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The UK Peace Dividend: Whence it Came, Where it Went

Ian Davis

September 1996
1. Introduction

When disarmament got seriously under way after the end of the Cold War there was much hope for a 'peace dividend' in Europe, of savings from military expenditures that could be used to the benefit of domestic economies. In the UK in particular, there was considerable speculation about the economic implications of major cuts in military spending, and several studies suggested that with sensible adjustment policies such reductions would provide an opportunity for improved economic performance. A macro-economic simulation carried out by Barker, Dunne and Smith, for example, suggested that a halving of the UK's military expenditure by the year 2000 would lead to a reduction in unemployment of 0.52 million and a net increase of almost 2% of GDP (provided that the expenditure was reallocated to other categories of government current and capital expenditure). Similarly, an earlier report by Christopher Johnson, Chief Economic Adviser, Lloyds Bank, concluded that the British economy would benefit from cuts in defence spending through:

lower public expenditure, the release of scarce manpower, the switch of high technology manufacturing capacity into civilian production, and a reduction of the military balance of payments deficit.

Six years after the end of the Cold War (and ten years after military expenditure peaked in the UK), a critical assessment of what has actually happened to the savings in military expenditure seems overdue, particularly as none of the competing claims seem to have been fulfilled and there is a general feeling that, in the UK at least, there has been no peace dividend. This paper is a contribution to the growing debate on whether the opportunities presented by the changed strategic climate in Europe have been fully utilised. The general theoretical and conceptual issues surrounding the 'peace dividend' are discussed in Section 2. The paper then examines the economic consequences of reductions in UK military expenditures (in the period from 1985-86 to 1994-95): in Section 3 the extent of the cuts in the total defence budget are considered, while Section 4 examines the shifts in expenditure categories within the budget. Consideration is also given to some of the costs and benefits of the military drawdown, including the impact on procurement, employment and equipment holdings. In Section 5, the paper provides a short quantitative analysis of which categories of government expenditure have increased and/or decreased during this period, although there is little evidence to suggest a direct correlation between the limited reductions in the defence budget and the greater increases in some of the other categories of public expenditure. This is followed in Section 6 by a brief consideration of the opportunities for restructuring the economy in Northern Ireland as a result of the potential demilitarisation in the Province (where, for a short time at least, and in stark contrast to the situation in mainland Britain, the peace dividend was recycled in the economy). In Section 7, the paper reviews the extent to which financial support has been provided to assist industrial conversion in the UK. Finally, drawing on the preceding analysis, the paper reaches some conclusions as to why a significant 'resource dividend' appears to have resulted in a partial 'welfare dividend', but not a 'product dividend'.

2. The Theoretical and Conceptual Context

The idea that it is possible to obtain a so-called peace dividend from a fall in military expenditures is a popular notion, yet rarely is the process well defined. A recent review by the United Nations Institute for Disarmament Research (UNIDIR) concluded that disarmament is best seen as an investment process, with short-term costs (as resources are displaced) but long-term benefits (as the resources are allocated to alternative uses). The UNIDIR study
also suggests that if there are alternative sources of demand available and if the economy adjusts faster, then the costs will be smaller and the benefits larger. This macroeconomic verdict is also reflected in the work of the economist, Steve Chan, who suggests that there are at least two, and possibly three, steps in the process of realising the peace dividend. Step one involves the creation of a resource dividend, through substantial cuts in military expenditure, which in turn can be applied to promote greater production efficiency. This product dividend is step two. The third step, a welfare dividend, results 'either directly from the transfer of defence savings to increase public funding for social programmes, or indirectly from the trickle-down effects of a healthier economy'. It is clear from this typology of meanings that lower defence spending, while creating a resource dividend, does not automatically or even inevitably result in a product or welfare dividend. As the authors of the UNIDIR study wrote, it is not like shifting money from one pocket to another. This simplistic view ignores the fact that lower defence spending 'entails a fundamental reallocation of resources in the economy with real adjustments to be made in employment patterns, capital utilisation, in the size and structure of industries and in land use'. While one of the long-term economic effects of defence cutbacks may be to produce an indirect welfare dividend, the socioeconomic disruption caused by lower military expenditure is likely to cause a welfare deficit in the short-term (in the absence of compensatory social spending). Moreover, the prospects for a product dividend, are likely to be even more dependent on how defence savings are redeployed and how efficiently they are put to use in the economy. Chan suggests that national economic structures are also important:

How quickly and how large a product dividend can be realised from defence reductions also depends on the nature of existing economic structure, the extent to which defence industries are already involved in civilian production, and the efficiency with which a country is likely to further convert military resources into civilian production.

These observations on the three-step approach to the peace dividend lead Chan to a number of other broad assumptions. The most important (within the context of a UK case study) are summarised as follows. First, and most obviously, the resource dividend is reliant on significant defence cuts. Second, the product and, to a lesser extent, the welfare dividend appear to be dependent on overall government spending remaining constant or even rising during periods of military retrenchment. Third, there is no guarantee that this is how the resource dividend will be utilised. It can also be used to cut business taxes, reduce budget deficits (which may allow interest rates to be lower and investment higher) or raise private consumption (through reduced personal taxation). These alternative choices all have different economic impacts, both beneficial and negative, although the implicit assumption is that the end result is a much more diluted peace dividend with greater displacement costs. This leads on to the fourth assumption, that defence cuts will inevitably produce displacements in the economy at the microeconomic level, and the resulting 'burden of adjustment' will be distributed unevenly across different regions, industries and occupations. As Chan concludes, this also implies 'that those who are asked to bear most of this adjustment burden may not be the same people who stand to benefit most from the peace dividend'. Fifth, the distribution of this burden will depend on which categories of defence spending bear the brunt of the budgetary cuts. The choices made, for example, between reducing personnel costs, closing military bases and cutting weapons procurement, will determine who shoulders the principal burden of adjusting to a smaller defence budget. Finally, as a corollary of the previous assumptions, allocation of the resource dividend (and the precise location of defence cuts) will involve distributive and ideological struggles among rival political, military and
domestic interest groups. These assumptions are now put to the test, starting with an evaluation of the cuts in the aggregate UK defence budget.

3. Reductions in the Aggregate Defence Budget

The reductions in the UK defence budget since the end of the Cold War can be interpreted in a number of ways and a useful starting point is the decision-making context. In power for more than sixteen years, the Conservative Government's response to the transformation in European security is represented by Options for Change\(^\text{11}\) (supplemented later by the Front Line First study\(^\text{12}\)). The Options for Change process started in late 1989 and was conducted in secret within various government ministries and coordinated in the MoD. A drip feed of interim announcements culminated in the defence White Paper in July 1991 (known as 'Options for Change') which sought to maintain most of the UK's former defence capabilities while simultaneously making reductions in armed forces and overall defence expenditure. The Government also emphasised the need to maintain a robust defence capability as insurance against the unexpected, and the cuts were to be compensated by improvements in equipment.\(^\text{13}\) This strategy was thought to be politically acceptable but rather surprisingly elicited a hostile reaction from many Conservative and Opposition MPs - resulting in some of the planned Army regiment amalgamations being rescinded.

