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Defence Statistics 1999

The main aim of this paper, which updates Research Paper 98/120, is to bring together the more commonly used statistics relating to defence expenditure and manpower and to explain some of the problems involved in using such statistics, particularly when making international comparisons.

Readers will also wish to consult a forthcoming Library Research Paper *Defence Employment 1997-98* which sets out some statistics on defence employment and manpower.

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Summary of main points

- The UK Defence Budget has fallen from 5.3% of GDP in 1984/85 to 2.7% in 1998/99 and is planned to fall to 2.3% by 2001/02.
- There has been a 32% fall since 1990 in the size of UK regular armed forces. The number of regular reserves is slightly above the 1990 level fell by 3% between April 1998 and 1999
- The total number of armed forces personnel in NATO countries has fallen by more than a fifth since 1990.
- Since 1992/93 salaries of senior officers have increased at a faster rate than other ranks. The increases seen in other ranks are lower than for average earnings in the whole economy.

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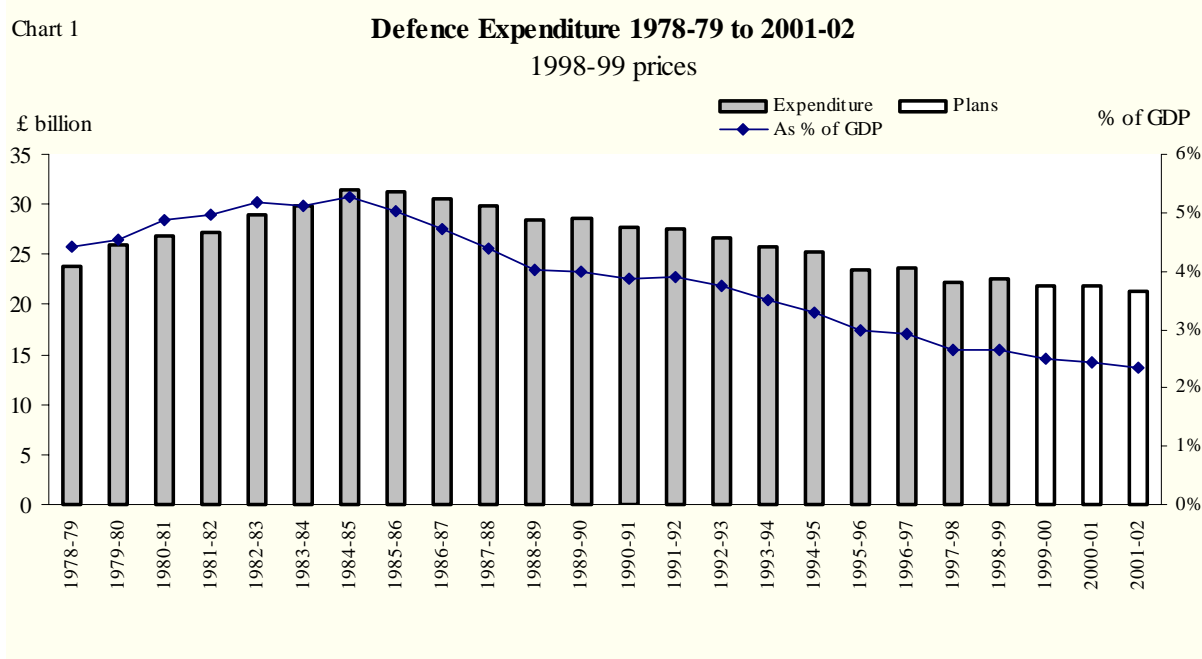
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I Defence expenditure

A. UK defence expenditure

The principal measure of defence expenditure in the United Kingdom is the Defence Budget, which covers all expenditure on the Ministry of Defence's programme, and is met from three votes within the Supply Estimates (Class I, Votes 1 to 3). These votes are individually cash limited, but together they form the block defence cash limit and are managed as a block budget. Expenditure incurred against Class I, Vote 4 on pensions for retired members of the Armed Forces falls outside the Defence Budget and is not cash limited.

The Defence Budget for the years 1979/80 to 1998/99 is shown in Table 1 and Chart 1, together with MoD planned defence expenditure to the financial year 2001/02. The figures are given at both outturn prices and constant 1997/98 prices (revalued using the adjusted GDP deflator). The figures at 1997/98 prices should be regarded more as a guide to what that expenditure could have purchased in other sectors of the economy (i.e. the opportunity cost), rather than as a guide to the volume of defence services/equipment purchased. The table also shows the Defence Budget as a percentage of Gross Domestic Product and of public expenditure.



It is clear from these figures that defence expenditure has been falling steadily since the mid-1980s both in real terms and as a percentage of GDP. The figures show:

- Defence expenditure is planned to fall to around 2.3% of GDP by 2001/02. This figure has been falling since 1984/85 when the figure was 5.3%;

- According to the best available estimate of defence expenditure as a percentage of GDP, the previous low was recorded in 1930 when the figure was around 2.6%;¹
- Planned defence expenditure in the current financial year is 31% below that in 1984/85 in real terms.

Table 2 looks at the defence budget according to the New Management Strategy which was introduced on 1 April 1991. This comprises a system of management planning centred on the Departmental Plan which established targets for managers throughout the Department and the armed forces, and a system of budgets which provide managers with a cash allocation with some flexibility in the way in which they use it. The figures show expenditure on defence systems procurement increasing over the period shown.

Table 3 looks at the Defence Budget broken down by principal heading. The expenditure total shown in this table differs from that in Table 1 as it shows expenditure at outturn prices. Also, other countries' contributions to the cost of the Gulf War are excluded from this table, so expenditure in 1990/91 in 1991/92 in this table is higher than in Table 1. The percentage of total expenditure spent on personnel, equipment and other items has varied from year to year. The proportion of expenditure spent on equipment has been higher in the latest three years than since 1988/89.

