are log-linear in the parameters. The cyclical component of the external balance can then be approximated by

$$B_c = (a_1 \cdot X) \cdot Y_{wc} - (a_2 \cdot M) \cdot Y_c \quad (4)$$

where a_1 and a_2 are the activity elasticities for exports and imports and Y_{wc} and Y_c are defined as percentage deviations from trend of domestic and world income, respectively. 1/ The levels of exports and imports (X , M) are used to scale the cyclical estimates so that a level balance can be calculated.

The export elasticity was estimated at unity with respect to partner-weighted real import demand, a result that is consistent with that assumed in econometric models of the U.K. economy (see tabulation below). The import elasticity was estimated to be somewhat greater than in other models due to a different treatment of trend specialization. In the staff's model, trend specialization is captured by a time trend with the income elasticity freely estimated in order to measure the cyclical sensitivity directly. In other models, specialization is proxied by different variables, while typically the income elasticity of import demand is constrained to unity. As a further simplification, GDP is used as the domestic income variable in the staff's model whereas other models typically use domestic demand.

Income Elasticities in Trade Volume Equations 2/

	Imports	Exports
National Institute	1.0	0.9
Treasury	1.0	1.0
Bank of England	1.0	1.0
Staff	1.6 <u>3/</u>	1.0

Sources: Church (1992) and Fund staff estimates.

In applying the above model, it was assumed that the U.K. economy was operating at about 6 percent below potential GDP in the third quarter of

1/ Log-linear functions are often used to model export and import volumes. For a discussion of the drawbacks of this specification for import equations see Anderton, Pesaran, and Wren-Lewis (1992).

2/ Non-staff estimates based on weighted averages of income elasticities for manufactures and services. Staff estimates based on non-oil trade elasticities.

3/ Relative to GDP.

1992. 1/ Moreover, it was assumed, based on an analysis of trend GDP in major industrial countries, that the corresponding output gap in the U.K.'s trade partners was around 2½ percent. This would imply a deviation of around 4½ percentage points in partner's import demand from trend. On this basis, the cyclically adjusted current account deficit in the United Kingdom was estimated at around 3½ percent of GDP in the third quarter of 1992 rather than the 1½ percent deficit actually recorded. This would reflect the continued effect of imports being reduced by about £15 billion due to the domestic recession, while exports would have been about £5 billion higher had partner country demand been on trend. The above calculation is highly sensitive to the assumed relative output gap. Thus, for example, if it were assumed that the domestic output gap were around 4 percent, rather than 6 percent, the cyclically adjusted deficit would be estimated at about 2½ percent of GDP.

1/ Based on the assumption that the trend real GDP growth rate in the late 1980s and early 1990s was around 2.4 percent a year and that GDP was operating at close to potential toward the end of 1990. At that point, inflation reached a turning point and the CSO's coincident indicator series stood at about 100.

IV. Fiscal Policy and Developments

Since the early 1980s, the U.K. has eschewed the use of fiscal policy as a means of short-run demand management. Instead, policy has aimed at the medium-term objective of achieving budget balance, whilst reducing the share of resources controlled by the public sector. After having reached budget balance in 1987/88, the objective became that of keeping the fiscal accounts in balance, defined as a zero public sector borrowing requirement (PSBR), on average, over the course of the economic cycle. This objective would permit the PSBR to exceed zero during periods of low capacity utilization via the operation of the automatic stabilizers.

During the current recession, the PSBR has risen sharply to an estimated 6½ percent of GDP in 1992/93. While the unusual length and depth of the recession makes it difficult to judge the cyclical content of the rising PSBR, large budget deficits are likely to remain over the next several years, even under relatively favorable economic growth assumptions. The prospective persistence of such deficits would reflect in part the likelihood of the maintenance of a significant output gap. However, it would also reflect an erosion of the revenue base and past public expenditure overruns. The remainder of this chapter reviews recent fiscal policy developments, examines the November 1992 Autumn Statement, and analyses the medium-term fiscal outlook on present policies.

1. Recent fiscal developments

The general government financial deficit was reduced from around 4 percent of GDP at the end of the 1970s to approximate balance in 1987/88, owing in part to the effects of the authorities' medium-term fiscal consolidation strategy (see tabulation below and Chart 13). ^{1/} In 1988/89, when the economy was operating at above normal capacity, the financial balance moved to a surplus of nearly 1½ percent of GDP. Given privatization receipts equivalent to 1½ percent of GDP, a record public sector debt repayment of almost £15 billion, or 3 percent of GDP, was made that year.

^{1/} For more details about the adjustment of the public finances in the 1980s, see United Kingdom--Selected Background Issues, (SM/92/22) February 1992.

Government deficit and borrowing, 1978-92

(In percent of GDP)

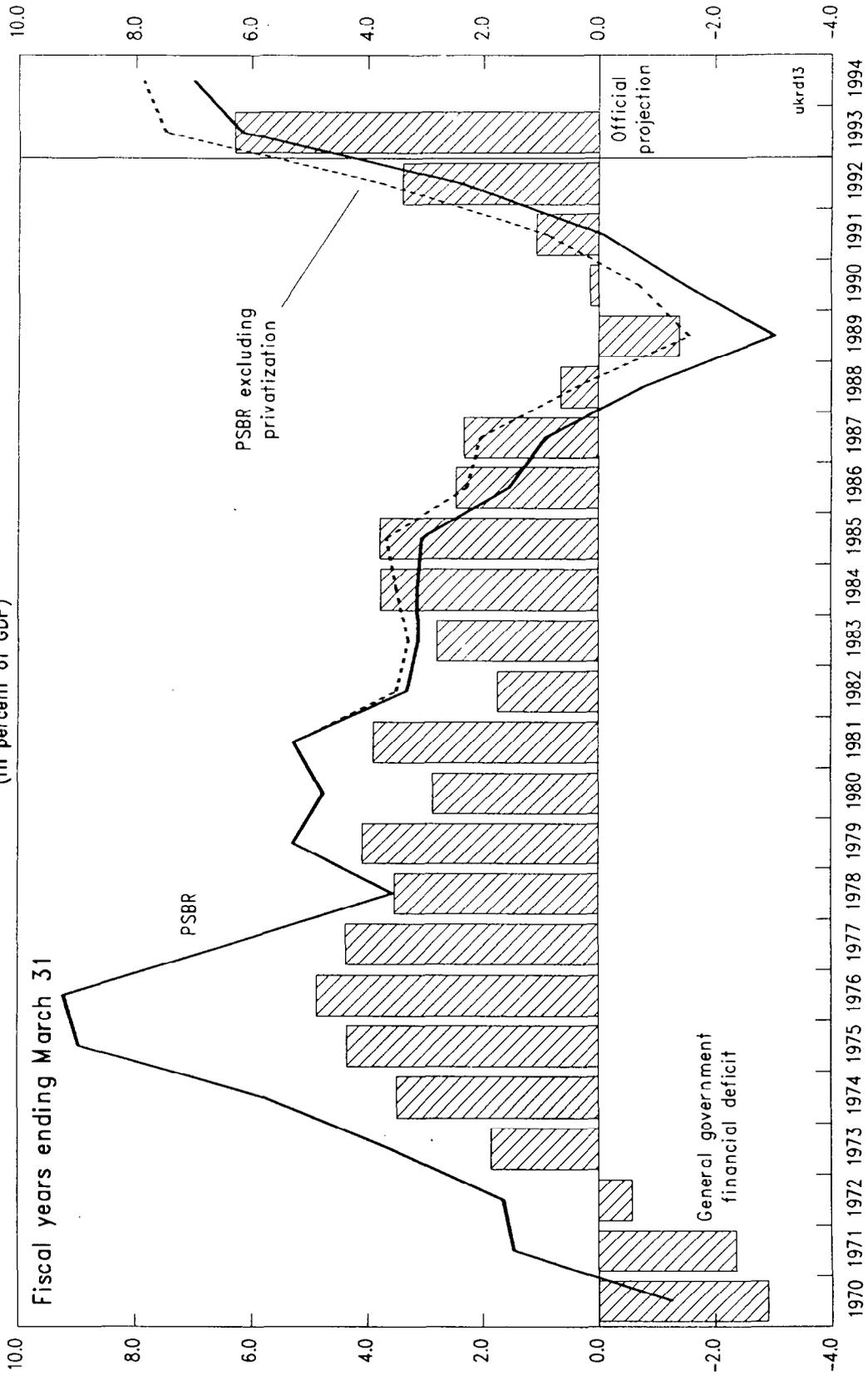
	General Govern- ment financial balance	PSBR	
		actual	excluding privatization
1978/79	-4.1	5.3	5.3
1979/80	-2.9	4.8	4.8
1980/81	-3.8	5.3	5.3
1981/82	-1.8	3.3	3.5
1982/83	-2.8	3.1	3.3
1983/84	-3.8	3.1	3.5
1984/85	-3.9	3.1	3.7
1985/86	-2.5	1.5	2.3
1986/87	-2.4	0.9	2.0
1987/88	-0.7	-0.8	0.4
1988/89	1.4	-3.0	-1.6
1989/90	-0.2	-1.5	-0.7
1990/91	-1.1	-0.1	0.9
1991/92	-3.4	2.4	3.7
1992/93 <u>1/</u>	...	6.2	7.5

As economic growth subsequently slowed and the economy moved into recession, the surplus was quickly eroded and by 1990/91 the general government accounts recorded a deficit of around 1 percent of GDP (Tables 17 and 18). The deficit widened to 3½ percent of GDP in 1991/92 and is estimated to rise to over 7 percent of GDP in the current fiscal year. The rise in the deficit during the recession has been due in large part to the effects of allowing the automatic stabilizers to both raise expenditures and to lower revenues as a proportion of GDP. 2/ However, a significant

1/ 1992 Autumn Statement estimate.

2/ Estimates of the cyclical component of the rise in the deficit depend on the assumed underlying model of the tax and expenditure systems and on the estimated rate of growth of trend GDP. Using the IMF Fiscal Affairs Department method of cyclical correction (described in Heller et al, 1986) and an assumed trend GDP annual growth rate of 2.4 percent, around 60 percent of the change in the PSBR between 1989/90 and 1992/93 might be attributed to cyclical factors. Alternatively, basing the calculations on research presented in the Treasury Bulletin, Winter 1990-91, the cyclical component could be as high as 80 percent. The difference in estimates largely reflects the treatment of revenue. In contrast to the IMF treatment, the Treasury Bulletin methodology attributes a significant proportion of the observed decline in the revenue/GDP ratio to cyclical factors.

CHART 13
UNITED KINGDOM
GOVERNMENT BALANCE
(in percent of GDP)



Sources: CSO data tape; and Autumn Statement, November 1992.



part of the increase in the deficit would also reflect a discretionary easing of policy over this period.

a. Revenue

General government revenue as a proportion of GDP has declined steadily since reaching a peak of 44 percent in 1981/82. A large part of this decline has been due to dwindling North Sea oil tax receipts and royalties (Chart 14). If these oil receipts are excluded, the decline in general government revenue as a proportion of GDP has been more modest, because fiscal drag has to some extent offset the effects of discretionary tax cuts.

During the course of the current recession, the pace of decline in the government revenue to GDP ratio has accelerated. Thus, non-oil revenue fell from about 40 percent of GDP in 1987/88 to an anticipated 37½ percent of GDP in 1992/93. The fall in revenue is in large part accounted for by declining corporation tax receipts, which declined from a historically high level of 4 percent of GDP in 1989/90 to 3 percent of GDP in 1991/92 and are set to fall further in the current fiscal year.

The recent decline in corporation tax receipts has been partly a cyclical phenomenon that reflects the high sensitivity of corporate profits to economic activity. However, the high degree of variability of corporation tax receipts over the current economic cycle also reflects certain one-off factors that were connected with the corporate tax reform of 1984 (notably the effects of an incomplete build up of capital allowances) and the unusually long economic expansion phase between 1983 and 1989. In addition, corporate tax receipts were swollen in the late 1980s by abnormally high financial companies' profits and the effects of the privatization program. 1/

According to official estimates, as reflected in the Financial Statement and Budget Reports (FSBR), discretionary tax changes announced in the last three budgets would have had only a small negative impact on revenue (see tabulation below). Most of the erosion in the tax base on these estimates would stem from the earlier reforms to employees' national insurance contributions (1989 budget) and income tax cuts (1987 and 1988

1/ For an extended analysis, see Treasury Bulletin, Summer 1992. The likely absence of these factors in the economic recovery phase will limit any recovery in corporate tax receipts. In addition, changes to the tax code in the 1991 budget, which allow a three year carry forward of trading losses against future tax liabilities (instead of one year) and a lowering of corporate tax rates from 35 to 33 percent, will further inhibit any short-term rebound in the corporate tax take.

budgets). ^{1/} In some cases, however, the FSBR underestimated the cost of discretionary measures. For example, the revenue cost of the introduction of tax exempt special savings accounts (TESSAs) in the 1990 budget was based on a considerable underestimation of the demand for such accounts, while the phasing out of the community charge in the 1991 budget underpredicted the degree of tax avoidance in 1991/92 by about £½ billion.

Budget revenue measures based on FSBR costing

(Change from indexed base in £ billions)

	<u>1989/90</u>	<u>1990/91</u>	<u>1991/92</u>	<u>1992/93</u>	<u>1993/94</u>
FSBR, 1992	...	...	...	-1.5	-2.6
FSBR, 1991	...	...	0.3	1.9	...
FSBR, 1990	...	0.4	1.0	...	...
FSBR, 1989	-1.9	-3.5	...	...	...
FSBR, 1988	-6.2	...	...	...	...

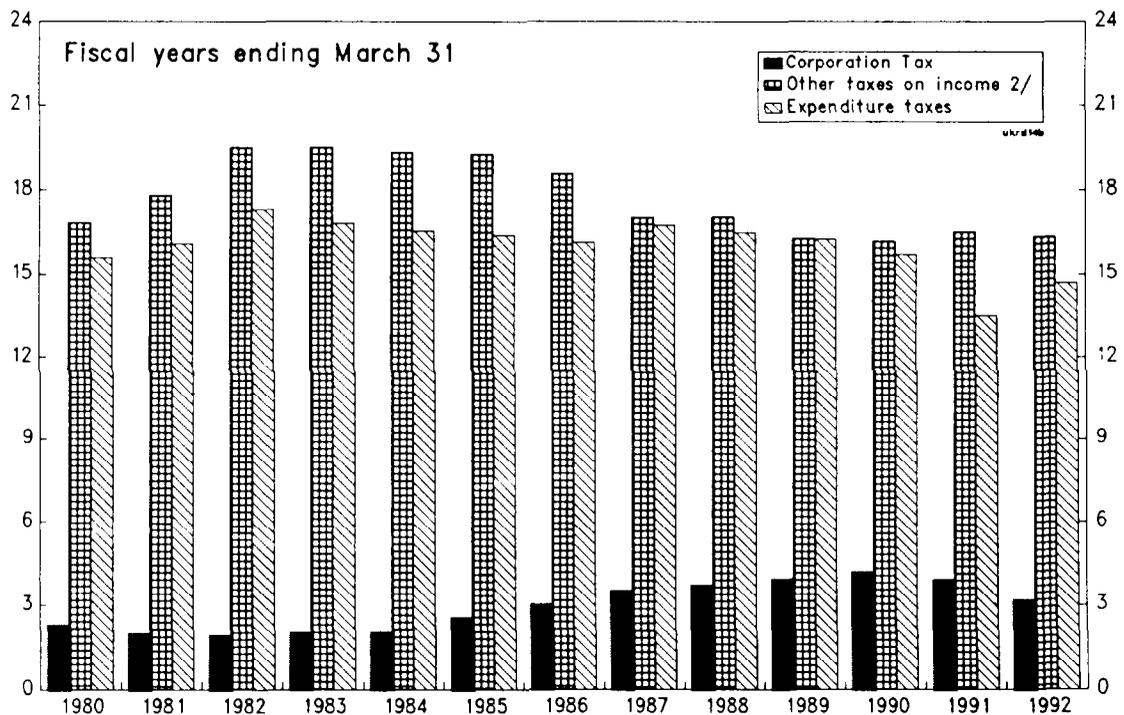
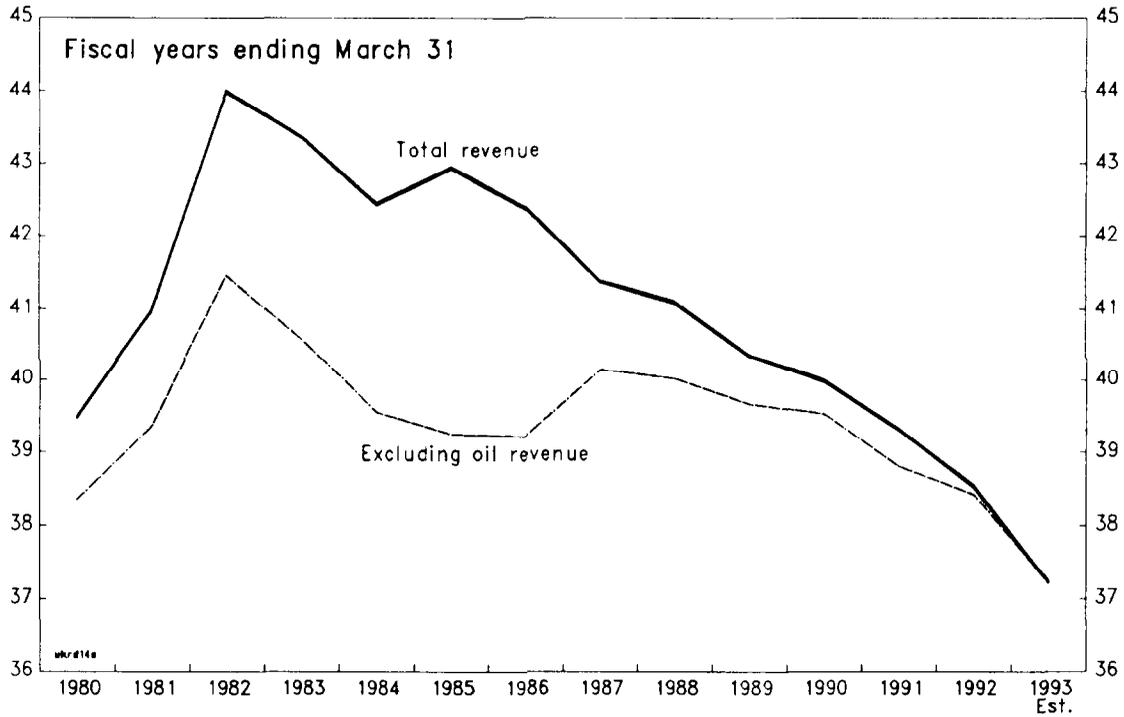
b. Expenditures

The movement toward budget balance in the 1980s was achieved through a substantial cut in the ratio of general government expenditure to GDP that more than offset the loss of North Sea oil revenues (Chart 15). Thus, from a peak of 47½ percent of GDP in 1982/83, expenditures (excluding privatization receipts) were reduced to a low of 39¼ percent of GDP in 1988/89. In this period, real expenditure growth was in the 1-1½ percent a year range.

Since 1988/89, which predated the peak of the economic cycle, the ratio of expenditures to GDP has been rising steeply. Thus, according to the 1992 Autumn Statement estimates, this ratio will have risen by 5½ percentage points to reach 44¼ percent of GDP in the current fiscal year. As can be seen from Chart 15, the rise in the expenditure/GDP ratio has been broad-based, although the increase in general government consumption has been notably rapid. Growth in clearly cyclical spending areas--for example, unemployment benefits--can account for only a small proportion of the rise in overall expenditures (see tabulation below).

^{1/} The cost of the main measure in the March 1992 budget, the introduction of a new low 20 percent income tax band, would, according to official estimates, have broadly offset small net budget savings in the 1990 and 1991 budgets (Table 19).

