

# Experimental consistent time series of historical Labour Force Survey data

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## Key points

- ONS has produced a consistent time series of headline labour market figures covering the past 30 years. The pre-1992 data are still experimental, but give an accurate picture of the main long-term trends.
- Despite fluctuations there has been an overall increase in the number of people in employment over the period (from 24.6 to 27.9 million), but the effects of the economic cycle are clearly shown in the falls of the early 1980s and 1990s.
- The current rates of employment (74.6 per cent) and unemployment (5.0 per cent) have not been seen since the 1970s.
- Total hours worked in the economy has also been modelled back to 1971. The increase in hours worked due to higher levels of employment have tended to be offset by greater part-time working and people's wanting to work less, but the present level of average weekly hours (895 million) is similar to that seen in the boom of 1974.
- The data show up sharp differences between the labour market experiences of men and women. For example, the effects of periods of recession have been felt much more strongly by men than women, as shown by the unemployment series.
- The growth in female participation in the labour market since 1971 (from 59 to 73 per cent) contrasts with the decline in economic activity rates for men (from 95 to 84 per cent).

## Introduction

UNTIL RECENTLY it has been difficult to obtain consistent time series of headline UK labour market figures for employment status. In order to address this, ONS has conducted a project to estimate time series for the 1971 to 1992 period consistent with post-1992 Labour Force Survey (LFS) data. This article presents the results of that work, describing how the data fit with, and further illustrate, economic developments over the past 30 years.

Headline UK labour market figures for employment status are estimated from data collected by the LFS. The current definitions used in the LFS are based on internationally agreed standards set by the International

Labour Organisation. The LFS itself has changed over time. For example, the survey was first conducted in 1973, but its results are not considered to be of useable quality until 1979. From 1979 to 1983 the survey was run biennially, before moving to an annual cycle in 1984. In 1992 it moved on to a quarterly basis. Alongside these changes, there have been changes in definitions, population, and coverage. All of this has meant that pre-1992 data has been incompatible with post-1992 data, and no reliable LFS information has been available before 1979.

The estimation of historical time series has involved making adjustments to allow for known discontinuities

interpolating data for intermediate periods between actual data for 1979-92, and modelling data for the period 1971-79. Estimates for spring quarters 1971-91 are given in *Tables 1* to *3*. The estimates produced are experimental at this stage, and may be revised following the full reweighting of the LFS to take on the results from the 2001 Census. Readers requiring a more detailed description of the methodology behind the new estimates can find this at <http://www.statistics.gov.uk/statbase/product.asp?vlnk=10620&more=n>.

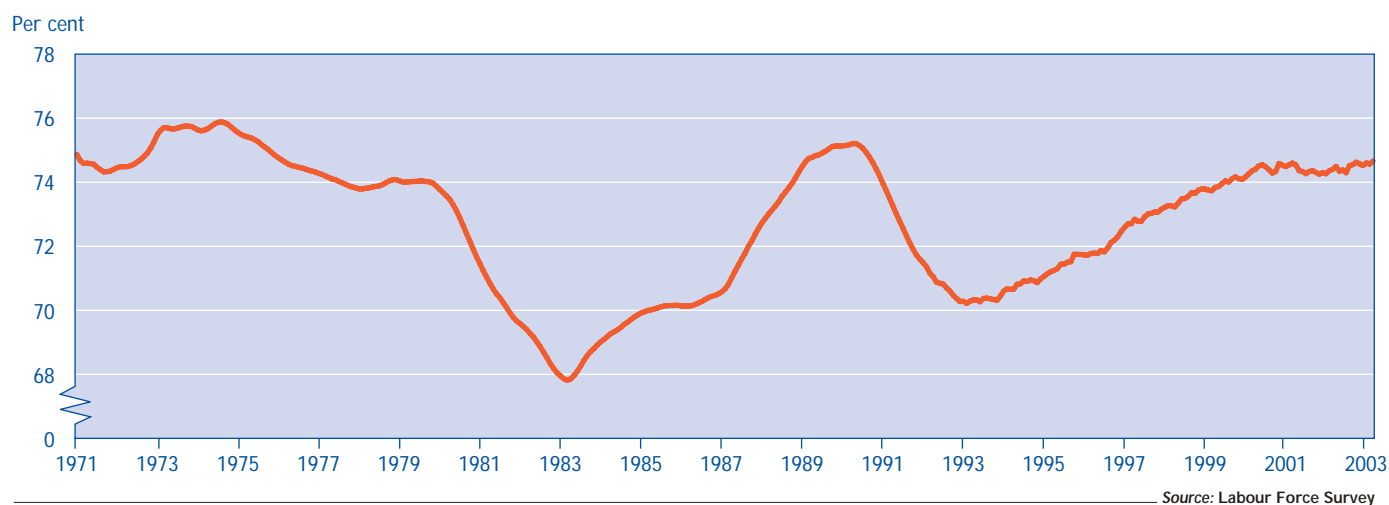
There are three clear messages coming out of the data. One is the

cyclical nature of the labour market, and the way in which employment, unemployment and economic inactivity are affected by the economic cycle. The second is the contrast in the data for men and women. This is both in terms of longer-term trends, such as the increased female participation in the labour market or the decline in male economic activity, and in terms of the greater impact recent recessions have had on male employment. Finally, the historical data suggests that current rates of employment and unemployment are at levels which have not been seen on a sustained basis since the 1970s.