¹ Peacock & Wiseman, *The Growth of Public Expenditure in the United Kingdom, 1961*
ONS database series YBHA

Table 1

Defence Budget: 1979/80 to 2001/02

		£ billion	£ billion at 1998/99 prices ^(a)	% change over previous year in real terms	As per cent of GDP	As per cent of TME ^(b)
1979-80	<i>outturn</i>	9.4	25.9		4.5%	10.2%
1980-81	<i>outturn</i>	11.5	26.8	+3.5%	4.9%	10.3%
1981-82	<i>outturn</i>	12.8	27.2	+1.6%	5.0%	10.3%
1982-83	<i>outturn</i>	14.6	29.0	+6.7%	5.2%	10.6%
1983-84	<i>outturn</i>	15.7	29.8	+2.8%	5.1%	10.6%
1984-85	<i>outturn</i>	17.4	31.4	+5.3%	5.3%	11.0%
1985-86	<i>outturn</i>	18.2	31.2	-0.6%	5.0%	11.1%
1986-87	<i>outturn</i>	18.4	30.6	-2.0%	4.7%	10.8%
1987-88	<i>outturn</i>	18.9	29.8	-2.5%	4.4%	10.5%
1988-89	<i>outturn</i>	19.2	28.4	-4.8%	4.0%	10.2%
1989-90	<i>outturn</i>	20.8	28.6	+0.9%	4.0%	10.0%
(c) 1990-91	<i>outturn</i>	21.7	27.8	-3.1%	3.9%	9.7%
(c) 1991-92	<i>outturn</i>	22.9	27.6	-0.6%	3.9%	9.2%
1992-93	<i>outturn</i>	22.9	26.7	-3.2%	3.7%	8.5%
1993-94	<i>outturn</i>	22.8	25.8	-3.2%	3.5%	8.0%
1994-95	<i>outturn</i>	22.6	25.3	-2.3%	3.3%	7.6%
1995-96	<i>outturn</i>	21.5	23.4	-7.3%	3.0%	7.0%
(d) 1996-97	<i>outturn</i>	22.3	23.5	+0.6%	2.9%	7.1%
(d) 1997-98	<i>estimates</i>	21.6	22.2	-5.9%	2.7%	6.7%
1998-99	<i>estimates</i>	22.5	22.5	+1.8%	2.7%	6.8%
1999-00	<i>plans</i>	22.3	21.8	-3.4%	2.5%	6.4%
2000-01	<i>plans</i>	22.8	21.8	-0.1%	2.4%	6.2%
2001-02	<i>plans</i>	23.0	21.4	-1.8%	2.3%	5.9%

Notes: (a) Adjusted using the adjusted GDP deflator as at 9 November 1999

(b) Total Managed Expenditure is total current and capital expenditure of the public sector.

(c) Figures for 1990/91 and 1991/92 are net of other countries contributions to the cost of the Gulf War of £498m and £1,525m respectively.

(d) Figures for 1996/97 and 1997/98 are net of the element of receipts from from the sale of married quarters that have been or will be appropriated onto Defence Votes, £304m and £700m respectively. The figures for these years including these amounts are given below:

1996-97	22.0	23.2	2.9%	7.0%
1997-98	20.9	21.4	2.6%	6.5%

(e) The planned expenditure figures to 2001/02 are net of defence estate disposals which should exceed £700 million over the next four years

Sources: *Defence Statistics 1999 (DASA) Table 1.2*

Ministry of Defence: The Government's Expenditure Plans: 1999/2000 to 2001/2002, Cm 4208

Public Expenditure: Statistical Analyses 1999-2000, Cm 4201

Table 2

The Defence Budget by budgetary area: 1996-97 to 1999-00		£ million			
Vote Section		1996-97 <i>outturn</i>	1997-98 <i>outturn</i>	1998-99 <i>estimated outturn</i>	1999-00 <i>planned</i>
1A	Commander-in-Chief Fleet	1,155	1,106	1,097	1,058
1B	GOC (Northern Ireland)	505	509	517	525
1C	Commander-in-Chief, Land Command	2,970	2,870	2,937	3,017
1D	Air Force Commanding-in-Chief RAF Strike Command	1,701	1,653	1,747	1,560
1E	Chief of Joint Operations	395	389	377	317
1F	Chief of Defence Logistics	4,898	4,700	5,032	4,627
1G	2nd Sea Lord/Commander-in-Chief Naval Home Command	632	529	552	541
1H	Adjutant General (Personal & Training Command)	2,117	2,048	2,057	2,057
1I	Air Officer C-in-C RAF Personnel and Training Command	813	596	589	583
1J	2nd Permanent Under Secretary of State	2,049	2,051	2,010	1,892
1K	Chief of Defence Procurement	775	699	682	667
3A	Defence systems procurement	4,791	5,014	5,508	5,917
3J	Major Customers' Research Budget	531	456	460	453
1N	Loans and grants to and repayments from the Hydrographic Office	3	-3	0	0
1J	Loans and grants to and repayments from the Meteorological Office	27	-6	-16	-9
3K	Defence Evaluation and Research Agency	16	-32	-29	-8
	Total Defence Budget	22,345	21,610	22,549	22,280
4A	Retired pay, pensions and other payments to Service personnel and their dependants	1,076	1,109	1,191	1,270

Sources: Ministry of Defence: *The Government's Expenditure Plans: 1999/2000 to 2001/2002, Cm 4208*