CHART 14
 UNITED KINGDOM
GENERAL GOVERNMENT REVENUE
 (In percent of GDP) 1/



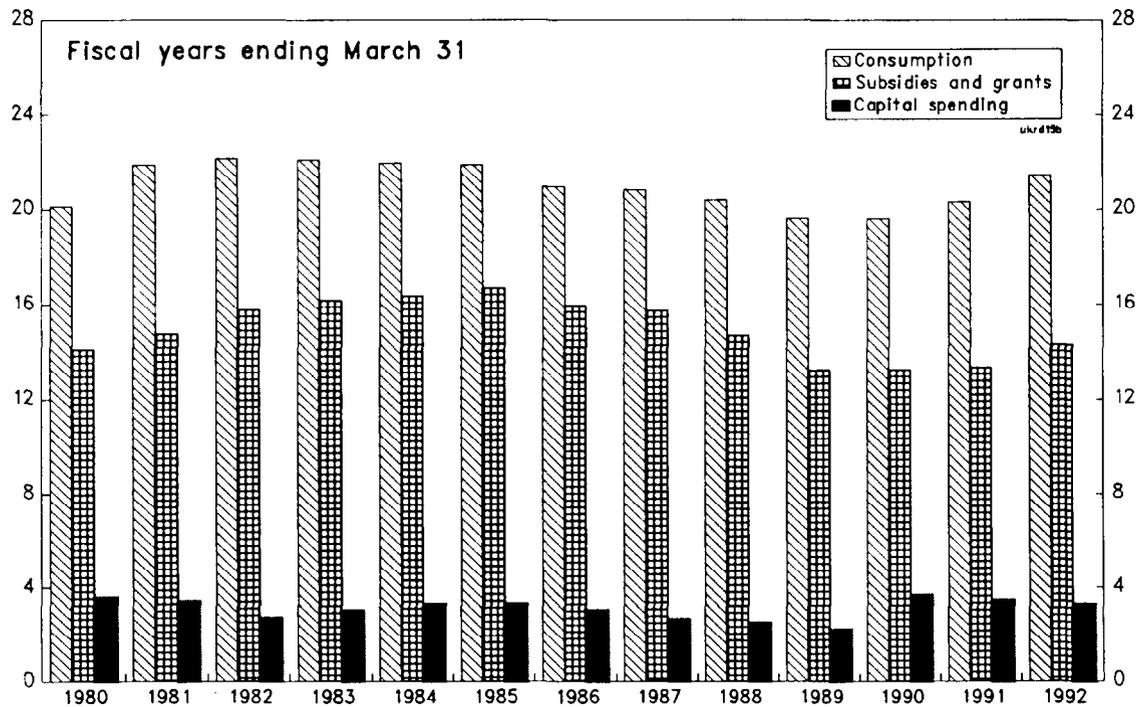
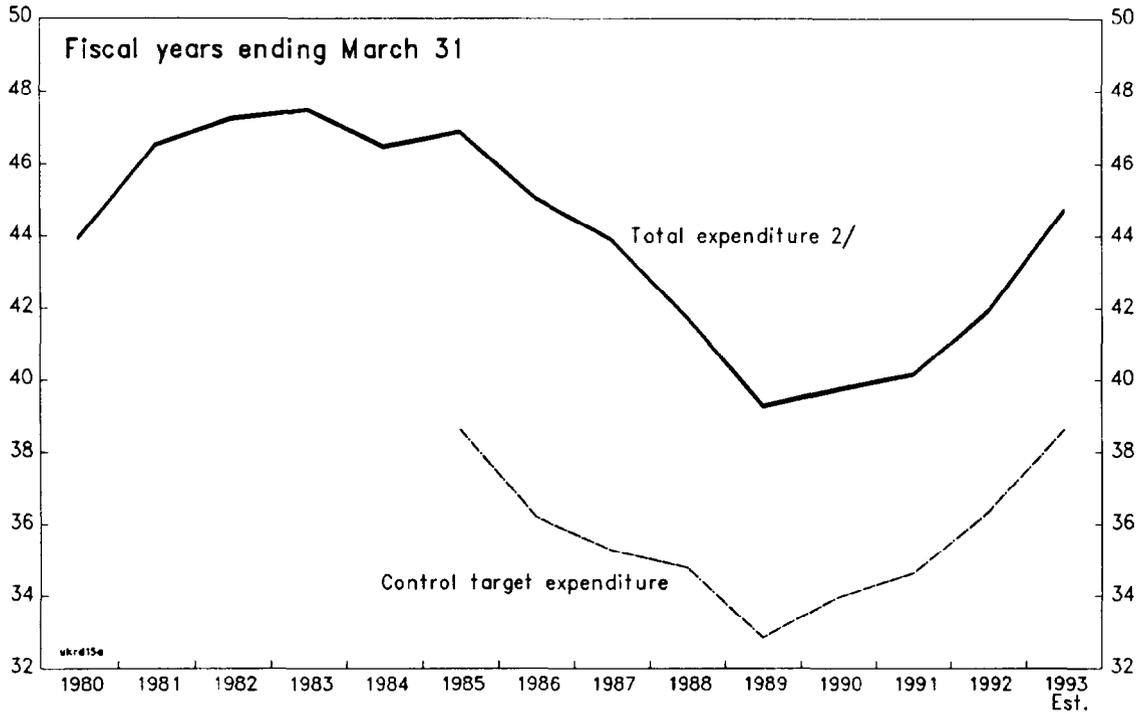
Sources: CSO, Financial Statistics; staff estimates.

1/ GDP adjusted for the abolition of domestic rates.

2/ Excluding corporation tax; including social security contributions.



CHART 15
 UNITED KINGDOM
 GENERAL GOVERNMENT EXPENDITURE
 (In percent of GDP) 1/



Sources: CSO, Financial Statistics; and Autumn Statement, November 1992.

1/ GDP adjusted for the abolition of domestic rates.
 2/ Excluding privatization receipts.

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General Government Spending, 1987-93

(In percent of GDP) 1/

	Total excluding privatization	New control total	Cyclical social security	Debt interest
1987/88	41.7	34.8	1.9	4.0
1988/89	39.3	32.8	1.5	3.7
1989/90	39.7	33.9	1.3	3.4
1990/91	40.2	34.6	1.4	3.2
1991/92	41.9	36.3	1.9	2.8
1992/93 2/	44.7	38.5	2.2	2.9

The increase in spending during the recession has reflected sizable expenditure overruns in general and on health, education, and transport in particular, that far exceeded the amounts set aside in the contingency reserve (see tabulation below and Table 20). Moreover, it may be noted that in 1990 and 1991, the published spending plans were based on what subsequently turned out to be overly optimistic forecasts for GDP growth. Since these plans were not scaled back in line with the weakening in the economy they resulted, in effect, in a strong anti-cyclical behavior of realized public spending.

Autumn Statement Revisions to
Medium-Term Spending Plans of Previous Year 3/

(In billions of pounds)

	<u>1990/91</u>	<u>1991/92</u>	<u>1992/93</u>	<u>1993/94</u>
1992 Autumn Statement	1.2 (0.5)	-0.3 (-0.1)	4.5 (1.7)	4.6 (1.6)
1991 Autumn Statement	0.5 (0.2)	4.9 (2.0)	7.7 (3.0)	12.6 (4.7)
1990 Autumn Statement	5.6 (2.6)	12.0 (5.3)	17.5 (7.3)	... (...)

Memorandum item:

Difference between 1992
and 1990 Autumn Statement's
nominal GDP assumption in
percentage points

-0.6	-3.7	-7.4	-8.8
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1/ GDP adjusted for the abolition of domestic rates.

2/ 1992 Autumn Statement estimates.

3/ Changes in general government spending, excluding privatization receipts, from the previous Autumn Statement; percentage changes in parentheses.

2. The 1992 Autumn Statement

The November 1992 Autumn Statement outlines the Government's revised expenditure plans for the next three years. These plans were formulated using a new system for expenditure control that was intended to give greater top-down control over overall spending. The 1992 Autumn Statement was also used by the Chancellor to introduce a number of temporary stimulatory measures aimed at reviving confidence and promoting economic recovery.

a. Measures to revive confidence

The confidence-boosting stimulus package consisted of a number of time-limited measures to help those sectors of the economy, which had been hardest hit by the recession, such as house-building and construction. It was also intended that these measures should sustain investment and help exporters, thus supporting industry more generally, rebuilding confidence, and fostering recovery. The estimated cumulative cost of this package was to add £4 billion to the PSBR over the period to 1995/96 but to have no long-term effect on the borrowing requirement. The basic measures comprised:

--providing an extra £750 million in 1992/93 for government purchase of empty housing;

--allowing local authorities to spend their receipts from asset sales (principally council houses) on capital goods, as opposed to using them to reduce debt, which would raise local authority capital spending by £1.8 million over the next 3½ years;

--increasing first year capital allowances for investment in plant and machinery from 25 percent to 40 percent for one year beginning November 1992 and introducing a special 20 percent initial allowance for agricultural and industrial buildings for the same limited period at a revenue cost of £200 million in 1992/93 and £500 million in 1993/94;

--abolishing the (5 percent wholesale) car tax from mid-November 1992 at a revenue cost of £100 million in 1992/93; future costs would be recouped in the next budget through other motoring tax increases;

--making available an extra £700 million of Export Credit Guarantees Department (ECGD) cover to exporters over the current and next fiscal years.

In addition, the Chancellor announced a public sector pay limit of 1½ percent for 1993, to take effect from mid-November, and initiatives to encourage private sector financial involvement in public investment projects. The latter included facilitating the approval process for private sector financed investment projects that could, in principle, be carried out by the public sector; encouraging more government joint ventures with the private sector; and extending leasing arrangements of public sector assets. A potentially important area for joint ventures would be the transport

sector, especially if a review planned for early 1993 approved measures to introduce charges for the use of inter-urban roads.

b. Revised spending plans

The expenditure plans in the 1992 Autumn Statement were based on ceilings for the growth of aggregate expenditures falling within a new control total (NCT), which replaced the previous planning total. This new Control Total includes about 85 percent of all general government spending and excludes only certain cyclical social security spending and central government debt interest payments. 1/ Compared to the former planning total, it includes self-financed local authority spending, but excludes the cyclical element of social security spending and privatization receipts (treated as negative expenditures).

In the current and next fiscal year, the NCT provides a nominal ceiling on expenditure. Thereafter, the NCT is expressed as a real growth ceiling that is to operate as an independent constraint on expenditures when medium-term fiscal plans are considered in detail at the time of the unified budget. 2/ In order to meet the Government's objective of reducing the share of public expenditure in GDP, the average medium-term real growth ceiling for the NCT has been set at 1½ percent a year in real terms. This is intended to limit real growth in overall general government expenditures to under 2 percent a year or to below the 2-2½ percent estimated range for potential GDP growth.

The Autumn Statement expenditure plans left unchanged the planning total estimates for 1993/94. These plans allow for an increase in general government expenditure, excluding privatization receipts, of 6½ percent in nominal terms (3¾ percent in real terms) in 1993/94 following estimated spending growth of 10¾ percent (5¾ percent real) in 1992/93. Excluding debt interest and cyclical social security expenditures, real expenditure growth would be 5¾ percent and 2¾ percent in 1992/93 and 1993/94, respectively (Table 21).

Real NCT growth is planned at just ¾ percent in 1994/95 and at 1 percent 1995/96. This would bring real NCT spending within the 1½ percent annual indicative limit for the three year period 1993/94-1995/96. The spending plans allow for somewhat more rapid growth in health, education, and social security, which would be made possible by further savings in defense expenditures (Table 22). If the spending targets were achieved,

1/ Because it would exclude some elements such as rent support for the unemployed, the cyclical social security expenditure component would cover only about two thirds of all cyclically related expenditures according to Treasury estimates.

2/ Beginning in December 1993, the United Kingdom will replace with a unified budget the present system of a March budget mainly covering revenues and of an Autumn Statement setting out spending plans.

real general government expenditure growth would average 2½ percent a year in the planning period.

3. Medium-term fiscal outlook

The authorities' medium-term fiscal strategy (MTFS) has, for many years, provided the key framework for achieving longer-term fiscal consolidation. The latest version of the MTFS, published with the March 1992 budget, envisioned approximate budget balance being achieved in 1996/97 as the economy recovered, owing to a combination of expenditure restraint and a rise in the ratio of revenue to GDP (see tabulation below). However, the MTFS was prepared against a more favorable outlook for the economic recovery and a considerably stronger starting position for the fiscal accounts than now appears to be the case.

MTFS: Financial Statement and Budget Report, March 1992

	<u>(In percent of GDP)</u>					
	<u>1991/92</u>	<u>1992/93</u>	<u>1993/94</u>	<u>1994/95</u>	<u>1995/96</u>	<u>1996/97</u>
General government:						
Expenditure	40½	41¾	42½	41¾	41	40
Revenue	38	37	37¾	38	38½	39¾
PSBR	2¾	4¾	4¾	3½	2½	¾
excluding privatization receipts	3½	5¾	5½	4¾	2¾	1
Memorandum item:						
Real GDP growth	-2	2	3¾	3¾	3½	3¾

The staff has, therefore, updated the MTFS on the basis of the newly announced spending plans and on a projection of medium-term GDP growth that would be compatible with reducing inflation and with a sustainable balance of payments position. The staff's update of the MTFS presupposes that the tax system can be characterized by a revenue elasticity of 1.1 with respect to nominal GDP growth. 1/ The staff also assumes a short-term cyclical rebound in the ratio of revenue to GDP, but, given the structural changes to the corporation tax referred to above, the rebound is assumed to be relatively modest.

1/ This assumed revenue elasticity would be consistent with the work of other analysts including Davies, et al (1992) and the Treasury. The latter utilizes a rule of thumb that over the medium term the revenue/GDP ratio, increases by 0.22 percentage points a year when the economy is growing at 2½ percent a year.

Underlying the staff's fiscal projection is the assumption that from 1993/94 onward real GDP growth would average about 3 percent a year, which would approximately eliminate the estimated 6 percent output gap at present by 1997/98 (see tabulation below). 1/ Inflation is assumed to fall below 3 percent at the end of the scenario, broadly in line with the Government's medium-term objective. The economic growth assumptions would be consistent with a fall in unemployment from over 3 million in 1992/93 to about 2½ million by 1997/98.

Economic Assumptions

(Percentage change)

	<u>Real GDP</u>	<u>GDP deflator</u>
1992/93	-0.9	4.3
1993/94	2.2	3.8
1994/95	3.4	3.6
1995/96	3.2	3.2
1996/97	2.8	2.9
1997/98	2.7	2.7

Under these assumptions, the PSBR excluding privatization receipts would decline from an estimated peak of around 8 percent of GDP in 1993/94 to 5 percent of GDP in 1996/97 (see tabulation below). The fall would reflect the combination of a 1½ percentage point rise in the ratio of revenue to GDP and a 2 percentage point fall in the ratio of expenditure to GDP. As a result of the cumulative borrowing in this period, gross general government debt would stand at about 53 percent of GDP at the end of 1996/97 compared with an estimated 36 percent of GDP at end-1991/92. Debt service payments would rise to 4 percent of GDP or to around one tenth of total government expenditure by the end of the scenario. 2/

1/ As explained in the annex to Chapter III, the estimated output gap assumes trend GDP growth of 2.4 percent in the early 1990s and an economy operating at close to potential at the end of 1990.

2/ The debt service calculation is based on a broadly unchanged average debt service charge. Given that the average portfolio maturity is 8-10 years (see Bank of England Quarterly Bulletin, November 1992) and that the marginal cost of recent borrowing has exceeded the average service cost, this assumption would be consistent with declining nominal long-term interest rates over the medium term.

Staff update of MTFS

(In percent of GDP)

	<u>1992/93</u>	<u>1993/94</u>	<u>1994/95</u>	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>
General government:						
Expenditure	44.9	45.3	44.5	43.8	43.4	43.0
Of which:						
debt interest	(3.0)	(3.3)	(3.6)	(3.8)	(4.0)	(4.2)
Revenue	37.4	37.5	38.1	38.4	38.6	38.8
Financial deficit	7.5	7.8	6.4	5.4	4.8	4.2
Public sector:						
PSBR	6.4	7.2	5.8	5.5	4.9	4.3
(excluding privatization receipts)	(7.7)	(8.1)	(6.6)	(5.6)	(5.0)	(4.4)
General government gross debt	41.2	48.0	48.7	51.2	53.3	54.7

The staff's projection clearly suggests that budget balance is unlikely to be achieved in the next several years on the basis of current spending plans and tax rates. Moreover, it should be noted that the scenario above is very sensitive to the economic growth assumptions. If, for example, the attainment of the projected inflation path were consistent with real GDP growth averaging $\frac{1}{2}$ percentage point less a year than assumed above, the PSBR would be close to 6 percent of GDP in 1996/97 and general government debt would have risen to nearly 60 percent of GDP by the end of the period.

V. Monetary Policy and Developments

The withdrawal of sterling from the exchange rate mechanism (ERM) of the European Monetary System on September 16, 1992 has profoundly changed the framework in which monetary policy is conducted in the United Kingdom. This chapter reviews the events leading up to the pound's withdrawal from the ERM, describes the new policy framework, and analyzes recent developments in those indicators now to be accorded priority in the monitoring of monetary conditions. An annex to this chapter assesses the financial condition of the financial system.

1. The events surrounding sterling's withdrawal from the ERM

During the United Kingdom's first year of membership in the ERM, from October 1990 to October 1991, the ERM provided a helpful framework for sustained reductions in U.K. interest rates. Thus, having reduced base rates by 1 percentage point to 14 percent on the day of entry, rates were lowered cautiously in seven half-percentage point steps to 10½ percent by September 1991. During this period, the pound remained for the most part within a 2½ percent narrow band around its DM 2.95 central ERM parity, rather than the 6 percent wider band, which the arrangement allowed the United Kingdom to avail itself of in the initial stages of its membership (Chart 16).

In the first year of ERM membership, little conflict arose between the external and domestic objectives of monetary policy. Whereas the U.K. economy was in recession, a cautious lowering of interest rates appeared appropriate in light of the significantly higher U.K. inflation rate than that in most other major EC countries. The cuts in interest rates led to an easing of monetary conditions as measured by the yield curve which, although remaining inverted, flattened out significantly.

The cuts in interest rates also led to an appreciable narrowing of U.K. and German interest rate differentials suggesting rising market confidence in the authorities' exchange rate commitment. At 3-month maturities, for example, the differential between U.K. and German interest rates narrowed to around 1 percentage point in September 1991, compared with the 5-7 percentage point range that had prevailed for several years before ERM entry (Chart 16, lower panel). At longer maturities, the narrowing was also significant as suggested by the narrowing in differentials on 10-year government bond yields from around 3 percent at the time of ERM entry to 1 percent by September 1991. While the easing of monetary conditions in this period was facilitated by rising policy credibility, it also owed much to the weakening cyclical position of the U.K. economy and to the relatively stable monetary environment in the rest of Europe. Moreover, the effects of higher, albeit falling, inflation on external competitiveness were offset by an appreciation of the U.S. dollar against ERM currencies in the first half of 1991.

In December 1991, German short-term interest rates were raised by a $\frac{1}{2}$ percentage point thereby continuing the process of monetary policy tightening that had followed the reunification of Germany. This interest rate rise was matched by all other ERM countries except Britain. At the same time, the United States cut its discount rate by a full percentage point, thereby adding to dollar weakness that had begun in the summer of 1991. These interest rate changes contributed to pressure on sterling, which fell below the floor of the 2 $\frac{1}{2}$ percent implicit band in which it had been trading up to that time.

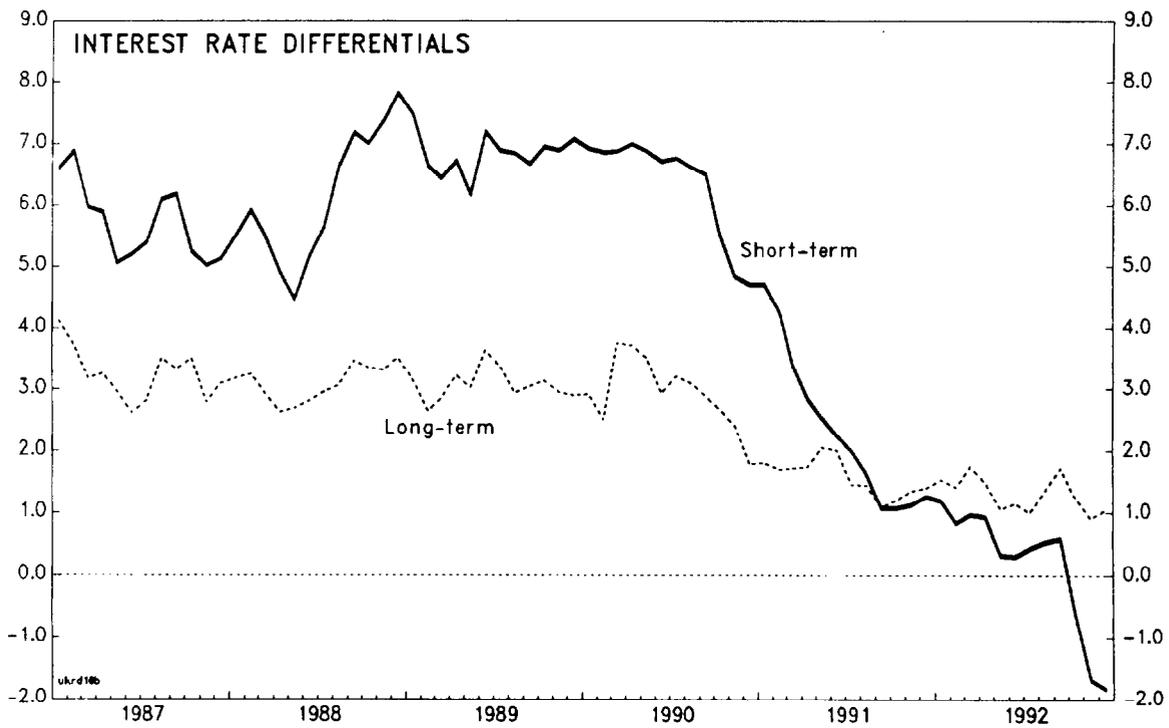
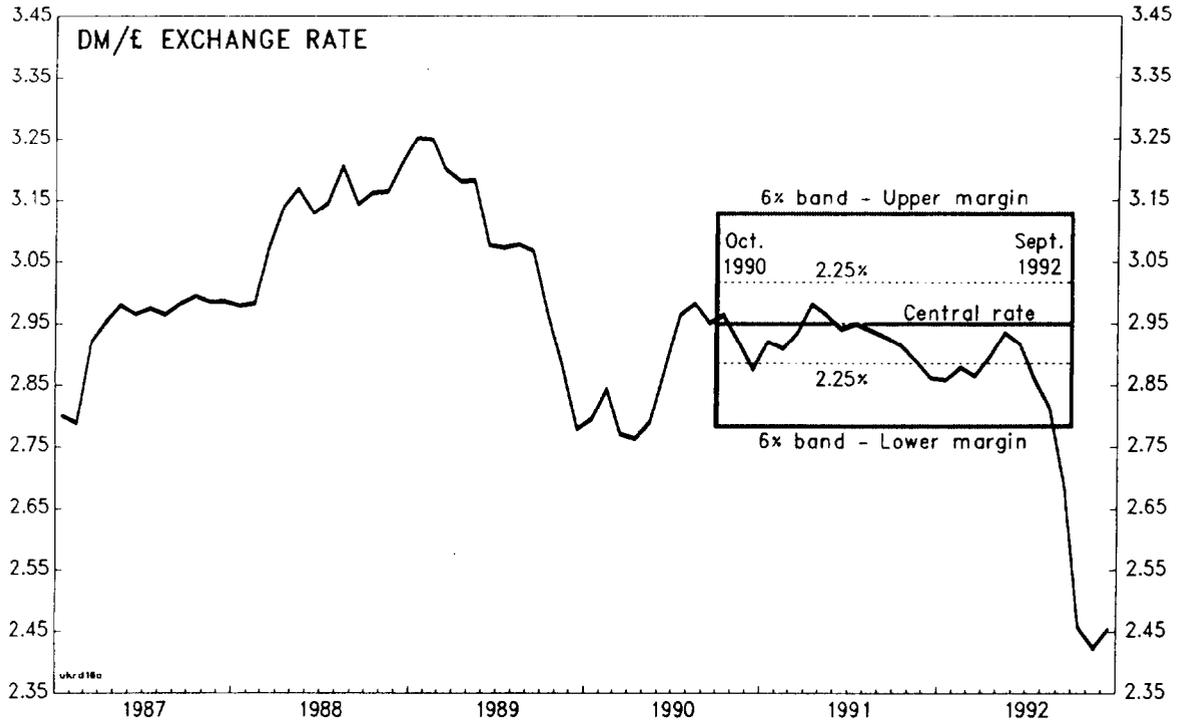
The sterling/DM rate hovered around 2 $\frac{1}{2}$ percent below the central rate during the following 3-month run up to the April 9, 1992 general election. Following that election, sterling rallied in the face of renewed confidence and of domestic economic indicators that pointed to the beginning of an economic recovery. In the event, the recovery proved illusive and, with falling inflation, concerns that monetary conditions were unsuited to domestic conditions began to intensify. Despite unchanged interest rates in Europe, the U.K. cut base interest rates a further $\frac{1}{2}$ percentage point in May 1992 to 10 percent.