Despite the furious political storm over disbanded regiments, there was no proper public discussion of these issues.\(^\text{14}\) While the Government insist that the changes are 'strategy-led and resource-disciplined'\(^\text{15}\) almost all the opposition parties have condemned Options for Change as inadequate and 'treasury-driven'.\(^\text{16}\) Moreover, the demand for a proper defence review is increasingly coming from those who think that the changes have gone too far (whereas initially the demand came from those who thought that they did not go far enough), including a number of prominent politicians on the Government benches, the all-party House of Commons defence committee and defence industry representatives. Indeed, the House of

| Table I: UK Government Defence Expenditure 1978-79 to 1996-97 |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| (A) £bn          | 21.1    | 22.4    | 23.0    | 23.5    | 25.1    | 25.8    | 27.1    | 26.9    | 26.4    | 25.8    |
| (B) %            | 4.5     | 4.6     | 4.9     | 5.0     | 5.2     | 5.2     | 5.3     | 5.1     | 4.8     | 4.4     |
| (A) £bn          | 24.5    | 24.8    | 24.1    | 23.9    | 23.6    | 22.7    | 21.3    | 19.9    | 19.6    |
| (B) %            | 4.0     | 4.0     | 3.9     | 4.0     | 3.9     | 3.7     | 3.3     | 3.0     | 2.9     |

Notes: (1) Cash figures adjusted to 1992-93 price levels by excluding the effect of general inflation
(2) The figures for 1990-91 and 1991-92 are net of other governments' contributions to the cost of the Gulf conflict

Sources: 1978-79 to 1993-94 - Public Expenditure: Statistical Supplement to the Financial Statement and Budget Report 1994-95, Cm 2519, HM Treasury February 1994, Table 1.3.
1994-95 - MoD, UK Defence Statistics 1994, London: HMSO, Table 1.2
1995-96 and 1996-97 - Authors' calculations based on predicted reductions in real terms of 6.5% and 1.5% respectively, quoted in Financial Times on 30 November 1994.
Commons Defence Committee warned that further cuts in Britain's defence budget would result in the armed forces' capabilities falling 'below the minimum level necessary for the security of the UK'.

Given this cautious policy context, the actual reductions in defence expenditure initially seem quite impressive, particularly when measured against the peak years of defence spending in the mid 1980s. As Table I shows, this approach can reveal quite significant reductions in defence expenditure, especially as the defence budget has not carried the net additional costs of either the Gulf War or the Bosnian peacekeeping operations. Having peaked in 1984-85 at £27.1 billion (at constant 1992-93 prices), the defence budget has tended to fall at about 1% or 2% per annum in real terms since then. The estimated defence budget for 1994-95 (at constant 1992-93 prices) is £21.3 billion, and so the defence budget has shrunk by roughly £5.8 billion (or 21%) since the peak year. According to government estimates, defence spending is expected to fall by a further 14% in real terms between 1992-93 and 1996-97. Measured as a percentage of GDP, defence expenditure has been reduced from 5.3% in 1984-85 to 3.7% in 1993-94 (and is projected to fall to 2.8% of GDP by 1997-98).

If, however, the reductions in defence expenditure are measured against defence budgets over the period of the Cold War, the recent reductions are much less impressive. The historic trend of UK defence spending since the mid 1950s has been to remain roughly constant in real terms, while falling gradually as a percentage of GDP. The UK will still be spending more in 1994-95, for example, than in 1978-79 when the Cold War conflict was about to intensify again. One should be cautious, therefore, about using 1984-85 as a base year for making a trend analysis of UK defence spending. Moreover, if we take the UK's average annual expenditure during the Cold War as the base line, a rather different picture emerges. As shown by Table II, UK defence spending during the Cold War (1947-48 to 1989-90) totalled approximately £890 billion at 1992-93 prices, or an average of £20.7 billion per annum. Even after ten years of decline, the 1994-95 defence budget at £21.3 billion (in 1992-93 prices) not only remains greater than the average annual Cold War defence budget, but also exceeds in real terms the annual budget for 29 out of the 43 years of the conflict. Thus, given the current secure West European military environment and the disarmament measures introduced in the East, it is difficult not to conclude that the UK reductions in defence spending since 1984-85 remain modest.

Given these different interpretations of the statistical evidence, how do we set about measuring the resource dividend? This entirely depends on your choice of what economists call the 'counterfactual'. Put simply, this means an assumed turning point which allows a comparison to be made between recent spending levels and what would have happened in the absence of a commitment to check spending. The core counterfactual question in this case, therefore, is how much would Britain be spending now, if the Cold War had continued for another decade. Many analysts would argue that there has been a long term trend of rising defence spending which was only reversed in 1984-85. Hence, given this point as the assumed counterfactual, the cumulative annual savings on the defence budget between 1985-86 and 1994-95 amount to an 'optimum' resource dividend of £29.1 billion (see Table X).

Measured in this way, the implication is that the resource dividend will continue to grow in future years - or there will be a second resource dividend - provided the defence budget remains below the 1984-85 ceiling (although at some later point, presumably a revised counterfactual should be chosen). While most commentators suggest that the downward trend
Table II: UK Government Defence Expenditure During the Cold War 1947-48 to 1989-90 in real terms(1)

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<td>1947-48</td>
<td>16.4</td>
<td>13.8</td>
<td>13.3</td>
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<td>20.0</td>
<td>20.7</td>
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<td>19.9</td>
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<td>1958-59</td>
<td>17.8</td>
<td>17.7</td>
<td>18.8</td>
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<td>19.6</td>
<td>19.4</td>
<td>19.7</td>
<td>20.3</td>
<td>20.0</td>
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<td>1969-70</td>
<td>18.4</td>
<td>19.3</td>
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<td>21.2</td>
<td>21.7</td>
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<td>1980-81</td>
<td>23.0</td>
<td>23.5</td>
<td>25.1</td>
<td>25.8</td>
<td>27.1</td>
<td>26.9</td>
<td>26.4</td>
<td>25.8</td>
<td>24.5</td>
<td>24.8</td>
<td>889.0</td>
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Note: (1) Cash figures adjusted to 1992-93 price levels
Sources:

is set to continue, caution is needed when looking at government estimates on the future size of the defence budget. Further reductions are being predicted on the basis of lower inflation and pay costs, a receipt of £500 million pounds in respect of the sale of Service married quarters and (from 1996-97 onwards) 'substantial savings' from the Defence Costs Study. This latter Study, more commonly known as Front Line First, was launched in December 1993 to meet a Treasury demand for cuts of at least £750 million a year from 1996-97. It is to be achieved by streamlining administration and support services on a tri-service basis where possible, and by 'contracting out' support services, such as aircraft maintenance.

While the privatisation of support services and other administrative changes will undoubtedly lead to reductions in the overall defence budget, the underlying trend as regards the combat arm of the budget (namely equipment procurement expenditure and expenditure on personnel of the Armed Forces) is less easy to discern. On the one hand, official forecasts suggest that the procurement budget will stabilise at around £9 billion or decrease marginally in the latter part of the 1990s. On the other hand, it may be difficult (for a number of reasons discussed below) for the government to keep within equipment planning targets. In addition to aggregate spending levels, therefore, it is important to consider the changing composition of the defence budget and in particular the growing emphasis on 'Front Line' capabilities. It is to the composition of the defence budget that we now turn our attention.