Table 3

Principal Headings of the Defence Budget: 1979/80 to 1999/00

£ billion

		Total Expenditure as per cent of total												
		Expenditure (outturn/ estimates prices) ^(a)	Expenditure on personnel				Expenditure on equipment					Other expenditure		
			Total	<i>of the Armed Forces</i>	<i>of the retired Armed Forces</i>	<i>of civilian staff</i>	Total	<i>Sea</i>	<i>Land</i>	<i>Air</i>	<i>Other</i>	Total	<i>Works, buildings and land</i>	<i>Misc. stores etc</i>
1979-80	<i>outturn</i>	9.2	42.6%	22.9%	5.0%	14.8%	39.7%	12.1%	8.1%	15.5%	4.0%	17.7%	6.5%	11.2%
1984-85	<i>outturn</i>	17.1	34.9%	18.9%	4.8%	11.2%	45.8%	13.0%	9.6%	20.3%	2.9%	19.3%	7.4%	11.9%
1985-86	<i>outturn</i>	17.9	35.6%	19.6%	5.0%	11.0%	45.7%	13.9%	10.5%	18.4%	2.8%	18.8%	7.9%	10.9%
1986-87	<i>outturn</i>	18.2	37.9%	20.9%	5.4%	11.7%	43.4%	13.7%	9.7%	17.0%	3.0%	18.6%	8.2%	10.4%
1987-88	<i>outturn</i>	18.9	38.2%	21.4%	5.7%	11.1%	43.9%	14.8%	9.0%	17.1%	2.9%	17.8%	7.7%	10.2%
1988-89	<i>outturn</i>	19.1	39.7%	22.5%	5.6%	11.6%	42.1%	13.8%	8.1%	16.2%	4.0%	18.2%	7.4%	10.8%
1989-90	<i>outturn</i>	20.8	39.0%	21.8%	5.8%	11.4%	41.1%	13.9%	8.4%	14.9%	3.9%	19.9%	9.2%	10.7%
1990-91	<i>outturn</i>	22.3	39.5%	21.6%	6.3%	11.6%	39.6%	13.3%	8.6%	14.3%	3.4%	20.9%	9.3%	11.6%
1991-92	<i>outturn</i>	24.6	40.5%	22.4%	6.6%	11.5%	39.7%	12.8%	8.8%	14.5%	3.6%	19.8%	8.5%	11.3%
1992-93	<i>outturn</i>	23.8	44.2%	23.7%	8.2%	12.3%	36.7%	12.2%	7.8%	13.3%	3.4%	19.1%	7.5%	11.6%
1993-94	<i>outturn</i>	23.4	42.0%	29.5%	(c)	12.5%	39.3%	11.0%	7.7%	13.9%	6.7%	18.7%	8.9%	9.8%
1994-95	<i>outturn</i>	22.5	41.3%	28.8%	(c)	12.5%	39.2%	10.9%	7.3%	14.1%	6.9%	19.5%	10.7%	8.8%
1995-96	<i>outturn</i>	21.5	39.6%	28.6%	(c)	11.0%	39.7%	9.8%	7.3%	15.6%	7.0%	20.7%	9.6%	11.1%
1996-97	<i>outturn</i>	22.0	39.2%	28.2%	(c)	10.9%	41.3%	9.9%	8.2%	15.9%	7.2%	19.5%	8.6%	10.9%
1997-98	<i>outturn</i>	20.9	39.5%	28.4%	(c)	10.8%	43.1%	9.5%	7.9%	18.4%	6.5%	17.4%	6.0%	11.5%
1998-99	<i>estimates</i>	22.2	37.1%	27.3%	(c)	9.9%	44.0%	10.6%	7.7%	19.8%	6.0%	18.9%	8.1%	10.7%
1999-00	<i>estimates</i>	22.3	38.1%	28.0%	(c)	10.1%	44.0%	10.3%	7.4%	20.3%	5.9%	17.9%	7.8%	10.1%

Notes: (a) Figures for 1990/91 and 1991/92 exclude overseas contributions to the cost of the Gulf War.

(b) Using the GDP deflator and forecasts given in the Financial Statement & Budget Report 1995-96.

(c) Pension payments to retired service personnel are outside the new public expenditure control total and are excluded from the defence budget.

Sources: UK Defence Statistics 1999 and earlier editions, Table 1.2

B. International comparisons

There are problems when making international comparisons of military expenditure. One of the most important of these is the suitability of the exchange rates used when expenditures in national currencies are converted to a common basis. The use of current exchange rates can lead to substantial distortions when comparing defence expenditures. This is because the official exchange rates of currencies are often not an accurate reflection of the internal purchasing power of the respective currencies - rates of exchange may be fixed by administrative decree, or in the case of a floating rate, by forces reflecting many factors, such as the movement of capital or expectations about the future. Also, the national definitions of military spending may vary.

These problems mean, then, that international comparisons of defence expenditure tend to be crude measures which should be treated with a substantial amount of caution. Differences of a fraction of a percentage point should not be used as a basis for argument.

Furthermore, the basis of payment through which the military sector acquires resources can also differ between countries. If, for example, conscription takes place in a country, the total cost of the armed forces in that country is likely to be lower than in a country with a similar size of force which is fully professional².

Tables 4 and 5 show international comparisons of Defence Expenditure based on the NATO definition of defence expenditure. This includes all spending on military forces, military aid to another nations, military pensions, host government expenses for NATO tenant forces, NATO infrastructure and civilian staff costs; but excludes spending on paramilitary forces. In view of the differences between this and national definitions, the figures may diverge considerably from those which are quoted by national authorities or given in national budgets, although for the UK the difference is minor³.

Table 4 shows expenditure as a percentage of Gross Domestic Product, while Table 5 shows expenditure in terms of US dollars per capita.

Figures for the three new NATO member countries (Czech Republic, Hungary and Poland) are included for the first time. As a proportion of GDP, defence expenditure in the new member states is broadly in line with other NATO Europe countries. However, as GDP per head is relatively low, defence expenditure per head is well below average.

Expenditure as a proportion of GDP has fallen since the 1980s in all member countries except for Greece and Turkey. Between 1985 and 1989 average defence expenditure in NATO member countries was 4.8% of GDP. This has fallen to 2.6% in 1999.