In early June 1992, the results of the Danish election on the Maastricht Treaty raised doubts about the path to EMU and signaled the beginning of a period of heightened turbulence in foreign exchange markets. Tensions in the ERM were further increased by a cut in U.S. interest rates and by a further $\frac{1}{4}$ percentage point increase in the German discount rate in July. The U.K. authorities responded to these developments by permitting the pound to fall within its wide band, while undertaking only limited covert intervention at key psychological rates. By early August 1992, the pound was only slightly above its 6 percent floor of DM 2.78 (Table 23).

Tensions in the ERM continued to intensify in August-September 1992, particularly as opinion polls showed falling popular support for Maastricht ratification ahead of the French referendum on September 20. The tensions abated temporarily on September 3, 1992 when the U.K. authorities announced an ECU 10 billion borrowing program. However, the effect on confidence was undermined shortly thereafter by a further cut in U.S. interest rates that pushed the dollar to an all-time low against the deutsche mark and to beyond the important US\$2.00 threshold against sterling.

The first casualty in the ERM was the lira, which was devalued by 7 percent on September 14. Despite a $\frac{1}{4}$ percentage point cut in the German Lombard rate, pressure on sterling continued and, on the following day, the Bank of England was conducting large scale intra-marginal intervention to keep the pound above its ERM floor. On September 16, 1992, Bank of England intervention was intensified and was backed up by a two percentage point increase in base lending rates to 12 percent. However, neither these actions, nor the subsequent announcement that base lending rates would be raised to 15 percent the following morning, did little to revive sterling. As the speculation intensified, overnight rates rose to 100 percent, while the cost of borrowing for the period covering the weekend reached

CHART 16
UNITED KINGDOM
EXCHANGE RATE AND INTEREST RATES
WITH REGARD TO GERMANY



Source: IMF, International Financial Statistics, Treasurer's Department.

180 percent. By close of trading in London, sterling had dropped below its ERM floor and, its participation in the ERM was suspended.

On September 17, 1992, the interest rate hikes of the previous day were rescinded, while on September 22, 1992 base rates were reduced to 9 percent. Two further 1 percentage point cuts in base interest rates were made on October 16 and November 13, 1992, that pushed 3-month rates in the United Kingdom about 1½ percentage points below those in Germany. After touching a low of DM 2.37, or around 15 percent below the ERM floor, in early October, sterling's effective exchange rate stabilized at around 13 percent below its September 16, 1992 level in the three months through end-January 1993. Base rates were further lowered to 6 percent on January 26, 1993.

Selected Daily Interest and Exchange Rates
(Percent for interest rate; level for exchange rate)

	Sterling interbank rates				3-month sterling futures <u>1/</u>	Exchange rates		
	1-month	3-months	6-months	10-year gilts		\$/£	DM/£	effective index
<u>1992</u>								
July 1	10.0	10.0	10.0	9.1	9.9	1.91	2.90	93.2
Aug. 26	10.3	10.8	10.9	9.6	10.8	1.98	2.80	92.3
Sept. 4	10.0	10.3	10.4	9.2	10.3	1.99	2.80	92.4
Sept. 14	10.1	10.2	10.3	9.1	10.3	1.89	2.81	91.6
Sept. 16	27.0	16.0	13.5	9.3	11.4	1.85	2.78	90.5
Sept. 18	10.2	9.6	9.0	9.1	8.4	1.74	2.61	85.5
Sept. 30	9.2	9.0	8.8	9.0	8.2	1.78	2.51	83.7
Oct. 30	8.4	7.7	7.1	8.1	6.7	1.57	2.41	78.4
Nov. 30	7.6	7.5	7.3	8.6	6.7	1.51	2.42	78.5
Dec. 30	7.1	7.1	6.9	8.2	6.5	1.51	2.44	79.3

Since September 16, 1992 long-term interest rate have declined by around ¼ percentage points (Table 24). As a consequence, the yield curve has become significantly upward sloping for the first time since the mid-1980s and the differential with German bond yields has widened to over 1½ percentage points.

2. The new monetary policy framework

During the period of ERM membership, monetary policy was principally guided by the need to maintain sterling's parity within the ERM. The withdrawal of sterling from the ERM has now provided the U.K. authorities with greater room to use monetary policy to pursue domestic economic objectives. Nevertheless, the authorities have stated that the ultimate goal of monetary policy remains as it was during ERM membership, namely that of achieving price stability. In this context, the Chancellor of the

1/ Implied future rate.

Exchequer has announced specific inflation objectives: during the current parliamentary term, which could extend through April 1997, retail price inflation, excluding mortgage interest, is to be contained in a range of 1-4 percent and it is to be in the lower part of that range by the end of the current parliamentary term. 1/

Outside the ERM, the operation of monetary policy is to be steered by a number of indicators that are to provide information on the progress being made in reducing inflation. These include: the growth of the narrow and broad monetary aggregates (M-0 and M-4), for which a target range of 0-4 percent and a monitoring range of 4-8 percent, respectively, have been set for the current fiscal year; movements in asset prices, and in particular housing prices; and exchange rate developments.

To improve the transparency of the policy decision process, future changes in interest rates are to be accompanied by a full description of the factors determining such a decision. Moreover, the Treasury is to publish a Monthly Monetary Report, following the regular meeting between the Chancellor and the Governor of the Bank of England, to provide the background against which monetary policy decisions are to be taken. For its part, the Bank of England is to publish a quarterly analysis of the progress being made toward attaining the inflation objective in its Quarterly Bulletin, starting in February 1993.

The authorities have indicated that a number of conditions would need to be met before sterling returned to the ERM. These include an end to the recent turbulence in the foreign exchange markets; the completion of a review of the EMS and the world monetary system; and the coming closer into line of the German and U.K. economic cycles. The latter condition would require a narrowing of the currently wide differential between German and U.S. interest rates. The stated conditions for reentry would override any need to rejoin the ERM in order for Britain to satisfy the Maastricht timetable for European Monetary Union at the earliest possible date. 2/

Since leaving the ERM, the authorities have reduced short-term interest rates to 6 percent, or to some 4 percentage points below their level prevailing prior to September 16, 1992. 3/ This reduction, coupled with the almost 15 percentage point depreciation of sterling since withdrawing

1/ Letter to Treasury and Civil Service Committee, October 8, 1992.

2/ See SM/92/129 for a description and analysis of the Maastricht Treaty and the timetable for monetary union.

3/ In the United Kingdom, the Bank of England signals changes in short-term interest rates through its money market dealing rates. There is no administered discount rate. Commercial banks' base rates (essentially prime lending rate minus one percentage point) provide the usual reference point.

from the ERM, represents a substantial easing of monetary conditions. 1/ However, short- and long-term interest rates remain positive in real terms: real short rates in January 1993 were of the order of 2-3 percent, while real long rates were of the order of 4-5 percent.

3. Developments in monetary policy indicators

The U.K. authorities have stressed that the closer monitoring of the monetary aggregates does not represent a return to monetary targeting that was abandoned in the second half of the 1980s. The only official target remains that for M-0, although a monitoring range has been published for M-4. The purpose of the monitoring range is to indicate values of monetary growth that would, according to the Chancellor's letter to the Treasury and Civil Service Committee, give increasing cause for concern about prospective inflationary developments. In this respect, the authorities have over the past found developments in M-0 growth to be a reliable contemporaneous indicator of developments in nominal income growth.

The abandonment of monetary targeting stemmed in the mid-1980s from difficulties in interpreting velocity movements, which were subject to the destabilizing effects of financial liberalization on the demand for credit and liquid assets. The problem was particularly pronounced for the broad monetary aggregate, £M-3 (and its successor, M-4), that in the early 1980s was the most important intermediate target variable. 2/ As can be seen from Chart 17, broad money velocity underwent large gyrations in the 1970s before settling on a steep downward trend in the 1980s that was only arrested during the current recession.

Recent empirical work has shown that the movements in broad money velocity over the past decade can be explained to a large extent by developments in private sector wealth holdings. 3/ In particular, part of the gains from the rapid growth of tangible and financial assets in the liberalized financial environment of the 1980s was re-distributed to more liquid assets, such as bank deposits, that acted as a store of value. Similarly, during the current recession, as wealth has contracted, the growth in demand for bank and building society deposits has slowed considerably. The relative usefulness of M-4 for the purposes of guiding policy is, however, limited by the long delays in obtaining data on private sector wealth that might be relevant for interpreting movements in this aggregate.

1/ According to Treasury model simulations, the depreciation of sterling would have the same first year effect on real aggregate demand of a 3-4 percentage point cut in interest rates.

2/ M-4 (shown in Chart 17) includes deposits with building societies as well as cash and bank deposits that make up M-3.

3/ See, for example, Hall, Henry and Wilcox (1989).

The growth rate of M-4 began to turn down just before the start of the recession. As the recession developed, M-4 growth fell sharply from a peak of nearly 19 percent at the beginning of 1990 to 4 percent by September 1992 (Table 25 and Chart 18). In real terms, growth turned negative in the second half of 1991 for the first time since the 1980-81 recession. The main counterpart to the slowdown in growth has been a rapid deceleration in private sector credit demand that has reflected the decline in economic activity, the efforts of households and businesses to reduce their indebtedness, and a more cautious attitude to lending by financial institutions (Table 26). 1/ In particular, borrowing for house purchases has roughly halved during the recession and net consumer lending had all but dried up by 1992. Corporate borrowing has also been weak with companies making net repayments of loans during 1991 and 1992.

In the mid-quarters of 1992, growth in M-4 was only 4-5 percent, or toward to the bottom of its present monitoring range, which was its lowest rate since 1970. However, growth in the third quarter of 1992 was affected in part by the effects of the foreign exchange intervention and overseas borrowing by the public sector in September. 2/ Data for October 1992 showed a rebound in monetary growth to 5½ percent as these special factors were unwound, although growth slowed again somewhat in November 1992.

The velocity of narrow money (M-0), has been on an upward trend throughout the post-war period. This trend would be consistent with technological advances in the payments system that permit steady reductions in the proportion of cash holdings to finance transactions. Studies suggest that demand for narrow money functions are fairly stable and that M-0 is a reliable coincident indicator of economic activity.

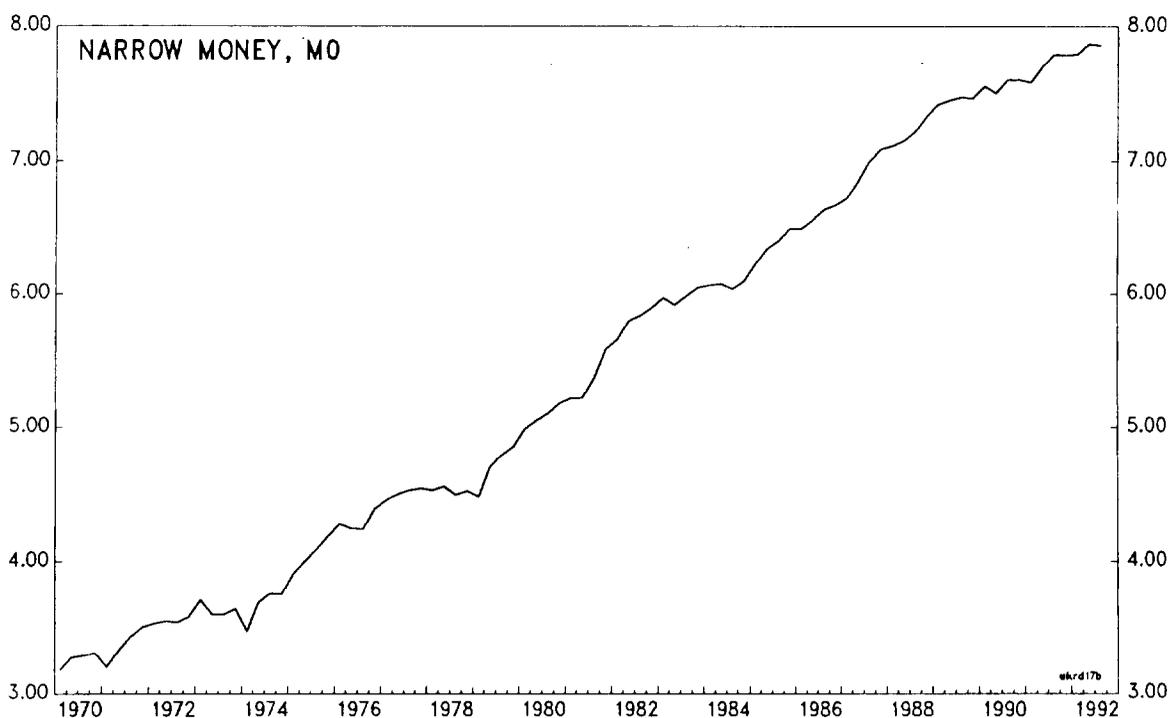
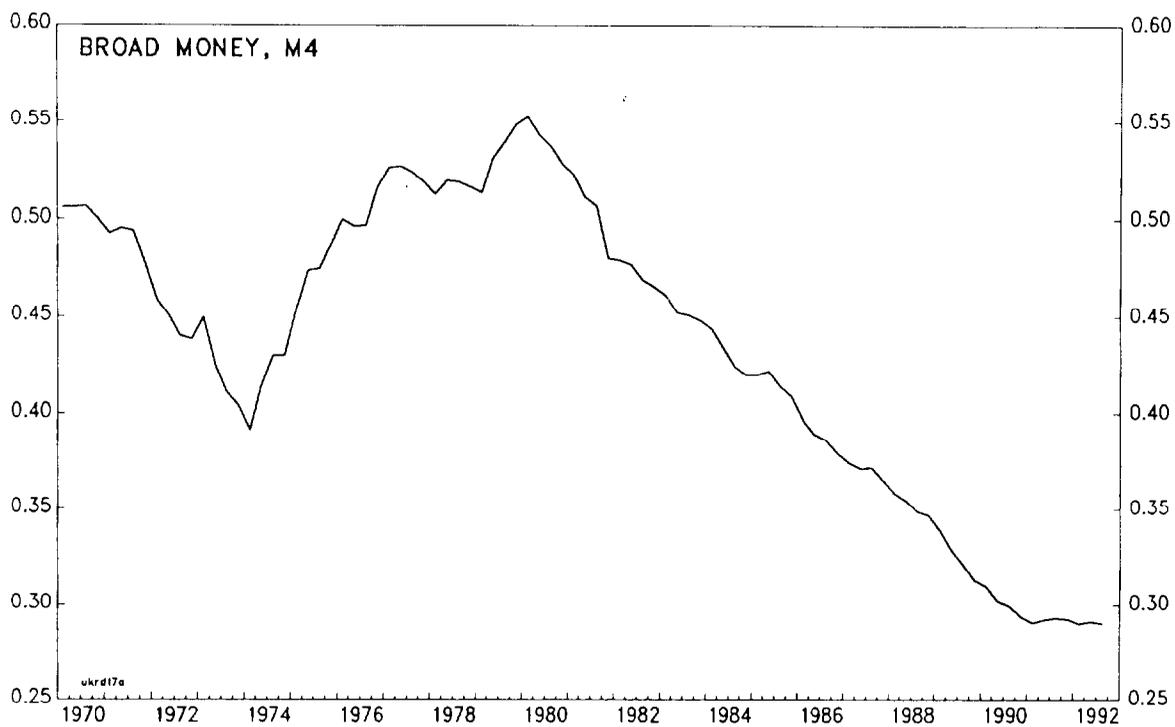
During the current recession, M-0 growth has fallen sharply from the 5-8 percent range at the end of the 1980s to around 2 percent in 1991-92. In real terms, growth has been persistently negative in keeping with weakness in overall consumption. Data for the final quarter of 1992 showed a pick up in narrow money growth to the 2½-3 percent range, bringing it above the middle of its target range.

Asset prices, and house prices in particular, are to be given more prominence in the gauging of monetary conditions. While not adding directly to measured inflation, the house price rises during the 1980s were a fundamental factor underlying the marked acceleration in consumer and business demand toward the end of that decade. Their subsequent collapse in the period 1990-92 is similarly considered to be a major factor underlying the weakness in consumer demand during the present recession. Whereas the

1/ Although the PSBR has grown rapidly during the recession, the potential impact on monetary growth has been offset by sales of debt to the non-bank private sector under the operation of the "full funding" rule.

2/ However, the effects of intervention were neutralized in large part by sterling bank lending to overseas borrowers.

CHART 17
UNITED KINGDOM
MONEY VELOCITIES
(GDP divided by money)

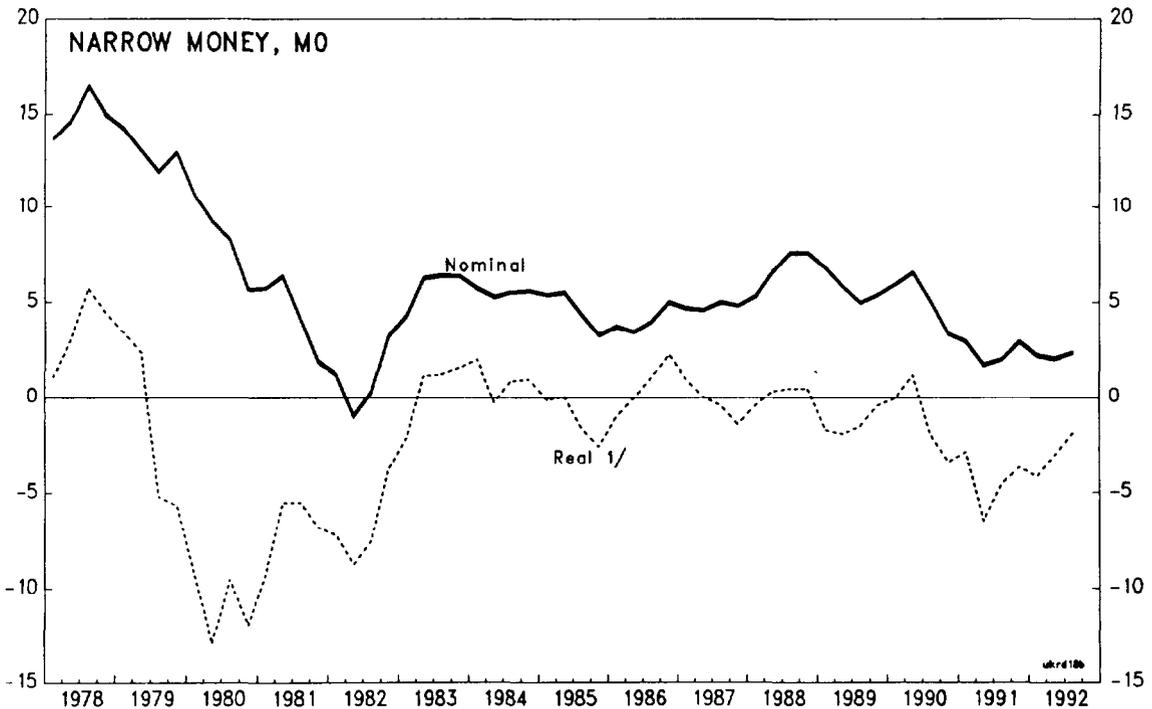
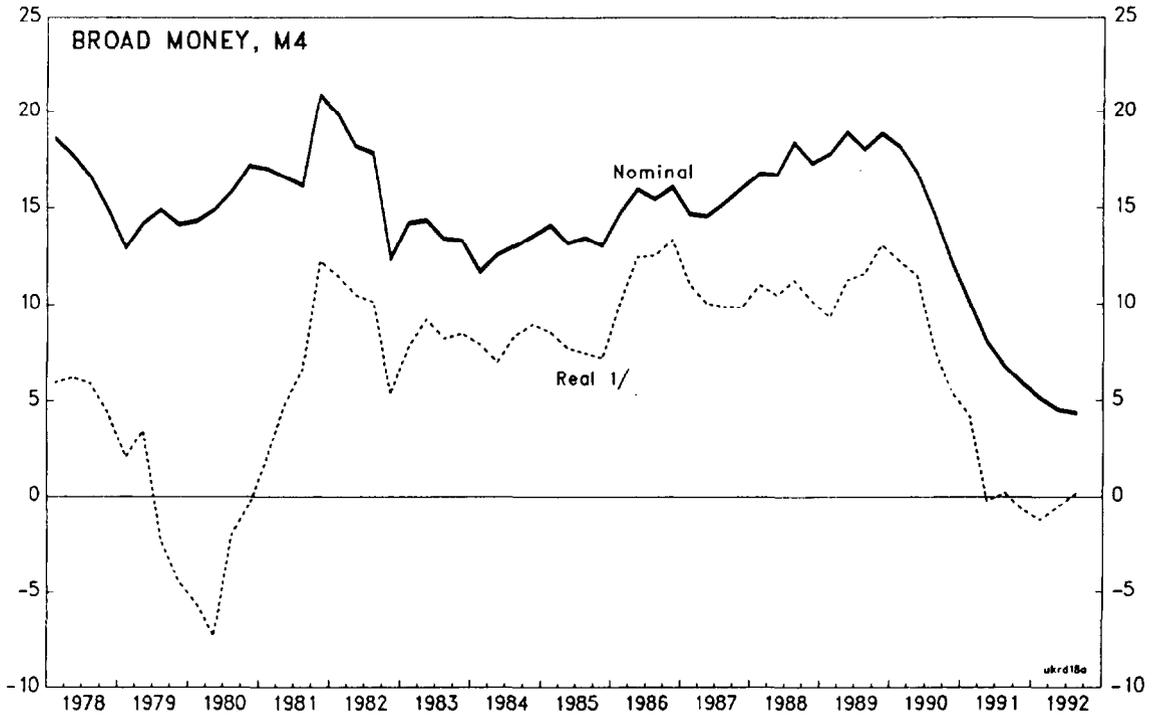


Source: CSO data tape.