## Employment

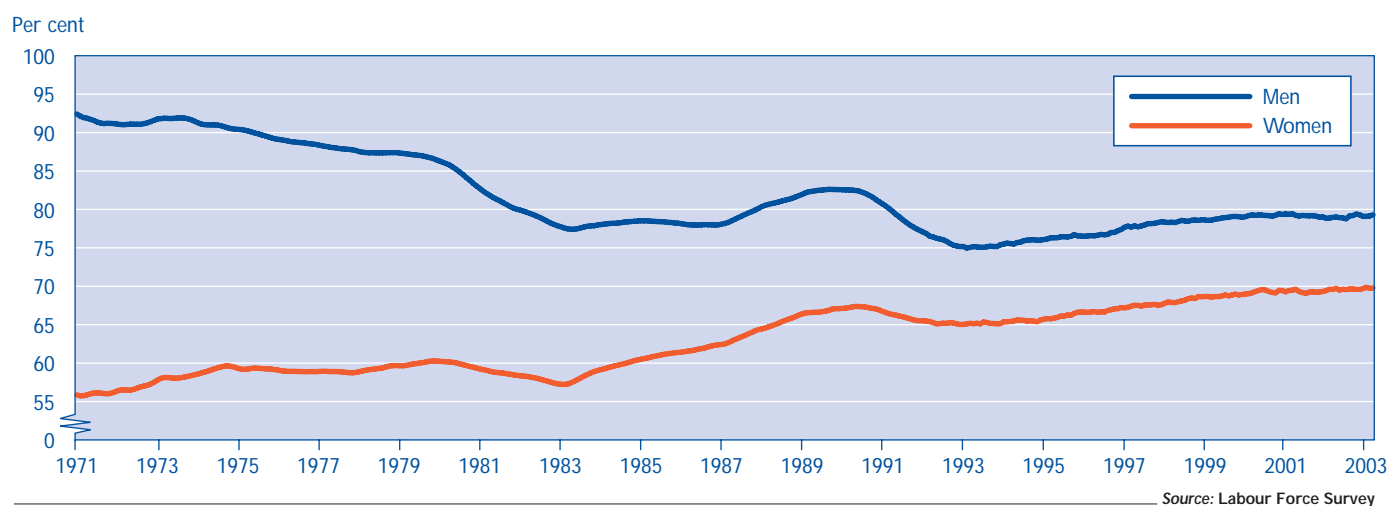
Looking at the data highlights a number of trends. Generally, the total employment level has been rising, reflecting the increase in the UK population, and the current level is the highest on record. However, there have been clear cyclical impacts, for example with employment falling in the early 1980s and 1990s. This shows up particularly strongly in the working-age employment rate (see *Figure 1*). The working-age employment rate was above 74 per cent throughout most of the 1970s, even during the recession of

**Figure 1** Employment rate for all people of working age;<sup>a</sup> United Kingdom; January-March 1971 to March-May 2003



<sup>a</sup> Working age is 16-64 for men and 16-59 for women.

**Figure 2** Employment rates for people of working age by sex;<sup>a</sup> United Kingdom; January-March 1971 to March-May 2003



<sup>a</sup> Working age is 16-64 for men and 16-59 for women.

1973-4, and it peaked at just under 76 per cent in the final quarter of 1974 during the boom period of the cycle. The rate then slumped to around 68 per cent during the recession of the early 1980s. The 1980s boom saw the employment rate recovering briefly to reach 75 per cent in 1990 before falling again in the subsequent recession. The rate has now returned to over 74 per cent, which it has sustained for the longest period since the 1970s. Looking ahead, the Government's target is to achieve a higher percentage of people in employment than ever before, but to do this in a way that is sustainable, and not fuelled by excessive growth.<sup>1</sup>

However, focusing on the overall employment figures disguises important changes. For example, looking at a gender split, one can see that there have been distinctly different trends in male and female employment (see [Figure 2](#)). The male working-age employment rate was over 90 per cent in the early 1970s, but by 2000 it was below 80 per cent. Male employment was on a downward trend during the 1970s, but it has been particularly affected by the two recessions of the

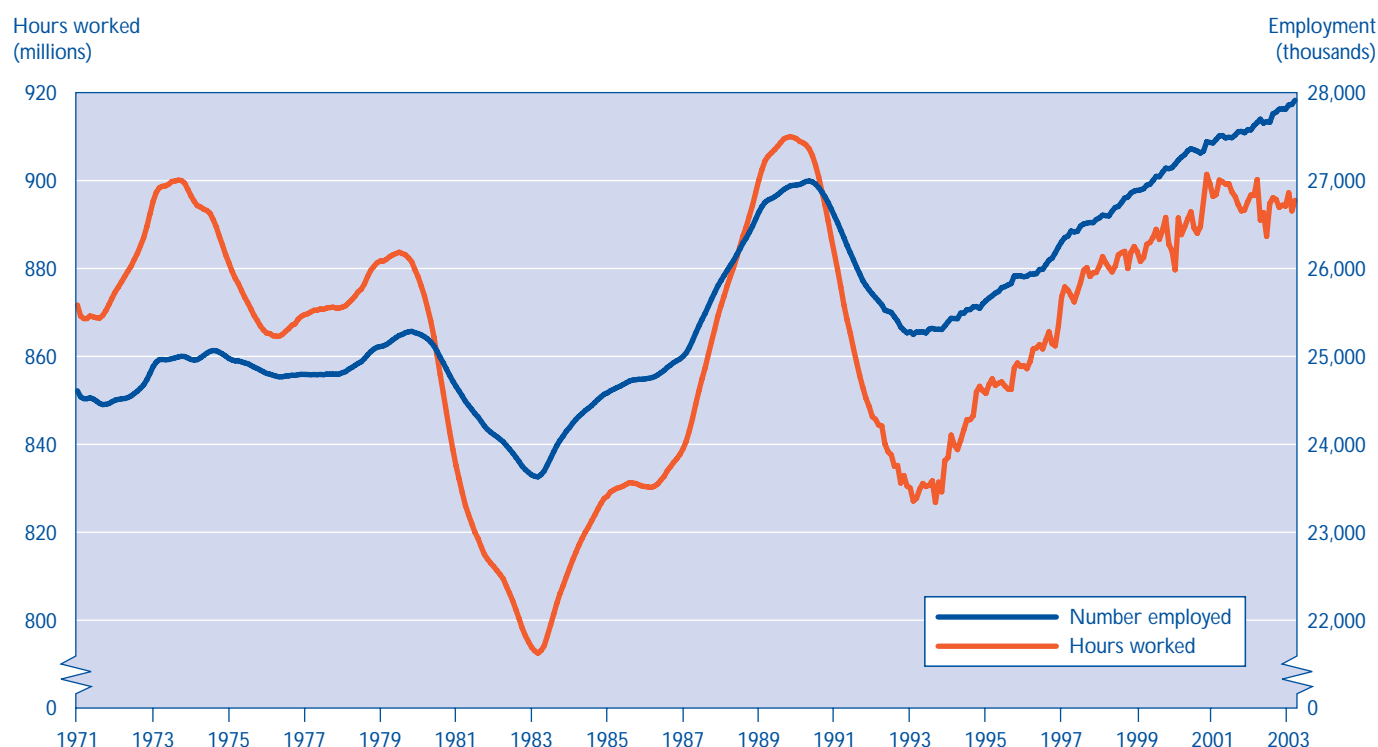
early 1980s and 1990s. The more male-dominated industries, such as manufacturing, have tended to be hit harder during the slow-downs, and this shows up in male employment data. By comparison, while the female employment figures do show the effect of the economic cycle, it is less marked. For example, the male working-age employment rate fell 10 percentage points in the early 1980s, compared with a fall of just 3 percentage points in the female rate. More generally, female employment has been growing, reflecting changes in society and the switch from manufacturing to services which has opened up more opportunities for women, whether in the type of work or the more flexible working hours. In total, the female working-age employment rate has increased from around 55 per cent in 1971 to almost 70 per cent in 2003, the highest on record and probably the highest it has been in peacetime.