² although the professional force may well be more effective i.e. the size of professional force necessary to perform a specific defence role may be smaller than that required with conscripts

Table 4

Defence Expenditure as % of GDP^(a)

Country	Average 1975-79	Average 1980-84	Average 1985-89	Average 1990-94	1994	1995	1996	1997	1998	1999 ^(b)
NATO countries										
Belgium	3.2	3.3	2.8	2.0	1.7	1.6	1.6	1.5	1.5	1.5
Czech Republic	..	..	..	..	..	..	..	..	..	2.2
Denmark	2.4	2.4	2.1	1.9	1.8	1.7	1.7	1.7	1.6	1.6
France	3.8	4.1	3.8	3.5	3.3	3.1	3.0	2.9	2.8	2.8
Germany ^(c)	3.4	3.4	3.0	2.2	1.8	1.7	1.7	1.6	1.6	1.5
Greece	5.6	5.4	5.1	4.4	4.4	4.4	4.5	4.6	4.8	4.9
Hungary	..	..	..	..	..	..	..	..	..	1.6
Italy	2.1	2.1	2.3	2.1	2.0	1.8	1.9	2.0	2.0	2.0
Luxembourg	0.9	1.1	1.0	0.9	0.9	0.8	0.8	0.9	0.9	0.9
Netherlands	3.1	3.1	2.9	2.4	2.1	2.0	2.0	1.9	1.8	1.8
Norway	2.9	2.7	2.9	2.8	2.8	2.4	2.2	2.1	2.3	2.2
Poland	..	..	..	..	..	..	..	..	..	2.2
Portugal	3.4	3.0	2.8	2.7	2.6	2.6	2.4	2.3	2.2	2.2
Spain	..	2.4	2.2	1.7	1.5	1.5	1.5	1.4	1.4	1.4
Turkey	4.4	4.0	3.3	3.8	4.1	3.9	4.1	4.1	4.4	5.7
United Kingdom	4.9	5.2	4.5	3.8	3.4	3.0	3.0	2.7	2.7	2.6
NATO Europe	..	3.6	3.3	2.7	2.4	2.3	2.2	2.2	2.2	2.2
Canada	1.9	2.1	2.1	1.9	1.8	1.5	1.4	1.2	1.2	1.2
United States	5.0	5.8	6.3	4.9	4.3	3.8	3.5	3.4	3.2	3.2
NATO Total	..	4.6	4.8	3.6	3.3	3.0	2.8	2.8	2.7	2.6

Notes: (a) NATO definition of defence expenditure as a proportion of gross domestic product (based on current prices). Figures are for financial year with most months in fiscal year i.e 1999 is 1999/00 for UK.

(b) 1999 figures are estimates.

(c) These percentages have been calculated without taking into account the expenditure for Berlin.

Sources: NATO press release M-DPC-2(99)152 - 'Financial & Economic Data Relating to NATO Defence' Table 3 and earlier editions

³ Only around £2 million in 1998/99 made up of expenditure on support services outside the defence budget (mainly provided by the National Audit Office).

Table 5

NATO Defence Expenditures Per Capita In US\$ (1990 prices & exchange rates) ^(a)

Country	1975	1980	1985	1990	1995	1996	1997	1998	1999 ^(b)
Belgium	405	483	478	466	342	337	332	330	333
Czech Republic	..	..	..	..	..	..	..	..	58
Denmark	450	493	498	515	480	478	479	477	474
France	588	695	740	751	673	658	661	639	654
Germany	606	644	671	669	375	368	355	355	358
Greece	356	343	438	380	367	387	406	439	456
Hungary	..	..	..	..	..	..	..	..	59
Italy	332	344	392	412	360	361	357	365	362
Luxembourg	137	184	203	253	265	269	285	302	312
Netherlands	442	457	494	496	407	413	407	400	391
Norway	564	631	758	800	726	732	717	760	728
Poland	..	..	..	..	..	..	..	..	46
Portugal	199	156	147	189	195	188	190	183	190
Spain	..	226	246	233	207	203	204	199	206
Turkey	65	74	71	95	95	100	104	106	110
United Kingdom	690	697	770	688	517	518	485	492	473
NATO Europe	..	464	494	484	378	375	368	365	328
Canada	313	327	414	415	330	297	274	281	271
United States	987	987	1,265	1,225	914	863	854	824	829
NATO Total	..	652	779	761	576	554	546	534	499

Notes: (a) 1999 population data have been calculated by applying the average annual growth over previous ten years to 1996 figures.

(b) 1999 figures are estimates.

Sources: *NATO press release M-DPC-2(99)152 - 'Financial & Economic Data Relating to NATO Defence' Table 4* and earlier editions

II Defence personnel

A. Armed Forces personnel

There have been large-scale reductions in the size of UK regular and reserve force since 1990. These follow from the restructuring set out in *Britain's Defence for the 90s* and the *Defence Costs Study*. Between 1990/91 to 1996/97 there were 34,600 redundancies in the UK Armed Forces, with almost half of these in the Army⁴.

Tables 6 and 7 provide a simple analysis of the strength of UK regular and reserve forces since 1980. Between 1 April 1990 and 1 April 1998, the number of UK regular forces fell by 32% to 210,100. Over the same period the number of regular reserves has risen by 2% whilst the number of volunteer reserves and auxiliary forces has fallen by 31%.

At 1 April 1999, the strength of the UK cadet forces was 128,300. This is around 7,700 below the strength in April 1990.

The Strategic Defence Review proposed that the establishment of the regular Army should increase by 3,300 posts to 111,300. The Royal Naval Reserve (RNR) and Reserve Air Forces are to see minor expansions while in contrast, the Territorial Army will see a significant reduction from 57,000 to "around 40,000".⁵

The SDR also set targets of full manning of the Royal Air Force by 2000, of the Royal Navy by 2002, and of the Army.

Table 8 shows the trained strength and establishment of UK regular forces. The figures show that at 1 April 1999 the Naval Service had a shortfall of around 1,600 between trained requirement and strength compared with 5,600 in the Army and 600 in the RAF.