CHART 18
UNITED KINGDOM

MONETARY GROWTH
(Percentage change from a year ago)

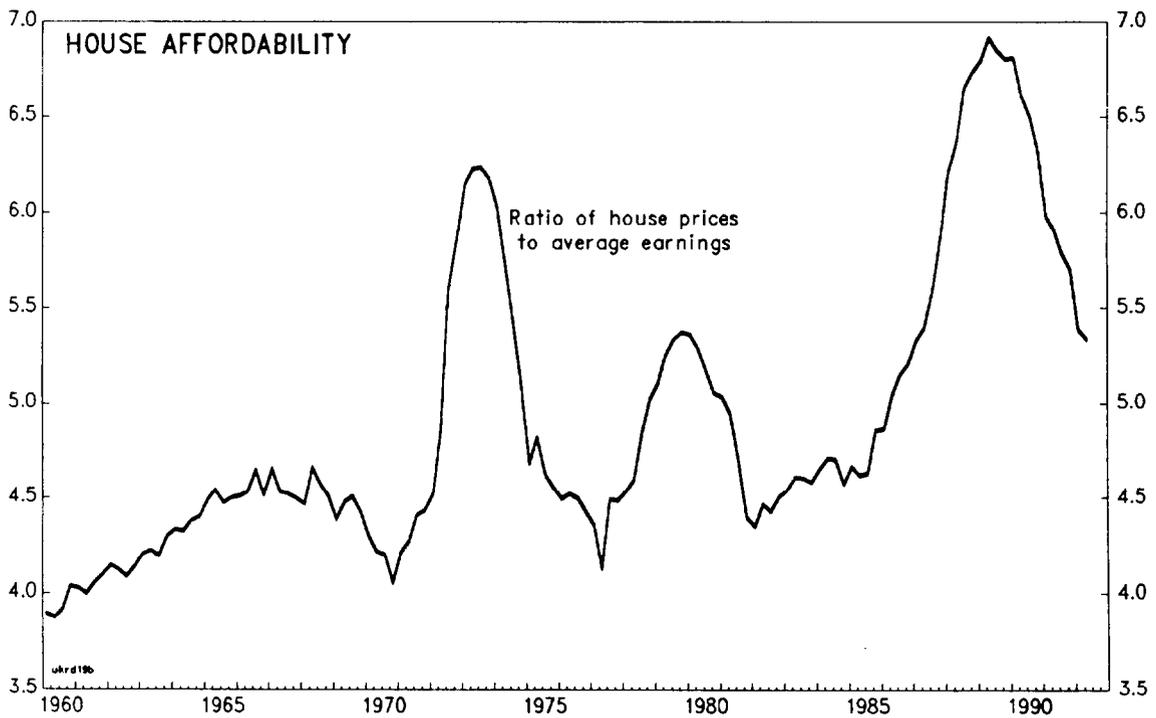
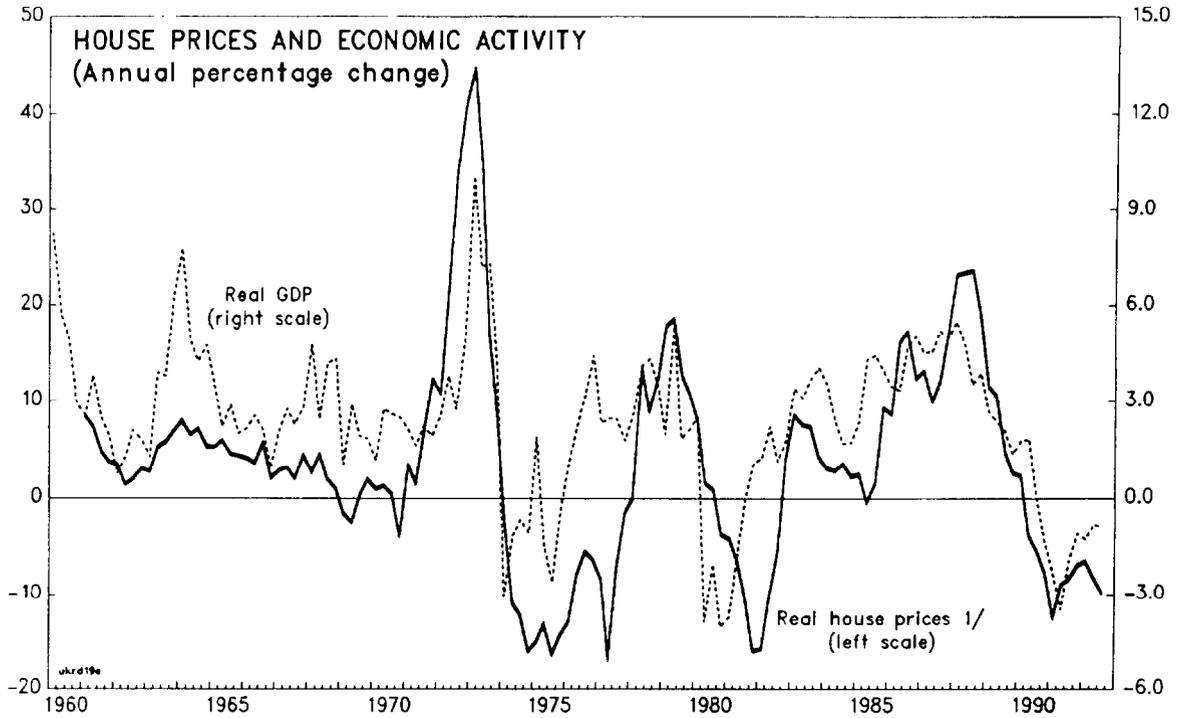


Sources: CSO data tape.

1/ Deflated by GDP deflator.



CHART 19
UNITED KINGDOM
HOUSE PRICES



Sources: CSO data tape and staff estimates.

1/ Price of new homes deflated by RPI.



recent impact on the economy of house price changes has been accentuated by a rise in home ownership, over longer periods of time it is less easy to identify a systematic relationship between house prices and the economic cycle (Chart 19).

During 1992, house price declines continued, despite the support provided to housing turnover by the temporary suspension of stamp duty on house transactions (see tabulation below). With the ending of this concession in August 1992, house price declines accelerated in September and October, but prices are estimated to have stabilized in November-December. House price declines have been particularly severe in the southeast of England, with the result that regional disparities in average house costs have narrowed during the recession. Toward the end of 1992, affordability ratios suggested that house prices had perhaps slightly overshot their long-term trend values.

Selected Asset Prices

(Percent change from one year earlier)

	<u>New house prices 1/</u>		<u>FT all share index</u>	
	£'000s	percent change	index	percent change
December 1989	78.5	10.7	1175	28.5
December 1990	80.8	2.9	1040	-11.5
December 1991	75.4	-6.7	1157	11.2
March 1992	73.6	-3.9	1199	0.7
June 1992	71.4	-7.2	1260	5.1
September 1992	70.8	-5.9	1157	-8.6
November 1992	...	...	1426	5.3

Regarding other assets, U.K. company security prices have continued to rise during the recession. Thus, although stalling in 1990, the Financial Times all share index increased by about 10 percent during the course of both 1991 and 1992. Share prices declined steeply in mid year as signs of economic recovery petered out, but rose sharply on and after September 16 when sterling's withdrawal from the ERM fostered expectations of lower interest rates.

1/ Average, mortgage approved.

The Financial Position of Financial Intermediaries in the United Kingdom

Compared with financial systems in other countries that have experienced asset price deflation and financial restructuring in the private nonfinancial sectors, financial intermediaries in the United Kingdom, though weakened, have remained in relatively stable financial position. 1/

A number of features of the U.K. financial system account for this relatively stable position. First, the U.K. authorities have for some time required banks to hold a larger share of assets as capital than required by the recently implemented Basle capital standards. For example, at the end of the first half of 1992, the "big four" banks, on average, had a risk-weighted capital-asset ratio for Tier I capital of nearly 6 percent, 50 percent above the ratio for Tier I capital required by the Basle accord. 2/ Thus, unlike in some other countries, banks in the United Kingdom have not been overly burdened to either raise capital or undergo a rapid retrenchment to meet these requirements. An additional factor that contributed to the relatively well-capitalized position was that banks in the United Kingdom enjoyed tremendous growth and profits during the expansion of the 1980s and were in a reasonably good position to provision against bad loans once the asset price deflation and recession began (Table 27).

Second, the banking system in the United Kingdom is a highly concentrated one in which a relatively small number of large institutions account for the bulk of the assets and liabilities within the system. As has been the case in other banking centers, banks in the United Kingdom have recently derived a large share of their revenues from noninterest sources, and this is likely to continue. Nevertheless, interest does account for a significant part of net revenues. Although spreads between lending and deposit rates in the United Kingdom have narrowed considerably during the course of the recession due to market pressures, banks, and particularly the large banks, have been able to maintain interest rate spreads well above those of their counterparts in the other major industrial countries. For example, interest rate spreads at the "big four" banks narrowed from an average of about 5½ percentage points during 1983-87 to less than

1/ See Annex I of both the May 1992 and the October 1992 World Economic Outlook for an analysis of the rapid growth and restructuring of the financial sectors of key industrial countries in recent years.

2/ See British Bankers Association, Annual Abstract of Banking Statistics, 1992.

4½ percentage points at the end of the first half of 1992. ^{1/} By contrast, bank interest margins in the United Kingdom were half those in the United States and Japan during the first half of 1992.

Third, the banking system has a wide regional network of branches throughout the United Kingdom that has allowed the banks, and particularly the larger banks, to maintain profit margins while at the same time diversifying portfolios. Moreover, even though several categories of bank loans have been hard hit by the recession, most notably in loans to the commercial real estate sector, most of the portfolio of bank loans is to small business in the commercial and industrial sector. While this sector was also hard hit during the recession, it adjusted relatively quickly and is currently generating net financial surpluses after generating financial deficits for some time. This sector has been able to maintain its debt-service payments and is likely to continue to do so unless the recession continues for a considerable period of time. All of these factors together have allowed the banking system in the United Kingdom to maintain profits to some extent, while at the same time provisioning against bad loans.

The building societies have also emerged from the recession in a reasonably stable financial position. They, too, were extremely well capitalized before the recession. The combination of financial deregulation and liberalization during the 1980s and their unique position in the United Kingdom to provide mortgage lending to the household sector allowed them to grow very rapidly in what, in the event, was a very profitable expansion of mortgage credit. Thus, even though the personal sector has been hard hit by the decline in housing prices, which has continued during the fourth quarter of 1992, and foreclosures have reached record highs, the building societies have been able to provision against these loan losses while at the same time maintaining capital well above the Basle standards. Moreover, while a large percentage of new home buyers since 1990 now have negative home equity--a position in which their outstanding mortgage debt exceeds the market value of their property--there are few alternatives to home-ownership and so most homeowners are likely to maintain ownership and maintain debt-service.

In addition to their well-capitalized position, it has become the practice of building societies to require buyers of new homes to also purchase mortgage insurance. Consequently, the building societies have been insulated from the losses associated with personal bankruptcies and property foreclosures as a result of the requirement to insure; instead, the losses have been absorbed by the insurance industry in the United Kingdom.

While further declines in housing prices pose a potential threat to the health of the building societies they do not appear to be the overriding risk for the building societies. A more important factor is their ability to fund their current operations should the recession persist. About a third of the activities of the building societies are funded through

^{1/} Annual Abstract of Banking Statistics, 1992.

wholesale financing in the money markets. This exposure can raise difficulties if there is a widespread market perception that the building societies are likely to experience significant losses. Offsetting this concern to date, however, has been the very large capital position of the building societies which is unlikely to deteriorate unless the recession persists.

Further declines in housing prices are also unlikely to pose a major risk to the banking sector as only about 10 percent of their assets are held in mortgages. The main risk is elsewhere, namely, most bank loans are to the business sector and are collateralized against plant and equipment, whose values derive from the future profit of these enterprises. If the recession were to persist, the profit outlook for the business sector would deteriorate further and pose a substantial risk to the smaller banks, if not the larger banks.

VI. Labor Market Performance and Policies

This chapter examines the contribution of labor market policies to recent wage and productivity developments. It concludes that the labor market reforms of the past decade have improved the industrial relations climate and have helped to spur productivity growth. However, their impact on wage flexibility has been less obvious as suggested by the relatively predictable decline in earnings growth during the current recession. The remainder of this chapter reviews the labor market reforms of the 1980s, examines the evidence for their effects on wage and productivity trends, and analyses the empirical evidence on increased wage flexibility during the current cycle.

1. The labor market reforms of the 1980s

During the 1980s, a number of basic labor market reforms were adopted, which were directed mainly at various aspects of collective bargaining. ^{1/} This legislation included the Employment Acts of 1980 and 1982, which dealt with the trade unions' civil liabilities with respect to fines; the Trade Union Act of 1984, which reformed the use of ballots in union decision making; the Employment Act of 1989, which made it more difficult for shop stewards to organize multi-plant bargaining; and the Employment Bill of 1989, which concentrated on the control of unofficial strikes, a ban on all secondary action, and pre-entry closed shops.

The legislation aimed at decentralizing wage bargaining with the objective of making wage settlements more responsive to labor market conditions in general and to firm specific factors in particular. In addition, it aimed at improving the industrial relations climate through banning unofficial strikes, secondary picketing, and the practice of "closed shops". In part as a consequence of these reforms, along with the relative contraction in manufacturing employment, there has been a decline in the role of trade unions in the U.K. and a lower incidence of strike activity (see tabulation below).

^{1/} For a more detailed analysis of the various trade union legislation enacted in the U.K. in the 1980s, see Brown and Wadhvani (1990) and Mayhew (1991).

Average Trade Union Membership and Strike Activity

(In thousands)

	<u>Union membership</u>	<u>Days lost through strikes</u>
1970-74	11,380	14,082
1975-79	12,634	11,648
1980-84	11,775	8,570
1985-89	10,473	3,940
1990	9,947	1,903
1991	...	761

During the same period, a variety of supply side reforms were also introduced aimed at improving incentives to work and at improving the quality of the workforce. The reforms designed to influence the levels of voluntary unemployment consisted mainly of changes in the tax and benefit policies. Thus, by 1991 the highest marginal rate of income tax had been reduced to 40 percent from 83 percent in 1979. At the same time, far-reaching reforms were made to benefit policies, which affect the lower income groups and which had reduced the incentives to work. A basic objective of those reforms was to reduce the effective marginal tax rates on entering employment and to ensure that it was more advantageous to work than to receive income support. Moreover, the benefit system was altered to assist people to accept employment, including part-time employment. Measures were also taken to encourage regional mobility, including the provision of assistance to people who need to travel outside their immediate home in order to find work.

It is difficult to find unambiguous empirical measures to gauge the success of these programs. However, one indirect measure, which can provide some indication about involuntary unemployment, is the participation rate. Data from the Employment Gazette shows that while male participation rates declined from 76.5 percent in 1981 to 74.2 percent in 1990, female participation rates increased from 47.6 percent in 1981 to 52.8 percent in 1990.

Regarding measures to improve the quality of the labor force in the U.K., there is wide agreement that the U.K. compares unfavorably with its major competitors at most levels of vocational education and training. 1/ It has been estimated that only about 55 percent of sixteen-year-olds continue with higher education in the U.K. compared with substantially

1/ See Mayhew (1991) and the articles on Education and Training in the Autumn 1988 issue of the Oxford Review of Economic Policy (Vol. 4, No. 3).

higher figures in other OECD countries. In 1986, only a third of 16-18-year-olds in the United Kingdom participated in full time education and training, while 64 percent participated in both full- and part-time training. This latter figure compares with 90 percent for Germany and 79 percent for Japan. Moreover, for 1988 it was estimated that as much as 63 percent of the British workforce had no vocational qualifications whatsoever, which compared most unfavorably to corresponding figures in continental Europe (see tabulation below). There, was, however some improvement by the late 1980s as a consequence of the training initiatives launched by the Government. By 1989, the percentage of 16-18-year-olds participating in education and training had risen to 70 percent.

Vocational Qualifications of the Workforce in 1988

(In percent)

	Britain	Germany	Netherlands	France
<u>Total</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
University Degrees	10	11	8	7
Intermediate	27	63	57	40
No Vocational Qualifications	63	26	35	53

Source: National Institute Economic Review, May 1992, quoted in Layard et al (1992).

In 1983, the authorities introduced a Youth Training Scheme (YTS) as a one-year traineeship, which included elements of planned work experience combined with a minimum of 13 weeks off-the-job further education. The duration of the YTS was extended to two years in 1986 and replaced by the more comprehensive Youth Training programme (YT) in 1988. The needs of adult training were met by the Community Programme, which was, however, more of a job-counselling scheme than a training scheme and which was replaced by the Employment Training program in 1988.

In 1990, the responsibility for running the YT and Employment Training programs was transferred to the Training and Enterprise Councils (TECs). The TEC is a system in which employers could contract with the government to plan and deliver training and to promote and support the development of small business and self-employment within their area. This was to enable the Government's major training programs to be tailored to local needs. Almost 90 percent of the organizations offering work experience under the YTS are in the private sector.

Since 1987/88, public expenditure on "off-the-job" vocational education has declined in real terms (see tabulation). This is reinforced by the November 1992 Autumn Statement's figures on spending on employment related measures, which envisages a further slight fall in real terms on employment-related spending up to 1995-96. Other than the inadequate government expenditure on employment and training, criticism has been voiced about the

heavy dependence for the provision this training has on the enterprises themselves, as in the case of the TECs, on grounds of externality arguments.

Public Expenditure on "Off-the-Job" Vocational Education and Training

(In thousands of pounds)

Year	Local Authority Expenditure	YTS (est.)	Total	Total (1991 prices)
1987/88	1,231	235	1,466	1,944
1988/89	1,400	266	1,666	2,016
1989/90	1,527	251	1,778	2,125
1990/91	1,570	211	1,781	1,905
1991/92	1,644	215	1,859	1,859

Source: Layard et al (1992).

Government supply side measures were backed up in the 1980s by a number of initiatives to improve job search, the most important of which was the Restart program. Launched in 1986/87, Restart provides interviews for those who have been unemployment claimants for 6 months or more with the aim of informing them about job and training opportunities. Cohort studies suggest that Restart has helped to reduce the length of time on the unemployment register and to raise the amount of time that participants spend on employment training schemes. 1/ By end-1992, more than 14 million Restart interviews had been conducted.