4. Changes in the Composition of the Defence Budget

The UK defence budget is divided into three principal headings: expenditure on personnel, expenditure on equipment and other expenditure. Estimated expenditure for these categories in 1994-95 current prices are £9,435 million, £8,590 million and £4,747 million respectively. As Table III shows, all three headings show real reductions in expenditure over the period
between 1985-86 and 1994-95, although rather surprisingly in the light of Front Line First, the largest reduction of 35% is recorded for equipment expenditure, with personnel and other expenditure showing more modest reductions of 9% and 13% respectively. Again, however, these initial findings only provide a partial picture, and it is necessary to look at each individual heading in closer detail to reveal some of the longer-term trends.

Table III: Principal Headings of the UK Defence Budget (at constant 1992-93 prices)

<table>
<thead>
<tr>
<th>Expenditure on personnel</th>
<th>£ million</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975-76</td>
<td>11,223</td>
</tr>
<tr>
<td>1980-81</td>
<td>9,799</td>
</tr>
<tr>
<td>1985-86</td>
<td>9,681</td>
</tr>
<tr>
<td>1988-89</td>
<td>9,816</td>
</tr>
<tr>
<td>1989-90</td>
<td>9,926</td>
</tr>
<tr>
<td>1990-91</td>
<td>10,052</td>
</tr>
<tr>
<td>1991-92</td>
<td>10,419</td>
</tr>
<tr>
<td>1992-93</td>
<td>10,504</td>
</tr>
<tr>
<td>1993-94</td>
<td>9,539</td>
</tr>
<tr>
<td>1994-95</td>
<td>8,829</td>
</tr>
</tbody>
</table>

% share of the total expenditure
- of the Armed Forces
  1975-76: 47.3
  1980-81: 40.7
  1985-86: 35.6
  1988-89: 39.7
  1989-90: 39.0
  1990-91: 39.5
  1991-92: 40.5
  1992-93: 44.2
  1993-94: 42.0
  1994-95: 41.4
- of the retired Armed Forces
  1975-76: 24.4
  1980-81: 22.0
  1985-86: 19.6
  1988-89: 22.5
  1989-90: 21.8
  1990-91: 21.6
  1991-92: 22.4
  1992-93: 23.7
  1993-94: 29.5
  1994-95: 29.0
- of civilian staff
  1975-76: 18.1
  1980-81: 14.2
  1985-86: 11.0
  1988-89: 11.6
  1989-90: 11.4
  1990-91: 11.6
  1991-92: 11.5
  1992-93: 12.3
  1993-94: 12.5
  1994-95: 12.4

Expenditure on equipment

% share of the total expenditure
- Other expenditure
  1975-76: 4,542
  1980-81: 3,744
  1985-86: 5,115
  1988-89: 4,940
  1989-90: 5,048
  1990-91: 5,303
  1991-92: 5,108
  1992-93: 4,547
  1993-94: 4,362
  1994-95: 4,441
- % share of the total expenditure
  1975-76: 19.2
  1980-81: 15.6
  1985-86: 18.8
  1988-89: 18.2
  1989-90: 19.9
  1990-91: 20.9
  1991-92: 19.8
  1992-93: 19.1
  1993-94: 19.2
  1994-95: 20.9

Total expenditure

% share of the total expenditure
- Other expenditure
  1975-76: 4,542
  1980-81: 3,744
  1985-86: 5,115
  1988-89: 4,940
  1989-90: 5,048
  1990-91: 5,303
  1991-92: 5,108
  1992-93: 4,547
  1993-94: 4,362
  1994-95: 4,441
- % share of the total expenditure
  1975-76: 19.2
  1980-81: 15.6
  1985-86: 18.8
  1988-89: 18.2
  1989-90: 19.9
  1990-91: 20.9
  1991-92: 19.8
  1992-93: 19.1
  1993-94: 19.2
  1994-95: 20.9

Notes:
(1) The figures for 1990-91 and 1991-92 include the cost of the Gulf conflict (in contrast to Table I)
(2) From 1993-94 the defence budget excludes pension payments to retired Service personnel and figures from 1994-95 exclude provision for the Security and Intelligence Services

Source: MoD, UK Defence Statistics 1994, London: HMSO 1994, Table 1.2

Table IV: UK Armed Forces and Civilian Personnel (and Redundancy) Levels

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<tbody>
<tr>
<td>Royal Navy</td>
<td>59,400</td>
<td>1,272</td>
<td>55,800</td>
<td>2,400</td>
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<tr>
<td>Army</td>
<td>34,600</td>
<td>6,460</td>
<td>123,000</td>
<td>7,015</td>
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<tr>
<td>Royal Air Force</td>
<td>80,900</td>
<td>968</td>
<td>75,700</td>
<td>2,200</td>
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</tr>
<tr>
<td>Total Service Personnel</td>
<td>318,900</td>
<td>274,900</td>
<td>8,700</td>
<td>254,500</td>
<td>11,615</td>
</tr>
<tr>
<td>Total Civilian</td>
<td>171,916</td>
<td>124,500</td>
<td>2,639</td>
<td>121,600</td>
<td>3,400</td>
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4.1 Expenditure on personnel

(a) The Armed Forces

While the percentage share of the total defence budget allocated to the Armed Forces (for salaries, pensions and associated personnel expenditure) has increased from 24.6% in 1985-86 to 29% (or £6,607 million at current prices) in 1994-95, in real terms this part of the budget has fallen by 8% over the same period. The main reason for this downward trend is the reduction in Service personnel numbers, although the overall effect on the defence budget is mitigated by redundancy and other demobilisation costs. The Options for Change review prescribed a 20% reduction in the British Armed Forces, with the British Army bearing the brunt of the cuts. Following further revisions under Front Line First the three services were expected to number 231,500 on 1 April 1996 (from a baseline of 305,711 on 1 April 1990): around 117,000 British Army; 48,000 Royal Navy; and 66,500 RAF. All three services are achieving the reductions through reduced recruitment, natural wastage and redundancies. So far, most of the redundancies (95% up to 1993) have been voluntary. Current force personnel levels and recently announced redundancy figures are shown in Table IV.

The Reserve Forces have also suffered cutbacks. A review of the role and organisation of the Territorial Army (TA) reserve force has been completed and the draft of a new Reserve Forces Bill is expected to be introduced in 1995-96. The TA's mission is shifting from 'Cold War mobilisation' to a wide ranging support role for the regular army. This will mean further cuts in TA infantry units, but increases in certain logistical support units, particularly those with specialist skills that are not cost effective to maintain on a large scale in the regular army. From an establishment of 93,000 personnel in 1991 (although actual strength at the time was only 75,000), the TA is expected to be reduced to 59,000 by April 1997. Finally, concern is often expressed that the UK has a higher ratio of senior officers to troops than many other countries, and that there may be too many senior officers holding non-combatant positions. While Front Line First is likely to lead to a reduction in the number of non-combatant officers, Table V shows that officer strength in the UK Armed Forces has so far been reduced less proportionally than overall service personnel levels. In fact, between 1985 and 1992 the number of senior Army officers (Lieutenant Colonel and above) actually increased. The number of Major Generals and more senior ranks only started to fall significantly in 1992.