### Hours worked

These trends in employment can also be seen in the total weekly hours worked

series, which shows the total hours worked in the economy and which has also been modelled back to 1971. The average hours worked by an individual has generally been trending down over the period, as people increasingly choose to work fewer hours and the level of part-time working increases. As a result, most of the fluctuations in the total weekly hours series are driven by employment and follow a similar cycle to the employment figures (see [Figure 3](#)). However, there are a few differences. Though the overall trend in average hours is downward, there are cyclical fluctuations. For example, firms tend to respond to economic upswings by first increasing overtime. As a result, the total weekly hours series is, if anything, more responsive to the economic cycle than employment. Though average hours have fallen, the increase in the employment level means that the total level of hours worked is now very similar to that seen during the 1974 boom. While there is no direct trade-off between reducing hours for one person and increasing employment elsewhere, the increase in employment has compensated for the decline in average hours.

**Figure 3** Total weekly hours worked and total number of people aged 16 and over employed; United Kingdom; January-March 1971 to March-May 2003



Source: Labour Force Survey

**Table 1** Summary of modelled and interpolated Labour Force Survey data for all people aged 16 and over by sex; United Kingdom; spring quarters 1971 to 1991

	All aged 16 and over (000s)	Total economically active (000s)	Total in employment (000s)	Unemployed (000s)	Economically inactive (000s)	Economic activity rate (%)	Employment rate (%)	Unemployment rate (%)	Economic inactivity rate (%)
Thousands and per cent									
<b>All</b>									
March-May 1971	40,550	25,553	24,520	1,033	14,997	63.0	60.5	4.0	37.0
March-May 1972	40,723	25,683	24,518	1,165	15,040	63.1	60.2	4.5	36.9
March-May 1973	40,895	25,951	24,964	987	14,944	63.5	61.0	3.8	36.5
March-May 1974	41,057	25,907	24,963	944	15,150	63.1	60.8	3.6	36.9
March-May 1975	41,235	26,048	24,949	1,099	15,186	63.2	60.5	4.2	36.8
March-May 1976	41,454	26,198	24,786	1,413	15,256	63.2	59.8	5.4	36.8
March-May 1977	41,720	26,241	24,792	1,449	15,479	62.9	59.4	5.5	37.1
March-May 1978	42,006	26,327	24,854	1,473	15,680	62.7	59.2	5.6	37.3
March-May 1979	42,321	26,541	25,136	1,405	15,780	62.7	59.4	5.3	37.3
March-May 1980	42,669	26,874	25,225	1,650	15,795	63.0	59.1	6.1	37.0
March-May 1981	42,991	27,093	24,549	2,544	15,898	63.0	57.1	9.4	37.0
March-May 1982	43,207	26,879	24,058	2,820	16,328	62.2	55.7	10.5	37.8
March-May 1983	43,441	26,653	23,630	3,023	16,788	61.4	54.4	11.3	38.6
March-May 1984	43,709	27,503	24,282	3,221	16,206	62.9	55.6	11.7	37.1
March-May 1985	43,983	27,725	24,626	3,099	16,258	63.0	56.0	11.2	37.0
March-May 1986	44,211	27,859	24,758	3,101	16,351	63.0	56.0	11.1	37.0
March-May 1987	44,425	28,112	25,102	3,010	16,313	63.3	56.5	10.7	36.7
March-May 1988	44,590	28,464	25,978	2,486	16,126	63.8	58.3	8.7	36.2
March-May 1989	44,737	28,832	26,754	2,078	15,905	64.4	59.8	7.2	35.6
March-May 1990	44,844	28,950	26,972	1,977	15,894	64.6	60.1	6.8	35.4
March-May 1991	44,935	28,843	26,434	2,409	16,093	64.2	58.8	8.4	35.8
<b>Men</b>									
March-May 1971	19,285	16,129	15,577	552	3,155	83.6	80.8	3.4	16.4
March-May 1972	19,383	16,114	15,453	662	3,269	83.1	79.7	4.1	16.9
March-May 1973	19,481	16,141	15,639	502	3,340	82.9	80.3	3.1	17.1
March-May 1974	19,576	15,994	15,524	470	3,582	81.7	79.3	2.9	18.3
March-May 1975	19,682	16,040	15,446	594	3,641	81.5	78.5	3.7	18.5
March-May 1976	19,801	16,103	15,278	825	3,699	81.3	77.2	5.1	18.7
March-May 1977	19,936	16,046	15,220	827	3,890	80.5	76.3	5.2	19.5
March-May 1978	20,076	15,988	15,164	825	4,087	79.6	75.5	5.2	20.4
March-May 1979	20,244	16,000	15,241	759	4,244	79.0	75.3	4.7	21.0
March-May 1980	20,423	16,075	15,152	923	4,348	78.7	74.2	5.7	21.3
March-May 1981	20,581	16,180	14,576	1,604	4,401	78.6	70.8	9.9	21.4
March-May 1982	20,686	16,003	14,201	1,802	4,683	77.4	68.7	11.3	22.6
March-May 1983	20,808	15,839	13,909	1,930	4,969	76.1	66.8	12.2	23.9
March-May 1984	20,953	16,071	14,152	1,919	4,882	76.7	67.5	11.9	23.3
March-May 1985	21,096	16,141	14,270	1,871	4,955	76.5	67.6	11.6	23.5
March-May 1986	21,206	16,073	14,208	1,865	5,134	75.8	67.0	11.6	24.2
March-May 1987	21,315	16,115	14,312	1,803	5,200	75.6	67.1	11.2	24.4
March-May 1988	21,402	16,264	14,793	1,471	5,138	76.0	69.1	9.0	24.0
March-May 1989	21,481	16,366	15,155	1,212	5,114	76.2	70.6	7.4	23.8
March-May 1990	21,547	16,393	15,233	1,160	5,155	76.1	70.7	7.1	23.9
March-May 1991	21,594	16,301	14,799	1,502	5,293	75.5	68.5	9.2	24.5
<b>Women</b>									
March-May 1971	21,265	9,424	8,943	480	11,841	44.3	42.1	5.1	55.7
March-May 1972	21,340	9,568	9,066	503	11,772	44.8	42.5	5.3	55.2
March-May 1973	21,414	9,810	9,325	485	11,604	45.8	43.5	4.9	54.2
March-May 1974	21,481	9,913	9,439	474	11,568	46.1	43.9	4.8	53.9
March-May 1975	21,553	10,008	9,503	505	11,545	46.4	44.1	5.0	53.6
March-May 1976	21,653	10,096	9,508	588	11,557	46.6	43.9	5.8	53.4
March-May 1977	21,783	10,195	9,572	622	11,589	46.8	43.9	6.1	53.2
March-May 1978	21,930	10,338	9,690	648	11,592	47.1	44.2	6.3	52.9
March-May 1979	22,078	10,541	9,895	646	11,536	47.7	44.8	6.1	52.3
March-May 1980	22,246	10,799	10,072	727	11,447	48.5	45.3	6.7	51.5
March-May 1981	22,411	10,913	9,973	940	11,497	48.7	44.5	8.6	51.3
March-May 1982	22,521	10,876	9,858	1,018	11,645	48.3	43.8	9.4	51.7
March-May 1983	22,633	10,814	9,721	1,093	11,819	47.8	42.9	10.1	52.2
March-May 1984	22,756	11,432	10,130	1,302	11,324	50.2	44.5	11.4	49.8
March-May 1985	22,887	11,584	10,356	1,228	11,303	50.6	45.2	10.6	49.4
March-May 1986	23,004	11,787	10,550	1,237	11,217	51.2	45.9	10.5	48.8
March-May 1987	23,110	11,997	10,790	1,207	11,113	51.9	46.7	10.1	48.1
March-May 1988	23,188	12,200	11,185	1,015	10,989	52.6	48.2	8.3	47.4
March-May 1989	23,257	12,466	11,599	867	10,791	53.6	49.9	7.0	46.4
March-May 1990	23,297	12,557	11,740	817	10,740	53.9	50.4	6.5	46.1
March-May 1991	23,341	12,541	11,635	906	10,800	53.7	49.8	7.2	46.3

Source: Labour Force Survey

Figure 4 Unemployment rate for all people aged 16 and over; United Kingdom; January-March 1971 to March-May 2003