⁴ HC Deb 4 June 1997 c183W

⁵ Strategic Defence Review, Essay 7, Para 16

Table 6

UK Regular Armed Forces Manpower^{(a) (b)}

	1 April 1980	1 April 1990	1 April 1993	1 April 1994	1 April 1995	1 April 1996	1 April 1997	1 April 1998	1 April 1999	1 Sep 1999	% Change since April 1990
Naval Service	71,900	63,200	59,400	55,800	50,900	48,300	45,100	44,500	43,700	43,200	-32%
Officers	10,100	10,100	9,800	9,200	8,800	8,400	7,900	7,800	7,700	7,600	-25%
Other ranks	61,800	53,000	49,600	46,600	42,100	39,900	37,200	36,700	36,000	35,600	-33%
Army	159,000	152,800	134,600	123,000	111,700	108,800	108,800	109,800	109,700	109,500	-28%
Officers	17,100	17,400	16,200	14,800	14,000	13,800	13,700	13,900	13,600	13,700	-21%
Other ranks	142,000	135,400	118,400	108,200	97,700	95,100	95,100	95,900	96,100	95,800	-29%
Royal Air Force	89,600	89,700	80,900	75,700	70,800	64,700	56,900	55,800	55,200	54,900	-39%
Officers	14,800	15,200	14,400	13,500	12,800	12,000	11,000	11,000	10,900	10,900	-28%
Other ranks	74,800	74,400	66,400	62,200	57,900	52,700	45,800	44,900	44,300	44,000	-41%
Total Officers	42,000	42,900	40,400	37,500	35,500	34,100	32,700	32,600	32,200	32,200	-25%
Total Other Ranks	278,600	262,900	234,400	217,000	197,800	187,800	178,100	177,500	176,400	175,400	-33%
Total Regular Forces	320,600	305,700	274,800	254,500	233,300	221,900	210,800	210,100	208,600	207,600	-32%

Notes: (a) Excludes locally entered personnel and Gurkhas.

(b) Figures may not sum to totals shown due to rounding.

Sources: *Defence Statistics 1999 (DASA) Table 2.8**MoD Statistical Bulletin TSP1 (August 1999)*

Table 7

UK Reserves & Auxiliary Forces

	1 April 1980	1 April 1990	1 April 1993	1 April 1994	1 April 1995	1 April 1996	1 April 1997	1 April 1998	1 April 1999	% change since 1990
Regular Reserve	192,300	250,800	258,300	262,200	264,100	264,600	259,500	254,700	247,500	+2%
Volunteer Reserve	77,100	90,600	76,100	71,300	64,900	6,200	62,500	62,400	57,400	-31%
Split by:										
Naval Service	35,100	34,200	27,600	27,900	27,000	27,400	27,700	28,500	28,600	-17%
<i>Royal Fleet Reserve</i>	<i>14,200</i>	<i>13,600</i>	<i>9,700</i>	<i>9,800</i>	<i>9,800</i>	<i>10,200</i>	<i>10,000</i>	<i>10,600</i>	<i>10,600</i>	<i>-22%</i>
<i>Individuals liable to recall</i>	<i>15,000</i>	<i>13,600</i>	<i>12,400</i>	<i>13,500</i>	<i>13,500</i>	<i>13,700</i>	<i>14,100</i>	<i>14,200</i>	<i>14,100</i>	<i>+4%</i>
Total regular reserves	29,200	27,200	22,000	23,300	23,300	23,900	24,100	24,800	24,800	-9%
Volunteer Reserves & Auxiliary Forces ^(a)	5,900	7,000	5,600	4,600	3,700	3,500	3,600	3,700	3,800	-47%
Army	203,500	265,400	258,900	257,500	255,200	252,800	247,700	243,000	237,800	-8%
<i>Army reserve</i>	<i>71,400</i>	<i>65,800</i>	<i>57,400</i>	<i>54,900</i>	<i>53,400</i>	<i>48,500</i>	<i>41,200</i>	<i>36,600</i>	<i>34,800</i>	<i>-44%</i>
<i>Individuals liable to recall</i>	<i>61,400</i>	<i>117,700</i>	<i>132,700</i>	<i>137,600</i>	<i>141,900</i>	<i>147,000</i>	<i>148,900</i>	<i>149,300</i>	<i>145,600</i>	<i>+27%</i>
Total regular reserves	132,800	183,500	190,200	192,500	195,300	195,500	190,100	186,000	186,000	+1%
Territorial Army ^(b)	63,300	72,500	68,500	65,000	59,900	57,300	57,600	57,000	51,800	-21%
Ulster Defence Regiment ^(c)	7,400	6,200	*	*	*	*	*	*	*	*
Home Service Force ^(d)	*	3,200	200	*	*	*	*	*	*	*
Royal Air Force	30,800	41,900	47,900	48,200	46,800	46,400	46,700	46,900	47,000	+12%
<i>Royal Air Force Reserve</i>	<i>3,600</i>	<i>10,100</i>	<i>15,900</i>	<i>16,300</i>	<i>15,900</i>	<i>16,000</i>	<i>16,300</i>	<i>15,400</i>	<i>14,700</i>	<i>+52%</i>
<i>Individuals liable to recall</i>	<i>26,700</i>	<i>30,100</i>	<i>30,200</i>	<i>30,100</i>	<i>29,600</i>	<i>29,200</i>	<i>29,000</i>	<i>28,500</i>	<i>27,700</i>	<i>-5%</i>
Total regular reserves	30,300	40,200	46,100	46,400	45,500	45,200	45,300	45,300	45,300	+13%
Volunteer Reserves & Auxiliary Forces	500	1,700	1,800	1,800	1,300	1,200	1,400	1,600	1,700	-6%

Notes: (a) The Royal Naval Auxiliary Service are not included in this table. They were disbanded on 31 March 1994.

(b) The figures for the TA include Non-Regular Permanent Staff of which there were around 1,400 at 1 April 1998

(c) On 1 July 1993 the UDR merged with the Royal Irish Rangers and are now counted as regular forces.

(d) By 1 April 1994 the Home Service Force had become fully amalgamated with the Group A of the TA.