### Table V: Reductions in UK Officers and Service Personnel, 1985-94

<table>
<thead>
<tr>
<th>Year (1 Apr)</th>
<th>Major General or above (MG)</th>
<th>Senior Officers (O)</th>
<th>Service Personnel (SP)</th>
<th>Ratio of MG to 10,000 SP</th>
<th>Ratio of O to SP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>207</td>
<td>6,393</td>
<td>42,500</td>
<td>283,600</td>
<td>7.3 : 1</td>
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<tr>
<td>1988</td>
<td>203</td>
<td>6,585</td>
<td>43,134</td>
<td>273,761</td>
<td>7.4 : 1</td>
</tr>
<tr>
<td>1991</td>
<td>204</td>
<td>6,771</td>
<td>42,850</td>
<td>255,215</td>
<td>8.0 : 1</td>
</tr>
<tr>
<td>1994</td>
<td>180</td>
<td>6,014</td>
<td>37,487</td>
<td>217,001</td>
<td>8.3 : 1</td>
</tr>
</tbody>
</table>

Change: -27 -379 -5,103 -66,599

Note: (1) Rank of Lieutenant Colonel and above (male only).

(b) Civilian staff

The civilian staff budget shows similar trends to that of the service personnel. While the percentage share of the total defence budget allocated to civilian staff has increased from 11% in 1985-86 to 12.4% (or £2,828 million at current prices) in 1994-95, in real terms this part of the budget has fallen by 11% over the same period. The inclusion from 1993-94 of pension provision for currently serving civilian personnel has not been sufficient to compensate for the downward trend caused by reductions in civilian staff numbers - which were planned to mirror the 20% reduction in the armed forces by 1996. Thus, civilian numbers are expected to be reduced to 128,700 by April 1996, a reduction of 32,100 on the July 1990 figures. The number of redundancies is expected to be kept to a minimum, however, and there have only been some 7,700 since April 1990. These continuing reductions come on top of a longer term trend which has seen the proportion of civilian staff to the total size of the armed forces fall from 88% in 1979 to 55% in 1994.

4.2 Expenditure on Equipment

(a) Procurement

UK defence procurement expenditure peaked in the mid-1980s, and has declined in real terms since then by about 35%. Overall, the procurement strategy over recent years has been to maintain R&D capabilities for new generations of equipment, with the emphasis on force multiplication - smaller numbers of military platforms but increased capabilities through enhanced communications and intelligence, which favours electronics-based equipment in general. This emphasis on technological improvements for smaller forces is reflected in the relative stability of defence R&D (which in 1992-93 began to rise as a proportion of the equipment budget) in comparison to the fall in overall equipment expenditure, as shown in Table VI. But given the history of technical problems and cost overruns on large military equipment projects, the government's twin objectives of increased military capability (through technological improvements) and lower equipment spending may be untenable on both counts. It is particularly difficult to see how the government can keep within equipment planning targets when most of the Cold War equipment programmes are continuing in development and production - although there have been significant reductions in the numbers of platforms ordered compared to original requirements.

These developments will have a crucial impact on future procurement spending. If the MoD keeps to the general policy reflected in current and planned R&D expenditure, there is every possibility that it will have to increase aerospace spending by up to 25% in real terms and it will be hard to find compensatory cuts in other areas of the budget. The growth in spending will be in the areas of aerospace and electronics - mainly for Eurofighter 2000, but also for a range of guided missiles and other aerospace programmes, as well as communications and command and control. As a result, it will be no surprise to see equipment expenditure rise in real terms and the MoD will have difficulty in offsetting this through savings in personnel and support services.

(b) Industrial Employment

At around £9 billion per annum, or about 10% of overall manufacturing production, the procurement budget still represents a large source of work for UK industries. However, the
Table VI: UK Government Spending on Defence R&D and Equipment 1975-76 to 1992-93 in real terms

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment (£m)</td>
<td>6,791</td>
<td>9,184</td>
<td>10,897</td>
<td>9,924</td>
<td>9,163</td>
<td>8,838</td>
<td>8,861</td>
<td>7,951</td>
<td></td>
</tr>
<tr>
<td>R&amp;D (£m)</td>
<td>2,595</td>
<td>3,075</td>
<td>3,014</td>
<td>2,587</td>
<td>2,420</td>
<td>2,463</td>
<td>2,337</td>
<td>2,311</td>
<td>2,437</td>
</tr>
<tr>
<td>R&amp;D as a proportion</td>
<td>38.2%</td>
<td>33.5%</td>
<td>27.6%</td>
<td>26.1%</td>
<td>26.4%</td>
<td>26.9%</td>
<td>26.4%</td>
<td>26.1%</td>
<td>30.6%</td>
</tr>
</tbody>
</table>

Source: MoD, UK Defence Statistics 1992, London: HMSO 1992, Tables 1.2 and 1.4, with 1990-91 as current year and deflator as given in Table 1.2.

Table VII: UK Defence Employment

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Totals</td>
<td>625</td>
<td>545</td>
<td>515</td>
<td>425</td>
</tr>
<tr>
<td>Direct</td>
<td>345</td>
<td>285</td>
<td>275</td>
<td>230</td>
</tr>
<tr>
<td>Indirect</td>
<td>280</td>
<td>260</td>
<td>235</td>
<td>195</td>
</tr>
<tr>
<td><strong>MoD Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>515</td>
<td>420</td>
<td>400</td>
<td>340</td>
</tr>
<tr>
<td>Direct</td>
<td>285</td>
<td>220</td>
<td>215</td>
<td>185</td>
</tr>
<tr>
<td>Indirect</td>
<td>230</td>
<td>200</td>
<td>180</td>
<td>155</td>
</tr>
<tr>
<td><strong>Exports</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>110</td>
<td>125</td>
<td>115</td>
<td>90</td>
</tr>
<tr>
<td>Direct</td>
<td>60</td>
<td>65</td>
<td>60</td>
<td>45</td>
</tr>
<tr>
<td>Indirect</td>
<td>50</td>
<td>60</td>
<td>55</td>
<td>45</td>
</tr>
<tr>
<td><strong>MoD Equipment Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>360</td>
<td>255</td>
<td>270</td>
<td>230</td>
</tr>
<tr>
<td>Direct</td>
<td>200</td>
<td>135</td>
<td>140</td>
<td>120</td>
</tr>
<tr>
<td>Indirect</td>
<td>160</td>
<td>120</td>
<td>130</td>
<td>110</td>
</tr>
<tr>
<td><strong>MoD Non-Equipment Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>155</td>
<td>165</td>
<td>125</td>
<td>110</td>
</tr>
<tr>
<td>Direct</td>
<td>85</td>
<td>85</td>
<td>75</td>
<td>65</td>
</tr>
<tr>
<td>Indirect</td>
<td>70</td>
<td>80</td>
<td>50</td>
<td>45</td>
</tr>
</tbody>
</table>


UK's industrial and technological base has been contracting for a number of years and as Table VII shows over 200,000 defence related jobs (32% of the total) have been lost in the UK since the mid 1980s. Similarly, 20,000 export-related jobs (18% of the total) have been lost over the same period. Moreover, this decline in defence employment precedes the end of the
Cold War and reflects wider trends in the defence industry - such as national concentration, greater commercialisation and increased internationalisation - as well as reductions in national defence expenditure. Thus, caution is needed when making projections about employment. Between 1989 and 1992, for example, there was a very steep level of job losses relative to the overall reduction in defence spending. However, direct employment stabilised in 1992, before experiencing another steep cut in 1993.