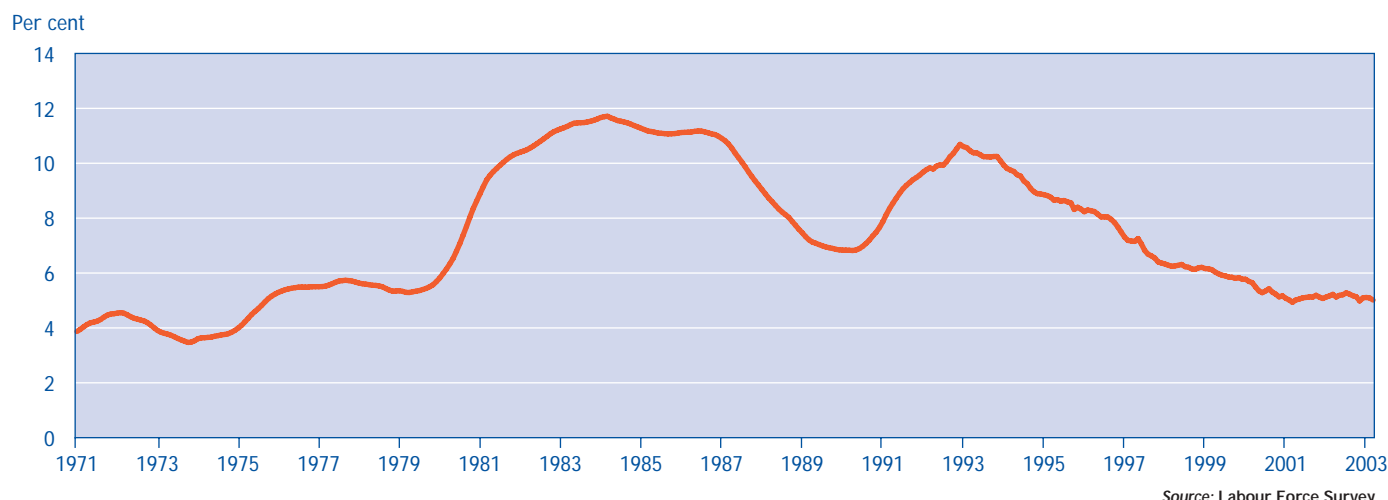
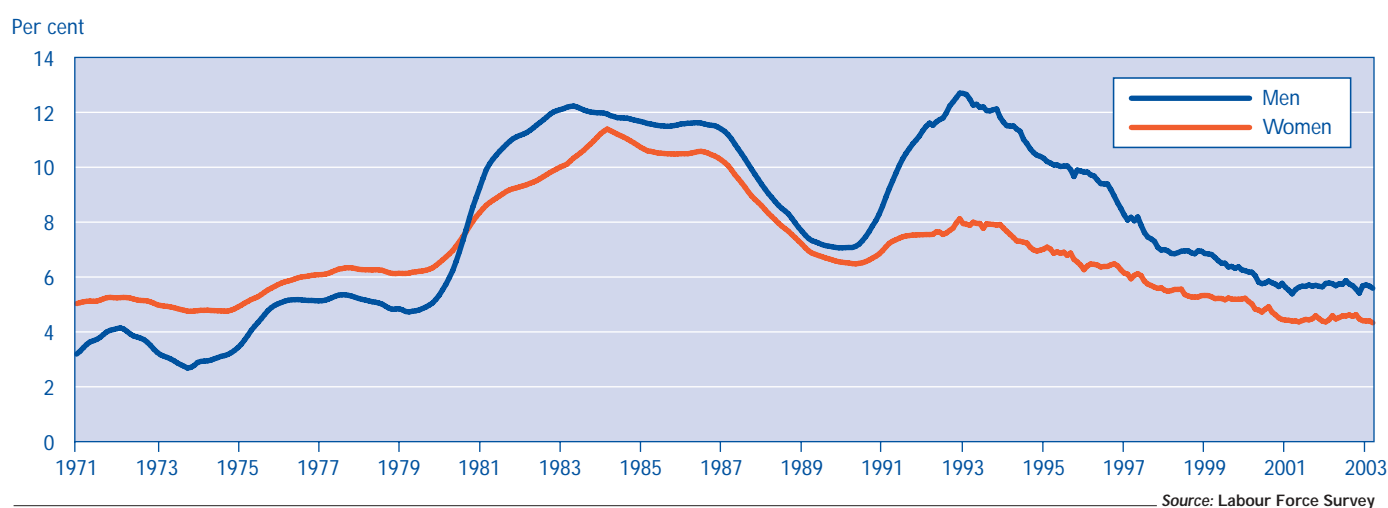


Figure 5 Unemployment rates for all people aged 16 and over by sex; United Kingdom; January-March 1971 to March-May 2003



Looking at the gender split (see [Table 3](#)), there is a familiar picture. Male actual weekly hours worked have declined from around 650 million in 1971 to 550 million in 2002. By comparison, female hours have increased from 225 million to 340 million over the same period. And again, the male series is noticeably more affected by the economic cycle. What is interesting to note is that female employment has increased from 35 per cent of the total workforce in 1971 to almost 50 per cent in 2002 (see [Table 1](#)). By comparison, the corresponding proportion of total weekly hours worked by women has increased from 25 to 38 per cent. The smaller share of hours reflects the greater degree of part-time working by women.

## Unemployment

The unemployment figures follow a well-known cyclical pattern. Unemployment during the early 1970s was relatively low at around 1 million, or 4 per cent of the population aged 16 and over. This increased in 1975-6 following recession, before flattening out at around 1.5 million. It then remained largely unchanged until 1980 when it leapt, peaking at over 3.2 million (or almost 12 per cent) in 1984. The late 1980s saw a recovery, with unemployment falling to 2 million, before the recession of the early 1990s drove it back up to 3 million. The last decade though has seen gradual improvements, and unemployment has

now levelled off at around 5 per cent (see [Figure 4](#)) – at both a level and rate not seen since 1980.

It is once again interesting to look at the relationship between male and female series (see [Figure 5](#)). The two have followed similar cyclical trends, but it underlines the fact that male unemployment has been more affected by the recessions of the 1980s and 1990s. Before 1980, the figures show that the male unemployment rate was actually lower than the female rate. This reflects the very high employment rates seen for men in the 1970s, and the lower participation rates for women. During the 1980s recession, the increase in male unemployment was particularly sharp – rising from 5 per cent to 12 per