Source: Defence Statistics 1999 (DASA) Table 2.13: TSP 7. 1 April 1998. DASA

Table 8

Strengths and requirements of UK Regular Forces: at 1 April											Thousands		
	<u>Naval Service</u>				<u>Army^(a)</u>				<u>Royal Air Force</u>				
	1996	1997	1998	1999	1996	1997	1998	1999	1996	1997	1998	1999	
Trained requirement	44.3	42.9	41.9	40.9	108.0	106.4	105.8	102.4	63.7	56.4	54.5	53.0	
Trained strength	45.5	41.7	40.4	39.1	103.8	101.5	101.1	96.3	62.5	54.2	52.7	51.8	
Variation	+1.2	-1.2	-1.6	-1.6	-4.2	-4.8	-4.7	-6.1	-1.2	-2.2	-1.8	-1.3	
Untrained strength	2.8	3.5	4.1	4.6	9.5	11.2	12.4	13.4	2.2	2.7	3.2	3.5	
Total UK regular forces	48.3	45.1	44.5	43.7	113.3	112.7	113.5	109.7	64.7	56.9	55.9	55.2	

(a) Includes Gurkhas

Ministry of Defence Performance Report: 1997/98, Cm 4170
TSP 3, DASA

B. Civilian staffing

Figures are given in Table 9 showing that by 1 April 1999, the total of UK and locally engaged civilian personnel had fallen by 56,600 or 33% since 1 April 1990. This reduction was greatest amongst locally employed civilians in Germany and amongst HQ staff.

Table 9

Civilian manpower at 1 April							
	1980	1990	1995	1996	1997	1998	1999
UK Personnel	239,800	141,400	116,100	109,900	109,200	104,200	100,900
Locally Engaged	36,400	30,900	17,100	16,900	15,700	15,000	14,800
Total civilians	276,200	172,300	133,200	126,800	124,900	119,200	115,700

Defence Statistics 1999 (DASA) Table 2.1

C. International comparisons

The numbers of military personnel in each NATO country are set out shown in table 8. Once again, this method of international comparison is very crude. Different organisations quote varying figures for the size of the armed forces for certain countries, depending on what definition is used. For example, figures could include or exclude paramilitary forces. The NATO figures given in Table 9 include paramilitary forces.

Table 10

NATO Armed Forces Personnel											Thousands
Country	1975	1980	1985	1990	1992	1995	1996	1997	1998	1999 ^(a)	% change 1990-99 ^(d)
Belgium ^(b)	103	108	107	106	79	47	46	45	43	43	-60%
Czech Republic	..	..	..	..	..	..	..	..	..	53	..
Denmark	34	33	29	31	28	27	28	25	25	25	-19%
France	585	575	563	550	522	504	501	475	449	421	-23%
Germany ^(c)	491	490	495	545	442	352	339	335	333	334	-39%
Greece	185	186	201	201	208	213	212	206	202	205	+2%
Hungary	..	..	..	..	..	..	..	..	..	61	..
Italy	459	474	504	493	471	435	431	419	402	391	-21%
Luxembourg	1	1	1	1	1	1	1	1	1	1	+41%
Netherlands	107	107	103	104	90	67	64	57	55	55	-47%
Norway	38	40	36	51	36	38	38	33	33	33	-36%
Poland	..	..	..	..	..	..	..	..	..	187	..
Portugal	104	88	102	87	80	78	73	72	71	72	-18%
Spain	..	356	314	263	198	210	203	197	189	155	-41%
Turkey	584	717	814	769	704	805	818	828	788	797	+4%
United Kingdom	348	330	334	308	293	233	221	218	218	218	-29%
NATO Europe	..	3,504	3,603	3,510	3,154	3,010	2,976	2,912	2,809	3,050	-22%
Canada	78	82	83	87	82	70	66	61	60	59	-32%
United States	2,146	2,050	2,244	2,181	1,919	1,620	1,575	1,539	1,505	1,489	-32%
NATO Total	..	5,636	5,930	5,778	5,154	4,700	4,617	4,512	4,375	4,598	-26%

Notes: (a) 1999 figures are estimates.

(b) Decrease from 1992 military strength reflects the decision by the Belgian government to demilitarise the Gendarmerie.

(c) Figures for Germany refer to Germany up to and including 1990 and to united Germany from 1991.

(d) NATO and NATO Europe changes exclude armed forces in new member countries

Source: NATO press release M-DPC-2(99)152 - 'Financial & Economic Data Relating to NATO Defence' Table 6 and earlier editions

III Formation of the armed forces

Table 11 gives information on the formation of the armed forces in terms of numbers of aircraft, ships and army units since 1975.

Changes to the formation of forces arising from the Strategic Defence Review were discussed in chapter VI of Library Research Paper 98/91 *The Strategic Defence White Paper*.

Table 11

Formation of the armed forces

		1975	1980	1985	1990	1993	1994	1995	1996	1997	1998	1999
Front-line units												
Royal Navy												
Submarines	Vessels	32	32	33	33	23	23	16	15	15	15	15
<i>Trident/Polaris</i>	Vessels	4	4	4	4	4	4	4	3	3	3	3
<i>Fleet</i>	Vessels	28	28	29	29	19	17	12	12	12	12	12
Carriers	Vessels	3	3	4	3	3	3	3	3	3	3	3
Assault ships	Vessels	2	2	2	2	2	2	2	2	2	2	3
Cruisers	Vessels	2	1									
Destroyers	Vessels	10	13	15	14	12	12	12	12	12	12	12
Frigates	Vessels	60	53	41	35	28	25	23	24	23	23	23
Mine counter measure vessels	Vessels	43	36	45	41	35	18	18	18	18	19	20
Patrol ships and craft	Vessels	14	22	32	34	25	34	32	32	34	28	24
Fixed wing aircraft	Squadrons	3	2	3	3	3	3	3	3	3	3	3
Helicopters	Squadrons	13	14	18	17	17	17	15	15	15	12	12
Royal marines	Commandos	4	4	3	3	3	3	3	3	3	3	3
Regular army												
Combat arms												
Armour	Regiments	19	19	19	19	14	12	11	11	11	11	11
Infantry	Battalions	55	26	26	55	48	45	41	41	40	40	40
Special Forces	Regiments	1	1	1	1	1	1	1	1	1	1	1
Aviation	Regiments	..	6	4	4	6	6	5	5	5	5	5
Combat support												
Artillery	Regiments	26	22	22	22	18	16	16	16	16	15	5
Engineers	Regiments	13	10	13	13	13	12	10	10	10	10	10
Signals	Regiments	17	13	14	13	13	14	12	12	11	11	11
Territorial Army												
Combat arms												
Armour	Regiments	3	4	5	5	5	5	5	5	6	3	4
Infantry	Battalions	38	38	35	41	36	36	36	36	33	33	15
Special Forces	Regiments	2	2	2	2	2	2	2	2	2	2	2
Aviation	Regiments	..	..	..	..	..	..	1	1	1	1	1
Combat support												
Artillery	Regiments	5	6	6	7	6	6	6	6	6	6	7
Engineers	Regiments	7	7	7	8	9	9	9	9	9	9	5
Signals	Regiments	11	11	11	11	11	11	11	11	11	11	12