Without a supportive framework for conversion defence companies have predictably responded to declining national procurement budgets through massive job losses and cutbacks in capacity. Some companies have achieved notable success through diversification, but the general trend has been one of rapid rationalisation with the prime contractors running down and closing large sites. Generally, the leading companies have consolidated around defence work and focused their efforts on expanding defence exports.

More UK-based jobs are likely to be lost in the future as the prime contractors attempt to maximise profits by transferring routine production to low-paid and non-unionised workers abroad. Within Europe, the Eurofighter 2000 project has already transferred aerospace employment from Britain to Spain, and it seems likely that future programmes will look to South East Asia for the advantages of cheap labour. Based on current trends, therefore, all that might remain in the way of defence employment in the UK by the end of the present decade, is a much reduced core of specialist R&D and assembly workers. What is clear, though, from the limited available evidence on the post-redundancy experience of displaced defence workers, is that valuable manufacturing skills are not being retained in the economy. According to a recent study of defence workers, of those who lost their jobs, 33% were unemployed a year later, 34% had semi-skilled employment and 29% were in manufacturing work.

(c) Disposal of Surplus Weapons

Significant savings in the defence budget are being made from the disposal of surplus conventional weapons and equipment. Reductions in front-line equipment and stockholdings under Options for Change, combined with the rationalisation of support functions, are expected to give rise to 'exceptional disposal activity in the next few years'. The MoD estimate that front line equipment will reduce by approximately 20% and stockholdings by 33-50%. It might be assumed therefore that a quantitative assessment of surplus creation since 1984-85 might reveal a constant upward trend in disposal by sale of such equipment. The available evidence suggests, however, that the underlying upward trend is dependent on overseas sales of major capital weapons, particularly operational vessels and aircraft. The disposal strategy to date has focused on exports, as opposed to the destruction or conversion of surplus equipment (although much of this equipment is either dual-use or predominantly civilian in nature, as opposed to operational weapon systems). In the future, however, an increase in the export of operational equipment is expected because surpluses are now arising out of the drawdown rather than as a result of the equipment reaching the end of its useful operational life. To deal with this general increase in disposal activity, a central disposal organisation was formed within the MoD in April 1990, and was granted Agency status (as the Disposal Sales Agency) in October 1994.

The withdrawal from Germany represents the largest peacetime movement of British troops and equipment in modern times. In addition to the withdrawal of around 27,000 troops, the
run-down of British forces in Germany includes the disposal of 2,900 tanks and armoured vehicles, 15,200 trucks and landrovers, 1.6 million items of stores and spares, 20,000 tonnes of ammunition and 54,000 square metres of accommodation. According to the National Audit Office, the withdrawal process is 'in chaos' however. Equipment in good working order is rusting in fields, records of potentially dangerous ammunition and detonators have gone missing and vehicles are being cannibalised unnecessarily. The audit report concludes that the projected savings of £177 million (including a sales target of surplus goods of £13.5 million) will not be met. Net savings of £105 million are now expected.

4.3 Other Expenditure

In the quest for economies it is the support services that are bearing the brunt of the changes. Training, distribution, transport, housing, spares and storage are increasingly being 'contracted out' to private companies. As Table VIII shows, the Front Line First study is set to exacerbate this trend, with an estimated net reduction of a further 18,700 support and administrative jobs by the year 2000. It has already been announced, for example, that the MoD's medical services are being reorganised on a tri-service basis with expected savings of about £50 million a year.

Base closures and the rationalisation of the defence estate have been another significant source of savings in the defence budget. In 1990 the MoD was thought to be using about 1.5% of the UK land area (or 223,000 hectares worth about £1 billion), mainly for training, firing ranges and airfields. Between 1980 and 1990 only about 5% (or 11,000 hectares) of this land was disposed off. In the last three financial years some £250 million has been raised from the sale of surplus property and further disposal activity is expected as the MoD continues to rationalise its land holdings. The legacy of military pollution remains a problem, however, and is likely to depress commercial values. Finally, in addition to the drawdown in Germany, recent overseas base closures and rationalisations include the closure of a small Royal Navy station in Bermuda, withdrawal of the infantry battalion from Gibraltar, the downgrading of the British garrison in the Central American state of Belize (from an operational command to a small training operation), and the withdrawal of 6,250 troops from Hong Kong. By the time China assumes sovereignty over Hong Kong in July 1997 the remaining Gurkha battalion will have also been withdrawn.

| Table VIII: Estimated Job Reductions Resulting from Front Line First by Year 2000 |
|-----------------|---|---|---|---|---|
|                 | RN | Army | RAF | Civilian | Total |
| HQ Reductions   | 150| 200  | 500 | 900      | 1,750 |
| More Efficient Recruiting | 600| 900  | 2,200| 3,700    |
| Medical Support | 250| 250  | 250 | 270      | 1,020 |
| Rationalisation of Spares Depots | 800| 300  | 2,150| 3,100    | 6,350 |
| Improvements in Info. Technology | 20 | 300  | 100 | 430      | 850   |
| Air Traffic Control | 200|      | 200 |          |
| Rationalisation of Science & Technology | 1,300|      | 1,300|      |
| Other Civilianisation  | 1,500|      | 1,500|      |
| Other Support Posts, incl Fire Services | 80 | 250  | 600 | 1,100    | 2,030 |
| Total            | 1,900| 2,200| 7,500| 7,100 | 18,700 |

Table IX: UK General Government Expenditure - Value and Percentage Difference (in real terms) from Base Year, 1984-85

<table>
<thead>
<tr>
<th></th>
<th>Value (£bn)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defence (1)</td>
<td>-2.6</td>
<td>-3.3</td>
</tr>
<tr>
<td>Social security</td>
<td>1.7</td>
<td>11.3</td>
</tr>
<tr>
<td>Health &amp; personal social services</td>
<td>4.1</td>
<td>8.6</td>
</tr>
<tr>
<td>Education</td>
<td>2.6</td>
<td>5.1</td>
</tr>
<tr>
<td>Law, order &amp; protective services</td>
<td>1.6</td>
<td>3.7</td>
</tr>
<tr>
<td>Housing</td>
<td>-3.0</td>
<td>-1.1</td>
</tr>
<tr>
<td>Transport</td>
<td>-1.4</td>
<td>0.7</td>
</tr>
<tr>
<td>Trade, industry, energy &amp; employment</td>
<td>-2.2</td>
<td>-4.0</td>
</tr>
<tr>
<td>Overseas services, including aid (2)</td>
<td>0.3</td>
<td>0.6</td>
</tr>
<tr>
<td>Total government expenditure (3)</td>
<td>0.3</td>
<td>16.1</td>
</tr>
</tbody>
</table>

Notes: (1) Defence figures for 1991-92 are net of other governments' contributions to the cost of the Gulf conflict.
(2) The modest increase in the overseas services budget (which includes overseas aid) has to be considered in the light of the covert practice in the UK of linking aid to arms. Unlike some arms exporting countries, the UK government claims that it has not established a specific aid budget to subsidise defence sales. However, the recent disclosure that £1.3 billion of British defence contracts were linked with £234 million of British aid to the Pergau hydro-electric dam project in Malaysia, drew attention to the practice - now thought to be widespread - of linking foreign aid with arms sales to developing countries.
(3) Excludes privatisation proceeds.