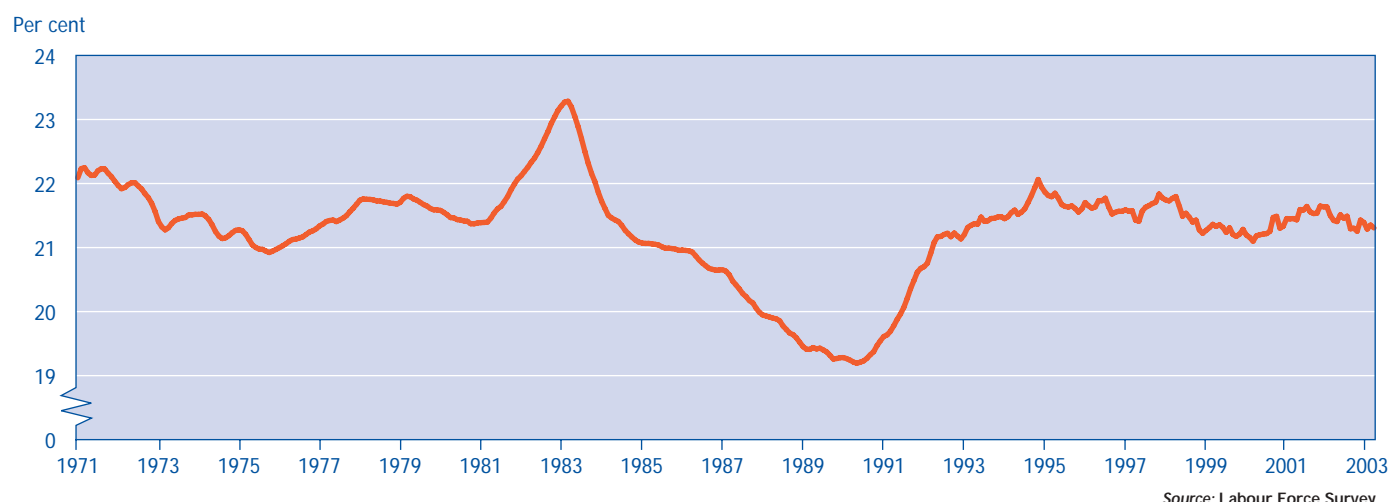


**Table 2** Summary of modelled and interpolated Labour Force Survey data for all people of working age<sup>a</sup> by sex; United Kingdom; spring quarters 1971 to 1991

	All aged 16 to 59/64 (000s)	Total economically active (000s)	Total in employment (000s)	Unemployed (000s)	Economically inactive (000s)	Economic activity rate (%)	Employment rate (%)	Unemployment rate (%)	Economic inactivity rate (%)
Thousands and per cent									
<b>All</b>									
March-May 1971	31,855	24,768	23,759	1,009	7,087	77.8	74.6	4.1	22.2
March-May 1972	31,898	24,900	23,760	1,141	6,998	78.1	74.5	4.6	21.9
March-May 1973	31,946	25,149	24,186	963	6,797	78.7	75.7	3.8	21.3
March-May 1974	31,982	25,108	24,188	920	6,875	78.5	75.6	3.7	21.5
March-May 1975	32,043	25,248	24,173	1,075	6,795	78.8	75.4	4.3	21.2
March-May 1976	32,179	25,403	24,014	1,388	6,777	78.9	74.6	5.5	21.1
March-May 1977	32,379	25,447	24,024	1,423	6,931	78.6	74.2	5.6	21.4
March-May 1978	32,622	25,526	24,078	1,447	7,097	78.2	73.8	5.7	21.8
March-May 1979	32,903	25,730	24,350	1,380	7,173	78.2	74.0	5.4	21.8
March-May 1980	33,123	25,998	24,372	1,626	7,125	78.5	73.6	6.3	21.5
March-May 1981	33,323	26,192	23,671	2,521	7,131	78.6	71.0	9.6	21.4
March-May 1982	33,480	26,030	23,234	2,795	7,450	77.7	69.4	10.7	22.3
March-May 1983	33,704	25,856	22,857	2,999	7,848	76.7	67.8	11.6	23.3
March-May 1984	33,962	26,660	23,497	3,163	7,302	78.5	69.2	11.9	21.5
March-May 1985	34,162	26,965	23,911	3,054	7,196	78.9	70.0	11.3	21.1
March-May 1986	34,317	27,127	24,067	3,060	7,189	79.0	70.1	11.3	21.0
March-May 1987	34,473	27,380	24,409	2,972	7,093	79.4	70.8	10.9	20.6
March-May 1988	34,600	27,709	25,261	2,449	6,890	80.1	73.0	8.8	19.9
March-May 1989	34,707	27,970	25,941	2,029	6,737	80.6	74.7	7.3	19.4
March-May 1990	34,791	28,097	26,152	1,944	6,694	80.8	75.2	6.9	19.2
March-May 1991	34,854	27,991	25,620	2,371	6,863	80.3	73.5	8.5	19.7
<b>Men</b>									
March-May 1971	16,571	15,774	15,236	538	796	95.2	91.9	3.4	4.8
March-May 1972	16,611	15,768	15,120	648	843	94.9	91.0	4.1	5.1
March-May 1973	16,650	15,783	15,295	488	866	94.8	91.9	3.1	5.2
March-May 1974	16,685	15,644	15,189	455	1,041	93.8	91.0	2.9	6.2
March-May 1975	16,734	15,691	15,111	580	1,043	93.8	90.3	3.7	6.2
March-May 1976	16,803	15,761	14,950	811	1,042	93.8	89.0	5.1	6.2
March-May 1977	16,888	15,707	14,894	813	1,180	93.0	88.2	5.2	7.0