2. Wages and productivity trends since 1980

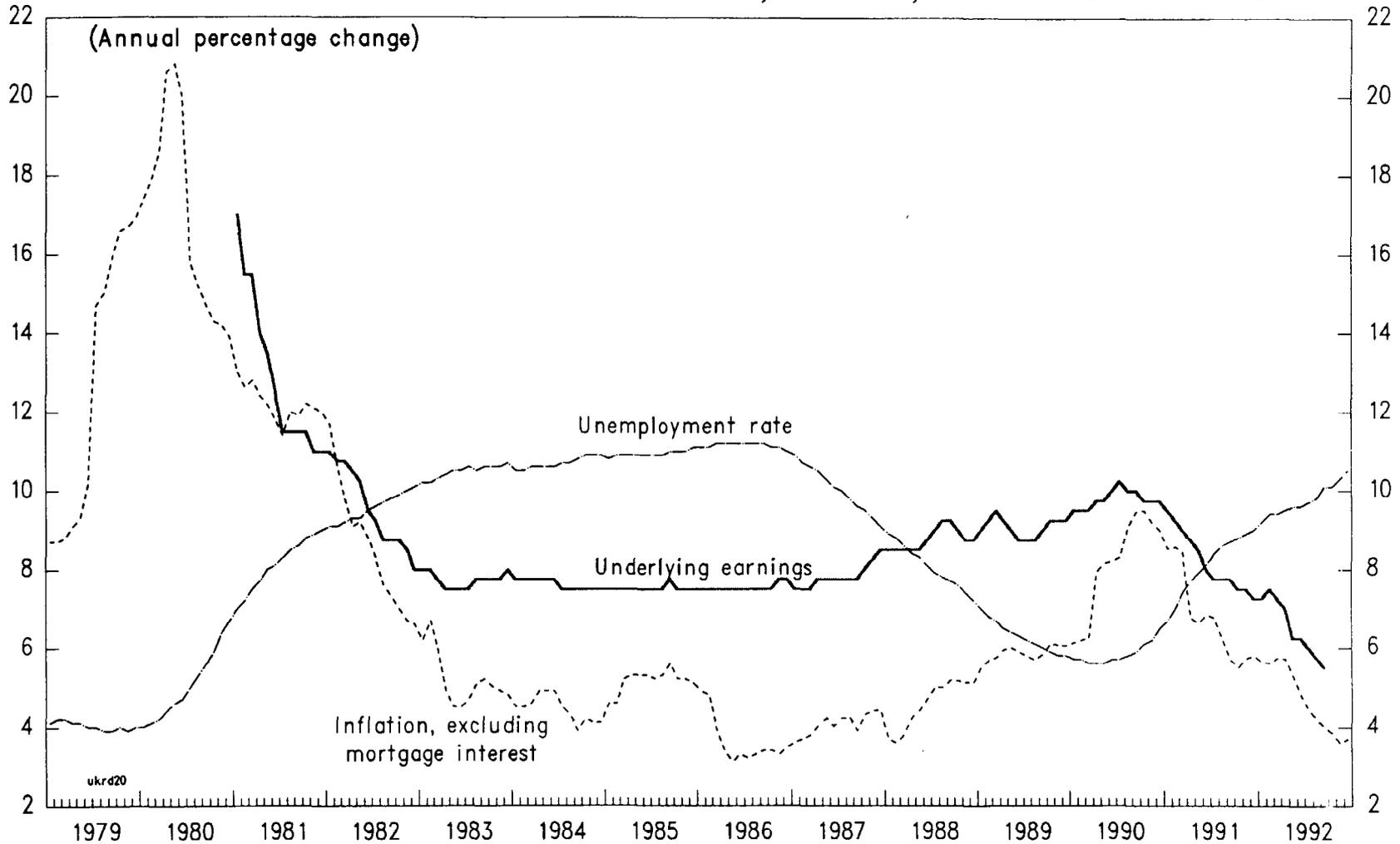
Despite the labor market policies and a marked decline in the growth of earnings at the start of the 1980s, underlying earnings continued to increase by around 7½ percent a year until 1987. Thereafter, in response to a tightening in the labor market, underlying earnings rose by almost 10 percent by early 1990 (Chart 20). Moreover, the growth of average earnings in the U.K. was high in the 1980s relative to that in other major industrial countries in spite of high rates of unemployment (Chart 21).

This relatively strong underlying growth of average earnings took place despite the achievement of a noticeable shift toward single employer bargaining on a number of items of pay and work conditions (see tabulation below). It therefore remains open to question as to whether the move to

1/ See Department of Employment, Employment Gazette, October 1992.

CHART 20
UNITED KINGDOM

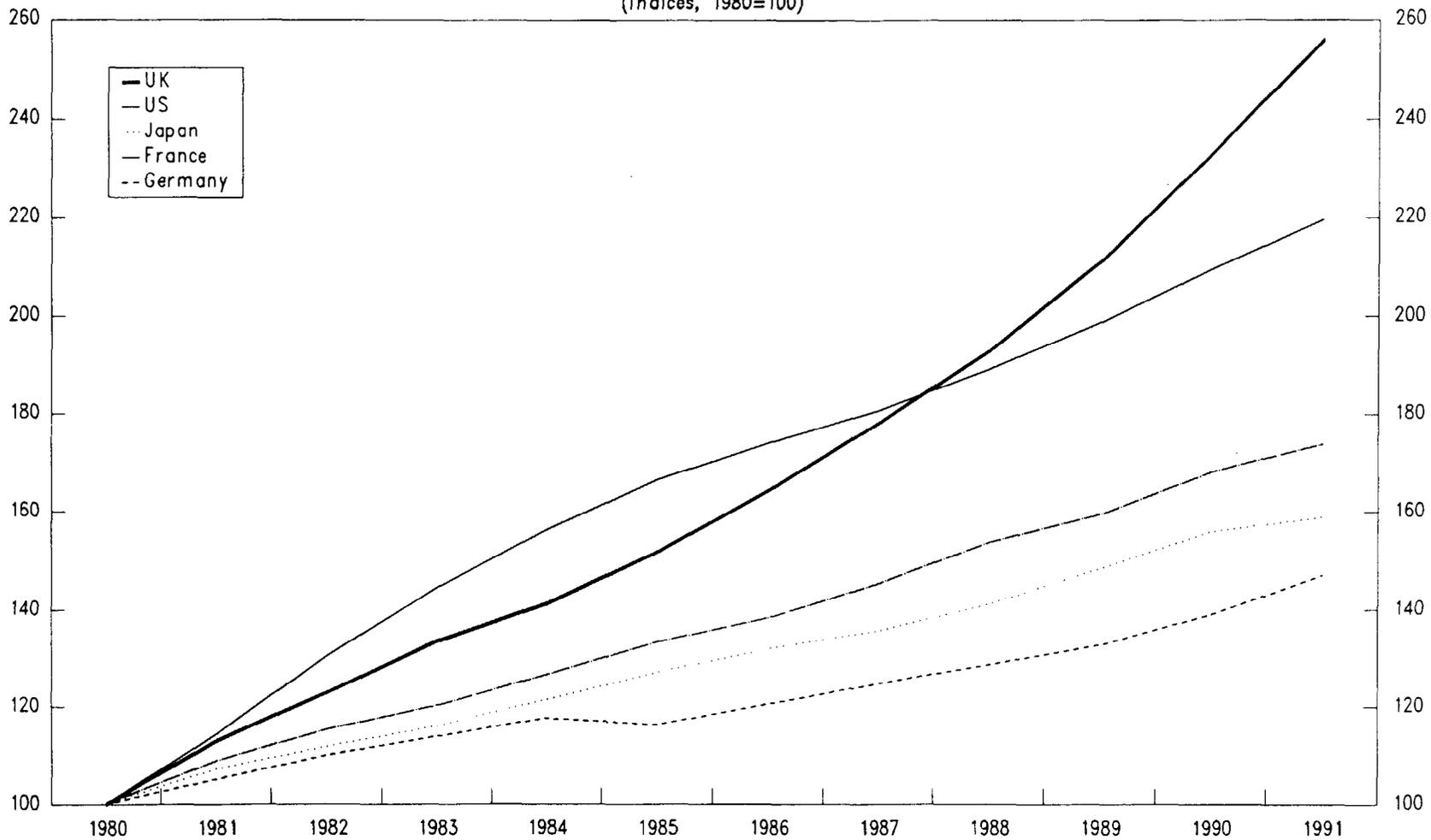
RECENT DEVELOPMENTS IN EARNINGS, PRICES, AND UNEMPLOYMENT



Source: CSO, Economic Trends.



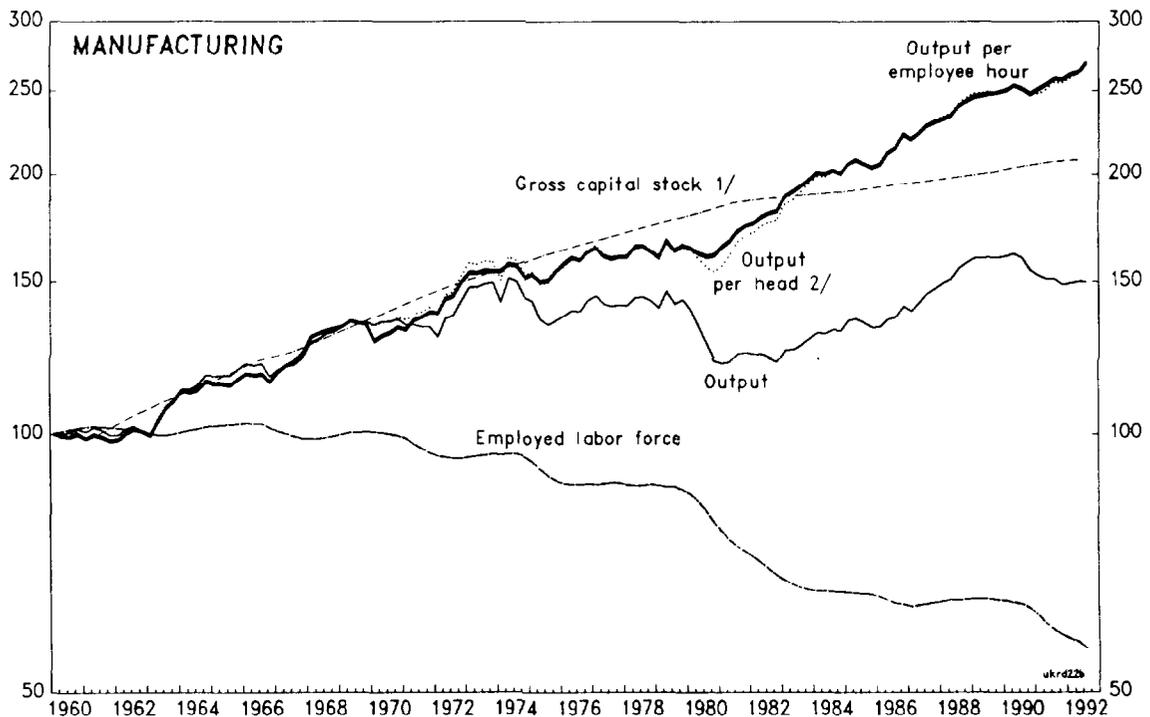
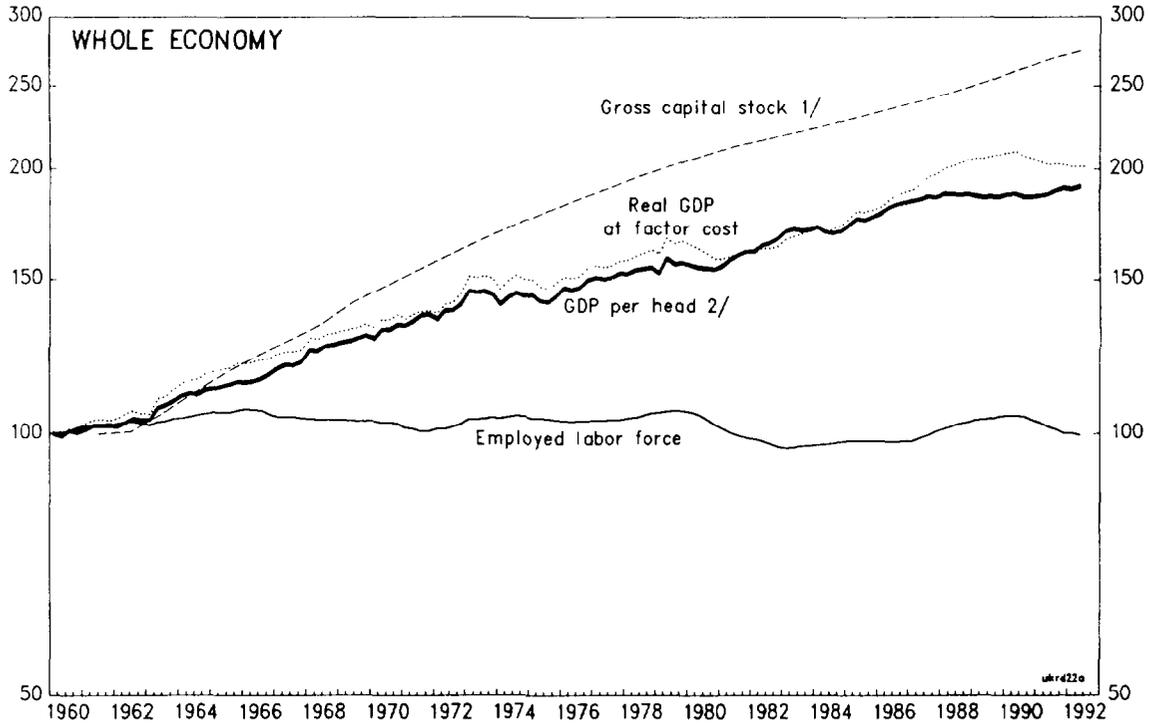
CHART 21
 UNITED KINGDOM
 AVERAGE EARNINGS IN SELECTED OECD COUNTRIES
 (Indices, 1980=100)



Source: National Institute of Economic Research, August 1992.



CHART 22
UNITED KINGDOM
PRODUCTIVITY TRENDS, 1960-1992
(1960 Q1=100; logarithmic scale)



Sources: CSO, Economic Trends, United Kingdom National Accounts.

1/ At 1985 replacement cost.

2/ Per person in employed workforce.



greater decentralization has brought with it greater wage flexibility. ^{1/} In particular, the United Kingdom labor market might be characterized as falling somewhere between the highly decentralized and highly centralized wage bargaining systems that the recent academic literature has suggested as the two most conducive cases to high wage responsiveness to labor market conditions. In this mid-way situation, unions might be more concerned about the employed "insiders" rather than the unemployed "outsiders". ^{2/}

Decentralization of Wage Bargaining on Different Items of Pay

(In percent)

	<u>Basic Pay</u>		<u>Overtime Pay</u>		<u>Shift Pay</u>		<u>Hours of Work</u>	
	1979	1986	1979	1986	1979	1986	1979	1986
<u>Total</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Single Employer	53	87	48	73	51	76	47	64
Multi-Employer	12	4	32	18	27	13	35	25
Multi-Level	35	9	20	9	22	11	19	11

Source: CBI data quoted by Purcell (1991).

An alternative view has been suggested by Soskice (1990), who argues that what really matters for controlling wage inflation is not so much the question of whether unions are centralized or decentralized, as the degree of effective coordination of wage settlements by employers. The main problem with the U.K. labor market, in this view, is the asynchronous structure of wage settlements and the way to increase labor market responsiveness is to aim at a greater degree of coordination of wage settlements.

Whereas the evidence that labor market reforms improved wage flexibility in the 1980s is thin, the likelihood that they helped to promote faster labor productivity growth, especially in the manufacturing sector, appears more compelling. Thus, between the output peaks of 1979 and 1989, labor productivity in manufacturing grew by over 50 percent or significantly faster than that for the economy as a whole (Chart 22). Moreover, as suggested by the tabulation below, long-run studies on labor productivity in the United Kingdom are unanimous about a marked break in trend manufacturing productivity in the 1980s. After decelerating in the 1970s, the trend rate

^{1/} A recent study by Nickell and Wadhvani (1990) suggests that the response of wages to unemployment is broadly similar for both union and non-union firms in the U.K., suggesting that high wage inflation is not simply a consequence of lack of further de-unionization.

^{2/} For more details on the insider-outsider theories, see Lindbeck and Snower (1988).

of growth of manufacturing labor productivity underwent a significant acceleration in the 1980s.

Manufacturing Productivity Estimates

(Annual average percentage change)

	1960s	1970s	1980s
Henry (1988)	2.0	1.1	3.0
Darby and Wren-Lewis (1992)	3.0	0.5	4.0
Cuthbertson & Gasparro (1991)	..	1.3	2.3
Mathews and Feinstein (1990)	3.7	1.1	4.2
Kendrick (1990)	3.5	1.5	2.6
O'Mahony (1992)	3.7	0.6	4.1

Source: Unpublished Bank of England paper by Dhar, Fisher and Henry (1992).

Both the deceleration of productivity growth in the 1970s and the acceleration in the 1980s would be consistent with improvements in the industrial relations climate. Thus, whereas the 1970s were marked by a high degree of industrial disputes, the labor market reforms of the 1980s provided a reforming shock to the industrial relations climate. In particular, by tightening discipline in the workplace, the reforms made both workers and managers cooperate to a much greater extent than had happened in the past. For example, workers were willing to accept new flexible working practices and a lot of reorganization and restructuring took place in manufacturing during this period. 1/ As indicated above, the average number of stoppages reported due to industrial disputes came down sharply from a high of about 2,900 per year during 1970-74 to about 500 per year during 1989-91.

It would be wrong, however, to attribute all--or even most--of the improved manufacturing productivity performance to the labor market reforms. 2/ In particular, the shakeout of the manufacturing sector that followed the exchange rate appreciation of the late 1970s would also have played a significant role. Indeed, the increase in the growth of labor productivity was largely confined to the manufacturing sector. A recent study by UBS Phillips and Drew (1992) estimates the growth of productivity in the service industries between 1981 and 1992 at 0.7 percent, in contrast to a 4.6 percent growth of manufacturing labor productivity over the same

1/ For more details, see the papers on labor markets in the Spring 1991 issue of the Oxford Review of Economic Policy (Vol. 7, No. 1).

2/ For an extended analysis of long-run trends in productivity, see United Kingdom--Selected Background Issues (SM/92/22), February 1992.

period. This discrepancy is only partly explained by the fact that the labor market reforms had their maximum impact on the manufacturing sector, which was most affected by industrial relations problems in the 1970s.

3. Empirical evidence on wage flexibility

From a theoretical perspective, the labor market reforms might have been expected to lead to either a reduction in the NAIRU or to a steepening of the Phillips curve. The former would imply that a given degree of labor market slack, measured by the unemployment rate, would exert greater downward pressure on wage developments. The latter would imply that a given gap between actual unemployment and the NAIRU would imply a more rapid adjustment in wages.

Evidence for a shift in the NAIRU was reviewed in the Selected Background Issues paper of last year's U.K. Article IV consultation (SM/92/22). That review noted that, whereas the NAIRU probably rose during the 1970s and the early 1980s, the empirical literature leaned to the view that the NAIRU had fallen in the second half of the 1980s. In particular, the work by Layard and his associates indicated a fall of about 2 percentage points in the NAIRU between the first half of the 1980s and the end of the decade, at which date the NAIRU was estimated at close to 8 percent of the workforce. However, the analysis was complicated by the presence of endogenous influences on the NAIRU, such as real exchange rate and terms of trade changes, and by the presence of persistence (hysteresis) effects. These influences made it particularly difficult to detect permanent structural shifts in either the NAIRU or in wage flexibility.

To test more general evidence of changes in wage behavior as a result of labor market reforms, the staff has estimated its own wage equation. The equation is based on a wage-bargaining framework in which the growth of wages is determined by expected price inflation, by labor market conditions and productivity growth, as well as by supply side and structural factors. Labor market conditions are proxied by the level of short-term unemployment (defined as those on the register for less than one year) on the assumption that those unemployed for an extended period of time have a smaller impact on wage settlements. This would be consistent with both some theoretical treatments of the hysteresis phenomenon and with empirical findings. ^{1/}

The short-run properties of the equation, which is estimated in error correction form, are similar to an inflation-augmented Phillips curve in which the rate of growth of wages is determined by the level of short-term

^{1/} See, for example, Nickell (1987). In general, U.K. wage equations exhibit a strong degree of hysteresis (see Holmlund (1991)) in which the coefficient on the change in unemployment tends to dominate the coefficient on the level of unemployment. This feature, confirmed by staff regression analysis, is also a feature of the Treasury's forecasting model.

unemployment and expected "headline" retail price inflation. 1/ In the long run, wages are homogeneous in prices and productivity. 2/ The equation would predict that a 100,000 increase in short-term unemployment would reduce wages by 0.4 percent in the short run and by 1.1 percent over the longer run. This would be on the high side of the range of estimates from wage equations embedded in large scale econometric models of the U.K. economy (see tabulation below). However, it should be pointed out that in the staff's equation the measured effect depends on the composition of the change in unemployment as well as on the aggregate change.

Long-term effect of 100,000 fall in unemployment 3/

	<u>Percent change in earnings</u>
London Business School <u>4/</u>	1.4
National Institute	0.4
H.M. Treasury	0.4
Bank of England	0.2
Liverpool	0.5
Oxford Economic Forecasting	0.2
Staff equation (fall in short-term unemployment)	1.1

The staff was unable to find significant supply side effects on wages, other than from changes in tax rates and productivity growth. 5/ In particular, a union membership variable did not have a significant coefficient. Nevertheless, even without many variables to capture potential structural shifts in labor market behavior, the staff's equation has fairly stable parameters over a wide range of sample periods. This would suggest there was little measurable shift in wage flexibility during the 1980s. Tests for parameter stability after the third quarter of 1990, when the

1/ Expectations were assumed to be essentially adaptive as more forward looking assumptions were not supported by the data. See the Annex to this chapter for a detailed specification of the equation.

2/ In this respect, the equation resembles the target real wage equation of Sargan (1964), which is often cited as an early error correction model.

3/ Single equation properties. Source: Fisher et al (1990).

4/ Assumes the fall in long-term unemployment is 1½ times as great as the fall in total unemployment.

5/ As described in Layard et al (1991), taxes enter the equation as a composite "tax wedge" that includes VAT, income tax and social security contributions.

United Kingdom joined the ERM, also failed to detect a structural break suggesting that announcement or credibility effects were at best small. 1/

The staff wage equation, in conjunction with a simple price equation, can be used to provide an explanation for developments in wage and price inflation during the current recession. The price equation assumes that retail prices, excluding mortgage interest, are a mark up on whole economy unit labor costs and imported goods and services prices. In the long run, the weight on unit labor costs in the price equation is 0.63, while that on imported costs is 0.31 implying approximate homogeneity between prices and costs. The high weight on imports would reflect the large share of imports in GDP. The model is completed with an identity linking the price variable and mortgage interest rates to produce the headline RPI used in the wage equation. 2/ Given that wages are homogeneous with prices, the model has the long-run property that a change in import prices would be almost fully passed through to domestic prices.

The model was used to evaluate the contribution to wage and price deflation of changes in unemployment, interest rates, import prices, taxes and productivity during the recession period from mid-1990 to the third quarter of 1992. The results, summarized in the tabulation below, indicate that these factors can provide an adequate explanation of the decline in inflation during the recession. In keeping with the stability test results reported above, there is no need to appeal to credibility effects due to the ERM to account for unexplained declines in inflation.