Sources: Defence Statistics 1999(DASA) Table 3.1

Table 11 (continued)

Formation of the armed forces		1975	1980	1985	1990	1993	1994	1995	1996	1997	1998	1999
Home Service Forces												
Infantry	Battalions	13	14	11	11	8	8	8	7	7	7	7
Royal Air Force												
Strike/attack	Squadrons	13	15	11	11	8	6	6	6	6	6	5
Offensive support	Squadrons	6	5	5	5	5	5	5	5	5	5	5
Reconnaissance	Squadrons	5	5	3	3	5	5	5	5	5	5	5
Maritime patrol	Squadrons	5	4	4	4	3	3	3	3	3	3	3
Air defence	Squadrons	9	9	9	9	7	6	6	6	6	6	5
Airborne Early Warning	Squadrons	1	1	1	1	1	1	1	2	2	2	2
Air transport, tankers and helicopters	Squadrons	17	11	14	15	16	15	14	14	13	14	14
Search and Rescue	Squadrons	2	2	2	2	2	2	2	2	2	2	2
RAF regiments												
Surface to air missiles	Squadrons	6	8	8	7	5	5	5	6	6	6	4
Ground defence	Squadrons	5	5	5	6	5	5	5	5	5	5	5
Royal Auxiliary Air Force												
Ground defence	Squadrons	..	3	6	6	6	5	5	5	5	5	5
Support units												
Royal Navy and Royal Fleet Auxiliary Service												
Support ships	Vessels	8	9	10	8	2	1	1	1	1		
Survey ships	Vessels	13	13	9	8	6	6	6	6	6	5	6
Ice patrol ships	Vessels	1	1	1	1	1	1	1	1	1	1	1
Tankers	Vessels	..	15	14	13	10	9	9	9	9	9	9
Fleet replenishment ships	Vessels	..	4	4	4	5	5	5	5	5	4	4
Aviation training ship	Vessels	..	..	..	..	1	1	1	1	1	1	1
Landing ships	Vessels	..	6	7	5	5	5	5	5	5	5	5
Forward repair ships	Vessels	..	..	1	1	1	1	1	1	1	1	1
Royal Marines												
Logistic unit	Regiments	1	1	1	1	1	1	1	1	1	1	1
Regular Army												
Combat service support												
Equipment support	Battalions	..	..	..	..	..	5	5	5	5	6	6
Logistics	Regiments	23	17	23	27	25	26	26	26	24	24	24
Field ambulances/field hospitals	Number	11	8	14	16	16	13	13	12	12	12	12
Territorial Army												
Combat service support												
Equipment support	Battalions	..	..	..	..	..	4	4	5	5	5	4
Logistics	Regiments	13	8	12	12	12	11	11	11	19	19	14
Field ambulances/field hospitals	Number	15	13	18	17	17	17	17	18	18	18	19

Sources: Defence Statistics 1999(DASA) Table 3.1

IV Armed Forces salaries

Military salaries for ranks in the armed services are quite complex as they often relate to bands, scales and classes according to employment classification, length of service, nature of specialisation etc. For example, there are nine pay rates for Majors in the Army on the main Officer pay scale according to the length of service in that rank.

The tables shown here look at illustrative military salaries for officers and servicemen, based on Army ranks. Table 12 compares indices based on average military salaries for different ranks with the Average Earnings Index. The table shows that salaries of senior officers have risen faster than those of other ranks (by 87% between 1988/89 and 1999/00 compared with 76% for ranks up to corporal). The table also shows the average annual percentage change in salaries for different periods. For average earnings in 1999/00, a forecast increase of 4.5% has been used.⁶

Table 13 looks at average military salaries for different ranks for various years since 1980/81. It also shows real terms changes calculated by converting the cash salaries to constant 1997/98 prices using the Retail Prices Index. The change in the RPI for 1999/00 has been calculated using the latest forecast given in the Pre-Budget Report⁷.

⁶ *Forecasts for the UK Economy*, HM Treasury, November 1998

⁷ *Pre-Budget Report*, HM Treasury, November 1998

Table 12

Military Salary Index: 1988-89=100

	All Ranks ^(a)	Senior Officers (Major General and above)	Officers (Up to Brigadier)	Other ranks (Sergeant and above)	Other ranks (Up to Corporal)	Average earnings (whole economy)
1978-79	37	33	33	35	39	37
1979-80	49	42	44	48	52	44
1980-81	57	51	52	56	59	52
1981-82	63	55	59	62	65	58
1982-83	66	63	64	66	68	63
1983-84	71	67	69	71	72	68
1984-85	75	73	73	74	76	73
1985-86	82	80	81	82	83	79
1986-87	87	90	86	86	88	85
1987-88	94	95	93	93	94	92
1988-89	100	100	100	100	100	100
1989-90	107	109	107	107	107	109
1990-91	115	117	115	114	115	120
1991-92	131	131	131	130	131	129
1992-93	139	138	139	138	139	135
1993-94	141	142	141	140	141	140
1994-95	145	150	145	144	145	146
1995-96	150	157	151	150	149	150
1996-97	157	164	157	156	156	157
1997-98	163	168	164	163	163	164
1998-99	168	178	169	168	168	171
1999-00	176	187	177	176	176	178
Average annual % change						
1978-79 to 1999-00	7.8%	8.6%	8.3%	8.0%	7.5%	7.7%
1988-89 to 1999-00	5.3%	5.9%	5.3%	5.3%	5.3%	5.4%
1992-93 to 1999-00	3.4%	4.4%	3.5%	3.5%	3.4%	4.0%

Notes: (a) Indices cover adult male UK regular forces and are based on the average rate of basic pay through the year.