March-May 1978	16,975	15,648	14,837	811	1,327	92.2	87.4	5.2	7.8
March-May 1979	17,092	15,657	14,912	745	1,435	91.6	87.2	4.8	8.4
March-May 1980	17,222	15,715	14,803	911	1,507	91.2	86.0	5.8	8.8
March-May 1981	17,346	15,832	14,237	1,595	1,514	91.3	82.1	10.1	8.7
March-May 1982	17,447	15,684	13,892	1,792	1,763	89.9	79.6	11.4	10.1
March-May 1983	17,590	15,551	13,630	1,921	2,039	88.4	77.5	12.4	11.6
March-May 1984	17,753	15,769	13,871	1,898	1,984	88.8	78.1	12.0	11.2
March-May 1985	17,838	15,855	14,005	1,849	1,984	88.9	78.5	11.7	11.1
March-May 1986	17,885	15,794	13,952	1,843	2,091	88.3	78.0	11.7	11.7
March-May 1987	17,939	15,831	14,049	1,783	2,107	88.3	78.3	11.3	11.7
March-May 1988	17,986	15,963	14,508	1,455	2,023	88.8	80.7	9.1	11.2
March-May 1989	18,029	16,024	14,838	1,186	2,004	88.9	82.3	7.4	11.1
March-May 1990	18,068	16,054	14,911	1,144	2,013	88.9	82.5	7.1	11.1
March-May 1991	18,084	15,964	14,480	1,484	2,120	88.3	80.1	9.3	11.7
<b>Women</b>									
March-May 1971	15,284	8,993	8,523	471	6,291	58.8	55.8	5.2	41.2
March-May 1972	15,287	9,133	8,640	493	6,155	59.7	56.5	5.4	40.3
March-May 1973	15,296	9,366	8,891	475	5,930	61.2	58.1	5.1	38.8
March-May 1974	15,298	9,464	8,999	465	5,834	61.9	58.8	4.9	38.1
March-May 1975	15,309	9,557	9,062	495	5,752	62.4	59.2	5.2	37.6
March-May 1976	15,376	9,641	9,064	577	5,735	62.7	59.0	6.0	37.3
March-May 1977	15,491	9,740	9,129	611	5,751	62.9	58.9	6.3	37.1
March-May 1978	15,647	9,878	9,242	636	5,769	63.1	59.1	6.4	36.9
March-May 1979	15,811	10,072	9,438	634	5,738	63.7	59.7	6.3	36.3
March-May 1980	15,901	10,283	9,568	715	5,618	64.7	60.2	7.0	35.3
March-May 1981	15,977	10,360	9,434	926	5,616	64.8	59.1	8.9	35.2
March-May 1982	16,034	10,346	9,342	1,004	5,688	64.5	58.3	9.7	35.5
March-May 1983	16,114	10,305	9,227	1,078	5,808	64.0	57.3	10.5	36.0
March-May 1984	16,210	10,891	9,625	1,266	5,319	67.2	59.4	11.6	32.8
March-May 1985	16,323	11,111	9,906	1,205	5,213	68.1	60.7	10.8	31.9
March-May 1986	16,432	11,333	10,116	1,217	5,099	69.0	61.6	10.7	31.0
March-May 1987	16,535	11,549	10,360	1,189	4,986	69.8	62.7	10.3	30.2
March-May 1988	16,614	11,746	10,753	994	4,867	70.7	64.7	8.5	29.3
March-May 1989	16,678	11,946	11,103	843	4,732	71.6	66.6	7.1	28.4
March-May 1990	16,723	12,042	11,242	800	4,681	72.0	67.2	6.6	28.0
March-May 1991	16,770	12,027	11,140	887	4,744	71.7	66.4	7.4	28.3