1/ Because they are based on a short sample period, the tests are not very powerful. However, they would agree with other analyses of the ERM such as Egebo and Englander (1992) and Anderton and Barrell (1991) that find little evidence of labor market credibility effects in most ERM countries.

2/ The Treasury model also assumes that headline inflation is the appropriate determinant of wages.

Explaining the Fall in Inflation During the Recession

(In percentage points)

	Headline RPI inflation	Average earnings growth
<u>Change, peak to trough 1/</u>	<u>-6.8</u>	<u>-5.0</u>
due to:		
interest rate cuts	-3.4	-2.7
rise in unemployment	-1.9	-3.2
fall in import prices	-1.9	-1.5
changes to taxes	0.6	0.5
rise in productivity	-0.6	-0.4
unexplained	0.4	2.0

The model would suggest that about two thirds of the 5 percentage point fall in earnings growth would be attributed to an approximate 1 million rise in the level of short-term unemployed. Cuts in interest rates, that reduced headline inflation considerably, and declining import prices are also likely to have played a significant role in reducing earnings growth, while changes in productivity and taxes would have had a negligible impact. For its part, the fall in price inflation is also broadly explained by cuts in interest rates, the fall in unemployment, and by lower import prices. Interestingly, the fall in import prices had perhaps as large an effect on domestic inflation as did the fall in unit labor costs due to the rise in unemployment during the recession.

1/ Peak 1990 quarter three to 1992 quarter three. Price inflation and earnings growth measured by percentage change from four quarters earlier.

The Wage-Price Model

This annex provides details of the staff's wage and price equations and the assumptions used to analyze the factors contributing to the decline in inflation during the recession.

The wage equation is as follows:

$$\begin{aligned} \Delta \ln W = & 0.612 \Delta \ln P_{-1} + 0.266 \Delta \ln TAX - 0.037 U^{st} - 0.330 \ln(W/(P*PROD))_{-4} \\ & (11.1) \quad (4.8) \quad (7.0) \quad (5.6) \\ & - 0.025 D1 + 0.127 D2 - 0.016 D3 - 1.388 \\ & (2.4) \quad (6.9) \quad (1.7) \quad (5.3) \end{aligned}$$

$$R^2 = 0.86; DW = 1.02; F(40) = 43.1 (55.7); F(8) = 13.1 (15.5)$$

where W represents average whole economy earnings (index, 1985=100); P, the "headline" RPI (index, 1985=100); TAX, an average tax wedge (in percent); PROD, whole economy output per man (index, 1985=100); and U^{st} , the number of unemployed who have been on the register for less than one year (in millions). D1, D2, and D3 are dummy variables taking the value 1 in the periods 1977 quarter one to quarter four, 1975 quarter one, and 1984 quarter one to four, respectively; and zero in other periods. The notation $\Delta \ln$ represents a four quarter change in the logarithm of the variable. T-statistics are in parentheses. F(n) represents a test for parameter stability in the last n periods of the sample; critical X^2 values at the 95 percent significance level are in parentheses.

The equation was estimated using OLS over the period 1971, quarter one to 1992, quarter three. In keeping with its error correction form, the change terms (" $\Delta \ln$ ") provide short-term dynamic responses of earnings to changes in the explanatory variables while the long-run response of earnings is determined by the stabilization term (last term on first line). The equation passes the tests for parameter stability in the periods after 1982 and 1990 quarter three.

The price equation is as follows:

$$\begin{aligned} \ln PXM = & 0.720 \ln PXM_{-1} + 0.175 \ln(W/PROD) + 0.086 \ln PM + 0.011 DCC \\ & (15.0) \quad (4.9) \quad (2.9) \quad (1.6) \\ & 0.003 DVAT + 0.040 \\ & (3.3) \quad (0.8) \end{aligned}$$

$$R^2 = 1.00; DH = 0.13$$

where PXM represents the RPI, excluding mortgage interest (index, 1985=100); PM, the deflator for imports of goods and services (index, 1985=100); DVAT, the VAT rate (in percent); and DCC a dummy variable for the community charge equal to one in 1990 quarter two and thereafter scaled in line with the value of the community charge collected. DH is the Durbin-h statistic. In the equation, prices have long-run elasticities of 0.63 with respect to unit labor costs (W/PROD) and 0.31 with respect to import prices.

The two equations, plus a linkage identity between mortgage interest rates, the RPI excluding mortgage interest and headline inflation, form a simple wage-price model. This model was simulated over the period 1990 quarter three to 1992 quarter three under differing assumptions about the exogenous variables in order to provide a decomposition of the factors behind the fall in inflation during the recession. The contributions to inflation were measured by the difference from the simulated inflation rates and the actual inflation rate in 1992 quarter three. The simulation assumptions were as follows:

--short-term unemployment remained at its 1990 quarter two level instead of rising by 800 thousand;

--import prices would have risen at a 4 percent rate instead of falling at 2½ percent annual rate;

--interest rates had remained at their 1990 level instead of falling by 5 percentage points;

--productivity growth was ½ percent a year instead of 1 percent;

--the VAT rate remained at 15 percent instead of increasing to 17½ percent and the community charge unchanged.

Table 1. United Kingdom: Real Output and Its Major Components
at Constant Factor Cost

(Percentage change over preceding year)

	1985 Weights	1987	1988	1989	1990	1991	1992 <u>1/</u>
Agriculture, forestry, and fishing	19	-3.0	-1.5	6.0	4.9	2.8	-3.4
Total production and construction	403	6.5	8.5	4.0	0.5	-6.9	-4.0
Manufacturing	238	5.2	7.0	4.3	-0.5	-5.3	-1.1
Construction	59	8.4	11.2	5.9	1.0	-8.7	-5.7
Utilities	106	-1.0	-4.4	-9.8	-0.7	3.8	0.6
Transportation and communications	70	7.7	6.2	5.0	2.2	-3.3	1.6
Distributive trades	134	6.6	6.9	2.3	-0.6	-3.3	-1.4
Other services	374	4.1	3.7	2.0	1.8	-0.6	-0.6
GDP <u>2/</u>	1,000	4.6	4.5	2.1	0.6	-2.5	-0.9
<u>Memorandum items:</u>							
Extraction of oil and gas	62	-2.6	-8.7	-18.5	0.1	2.1	2.9
Non-oil GDP	938	5.1	5.3	3.2	0.7	-2.6	-1.0
Consumer goods		5.2	5.3	2.3	-0.5	-3.9	0.8
Intermediate goods		2.7	1.4	-3.4	-1.1	-1.2	-0.4
Investment goods		2.4	7.9	8.4	0.9	-5.9	-3.7

Source: Central Statistical Office, Economic Trends.1/ Average for first three quarters over corresponding period one year earlier.2/ Based on output data.

Table 3. United Kingdom: Selected National Accounts Aggregates at 1985 Market Prices

	1987	1988	1989	1990	1991	1991 1/		1992 1/		
						1st half	2nd half	1st qtr.	2nd qtr.	3rd qtr.
(In billions of pounds sterling)										
Private consumption	245.8	264.1	272.9	274.7	269.2	270.2	268.1	266.8	268.1	269.1
Government consumption	76.0	76.5	77.2	79.7	81.8	81.8	81.9	81.7	82.5	81.5
Gross domestic fixed capital formation	67.8	77.4	83.0	80.5	72.3	72.9	71.8	72.5	71.9	71.8
Residential	13.5	15.5	15.3	13.6	10.8	10.7	11.0	11.4	10.0	11.0
Non-residential construction	21.7	24.9	26.3	27.1	26.4	26.7	26.2	26.0	26.9	25.4
Plant and equipment	32.6	37.0	41.4	39.8	35.0	35.5	34.5	35.1	35.0	35.4
Stockbuilding and work in progress	1.2	4.0	2.7	-1.1	-3.4	-4.2	-2.7	-1.2	-1.9	-0.8
Total domestic demand	390.8	422.0	435.8	433.8	419.9	420.7	419.0	419.7	420.6	421.7
Exports of goods and services	113.1	113.0	117.3	123.0	123.3	121.7	124.8	125.0	126.8	125.6
Imports of goods and services	113.9	127.8	137.3	138.7	134.4	133.3	135.6	139.5	143.2	142.8
Foreign Balance	-0.8	-14.9	-20.0	-15.7	-11.0	-11.6	-10.8	-14.6	-16.3	-17.1
Gross domestic product:										
Expenditure estimate	389.9	407.1	415.7	418.1	408.9	409.1	408.3	405.2	404.3	404.6
Statistical adjustment	--	--	--	-0.2	-0.3	-0.2	-0.1	-0.1	-0.0	-0.0
Average estimate 2/	389.9	407.1	415.7	417.9	408.6	409.0	408.1	405.1	404.3	404.5
(Annual percentage change)										
Private consumption	5.5	7.4	3.3	0.7	-2.0	-2.7	-1.5	-2.0	2.1	1.5
Government consumption	1.2	0.6	0.9	3.2	2.7	4.0	0.2	0.7	4.3	-4.7
Gross domestic fixed capital formation	9.6	14.2	7.2	-3.1	-10.1	-11.4	-3.0	4.7	-3.3	-0.2
Residential	4.4	15.4	-1.6	-11.1	-20.2	-22.5	5.9	18.3	-40.7	50.1
Non-residential construction	14.8	14.7	5.8	2.9	-2.4	-4.9	-3.1	4.4	16.0	-20.6
Plant and equipment	8.6	13.4	11.9	-3.9	-11.9	-12.3	-5.5	0.9	-2.1	4.8
Stockbuilding and work in progress 3/	0.1	0.7	-0.3	-0.9	-0.6	-1.2	0.7	1.0	-0.7	1.1
Total domestic demand	5.4	8.0	3.3	-0.5	-3.2	-4.2	-0.8	0.6	0.8	1.0
Exports of goods and services	5.6	-0.1	3.8	4.9	0.2	-0.0	5.1	0.1	6.1	-3.7
Imports of goods and services	7.8	12.2	7.4	1.0	-3.1	-4.9	3.5	10.8	10.8	-1.0
Foreign balance 3/	-0.6	-3.6	-1.3	1.0	1.1	1.6	0.4	-3.4	-1.7	-0.8
Gross domestic product:										
Expenditure estimate	4.8	4.4	2.1	0.6	-2.2	-2.7	-0.4	-2.8	-0.9	0.3
Average estimate 2/	4.8	4.4	2.1	0.5	-2.2	-2.7	-0.4	-2.7	-0.8	0.3
Memorandum items:										
GDP at factor cost based on:										
Expenditure data	4.6	4.5	2.1	0.7	-2.5	-3.2	-0.8	-1.8	-0.5	0.4
Income data	4.6	4.5	2.1	0.5	-2.3	-2.9	-0.7	-2.1	-0.4	0.4
Output data	4.6	4.5	2.1	0.6	-2.5	-3.1	-0.8	-1.7	-0.4	0.4
GDP at current market prices 4/	423.5	471.3	515.3	550.3	574.5	565.8	583.2	587.7	596.0	599.2
(Percent change)	(10.0)	(11.3)	(9.3)	(6.8)	(4.4)	(3.6)	(6.2)	(1.2)	(5.8)	(2.1)

Sources: Central Statistical Office, Economic Trends.

1/ Half yearly and quarterly levels or changes at seasonally adjusted annual rates.

2/ An unweighted average of expenditure, income, and output estimates.

3/ Contribution to growth of GDP (average estimate).

4/ Average measure in billions of pounds.

Table 4. United Kingdom: Selected Personal Sector Data

(In percent of GDP)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992 <u>1/</u>
Disposable income	68.8	69.5	69.7	68.9	68.0	69.0	68.5	69.1	67.8	67.9	68.7	69.4	71.1	72.7
Consumption	60.5	60.2	61.0	61.2	61.5	61.5	61.3	63.1	63.2	64.1	64.1	63.7	64.1	64.4
Saving	8.2	9.2	8.8	7.7	6.5	7.6	7.2	5.9	4.6	3.8	4.6	5.8	6.9	8.3
(savings ratio)	(12.0)	(13.3)	(12.6)	(11.2)	(9.6)	(11.0)	(10.6)	(8.6)	(6.8)	(5.6)	(6.6)	(8.3)	(9.7)	(11.4)
Net capital transfers	0.1	0.1	0.0	0.1	0.3	0.4	0.1	-0.0	-0.1	-0.3	-0.1	-0.0	0.2	0.2
Investment	4.8	4.3	4.0	4.5	4.8	4.7	4.5	4.9	5.3	6.4	5.7	5.0	4.1	3.8
of which: Dwellings	(2.7)	(2.6)	(2.4)	(2.5)	(2.5)	(2.8)	(2.6)	(2.9)	(2.9)	(3.5)	(3.3)	(2.8)	(2.4)	(2.2)
Financial balance	3.6	5.1	4.8	3.4	2.1	3.3	2.9	1.0	-0.8	-2.9	-1.3	0.7	3.1	4.1
Financial assets	125.5	132.0	136.3	148.8	160.1	174.7	180.6	201.5	202.9	206.9	228.2	216.4	232.8	222.1
Financial liabilities	39.6	39.3	42.1	46.0	50.1	54.6	57.9	62.9	67.5	72.6	76.7	80.4	82.2	80.5
Net financial assets	85.9	92.7	94.2	102.8	110.0	120.1	122.8	138.5	135.4	134.3	151.6	136.1	150.7	141.7
Tangible assets	173.4	165.6	157.0	155.3	164.6	169.6	173.5	185.9	200.8	240.8	239.7	226.2	...	...
of which:														
Residential buildings	(136.5)	(132.3)	(125.5)	(125.4)	(134.8)	(141.6)	(147.6)	(160.7)	(175.7)	(214.3)	(212.9)	(203.3)	(...)	(...)
Net wealth	305.3	298.3	286.3	291.2	306.8	317.9	323.7	350.0	362.4	401.4	415.9	385.3	393.8	...
<u>Memorandum items:</u>														
Household savings ratio	3.0	4.2	3.1	2.1	0.4	2.3	2.1	0.2	-1.2	-1.7	-1.7	0.5	2.6	...
House prices <u>2/</u>	25,036	27,986	26,717	29,604	31,977	35,127	40,117	46,332	56,746	70,946	78,508	80,763	75,357	...
Equity withdrawal/ disposable income	0.5	0.3	1.2	2.6	1.7	2.4	2.7	4.6	4.0	5.1	3.3	3.0	2.0	...

Sources: CSO, Financial Statistics, Economic Trends; and staff estimates.1/ First half of year.2/ New dwellings, mortgage approved. Data for December of each year.

Table 5. United Kingdom: Components of Personal Income

	1987	1988	1989	1990	1991	1991 1/		1992 1/		
						1st half	2nd half	1st qtr.	2nd qtr.	3rd qtr.
(In billions of pounds sterling)										
Total personal income	361.2	402.6	443.6	489.5	519.5	512.8	526.2	545.8	548.0	554.4
Wages, salaries, and armed forces pay	200.4	223.8	248.6	274.9	289.4	286.7	292.0	301.1	299.0	298.3
Employers' contributions	29.4	31.9	34.4	36.8	41.2	40.6	41.9	43.4	43.1	44.7
National Insurance benefits and other current grants from Government	52.5	54.1	56.8	62.0	71.9	68.9	74.8	78.6	80.8	83.3
Other personal income	78.9	92.9	103.9	115.7	117.0	116.6	117.5	122.7	125.1	128.0
U.K. taxes on income	43.4	48.3	53.6	61.5	63.7	63.9	63.6	71.3	66.9	65.0
National Insurance contributions	28.6	32.1	32.9	34.7	36.6	37.1	36.1	39.6	37.5	36.2
Community charge	--	--	0.6	8.6	8.2	9.2	7.1	7.1	8.2	8.2
Other miscellaneous deductions	2.1	2.3	2.4	2.6	2.6	2.6	2.6	2.6	2.3	2.4
Total personal disposable income	287.1	319.9	354.1	382.1	408.4	400.0	416.8	427.0	433.1	442.7
Real personal disposable income <u>2/</u>	263.8	279.7	292.4	299.6	298.7	298.2	299.1	301.2	302.6	306.7
Consumer expenditure	267.5	302.1	330.5	350.4	368.0	362.3	373.8	378.3	383.7	388.4
Real consumer expenditure	245.8	264.1	272.9	274.7	269.2	270.2	268.1	266.8	268.1	269.1
Durable goods	24.1	27.5	29.0	27.6	25.1	25.1	25.0	24.2	24.4	25.5
Non-durable goods	118.7	123.6	126.0	125.9	125.0	125.5	124.5	123.1	125.1	125.2
Services	103.1	113.0	118.0	121.3	119.1	119.6	118.6	119.5	118.6	118.5
Personal savings ratio <u>3/</u>	6.8	5.6	6.6	8.3	9.7	9.4	10.3	11.4	11.4	12.3
Personal financial balance <u>3/</u>	-1.1	-4.2	-1.8	1.0	4.3	3.5	5.0	5.6	5.7	...
(Annual percentage change)										
Total personal income	7.9	11.4	10.2	10.3	6.1	5.0	5.3	13.3	1.6	4.8
Wages, salaries and armed forces pay	8.6	11.6	11.1	10.6	5.3	4.8	3.7	11.6	-2.8	-0.9
Employers' contributions	5.9	8.3	7.8	7.3	11.9	17.3	6.7	9.2	-2.8	16.5
National Insurance benefits etc.	3.0	3.0	5.0	9.2	15.9	18.2	18.0	15.4	11.8	12.8
Other personal income	10.6	17.7	11.8	11.4	1.1	-4.9	1.4	17.7	7.9	9.7
U.K. taxes on income	6.3	11.3	11.0	14.8	3.6	3.1	-1.0	61.6	-22.5	-11.2
National Insurance contributions	9.5	12.1	2.5	5.3	5.7	15.5	-5.3	37.1	-19.4	-12.9
Community charge <u>4/</u>	--	--	-0.2	-2.3	0.1	1.1	1.1	-0.0	-1.0	--
Total personal disposable income	8.0	11.4	10.7	7.9	6.9	5.6	8.6	7.4	5.8	9.2
Real personal disposable income	3.5	6.0	4.5	2.5	-0.3	-2.1	0.6	2.9	1.9	5.6
Consumer expenditure	10.1	12.9	9.4	6.0	5.0	4.9	6.4	2.2	5.9	5.0
Real consumer expenditure	5.5	7.4	3.3	0.7	-2.0	-2.7	-1.5	-2.0	2.1	1.5
Durable goods	9.0	14.2	5.3	-4.8	-9.1	-12.5	-1.0	-7.5	3.6	19.4
Non-durable goods	3.5	4.2	1.9	-0.1	-0.7	-0.0	-1.5	-4.9	6.7	0.0
Services	7.1	9.6	4.4	2.8	-1.8	-3.2	-1.7	2.2	-2.9	-0.3
<u>Memorandum item:</u>										
Implied consumption deflator	4.3	5.1	5.9	5.3	7.2	7.8	8.1	4.3	3.7	3.4

Source: Central Statistical Office, United Kingdom National Accounts.1/ Half yearly and quarterly levels or changes at seasonally adjusted annual rates.2/ In 1985 prices, deflated by the implied deflator for consumers' expenditure.3/ Relative to personal disposable income.4/ Contribution to growth in disposable income.

Table 7. United Kingdom: Selected Indicators of Investment Activity 1/

	1987	1988	1989	1990	1991	1991 2/		1992 2/		
						1st half	2nd half	1st qtr.	2nd qtr.	3rd qtr.
<u>(Billions of 1985 Pounds Sterling)</u>										
Gross domestic fixed capital formation	67.8	77.4	83.0	80.5	72.3	72.9	71.8	72.5	71.9	71.8
By sector:										
Private sector	55.8	66.4	70.0	66.6	59.7	60.7	58.7	57.9	58.0	...
Residential	10.7	13.0	12.3	10.5	8.9	8.8	9.1	8.9	7.6	...
Nonresidential	45.1	53.4	57.8	56.1	50.8	51.9	49.6	49.0	50.5	...
Public sector	11.9	11.0	13.0	13.8	12.8	12.2	13.1	14.5	13.9	...
General government	7.5	6.6	8.3	9.8	9.5	8.9	10.2	10.4	9.2	...
Public corporations	4.5	4.4	4.7	4.0	3.2	3.5	3.0	3.5	3.0	...
By industry:										
Manufacturing	10.0	11.2	12.4	11.8	10.3	10.4	10.3	9.8	10.1	...
Mineral oil and natural gas extraction	1.9	1.9	2.2	2.7	4.0	3.7	4.4	4.3	5.0	...
<u>(Growth rates of real investment, in percent per annum)</u>										
Gross domestic fixed capital formation	9.6	14.2	7.2	-3.1	-10.1	-11.4	-3.0	4.7	-3.3	-0.2
By sector:										
Private sector	14.0	18.9	5.6	-4.9	-10.4	-8.4	-6.4	-4.0	0.5	...
Residential	3.6	21.1	-5.5	-14.5	-14.9	-13.3	8.3	-6.2	-47.8	...
Nonresidential	16.9	18.4	8.2	-2.8	-9.6	-7.6	-8.8	-3.6	12.0	...
Public sector	-7.2	-7.6	17.4	6.7	-7.6	-24.1	14.9	50.7	-17.3	...
General government	0.1	-11.0	24.7	18.6	-2.9	-17.0	29.4	14.0	-40.2	...
Public corporations	-17.4	-2.0	6.2	-14.5	-19.3	-30.7	-27.4	104.0	-47.1	...
By industry:										
Manufacturing	6.6	11.4	10.7	-5.1	-12.0	-12.1	-3.5	-17.4	13.7	...
Mineral oil and natural gas extraction	-22.4	0.7	11.5	25.3	48.4	70.4	45.6	-12.4	85.7	...
<u>(In percent of GDP (average estimate), calculated in nominal terms)</u>										
Gross domestic fixed capital formation	17.5	19.1	20.0	19.3	16.6	17.1	16.1	15.9	15.4	15.2
By sector:										
Private sector	14.6	16.7	17.1	16.1	13.8	14.3	13.3	12.8	12.5	...
Residential	2.9	3.5	3.3	2.8	2.4	2.4	2.4	2.3	2.1	...
Nonresidential	11.7	13.2	13.8	13.2	11.4	11.9	10.9	10.4	10.4	...
Public sector	2.9	2.4	2.9	3.2	2.8	2.8	2.8	2.9	2.5	...
General government	1.8	1.4	1.9	2.3	2.1	2.0	2.2	2.2	1.9	...
Public corporations	1.1	1.0	1.1	0.9	0.7	0.8	0.6	0.7	0.6	...
By industry:										
Manufacturing	2.6	2.6	2.8	2.6	2.2	2.2	2.2	2.0	2.1	...
Mineral oil and natural gas extraction	0.5	0.5	0.5	0.6	0.9	0.8	1.0	0.8	1.0	...