Sources: *Defence Statistics 1999 (DASA) and earlier editions*
ONS Database; Incomes Data Services

Table 13

Illustrative Rates of Military Salary (in terms of Army ranks) ^(a)

		1980/81	1985/86	1990/91	1994/95	1996/97	1997/98	1998/99	1999/00	<i>Average annual change in real terms ^(b)</i>				
										80/81	85/86	90/91	98/99	80/81
										-85/86	-90/91	-99/00	-99/00	-99/00
General		£30,999	£51,558	£76,489	£95,050	£100,579	£103,510	£106,098	£111,060	3.6%	2.0%	1.3%	2.6%	2.1%
Brigadier		£18,250	£29,401	£41,682	£55,271	£59,872	£62,351	£64,554	£67,448	3.0%	1.1%	2.5%	2.4%	2.2%
Colonel	after 4 years in the rank	£16,151	£25,711	£36,598	£47,427	£51,402	£53,511	£55,366	£57,958	2.7%	1.1%	2.2%	2.6%	2.1%
Lieutenant Colonel	after 4 years in the rank	£13,750	£22,170	£31,750	£40,728	£44,225	£46,040	£47,632	£49,863	3.0%	1.3%	2.1%	2.6%	2.1%
Major	after 4 years in the rank	£11,001	£16,976	£24,109	£30,284	£32,823	£34,138	£35,251	£36,902	2.1%	1.1%	1.9%	2.6%	1.7%
Captain	after 3 years in the rank	£8,501	£13,202	£18,819	£23,598	£25,441	£26,468	£27,351	£28,685	2.2%	1.2%	1.8%	2.8%	1.8%
Lieutenant	after 2 years in the rank	£6,650	£10,209	£14,395	£18,036	£19,443	£20,222	£20,882	£21,900	2.0%	0.9%	1.8%	2.8%	1.6%
Second Lieutenant		£5,201	£7,490	£10,389	£12,960	£13,976	£13,802	£15,006	£15,739	0.7%	0.6%	1.7%	2.8%	1.2%
Warrant Officer I	band 6, scale C, after 18 years	£8,983	£13,505	£18,888	£24,133	£26,119	£27,153	£28,032	£29,335	1.6%	0.8%	2.0%	2.6%	1.6%
Warrant Officer II	band 6, scale C, after 18 years	£8,593	£12,786	£17,935	£22,909	£24,789	£25,769	£26,602	£27,839	1.4%	0.8%	2.0%	2.6%	1.5%
Staff Sergeant	band 5, scale C, after 18 years	£7,669	£11,169	£15,620	£19,588	£21,190	£22,026	£22,739	£23,795	0.9%	0.8%	1.8%	2.6%	1.3%
Sergeant	band 5, scale C, after 12 years	£7,173	£10,417	£14,616	£18,344	£19,847	£20,631	£21,297	£22,287	0.9%	0.8%	1.8%	2.6%	1.3%
Corporal	class 1, band 2, scale C	£6,482	£9,289	£13,066	£16,367	£17,587	£18,296	£18,911	£19,791	0.6%	0.9%	1.7%	2.6%	1.2%
Lance Corporal	class 1, band 1, scale C	£5,344	£6,953	£9,614	£12,066	£13,010	£13,533	£13,988	£14,648	-1.3%	0.6%	1.8%	2.7%	0.6%
Private	class 2, band 1, scale C	£4,453	£6,081	£8,249	£10,439	£11,237	£11,685	£12,086	£12,691	-0.4%	0.2%	1.9%	2.9%	0.9%

Notes: (a) In the illustrative rates for officers, the mid-point of the incremental scales has been used. For servicemen, the pay bandings have been selected which contain the largest number at each rank. Within each rank servicemen are divided for the purposes of pay into classes, bands and scales according to their employment classification, the nature of their specialisation and the period of commitment to serve. All forms of additional pay, eg flying pay, diving pay etc are excluded since they are not paid to the majority of Service personnel. In each year the rates are calculated using a weighted average of the salaries in that year.

(b) Conversions to constant prices are made using the retail prices index. For 1999/00 a forecast increase of 2.5% has been used.

Sources: *Defence Statistics 1999 (DASA), Table 2.15*
ONS CSDB database series CHAW, CBAB & CZVJ

Appendix: Tri-Service and Civilian Personnel information published by DASA

Number	Title	Frequency
TSP1	UK Regular Forces strengths and changes	Monthly
TSP2	Trained requirements and strengths of service personnel	Quarterly
TSP4	UK Regular Forces quarterly press release	Quarterly
TSP5	UK Regular Forces premature voluntary release	Quarterly
TSP6	Global deployment of service personnel	Six-monthly
TSP7	Reserve and Cadet Forces	Yearly
TSP8	Age distribution of UK Regular Forces	Yearly
TSP9	Rank structure of UK Regular Forces	Quarterly
TSP10	UK Regular Forces deployment in UK by local authority area	Yearly
TSP11	Male UK Regular Forces marital status and family statistics	Yearly
TSP13	UK Regular Forces servicemen age on entry	Yearly
TSP15	UK Service Personnel on loan to other countries	Quarterly
TSP16	UK Regular Forces disciplinary convictions	Yearly
TSP18	UK Servicemen wastage during first six months of training	Yearly
TSP19	UK Regular Forces intake and outflow by age	Yearly
TSP20	Male Regular Forces outflow by rank	Yearly
TSP22	UK Regular Forces comparative statistics	Yearly
TSP24	Strength of uniformed medical staff	Yearly
SCPS1	UK service and civilian personnel by sector and TLB	Monthly
CPS1	Permanent UK-based civilian personnel by grade equivalent, type and area of work	Quarterly
CPS2	Regional analysis of resignations for admin and science group staff	Quarterly
	UK Defence Statistics	Annual