Source: Labour Force Survey

<sup>a</sup> Working age is 16 to 64 for men and 16 to 59 for women.

**Figure 6** Economic inactivity rate for all people of working age;<sup>a</sup> United Kingdom; January-March 1971 to March-May 2003

a Working age is 16-64 for men and 16-59 for women.

**Table 3** Total weekly hours worked; United Kingdom; spring quarters 1971 to 1991

	All	Men	Millions Women
March-May 1971	868.6	642.9	225.7
March-May 1972	877.0	646.1	230.9
March-May 1973	898.4	660.4	238.0
March-May 1974	894.3	653.1	241.2
March-May 1975	877.8	636.4	241.4
March-May 1976	864.7	623.3	241.4
March-May 1977	870.1	625.7	244.4
March-May 1978	872.2	624.4	247.8
March-May 1979	882.1	628.7	253.4
March-May 1980	873.8	615.5	258.4
March-May 1981	829.0	574.3	254.7
March-May 1982	810.4	558.7	251.8
March-May 1983	792.5	543.4	249.0
March-May 1984	815.4	555.5	259.9
March-May 1985	829.6	562.9	266.7
March-May 1986	830.2	558.1	272.1
March-May 1987	843.1	563.3	279.8
March-May 1988	876.1	585.1	291.0
March-May 1989	904.5	602.2	302.3
March-May 1990	908.6	602.8	305.8
March-May 1991	875.8	573.2	302.6

Source: Labour Force Survey

cent in three years. As a result, the male unemployment rate overtook the female rate in 1981 and has stayed above it ever since. For the period from 1981 to 1990, the male and female series moved relatively closely, but then came the recession of the 1990s. Again this hit male unemployment particularly hard. For example, at its peak in 1993 male unemployment was 2 million, and had increased by around 800,000 since 1990. By comparison, female

unemployment was 1 million, and up just 200,000. This shows up most strongly in the unemployment rates, where the impact of the recession on the female unemployment rate is relatively minor at less than 2 percentage points, compared with an increase of almost 6 percentage points for men. Indeed, the gap between male and female unemployment rates was at its greatest on record in the first quarter of 1993 (12.7 per cent compared to 7.9 per cent).