Source: Central Statistical Office, United Kingdom National Accounts.

1/ The sectoral breakdown of investment for the third quarter of 1992 and revisions for earlier quarters is not yet available. As a consequence, the sectoral breakdown presented in this table may not add to the totals presented.

2/ Half yearly and quarterly levels and changes at seasonally adjusted annual rates.

Table 8. United Kingdom: Selected Indicators of Wage Developments 1/

(Percentage changes from previous year)

	1987	1988	1989	1990	1991	1991 <u>2/</u>		1992 <u>2/</u>		
						1st half	2nd half	1st qtr.	2nd qtr.	3rd qtr.
Average earnings										
Whole economy	7.8	8.7	9.1	9.7	8.0	8.5	7.6	7.8	6.2	5.2
Manufacturing	8.1	8.4	8.8	9.4	8.2	8.7	7.8	8.6	5.9	6.2
Services	7.6	8.8	8.9	9.6	7.7	8.0	7.4	7.4	6.5	5.0
Average earnings deflated by retail prices										
Whole economy	3.5	3.6	1.2	0.2	2.0	1.0	3.0	3.5	2.0	1.5
Manufacturing	3.8	3.4	0.9	-0.1	2.2	1.2	3.2	4.3	1.7	2.5
Services	3.4	3.7	1.0	0.1	1.7	0.6	2.8	3.2	2.2	1.3
Average earnings deflated by producers' output prices										
Whole economy	3.7	4.1	3.8	3.7	2.3	2.3	2.2	3.2	2.5	1.7
Manufacturing	4.0	3.8	3.5	3.3	2.4	2.5	2.4	3.9	2.2	2.7
Unit wage costs <u>3/</u>										
Whole economy	4.5	7.2	9.5	10.0	7.8	9.4	6.3	6.0	4.2	...
Manufacturing	1.9	2.5	4.6	8.5	7.6	10.1	5.3	4.2	1.6	1.8

Sources: Central Statistical Office, Economic Trends; and Department of Employment, Employment Gazette.

1/ Great Britain.

2/ Relative to the same period in the previous year.

3/ Wages and salaries per unit of output, based on seasonally adjusted monthly statistics for earnings, employment and output.

Table 9. United Kingdom: Selected Indicators of Price Developments

(Percentage change from corresponding period of previous year)

	1987	1988	1989	1990	1991	1991		1992			
						1st half	2nd half	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.
GDP deflator <u>1/</u>											
(market prices)	5.0	6.6	7.1	6.3	6.7	7.0	6.6	6.3	5.1	4.2	...
(factor cost)	5.1	6.5	7.7	8.0	6.3	7.4	5.3	5.3	5.6	4.5	...
Retail prices											
All items	4.1	4.9	7.8	9.5	5.9	7.3	4.5	4.1	4.2	3.6	3.1
Non-food items	-1.4	5.2	8.2	9.8	6.0	7.6	4.4	4.2	4.5	4.1	3.4
Housing	8.6	8.9	20.3	21.0	-1.8	5.4	-8.5	-9.1	0.7	3.4	2.9
Excluding mort- gage interest	4.1	4.6	5.9	8.1	6.8	7.6	5.9	5.7	5.3	4.2	3.7
Tax and Price Index	2.5	2.9	7.1	8.3	5.4	6.9	3.9	3.5	3.3	2.6	2.0
Producer prices											
Input	3.1	3.2	5.8	-0.3	-1.1	-1.1	-1.1	-0.2	-1.3	-0.8	3.9
Output	3.9	4.5	5.1	5.9	5.6	6.0	5.3	4.5	3.6	3.5	3.4

Source: Central Statistical Office, Economic Trends.1/ Based on expenditure estimate.

Table 10. United Kingdom: Selected Balance of Payments Indicators

(In billions of pounds sterling)

	1987	1988	1989	1990	1991	Est. 1992 <u>1/</u>
Current Account Balance	-4.5	-16.2	-21.7	-17.0	-6.3	-10.9
Visible Balance	-11.6	-21.5	-24.7	-18.8	-10.3	-12.6
Exports	79.2	80.3	92.2	101.7	103.4	105.6
Imports	90.7	101.8	116.8	120.5	113.7	118.2
Invisible Trade Balance	7.1	5.3	3.0	1.8	4.0	1.8
Services balance	6.7	4.4	4.0	4.6	5.0	4.3
Interest, profits and dividends balance	3.8	4.4	3.5	2.1	0.3	3.1
Transfers balance	-3.4	-3.5	-4.6	-4.9	-1.3	-5.6
Net Long-term Capital Flows	14.9	-4.6	-23.8	-1.5	-12.9	-0.0
Net Direct Investment	-9.8	-8.9	-2.9	9.1	1.8	2.7
Net Portfolio Investment	24.7	4.3	-20.9	-10.6	-14.8	-2.7
Basic Balance	10.4	-20.8	-45.6	-18.5	-19.3	-14.4
Net Short-term Capital Flows	-10.6	14.0	43.1	12.6	18.6	0.4
Statistical Discrepancy	0.1	6.8	2.5	5.9	0.6	14.0
<u>Memorandum Items:</u>						
Non-oil Trade Balance	-15.7	-24.2	-25.9	-20.3	-11.5	-14.2
(As percent of GDP)	-3.7	-5.1	-5.0	-3.7	-2.0	-2.4
Current Account Balance						
(as percent of GDP)	-1.1	-3.4	-4.2	-3.1	-1.1	-1.8

Source: CSO, Financial Statistics.

1/ First three quarters at an annual rate based on seasonally adjusted data for the current account and its components; seasonally unadjusted data for the basic balance and capital account.

Table 11. United Kingdom: Merchandise Trade Indicators

(Percentage change from a year ago)

	1987	1988	1989	1990	1991	1991		1992		
						1st half	2nd half	1st qtr.	2nd qtr.	3rd qtr.
Exports										
Value										
All goods	9.0	1.5	14.7	10.4	1.7	-0.0	3.4	5.0	3.0	0.1
Non-oil goods	9.8	5.2	16.0	9.2	2.6	0.7	4.4	5.8	2.6	0.2
Volume										
All goods	5.2	1.8	4.5	6.5	1.7	-0.6	3.9	3.8	2.8	2.1
Non-oil goods	6.9	4.6	10.3	6.9	1.9	1.6	2.1	2.1	1.0	0.3
Price										
All goods	3.6	-0.3	9.7	3.6	-0.0	0.5	-0.5	1.2	0.2	-2.0
Non-oil goods	2.7	0.6	5.2	2.2	0.7	-0.9	2.2	3.6	1.6	-0.1
Imports										
Value										
All goods	10.4	12.2	14.7	3.2	-5.7	-10.0	-1.0	4.5	6.1	3.1
Non-oil goods	10.8	14.0	13.8	2.1	-5.6	-10.5	-0.3	6.0	6.5	3.6
Volume										
All goods	7.4	12.9	7.9	1.2	-2.8	-5.7	0.1	5.4	7.4	6.2
Non-oil goods	8.2	15.7	7.7	1.2	-4.3	-6.8	-1.8	4.7	8.0	6.7
Prices										
All goods	2.8	-0.6	6.3	2.0	-2.9	-4.6	-1.2	-0.8	-1.2	-2.9
Non-oil goods	2.4	-1.5	5.7	0.8	-1.3	-3.9	1.5	1.2	-1.4	-2.9
Terms of trade										
All goods	1.0	0.9	0.6	1.5	-0.2	2.4	-2.8	0.6	2.8	3.8
Non-oil goods	0.6	2.8	-0.1	0.6	0.6	2.5	-1.3	0.9	2.8	4.9

Source: Central Statistical Office, Monthly Digest of Statistics.

Table 12. United Kingdom: Exports by Commodity--Volume Indices

(1985=100; seasonally adjusted)

	1987	1988	1989	1990	1991	1991		1992		
						1st half	2nd half	1st qtr.	2nd qtr.	3rd qtr.
Total	109.8	112.5	117.3	125.1	126.8	124.8	128.9	127.5	130.3	130.8
Food, beverages and tobacco	112.0	112.4	123.5	124.0	130.3	125.5	135.2	131.7	143.0	148.0
Basic Materials	114.4	99.8	104.2	102.0	98.3	99.3	97.3	94.3	97.0	92.0
Fuels	100.8	93.9	75.2	80.8	78.3	73.5	83.2	78.7	80.0	89.7
Total Manufactures	112.2	119.6	131.0	141.2	144.7	143.5	145.8	145.7	147.7	146.0
Manufacturers excluding erratics <u>1/</u>										
Semi-manufactures <u>2/</u>										
Total less SNAPS	110.6	117.8	129.2	140.5	144.6	143.7	145.5	147.7	149.3	147.3
Total less PS	110.3	116.8	121.8	129.3	135.2	134.0	136.3	141.0	142.3	142.7
Chemicals	112.2	118.1	119.8	123.8	129.7	127.8	131.5	137.0	139.0	139.0
Other less PS	108.8	115.8	124.1	135.3	141.2	141.0	141.5	145.0	145.7	146.7
Finished manufactures <u>3/</u>										
Total less SNA	110.5	118.1	133.6	147.2	150.5	149.8	151.2	151.3	153.7	150.7
Passenger cars	117.3	122.9	153.1	183.5	219.2	229.5	208.8	201.3	196.7	202.3
Other Consumer	125.8	122.5	144.4	169.0	169.4	168.7	170.2	176.7	173.0	177.7
Intermediate	103.5	104.5	114.6	126.9	128.8	129.7	127.8	130.3	134.7	129.7
Capital	112.2	135.4	153.2	160.8	162.3	157.7	167.0	162.0	166.0	158.3

Source: Central Statistical Office, Monthly Digest of Statistics.1/ These are defined as ships, North Sea installations, aircraft, precious stones and silver.2/ Excluding precious stones and silver.3/ Excluding ships, North Sea installations and aircraft.

Table 13. United Kingdom: Direction of Trade 1/

(In percent of total)

	1987	1988	1989	1990	1991	1992 <u>2/</u>
<u>Exports, f.o.b.</u>						
European Community	49.5	50.0	50.7	53.1	56.7	55.6
Rest of Western Europe	9.3	8.8	8.5	8.7	8.2	7.8
Eastern Europe and former USSR	1.6	1.6	1.6	1.4	1.2	1.5
North America	16.3	15.6	15.4	14.4	12.5	12.8
Other OECD	4.0	4.3	4.8	4.7	3.8	3.7
Oil exporting countries	6.5	6.1	6.2	5.4	5.5	5.7
Other countries <u>3/</u>	12.8	13.6	12.8	12.3	12.1	12.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
<u>Imports, c.i.f.</u>						
European Community	52.9	52.5	52.3	52.3	51.6	52.5
Rest of Western Europe	13.5	13.0	12.4	12.5	12.0	11.4
Eastern Europe and former USSR	1.8	1.5	1.5	1.4	1.4	1.3
North America	11.5	12.1	13.1	13.3	13.2	12.5
Other OECD	7.1	7.3	7.0	6.7	6.8	7.3
Oil exporting countries	1.8	2.0	1.9	2.4	2.3	2.4
Other countries <u>3/</u>	11.4	11.6	11.9	11.5	12.6	12.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
(In billions of pounds)						
<u>Memorandum items:</u>						
Total exports, f.o.b.	79.8	82.1	93.8	103.7	104.8	107.0
Total imports, c.i.f.	94.0	106.6	122.0	126.1	118.9	123.6

Source: CSO, Monthly Digest of Statistics.

1/ Data on an Overseas Trade Statistics basis.

2/ First three quarters at a seasonally adjusted annual rate.

3/ Including residuals.

Table 14. United Kingdom: Imports by Commodity--Volume Indices

(1985=100; seasonally adjusted)

	1987	1988	1989	1990	1991	1991		1992		
						1st half	2nd half	1st qtr.	2nd qtr.	3rd qtr.
Total	114.8	130.5	140.8	142.7	138.6	137.2	140.1	143.3	148.1	148.5
Food, beverages and tobacco	109.4	115.1	118.2	121.4	122.6	122.0	123.2	127.0	131.0	132.3
Basic materials	116.8	118.2	116.8	114.3	114.8	109.7	119.8	121.7	122.0	113.7
Fuels	105.2	108.3	117.8	125.6	128.0	126.5	129.5	119.3	135.0	140.3
Total manufactures	117.7	138.4	151.0	152.1	145.6	144.3	146.8	152.7	156.3	156.7
Manufacturers excluding erratics <u>1/</u>										
Semi-manufactures <u>2/</u>										
Total less SNAPS	118.7	139.0	151.9	153.1	146.9	145.8	148.0	153.0	158.0	160.0
Total less PS	116.7	131.4	139.1	144.2	144.3	141.5	147.2	151.3	154.7	152.7
Chemicals	119.6	128.4	140.1	145.9	148.0	143.0	153.0	149.0	157.7	167.3
Other less PS	115.6	133.2	138.9	143.2	142.3	141.0	143.7	152.3	153.3	144.3
Finished manufactures <u>3/</u>										
Total less SNA	119.6	143.3	159.0	157.8	148.3	148.5	148.2	153.7	159.3	164.0
Passenger cars	99.1	130.1	134.9	121.5	85.8	90.5	81.2	97.0	106.3	99.0
Other consumer	127.4	141.7	159.0	169.1	159.8	161.5	158.2	159.0	169.0	182.0
Intermediate	123.8	148.2	164.9	166.6	163.2	164.8	161.5	166.7	175.0	176.3
Capital	115.8	144.4	161.8	152.1	146.2	140.8	151.5	157.0	156.0	160.0

Source: Central Statistical Office, Monthly Digest of Statistics.1/ These are defined as ships, North Sea installations, aircraft, precious stones and silver.2/ Excluding precious stones and silver.3/ Excluding ships, North Sea installations and aircraft.

Table 15. United Kingdom: Nonfactor Services

(In millions of pounds; seasonally adjusted)

	1987	1988	1989	1990	1991	1991		1992		
						1st half	2nd half	1st qtr.	2nd qtr.	3rd qtr.
Credits										
Private sector and public corporations										
Sea transport	3,282	3,522	3,848	3,732	3,658	1,888	1,770	859	853	867
Civil aviation	3,159	3,192	3,758	4,358	3,927	1,830	2,097	1,071	1,115	1,064
Travel	6,260	6,184	6,945	7,785	7,165	3,451	3,714	1,984	1,924	1,802
Financial and other services	14,656	13,911	14,899	15,482	16,444	8,163	8,281	4,282	4,223	3,866
Total	27,357	26,809	29,450	31,357	31,194	15,332	15,862	8,196	8,115	7,599
General government	521	550	445	425	412	253	159	78	143	75
Total credits	27,878	27,359	29,895	31,782	31,606	15,585	16,021	8,274	8,258	7,674
Debits										
Private sector and public corporations										
Sea transport	3,310	3,499	3,754	3,743	3,643	1,837	1,806	944	958	944
Civil aviation	3,775	4,203	4,397	4,769	4,397	2,199	2,198	1,202	1,153	1,126
Travel	7,280	8,216	9,357	9,916	9,825	4,793	5,032	2,863	2,788	2,693
Financial and other services	4,627	4,693	5,649	5,989	6,062	2,917	3,145	1,530	1,430	1,422
Total	18,992	20,611	23,157	24,417	23,927	11,746	12,181	6,539	6,329	6,185
General government	2,141	2,351	2,699	2,784	2,808	1,439	1,369	634	646	647
Total debits	21,133	22,962	25,856	27,201	26,735	13,185	13,550	7,173	6,975	6,832
Balance										
Private sector and public corporations										
Sea transport	-28	23	94	-11	15	51	-36	-85	-105	-77
Civil aviation	-616	-1,011	-639	-411	-470	-369	-101	-131	-38	-62
Travel	-1,020	-2,032	-2,412	-2,131	-2,660	-1,342	-1,318	-879	-864	-891
Financial and other services	10,029	9,218	9,250	9,493	10,382	5,246	5,136	2,752	2,793	2,444
Total	8,365	6,198	6,293	6,940	7,267	3,586	3,681	1,657	1,786	1,414
General government	-1,620	-1,801	-2,254	-2,359	-2,396	-1,186	-1,210	-556	-503	-572
Total	6,745	4,397	4,039	4,581	4,871	2,400	2,471	1,101	1,283	842

Source: Central Statistical Office, Balance of Payments.

Table 16. United Kingdom: Capital Account ^{1/}

(In billions of pounds sterling)

	1987	1988	1989	1990	1991	1992 ^{2/}
Transactions in external assets of the U.K.						
Direct investment	-19.2	-20.9	-21.5	-9.6	-10.1	-8.7
Portfolio investment	5.2	-11.2	-35.5	-15.8	-30.8	-15.7
Ordinary shares	2.3	-5.8	-14.7	-0.5	-14.6	...
Bonds	2.9	-5.5	-20.8	-15.4	-16.3	...
Bank lending	-50.5	-19.7	-28.6	-41.2	32.2	-35.9
Non-bank lending	-4.8	-3.0	-7.9	-11.8	-8.3	-24.9
Official reserves	-12.0	-2.8	5.4	-0.1	-2.7	1.3
Other assets of central government	-0.8	-0.9	-0.9	-1.0	-0.9	-0.6
Total	-82.2	-58.5	-88.9	-79.5	-21.0	-84.5
Transactions in external liabilities of the U.K.						
Direct investment	9.4	12.0	18.6	18.6	12.0	11.4
Of which:						
Non-oil companies	7.4	8.9	15.2	14.3	8.6	8.1
Portfolio investment	19.5	15.6	14.6	5.3	16.1	13.0
Of which: U.K. company securities						
Bonds	3.8	8.7	10.1	8.0	5.0	3.1
Ordinary shares	11.9	5.5	6.9	1.5	3.0	5.4
Bank borrowing	52.4	34.1	44.7	47.6	-24.0	11.2
Non-bank borrowing	3.3	5.4	27.5	18.2	23.7	38.7
Other liabilities of general government	1.8	0.8	2.8	0.9	-2.3	10.6
Total	86.5	67.9	108.2	90.6	26.7	84.8
Net transactions						
Total	4.3	9.4	19.3	11.1	5.7	0.4
Of which:						
Long-term private capital	14.9	-4.6	-23.8	-1.5	-12.9	-0.0
Short-term private capital	0.4	16.8	35.7	12.8	23.6	-11.0
Memorandum items:						
Net foreign assets ^{3/}	67.0	81.0	64.6	-0.4	12.0	18.1
Official reserves ^{3/}	23.5	28.6	24.0	19.9	23.6	24.0
Change in official reserves	-8.7	-5.1	4.6	4.0	-3.7	-0.4

Source: CSO, Financial Statistics.^{1/} A negative sign indicates a net outflow of capital (i.e. an increase in assets or a reduction in liabilities).^{2/} First three quarters at an annual rate.^{3/} End-period.