Table X: Comparison of UK Privatisation Dividend and 'Optimum' Peace Dividend

<table>
<thead>
<tr>
<th></th>
<th>£ bn (in real terms at 1993-94 prices)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peace Dividend</td>
<td></td>
</tr>
<tr>
<td>Privatisation Dividend</td>
<td></td>
</tr>
</tbody>
</table>

5. Changes in public expenditure

Having discussed the composition of the defence budget and shown in some detail where the adjustment burden has fallen, it is now time to turn our attention to the potential product and welfare dividends. As we have seen these were largely thought to be dependent on overall government spending remaining constant or even rising during the downturn in military spending. In the UK, however, it is clear from government statements that there has been no deliberate policy of using the resource dividend to boost spending in other categories of public expenditure. As shown by Table IX, the modest reductions in British defence spending since 1984-85 are swamped by the much larger increases in other programmes, notably the health and social security budgets. Indeed, when compared to the proceeds from privatisation, for example, the resource dividend is relatively small in comparison. As Table X shows, between 1985-86 and 1994-95, the privatisation dividend is expected to total £67.1 billion compared to an 'optimum' resource dividend of £29.1 billion over the same period. It is also worth noting that, initially at least, the increases in some areas of public expenditure took place within the constraints of declining total general government expenditure (which from 1981-82 until 1988-90 fell continuously as a percentage of GDP). Only since the beginning of the 1990s has the level of total general government expenditure started to rise again, due largely to the huge increases in social security spending. But this recent growth in public expenditure also coincides with a period in which the government has run a deficit of expenditure over tax revenues: a budget surplus of £9 billion in 1989 had been turned into a budget deficit of around £50 billion (or 8% of GDP) by 1993/94. Only now is the deficit beginning to fall and is forecast to decline to about £30 billion by 1997/98.

There is no doubt therefore that the current size of the budget deficit has been a major contributing factor in negating the benefits of lower defence spending. The two traditional remedies for the deficit - expenditure reductions and increased taxes - have combined to deter reinvestment of the resource dividend. Treasury pressure for reductions in government spending has meant that certain categories of 'regenerative' spending that might have been expected to rise in compensation for the declining defence budget (such as trade and industry, transport and housing), show little change or have seen their share fall. The large increases in 'rescue' programmes (largely income-related social benefits, health and law and order budgets), and the government's antipathy for raising taxes on income, exacerbate the pressure for reductions in these budget areas. Moreover, it is surely no coincidence that Treasury expectations of savings in the defence budget of £750 million from 1996/97 are timed to coincide with the next general election, when the Chancellor is expected to want every penny he can get for tax cuts. Of course, tax increases and cuts in government expenditure are not the only ways of reducing a budget deficit. Reinvestment of the resource dividend in wealth creating activities (the product dividend) could also reduce the deficit through increased exports and reduced unemployment. Interestingly, however, while the Government has refused to acknowledge the need to redirect public expenditure in mainland Britain from defence into regenerative measures, the current opportunity for transition to a peace economy in Northern Ireland may yet yield a different response.

6. The Peace Dividend in Northern Ireland

In general, the economy of Northern Ireland has been public-expenditure dependent and labour-intensive, with a large 'security industry' which is effectively reliant on the 'troubles'.

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So while the peace process in the Province provides a window of opportunity, the negative consequences of job losses in the security industry could be considerable. A study by the Confederation of British Industry Northern Ireland warned:

> it is essential that the overall level of public expenditure is at least maintained and that savings obtained in reducing security related expenditure are utilised to develop an optimal level of self-sufficiency, international levels of competitiveness and vigorous industrial and commercial activity. A range of indicators show that Northern Ireland continues to experience a high level of deprivation, lower health standards than in the UK as a whole, lowest average gross household income of any UK region, high levels of poor educational achievement, and excessively high levels of unemployment.... Refocussing public expenditure into tackling these issues will create the true 'peace dividend'.

This potential resource dividend has two parts: the redirection of public expenditure currently spent on Law, Order and Protective Services (LOPS) in Northern Ireland, and savings in the overall UK defence budget from a reduction in the number of army personnel based in the Province. In 1993/94 some £927 million (18.4% of the total Northern Ireland Block Grant) was spent on LOPS, including £593 million on police, £145 million on prisons and £121 million in compensation. The CBI estimate that a permanent cessation of violence would lead to a gradual reduction in the LOPS budget to around £505 million by 1998/99 and the loss of 20,000 jobs in security-related industries. If, however, the savings in public expenditure were to be redirected back into the Northern Ireland economy, the CBI expect that this, together with other major peace-dividend benefits (such as increased inward investment and tourism) would create 29,000 new jobs and 20,000 work-scheme places over the five year period. Indeed, the process of diverting money from security services to other social and economic programmes has already started: during the cease-fire, savings of £286 million in the security budget were re-allocated in this way. One of the main beneficiaries has been education with the announcement of a new £63 million programme to restore the decaying stock of schools and colleges in the Province. With the resumption of violence, however, some of this funding is likely to be clawed back.

The military commitment in Northern Ireland in support of the Royal Ulster Constabulary is a major drain on resources. The annual gross expenditure in the defence budget attributable to Northern Ireland is about £1.6 billion, which accounts for 12 regular infantry battalions (some 13,000 troops) and a further six battalions comprising the home service element of the locally-recruited Royal Irish Regiment (5,400 troops). Of the regular infantry battalions, six are stationed in Northern Ireland and as many again are caught up in the 'deployment cycle'. The 'extra cost' of the army's task in Northern Ireland is thought to be about £360 million per annum at 1994 prices, while annual local expenditure by the army is estimated at £450 million. When both the Provisional IRA and loyalist paramilitaries announced a cessation of violence in 1995, a reduction in overall UK troop levels in the Province became a distinct possibility. While this has become a more distant prospect following the end of the IRA cease-fire, some modest troop reductions have been made. Any eventual major drawdown, however, will have two significant economic consequences. First, a lasting political settlement could allow the UK to reduce its defence spending to nearer the European average (assuming that the troops are demobilised rather than redirected to other missions). Second, the reduction in troop numbers and associated incomes is likely to result in severe short-term economic consequences for some local communities in certain towns and villages in the Province (although these are likely to be mitigated in the longer-term by the positive benefits of the peace dividend).
The future possibilities for a peace dividend in Northern Ireland are rather an open question, dependent on both the outcome of the peace process, and the continued willingness of the government to utilise any future savings in the LOPS and defence budgets to address the structural economic problems in the Province.