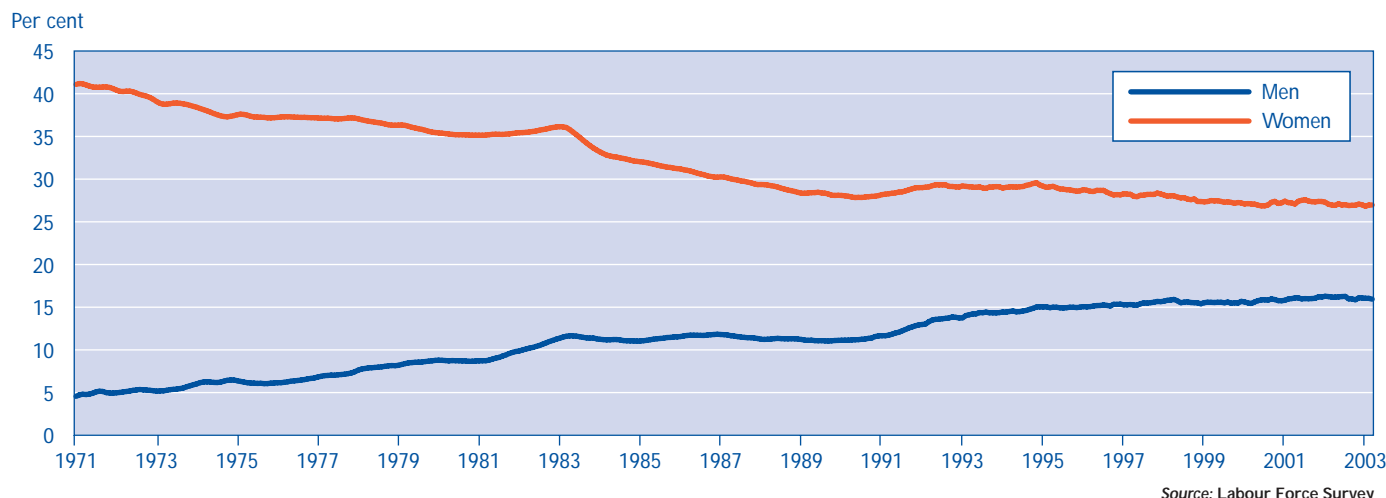
Since 1993, both series have been falling, but the greatest decrease has come for men, closing the gender gap. As of April-June 2003, male unemployment stands at 5.5 per cent, around levels not seen since 1980; female unemployment is 4.3 per cent, the lowest since records began.

## Inactivity

The employed and unemployed are the economically active. The remaining section of the population is the economically inactive, who either do not want to work, are not seeking work, or are not available to work. The movements in economic inactivity over the past 30 years again reflect both the economic cycle and the changing structure of the workforce (see *Figure 6*).

The working-age inactivity rate was around 22 per cent in 1971, and bounced around 21-22 per cent for most of the decade. However, even in the 1970s this was disguising different trends in male and female economic inactivity: female economic inactivity was declining as more women moved into the labour market, and between 1971 and 1980 the female inactivity rate fell from 40 per cent to 35 per cent. By comparison, male economic inactivity increased from 5 to 10 per cent. This continuing split has underlain all the changes in inactivity since. For

Figure 7 Economic inactivity rates for all people of working age by sex;<sup>a</sup> United Kingdom; January-March 1971 to March-May 2003



a Working age is 16-64 for men and 16-59 for women.

example, in the recession of the early 1980s, there was a sharp increase in inactivity, with the rate peaking at over 23 per cent. With worsening employment prospects, people were discouraged from searching for work, and moved out of the labour market into economic inactivity. Generally, the rise in economic inactivity is seen as a male phenomenon, as shown by the long-term trend already noted, and indeed the rise in economic inactivity was partly driven by the rise in the rate of increase in economic inactivity among men. However, female economic inactivity also rose during the recession, and was probably an equal driver behind the overall increase. The difference was that this effect was purely cyclical. As the economy improved in the 1980s, female economic inactivity resumed its downward path, dropping to 28 per cent by 1990 and driving the overall inactivity rate down to 19 per cent. By comparison, the male economic inactivity rate levelled off but did not fall back at all (see *Figure 7*).

This pattern was repeated in the 1990s recession, when both female and male economic inactivity rates rose. The difference was that, since 1993, while female economic inactivity resumed its downward trend, male inactivity continued to increase, with the result that the overall economic inactivity rate stayed relatively flat over

the following decade at 21-22 per cent – the sort of rate seen in the 1970s.

## Conclusion

In conclusion ONS considers that the estimates give an accurate picture of the state of the labour market, particularly from 1979 onwards (when the estimates are interpolates), but also in the period back to January-March 1971. In making the estimates consistent with the quarterly LFS, a number of adjustments have been made to the data.<sup>2</sup> The general effect of this has been to transfer numbers out of inactivity and into activity. Because these adjustments were made for the period 1979-91 they have been carried backwards by the models meaning the estimates of employment are higher than data sources from the time, unemployment estimates are broadly consistent, and because economic inactivity is calculated as a residual, its estimates are lower.

The model does inevitably have a number of limitations. These are set out in the full technical report (see <http://www.statistics.gov.uk/statbase/product.asp?vlnk=10620&more=n>), but the following key points should be noted.

1. The data are modelled estimates and as such have large standard errors that get larger the greater the distance from the real data points. This is

particularly the case for the backcast series (1971-78).

2. The model assumes that the relationship for the periods when both actual LFS data and the independent variable are in the model holds true for the periods when they are not both available. For example, the relationship between workforce jobs and the LFS in the 1970s would be the same as the relationship in the 1980s. Given the relatively simple models that have been used this is a major and necessary assumption.
3. The interpolated series are very smooth, which affects the estimated standard errors of the interpolated and backcast series. Users also need to be aware of the smoothness of the interpolated series, especially if they do modelling with the interpolated data.
4. The independent variables that are used to estimate employment and hours are of a lower frequency than the post-1991 LFS data. This implies that the interpolated and backcast series are less reliable. This is most prominent for the data points that are furthest away from an actual (that is, not interpolated) point of the corresponding independent variable. The problem is most serious for the hours series, as it uses an independent variable which is only of annual frequency.



## Notes

- 1 *Budget Report 2000*, HM Treasury, [http://www.hm-treasury.gov.uk/budget/budget\\_2000/budget\\_report/bud\\_bud00\\_chap4.cfm](http://www.hm-treasury.gov.uk/budget/budget_2000/budget_report/bud_bud00_chap4.cfm)
- 2 The main one has been to change the categorisation of unpaid family workers and people in full-time education who did some work in the reference week. At the time of the original survey they were assumed to be economically inactive. However, under the current LFS definitions as they did some work they are categorised as employed.

### Further information

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