Table 17. United Kingdom: General Government Accounts

(National accounts basis)

	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92 Budget	1991/92 Outturn	1992/93 Budget
(In billions of pounds sterling)								
Current receipts	<u>156.5</u>	<u>172.2</u>	<u>187.3</u>	<u>202.1</u>	<u>214.0</u>	<u>224.5</u>	<u>220.7</u>	<u>230.7</u>
Taxes on income	52.4	58.9	63.0	71.7	77.5	79.2	76.0	76.8
Taxes on expenditure	64.5	70.4	77.3	81.1	75.0	87.0	85.5	93.0
Social security contributions	26.7	29.5	32.8	33.2	35.5	37.2	37.2	39.1
Other <u>1/</u>	12.9	13.4	14.1	16.1	26.0	21.1	22.1	21.8
Capital receipts	<u>3.0</u>	<u>3.4</u>	<u>4.5</u>	<u>4.1</u>	<u>4.1</u>	<u>3.6</u>	<u>3.3</u>	<u>3.0</u>
Total receipts	<u>159.6</u>	<u>175.6</u>	<u>191.8</u>	<u>206.2</u>	<u>218.0</u>	<u>228.1</u>	<u>224.0</u>	<u>233.7</u>
Current expenditure	<u>158.5</u>	<u>167.8</u>	<u>174.6</u>	<u>188.1</u>	<u>204.9</u>	<u>217.7</u>	<u>224.8</u>	<u>241.7</u>
Final consumption	80.3	87.1	93.2	101.1	112.6	119.9	124.6	130.9
Subsidies and grants	60.6	62.7	62.9	68.2	73.9	80.6	83.1	92.5
Debt interest	17.6	17.9	18.5	18.8	18.4	17.2	17.1	18.3
Capital expenditure	<u>10.2</u>	<u>10.7</u>	<u>10.4</u>	<u>18.9</u>	<u>19.1</u>	<u>18.5</u>	<u>19.0</u>	<u>19.7</u>
Unallocated reserve	...	...	...	...	...	3.5	...	4.0
Total expenditure <u>2/</u>	<u>168.7</u>	<u>178.5</u>	<u>185.0</u>	<u>207.0</u>	<u>224.0</u>	<u>239.7</u>	<u>243.8</u>	<u>265.4</u>
Financial balance <u>2/</u>	<u>-9.1</u>	<u>-2.8</u>	<u>6.8</u>	<u>-0.8</u>	<u>-6.0</u>	<u>-11.6</u>	<u>-19.7</u>	<u>-31.7</u>
Financial transactions <u>3/</u>	<u>9.1</u>	<u>2.8</u>	<u>-6.8</u>	<u>0.8</u>	<u>6.0</u>	<u>11.6</u>	<u>19.7</u>	<u>31.7</u>
Net lending	3.9	5.2	5.3	6.2	6.6	5.5	7.9	8.0
Of which:								
Privatization proceeds	(4.5)	(5.1)	(7.1)	(4.2)	(5.3)	(5.5)	(7.9)	(8.0)
Other miscellaneous <u>4/</u>	0.4	-0.5	-0.3	1.2	-0.2	-2.2	-2.1	-3.8
Borrowing requirement	4.9	-1.9	-11.7	-6.6	-0.5	8.3	14.0	27.5
(Annual percentage changes)								
Memorandum items:								
Total receipts	5.2	10.1	9.2	7.5	5.7	3.3	2.8	4.3
Total expenditure	5.0	5.8	3.7	11.9	8.2	7.7	8.8	8.9
Including net lending	3.9	5.1	3.8	11.7	8.2	8.3	8.5	8.6
(In percent of GDP) <u>5/</u>								
Total receipts	40.6	40.4	39.6	39.3	39.3	39.3	38.5	37.6
Total expenditure	43.0	41.0	38.2	39.4	40.4	41.3	41.9	42.7
Including net lending	42.0	39.8	37.1	38.2	39.2	40.4	40.6	44.0
Financial balance	-2.3	-0.7	1.4	-0.1	-1.1	-2.0	-3.4	-5.1
Borrowing requirement	1.2	-0.4	-2.4	-1.3	-0.1	1.4	2.4	4.4
Excluding privatization receipts	2.4	0.7	-1.0	-0.4	0.9	2.4	3.8	5.7

Sources: Central Statistical Office, Financial Statistics and Economic Trends; and H.M. Treasury, Financial Statement and Budget Report 1991/92 and 1992/93.

1/ Includes community charge from 1989/90.

2/ Including unallocated reserve where appropriate.

3/ A positive sign denotes a drawdown in assets or an increase in liabilities.

4/ Including accruals adjustments and balancing item.

5/ GDP adjusted for statistical distortions arising from the introduction of the community charge. 1992/93 figures use budget estimate of GDP.

Table 18. United Kingdom: Central Government Accounts

(National accounts basis)

	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92 Budget	1991/92 Outturn	1992/93 Budget
(In billions of pounds sterling)								
Current receipts	<u>138.4</u>	<u>152.9</u>	<u>165.6</u>	<u>178.2</u>	<u>199.8</u>	<u>215.4</u>	<u>211.0</u>	<u>220.0</u>
Taxes on income	52.4	58.9	63.0	71.7	77.5	79.2	76.0	76.8
Taxes on expenditure	48.8	53.3	58.0	61.0	74.9	86.9	85.3	92.9
Social security contributions	26.7	29.5	32.8	33.2	35.5	37.2	37.2	39.1
Other	10.5	11.2	11.7	12.4	11.9	12.1	12.5	11.2
Capital receipts	<u>2.9</u>	<u>3.2</u>	<u>4.3</u>	<u>3.9</u>	<u>3.8</u>	<u>3.6</u>	<u>3.1</u>	<u>3.0</u>
Total receipts	141.2	156.2	169.9	182.1	203.6	219.0	214.0	223.0
Current Expenditure	<u>142.8</u>	<u>150.7</u>	<u>154.8</u>	<u>166.2</u>	<u>193.0</u>	<u>211.2</u>	<u>217.0</u>	<u>234.7</u>
Final consumption	49.2	53.0	56.6	61.8	68.5	72.5	76.2	80.0
Subsidies and grants	77.2	80.7	80.7	86.5	107.0	122.0	124.5	137.1
Debt interest	16.5	17.1	17.6	17.8	17.5	16.7	16.3	17.6
Capital expenditure	<u>6.4</u>	<u>6.8</u>	<u>7.8</u>	<u>14.2</u>	<u>15.2</u>	<u>15.6</u>	<u>15.0</u>	<u>20.2</u>
Total expenditure	149.2	157.5	162.6	180.4	208.2	226.8	232.0	254.9
Current surplus	-4.5	2.2	10.8	12.0	6.7	4.2	-6.1	-14.7
Financial balance	-8.0	-1.3	7.3	1.7	-4.6	-7.8	-18.0	-31.9
<u>Memorandum items:</u>								
(Annual percentage changes)								
Total receipts	4.7	10.6	8.8	7.2	11.8	6.1	5.1	4.2
Total expenditure	5.4	5.5	3.3	10.9	15.4	9.4	11.4	9.8
(In percent of GDP) ^{1/}								
Total receipts	36.0	35.9	35.1	34.7	36.7	37.8	36.8	35.9
Total expenditure	38.0	36.2	33.6	34.4	37.5	39.1	39.9	41.0
Current surplus	-1.1	0.5	2.2	2.3	1.2	0.7	-1.0	-2.4
Financial balance	-2.0	-0.3	1.5	0.3	-0.8	-1.3	-3.1	-5.1

Source: Central Statistical Office, Financial Statistics and Economic Trends; and H.M. Treasury, Financial Statement and Budget Report, 1991/92 and 1992/93.

^{1/} GDP adjusted for statistical distortion arising from the introduction of the community charge. 1992/93 figures use budget estimate of GDP.

Table 19. United Kingdom: The 1992 Budget Measures

(In millions of pounds) 1/

	1992/93		1993/94
	Changes from a non-indexed base	Changes from an indexed base	Changes from an indexed base
Business rates reduced	<u>-480</u>	<u>-480</u>	<u>-590</u>
Income tax changes	<u>-2,520</u>	<u>-1,370</u>	<u>-1,750</u>
Twenty percent rate band introduced	-1,770	-1,770	-2,320
Changes to basic rate limit and other allowances	-810	+340	+500
Car benefit scales raised	+60	+60	+70
Car tax halved	<u>-635</u>	<u>-635</u>	<u>-765</u>
Value added tax changes	<u>-285</u>	<u>-285</u>	<u>-135</u>
Excise duties raised	<u>+1,595</u>	<u>+590</u>	<u>+630</u>
Tobacco duties	+540	+305	+345
Alcohol duties	+160	--	--
Petrol and diesel duties	+655	+150	+145
Vehicle excise duty	+240	+135	+140
Inheritance tax reduced	<u>-40</u>	<u>-20</u>	<u>-45</u>
Other tax changes	<u>+70</u>	<u>+30</u>	<u>+55</u>
Total effects of budget changes	<u>-2,295</u>	<u>-2,170</u>	<u>-2,600</u>
Tax changes already announced <u>2/</u>	+680	+680	-15
Total general government receipts	<u>-1,615</u>	<u>-1,490</u>	<u>-2,615</u>

Source: H.M. Treasury Financial Statement and Budget Report, March 1992.

1/ A negative number implies a loss of revenue.

2/ The main item included was the postponement of the previously announced abolition of stamp duty on securities transactions.

Table 20. United Kingdom: General Government Expenditure--Plans and Outturn 1/(In percent of GDP) 2/

	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96
March 1988 FSR <u>3/</u>	42½	42	41½	40%	40				
January 1989 White Paper (Cmnd 621)	42½	40½	39%	39%	39½				
January 1990 White Paper (Cmnd 1021)	42	39%	39½	39%	39½	39%			
February 1991 Supplement (Cmnd 1520)	41%	39%	39½	39%	39½	39½	39		
February 1992 Supplement (Cmnd 1920)	42	39½	40	40	41½	42	41%	41½	
1992 Autumn Statement	41%	39%	39%	40%	42	44% <u>4/</u>	45½	45	44½

Source: H.M. Treasury, Autumn Statement, November 1992.1/ Excluding privatization proceeds.2/ GDP adjusted to correct for the abolition of domestic rates.3/ Financial statement and budget report.4/ Estimated.

Table 21. United Kingdom: The New Control Total and General Government Expenditure

(In billions of pounds)

	Estimates of Outturn		New Plans			Real Expenditure Growth				1/
	1991/92	1992/93	1993/94	1994/95	1995/96	1992/93	1993/94	1994/95	1995/96	
Central government expenditure 2/3/	144.5	158.7	166.1	171.6	176.4	5.3	1.9	--	0.1	
Central government support for local authorities 3/	53.4	58.9	58.7	62.0	64.3	5.8	-2.9	2.3	1.0	
Local authority self-financed expenditure	10.8	10.9	11.1	11.0	10.8	-3.5	-0.8	-4.0	-4.4	
Financing requirements of nationalized industries	2.5	3.4	3.9	1.9	1.7	...	...	...	...
Reserve			4.0	7.0	10.0	...	...	...	...
<u>New control total</u>	<u>211.2</u>	<u>232.0</u>	<u>243.8</u>	<u>253.6</u>	<u>263.3</u>	<u>5.3</u>	<u>2.3</u>	<u>0.7</u>	<u>1.1</u>	
Cyclical social security	11.0	13.0	15.5	16.5	17.0	13.1	16.1	3.1	0.3	
Central government debt interest	16.3	17.7	20.0	24.5	27.5	4.0	10.0	18.6	9.3	
Accounting adjustments	5.2	6.0	7.5	8.5	9.0	...	...	...	...
<u>General government expenditure excluding privatization proceeds</u>	<u>243.8</u>	<u>268.8</u>	<u>286.6</u>	<u>302.5</u>	<u>316.4</u>	<u>5.7</u>	<u>3.8</u>	<u>2.2</u>	<u>1.8</u>	
(as a percent of GDP)	(41.9)	(44.7)	(45.6)	(44.9)	(44.1)					

Source: H.M. Treasury, Autumn Statement, November 1992.

1/ Percentage change in planned expenditure deflated by GDP deflator.

2/ Excluding cyclical social security.

3/ Comparisons between 1992/93 and 1993/94 are distorted by the effects of transfers between departments and spending sectors.

Table 22. United Kingdom: Government Expenditure Plans--Main Departments

(In millions of pounds)

	Estimates of outturn		New Plans			Real Expenditure Growth ^{1/}		
	1991/92	1992/93	1993/94	1994/95	1995/96	1993/94	1994/95	1995/96
Social Security ^{2/}	54,722	61,200	65,000	67,100	70,800	3.4	--	2.7
Health ^{2/}	25,657	28,280	29,880	31,240	32,300	2.9	1.2	0.7
Defense ^{3/}	23,015	23,800	23,520	23,750	23,220	-3.8	-2.2	-4.8
Transport	5,354	6,750	6,430	6,070	5,860	-7.2	-8.6	-6.0
Education ^{2/}	6,342	6,980	9,520	10,120	10,500	...	2.9	1.0
Employment	3,636	3,640	3,740	3,700	3,730	0.1	-4.2	-1.9
Other Departments	92,498	101,350	105,710	111,620	116,890	1.6	2.2	2.0
New Control Total	211,222	232,000	243,800	253,600	263,300	2.3	0.7	1.1

Source: H.M. Treasury, Autumn Statement, November 1992.^{1/} Percentage change in planned expenditure deflated by GDP deflator.^{2/} Comparisons between 1992/93 and 1993/94 are distorted by the effects of transfers between departments and spending sectors. The data excludes cyclical social security expenditures.^{3/} The estimated outturn for Defense in 1991/92 is net of other governments' contributions to the cost of the Gulf conflict.

Table 23. United Kingdom: Nominal Exchange Rates 1/
(Period average)

	Nominal Effective Exchange Rate <u>2/</u> (1985=100)	U.S. Dollar	Deutsche Mark	Japanese Yen	French Franc
Changes to end of:					
1987	90.12	1.6389	2.9404	236.43	9.8358
1988	95.54	1.7814	3.1243	228.07	10.5976
1989	92.68	1.6397	3.0812	225.76	10.4571
1990	91.27	1.7847	2.8740	257.41	9.6846
1991	91.75	1.7694	2.9269	238.13	9.9514
1992	88.39	1.7654	2.7538	223.68	9.3334
1991					
January	94.18	1.9337	2.9199	258.89	9.9213
February	94.30	1.9657	2.9091	256.49	9.9061
March	93.02	1.8310	2.9336	251.21	9.9967
April	92.37	1.7499	2.9803	239.91	10.0784
May	91.76	1.7263	2.9641	238.30	10.0465
June	90.17	1.6477	2.9400	230.33	9.9819
July	90.33	1.6480	2.9477	227.44	10.0063
August	90.88	1.6834	2.9379	233.81	9.9832
September	91.12	1.7237	2.9270	231.97	9.9628
October	90.57	1.7225	2.9136	225.16	9.9266
November	91.04	1.7775	2.8884	230.50	9.8416
December	91.26	1.8232	2.8614	233.56	9.7650
1992					
January	90.82	1.8120	2.8583	226.67	9.7489
February	90.86	1.7769	2.8780	226.55	9.7926
March	90.11	1.7245	2.8645	228.84	9.7256
April	91.36	1.7567	2.8955	234.57	9.7916
May	92.81	1.8106	2.9343	236.41	9.8667
June	92.81	1.8531	2.9168	234.99	9.8186
July	92.57	1.9190	2.8610	241.12	9.6549
August	91.98	1.9390	2.8135	244.92	9.5493
September	88.09	1.8571	2.6885	227.90	9.1442
October	80.85	1.6590	2.4580	200.81	8.3460
November	78.33	1.5266	2.4238	189.10	8.1970
December	80.07	1.5508	2.4534	192.33	8.3659

Source: International Monetary Fund, International Financial Statistics.

1/ Units of foreign currency per pound sterling.

2/ Based on MERM weights.

Table 24. United Kingdom: Interest Rates ^{1/}

(In percent per annum)

	Three-Month Rates		London Clearing Banks' Base Rate	Government Securities Calculated Redemption Yields		
	U.K.	U.S.		5-year maturity	10-year maturity	20-year maturity
	Inter- bank	Treasury Bills				
1987	9.7	5.8	9.6	9.4	9.6	9.5
1988	10.3	6.7	10.3	9.7	9.7	9.4
1989	13.9	8.1	13.9	10.7	10.2	9.6
1990	14.8	7.5	14.8	12.1	11.8	11.1
1991	11.5	5.4	11.5	10.2	10.1	9.9
1991 1st qtr.	13.2	6.1	13.2	10.4	10.3	10.1
2nd qtr.	11.6	5.6	11.7	10.4	10.4	10.2
3rd qtr.	10.8	5.4	10.8	10.0	10.0	9.8
4th qtr.	10.6	4.6	10.5	9.8	9.7	9.6
1992 1st qtr.	10.5	3.9	10.5	9.7	9.5	9.4
2nd qtr.	10.2	3.7	10.0	9.3	9.2	9.2
3rd qtr.	10.2	3.1	9.7	9.4	9.2	9.0
1991 January	14.0	6.3	14.0	10.8	10.6	10.2
February	13.2	5.9	13.0	10.2	10.1	9.9
March	12.4	5.9	12.5	10.3	10.3	10.1
April	12.0	5.7	12.0	10.3	10.2	10.0
May	11.5	5.5	11.5	10.4	10.4	10.2
June	11.2	5.6	11.5	10.5	10.6	10.3
July	11.1	5.6	11.0	10.3	10.3	10.1
August	10.9	5.4	11.0	10.1	10.0	9.9
September	10.3	5.2	10.5	9.7	9.6	9.5
October	10.4	5.0	10.5	9.8	9.7	9.6
November	10.5	4.6	10.5	9.8	9.8	9.7
December	10.8	4.1	10.5	9.9	9.7	9.6
1992 January	10.6	3.8	10.5	9.7	9.5	9.3
February	10.4	3.8	10.5	9.5	9.3	9.2
March	10.6	4.1	10.5	9.9	9.7	9.5
April	10.6	3.8	10.0	9.7	9.4	9.3
May	10.0	3.7	10.0	9.2	9.0	9.0
June	10.0	3.7	10.0	9.0	9.1	9.2
July	10.2	3.3	10.0	9.2	9.0	8.9
August	10.4	3.1	10.0	9.6	9.3	9.1
September	10.0	3.0	9.0	9.6	9.3	9.1
October	8.3	2.8	8.0	7.8	8.7	9.2
November	7.2	3.2	7.0	...	8.3	...
December	7.2	3.3	7.0	...	8.4	...

Sources: U.K. Treasury; and Central Statistical Office, Economic Trends and Financial Statistics.

^{1/} The numbers are period averages, except for the clearing banks' base rate, for which monthly numbers are rates on the last Friday of the month and quarterly and annual numbers are period averages of the monthly numbers.

Table 25. United Kingdom: Growth Rates of Selected Monetary Aggregates
(Seasonally adjusted, 12-month rates of change, in percent)

	M0	M2	M4
Stock, end 1991, (Billions of)	18.9	276.8	501.0
Changes to end of:			
1987	4.8	11.0	16.0
1988	6.8	15.8	17.3
1989	5.7	9.9	18.8
1990	5.2	8.1	12.1
1991	2.4	9.1	5.9
1991			
January	3.6	10.0	11.1
February	2.7	9.6	10.7
March	2.5	10.1	10.0
April	1.5	10.0	9.7
May	1.6	10.5	9.2
June	2.0	10.4	8.0
July	2.1	9.6	7.6
August	1.6	10.1	7.2
September	2.3	9.4	6.7
October	2.6	9.0	6.5
November	3.0	9.8	5.7
December	3.1	9.1	5.8
1992			
January	2.1	7.5	5.8
February	2.2	7.2	5.6
March	2.3	6.4	5.0
April	2.3	4.9	4.8
May	2.5	4.7	4.4
June	1.3	3.9	4.5
July	2.5	3.7	4.8
August	2.4	3.1	4.7
September	2.1	-8.0	4.0
October	2.4	-7.8	5.4
November	3.0	...	4.6
December	...	...	...

Sources: Central Statistical Office, Financial Statistics; and Bank of England, Monetary Statistics.

Table 26. United Kingdom: Contributions of Asset Counterparts to Growth in Broad Money Stock M4 ^{1/}

(In percent of stock of M4 outstanding four quarters earlier)

	1988	1989	1990	1991				1992		
	Q1	Q1	Q1	Q1	Q2	Q3	Q4	Q1	Q2	Q3
M4	16.7	17.8	18.2	10.0	8.0	6.7	5.9	5.1	4.5	4.4
PSBR	-1.3	-4.7	-2.1	-0.1	0.2	1.1	1.6	2.8	3.6	4.3
Purchases of public sector debt by U.K. private sector	-1.9	3.1	2.4	-0.5	-0.2	-0.8	-1.1	-1.5	-3.2	-3.6
Sterling lending to U.K. private sector	22.9	27.4	24.4	13.8	10.9	9.4	7.7	6.1	6.5	5.6
Personal sector	(12.1)	(12.8)	(10.1)	(7.1)	(6.5)	(6.2)	(5.9)	(5.6)	(5.2)	(4.9)
For house purchase	10.0	10.9	8.7	6.4	5.8	5.6	5.4	5.1	4.8	4.6
Other	2.1	2.0	1.4	0.8	0.7	0.6	0.5	0.5	0.3	0.3
Industrial and commercial companies	(3.1)	(1.9)	(2.3)	(0.0)	(0.7)	(0.4)	(1.4)	(1.3)	(1.0)	(1.0)
Other financial institutions	(7.6)	(12.6)	(12.0)	(6.7)	(3.8)	(2.8)	(0.4)	(-0.7)	(0.3)	(-0.4)
External and foreign currency counterpart	-0.3	-3.6	-4.2	-1.6	-1.3	-1.6	-0.5	0.1	0.4	0.5
Net non-deposit liabilities	-2.6	-4.6	-2.7	-1.7	-1.5	-1.5	-1.5	-1.7	-2.0	-1.8

Sources: CSO/Bank of England; and staff calculations.

^{1/} Components may not add to totals due to rounding.

Table 27. Bank Profitability in Selected Countries
(Ratio of before-tax profits to total assets, in percent)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
United States										
Commercial banks	1.00	0.88	0.84	0.84	0.90	0.80	0.28	1.14	0.78	0.73
Large commercial banks	0.84	0.74	0.72	0.73	0.90	0.85	0.01	1.23	0.62	0.59
Japan										
Commercial banks	0.45	0.50	0.54	0.49	0.46	0.52	0.60	0.64	0.46	0.36
Large commercial banks	0.41	0.45	0.49	0.46	0.43	0.50	0.63	0.68	0.46	0.33
Germany										
Commercial banks	0.43	0.53	0.60	0.72	0.83	0.81	0.60	0.73	0.70	0.63
Large commercial banks	0.44	0.59	0.84	0.86	1.05	0.99	0.61	0.89	0.92	0.83
United Kingdom										
Commercial banks	...	...	...	0.88	1.09	1.19	0.19	1.52	0.11	0.65
Large commercial banks	1.21	0.84	0.82	0.81	1.09	1.21	0.12	1.51	0.03	0.50
Norway										
Commercial banks	0.72	0.54	0.91	0.85	0.64	0.64	-0.24	-0.32	0.17	-1.02
Sweden										
Commercial banks	0.41	0.35	0.44	0.35	0.34	1.00	0.73	0.59	0.47	0.22
Finland										
Commercial banks	0.48	0.51	0.42	0.49	0.54	0.63	0.45	0.77	0.22	0.21
Denmark										
Commercial and savings banks	0.95	1.20	5.08	0.09	3.72	-0.37	0.35	0.96	0.28	-0.27

Source: OECD, Bank Profitability: Statistical Supplement-Financial Statements of Banks, 1981-1990 (Paris, 1991).

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