7. Defence Cuts Without Conversion

The declining defence budget provides an economic opportunity. It was suggested earlier, however, that the product dividend is dependent on how the defence savings are redeployed and how efficiently they are put to use in the economy. Unfortunately, there has been no attempt in the UK to use the resource dividend to address the adjustment problems being encountered by defence contractors, defence workers and defence dependent communities. There is no national conversion policy in the UK, despite support for such a policy among opposition parties.53 Instead, the Conservative Government has adopted a free-market approach to defence restructuring, arguing that the defence industries themselves are best placed to make their own decisions on responding to the defence downturn.54 Support for industry has been restricted to a series of diversification seminars run by the Department of Trade and Industry (DTI). Given Britain's present economic situation, local and regional economic regeneration, together with the reorientation of military R&D towards civil programmes, seem to offer the best options for improved economic performance. As the following accounts show, however, these opportunities have not been realised.

7.1 Local Authority Policy and European Funding for Conversion

In the absence of any central government policy, local authorities have been the focal point for conversion activity in the UK. In the main, these have been local studies of defence dependency and in some cases have extended to practical help for local industries and for retraining. Funding from EU programmes - initially through Perifra and subsequently through Konver - have been especially important to the success of such initiatives. The UK's share of Konver money in 1993 was just over £15 million (which was split between 160 different awards across the UK). In comparison to the defence cuts experienced during this period, the Konver funding can only be expected to have a minor compensatory role, particularly as matching funding is required by local authorities and other local economic development agencies that are already faced with considerable budgetary pressures. In a small number of cases the Konver funding has resulted in practical initiatives to assist local economic restructuring, but most projects could be considered as little more than traditional, reactive local economic development around retraining and land re-use rather than longer-term strategies involving defence-industry diversification as an explicit element of policy.55 In the absence of any other sources of funding Konver is obviously welcome but it does highlight the lack of a co-ordinated national or European response to defence-industry diversification.

7.2 Support for Dual-Use Projects and R&D

In most advanced industrial nations research into dual-use technologies is becoming an integral part of national security and industrial policy. In the UK, however, MoD funds have traditionally been spent solely for defence purposes (and civil funds largely for civil needs) resulting in the separate development of defence and civil technologies.56 This structural separation of the government's research and development (R&D) effort between 'civil' and 'defence' projects, remains largely unchanged in the post-cold war era. Despite the
establishment of the Office of Science and Technology in 1992 (with a remit to oversee responsibility for science and technology at a strategic, central government level) and the first major policy review in this area for 20 years, the 'ring fence' around the MoD's R&D budget remains intact.

Since the late 1960s about half of government expenditure on R&D has gone on defence, yet the MoD continues to refuse responsibility for any broader technological or industrial policy. The MoD, for example, is the only government department not to have adopted a specific 'Science and Technology Mission Statement', preferring instead to commit itself to a few practical measures to enhance the amount of spin-off to (and collaboration with) the civil sector. Similarly, the Defence Evaluation Research Agency (DERA) - formed in April 1991 from the four main MoD non-nuclear research establishments and expanded in April 1995 to include the Chemical and Biological Defence Establishment and other defence research, evaluation and testing centres - has introduced a limited industrial access scheme which is intended to help commercialise defence research. The DERA has also established its first three dual use technology centres covering structural materials, marine technology and supercomputing, and several other centres are under development (including superconducting, software engineering and electronics).

The government has attempted to mitigate this lack of strategic thinking about defence R&D with the claim that significant reductions in such spending are taking place. According to the government's science and technology report, spending plans for defence R&D in 1995-96 are one fifth lower in real terms than expenditure in 1987-88, and by the turn of the century the reduction is expected to be about one third. Initial indications (see Table VI) are that such claims need to be treated with some caution. Not only is the decline in real terms fairly modest over recent years, but no allowance is made for the fact that private industry is being asked to take more responsibility for funding its own defence R&D. The growing opportunities for 'spin-in' from the civil to the defence sector, exacerbate the difficulties in obtaining an accurate picture. There are several reasons (as outlined in Section 4) for believing, however, that total UK (ie both public and private) spending on defence-related R&D is not being significantly reduced, and may even increase in the coming years. Moreover, while government spending on defence R&D is falling in real terms, it continues to constitute a high proportion (44.3% in 1991-92) of total government spending on R&D. This means that government funding of civil R&D is also in decline with few signs of funds being transferred from military to civil R&D.

8. Conclusion

That defence spending in the UK has fallen is uncontested. Though more modest than might have been expected in the circumstances, the UK defence budget has declined as a result of reductions in personnel levels, equipment expenditure and support services. Even allowing for disagreement over the method of measurement, these cuts in defence expenditure have resulted in a significant resource dividend - worth around £29.1 billion over the ten year period from 1985-86 to 1994-95. Assessing whether this has been translated into a product dividend and/or a welfare dividend is somewhat harder, however. Budgetary outcomes are a complicated process involving several groups of decisions taken together - expenditure decisions are one group and taxation another - and the fungible nature of public expenditure means that the exact destination of the resource dividend is virtually impossible to determine.
This does not prevent well-informed speculation, however. It is apparent, for example, that the money saved from the defence budget has allowed the government to loosen some of the financial and policy constraints within which it operates. Given the neo-liberal economic agenda pursued during this period, it can also be assumed that one or other of two potential welfare dividends may have been utilised. First, as government expenditure on defence began to decline, the burden on taxation was eased thereby allowing space for cuts in personal taxation. In this scenario the welfare dividend has almost certainly been unequally distributed because it is largely the rich who have benefited the most from tax cuts. Second, as John Lovering suggests, the resource dividend could effectively have been used to help underwrite the management of recession. As defence spending declined, non-defence spending rose dramatically, and so-called 'rescue' programmes (largely income-related social benefits, health and law and order budgets) expanded the most rapidly. Thus, it could equally be asserted that the resource dividend has been translated into a partial welfare dividend for the poorer members of society.

If the benefits of the peace dividend largely appear to have rebounded to the more affluent segments of society, the costs of disarmament have also been apportioned disproportionately. While military personnel have been granted generous redundancy, retraining and retirement packages which have helped to soften the worst effects of dislocation, the greater hardships have been borne by the defence industrial base, and by defence workers and defence dependent communities in particular. Indeed, the failure to reinvest the resource dividend in the economy to maintain aggregate demand (or to support an alternative industrial and technology policy) has undoubtedly prevented the realisation of a product dividend. Consequently, there is no defence conversion taking place in the UK and only minimal diversification. This laissez-faire approach to the 'adjustment burden' together with the centralising tendencies of government have also tended to undermine the autonomy of local authority initiatives under the Konver Programme. Thus, defence companies are either seeking to reduce their dependency on MoD contracts (largely through take over activity and seeking increased arms exports as opposed to product diversification) or are increasing their degree of specialisation in defence technologies via increased transnational co-production agreements and mergers. The UK's industrial and technological base is continuing to contract with thousands of skilled workers losing their jobs every month, often in regions where unemployment is already high. This 'product deficit' is, in turn, creating resistance to further cuts in defence expenditure.

What then of the future? Clearly, much deeper cuts in military spending are now needed if the UK is to have any chance of realising a 'second' peace dividend. The higher percentage of GDP spent in the UK on defence (3.3% in 1994-95, compared to the European NATO average of 2.2%) is attributed to significant commitments - including an independent nuclear deterrent, overseas garrisons, forces supporting the Royal Ulster Constabulary in Northern Ireland and a force structure that reflects Britain's role as an island nation - not shared by most other European NATO countries. But there is a clear rational for much larger defence cuts within the European pillar of NATO, and within the UK in particular. Again, however, these larger defence spending cuts will only lead to a product dividend if the money is reinvested in 'national needs' like industrial renewal, environmental restoration and renewable energies. Without a policy of structural, lasting disarmament based on a minimal European defence identity, and a major shift in economic and political thinking, the promised benefits from the peace dividend are likely to remain elusive.
Notes

1 This paper is largely based on a background paper commissioned by the Bonn International Conversion Centre (BICC): Ian Davis and Steve Schofield, 'The Peace Dividend in the UK: Myth or Reality', which was used in the preparation of Conversion Survey 1996: Global Disarmament, Demilitarization and Demobilization, BICC/Oxford University Press 1996. It also draws on research undertaken by the two authors for the Edinburgh and Lothian Defence Diversification Initiative (Trade Union Liaison Group), and published in 1996 under the title 'Trade Unions and Defence Diversification'. I am grateful to Steve Schofield for granting permission to use some of the joint research data in this paper. I am also grateful to Malcolm Chalmers, Andrew Cottee, Nils Petter Gleditsch and three anonymous referees for valuable comments on an earlier draft.

2 Terry Barker, Paul Dunne and Ron Smith, 'Measuring the Peace Dividend in the United Kingdom', Journal of Peace Research, Vol.28, No.4 1991, pp345-358. In the absence of compensatory spending, however, the authors found that the UK's GNP would fall 3.5% and unemployment would rise by 0.46 million.


4 This sense that there has been no tangible peace dividend is not confined to the UK, however. According to the UN Development Programme (UNDP), Human Development Report 1994, a global peace dividend of nearly one trillion dollars has 'disappeared'. UNDP administrator, James Speth, states that 'No one knows for sure where the savings from reduced military spending are going'.


7 Ibid, p54.


9 Ibid, p79.

10 Ibid, p71.


13 Indeed, the thrust of the new policy was to argue that technological improvements in the next generation of military equipment gave the remaining forces increased military capability. The 1st Armoured Division, for example, is expected to increase its combat capability by over 30% by the end of the decade, as new equipment like the AS90 self-propelled howitzer and Starstreak missile come on stream. See Statement on the Defence Estimates 1992, London: HMSO, Cm 1981.


15 Submission by the Defence Secretary to the House of Commons Defence Select Committee, 10 July 1991.

16 The two main opposition parties in the UK are the Labour Party and the Liberal Democrats. For an example of the Labour Party's response, see Martin O'Neill's article in the Guardian on 19 May 1991. The Liberal Democrats produced their own review document (Shared Security: Security and Defence in an Uncertain World, Policy Paper 6, Liberal Democrats, Brighton Conference, September 1994) which argued that there should be no further cuts to the UK armed forces in the short-term, and that cuts made in the longer-term should be linked to lower commitment levels and not fixed monetary targets.

The Foreign Office is responsible for recovering these costs, from interested foreign governments in the case of the Gulf War, and from the UN in respect of the Bosnian operation. In 1994, for example, the net additional costs for the Bosnian deployments was £91 million, for which the Foreign Office reimbursed the defence budget. However, only £40 million was recovered from the UN, and the remaining £51 million came out of the UK Treasury's contingency fund. See David Fairhall, *The Guardian*, 15 October 1993 and 2 August 1995. The impact of the Gulf War on the statistics is revealed in Tables I and III - the former excludes the cost of the conflict while the latter includes it. In 1995 the MoD wrote-off £111 million of disputed costs in respect of an undisclosed overseas military operation - thought to be the Gulf War. Anthony Bevins, 'How much did Saddam cost?', *The Observer*, 22 October 1995.

This figure is £600 million less than announced in the November 1993 estimates, due to the transfer of 'security and intelligence services' to a separate budget. This was the first confirmation that security and intelligence services had been funded from the defence vote.

This intensification in the conflict was marked by a rapid expansion in the UK's defence budget in the early 1980s (as Mrs Thatcher over-achieved the then NATO target of 3% real annual growth in defence spending). The UK defence budget rose by 28% in real terms between 1978-79 and 1984-85.

During most of the Cold War period, for example, military expenditure (as a share of GDP) was over twice its historical peacetime (ie from 1855 to 1935) average. See Hong Bai, Stephan Hall, James Nixon & Ron Smith, 'The Macroeconomics of the Peace Dividend in the UK', A Presentation to the *Wages of Peace* Symposium of the International Peace Dividend Research Project, United Nations, New York, March 1995.

Whether this is actually an 'optimum' resource dividend remains largely a matter of conjecture. If we were to assume, for example, that the long-term trend in rising defence expenditure would have continued in the absence of planned defence cuts, then the 1984-85 counterfactual actually underestimates the resource dividend. In the view of the author, however, the assumption that this trend might have continued beyond 1984-85 is rooted in a false economic and historical determinism and fails to place defence spending in its proper political context. One might equally ask the question: how much would Britain be spending now to maintain 1989 force levels, or to maintain an annual expenditure level of 3% of GDP per annum. The almost endless choice of counterfactual is a matter of political analysis, rather than scientific or economic theorem.

Since publication of the *Statement on the Defence Estimates* 1994, however, the sale of Service married quarters has run into difficulties and the housing trust set up by the MoD to manage the privatisation is due to be wound-up early in 1995 with 'huge losses'. *The Guardian*, 18 January 1995.

Administrative changes have also impacted on the budget. From 1993-94 the defence budget excludes pension payments to retired Service personnel, but includes pension provision for currently serving Service (and civilian) personnel. Because the first of these two changes is the greater, the net impact is a fall in the percentage share of expenditure on Service personnel.

The MoD claims that its resettlement programme has proved 'highly successful', with 60% of former military personnel finding civilian jobs immediately and fewer than 20% still looking for work after three months. *Statement on the Defence Estimates* 1994, London: HMSO, Cm 2550. Redundancy terms - whether voluntary or compulsory - include a pension and terminal grant, plus a special tax-free payment based on the years of service that the service person might have completed had they not been forced to leave.

A review of the number of senior naval officers by the MoD Internal Audit Bureau in 1987, for example, found that 9 of the 83 Commodores and above, and only 19 of 355 Captains, were in sea-going jobs. *National Audit Office (NAO), Ministry of Defence: Control and Use of Manpower, NAO 1989*, p20.

Civilian staff employed by the MoD include highly skilled industrial workers, scientists and engineers, police and security guards and civil servants, at over 2000 locations in the UK and overseas.

Part of this decline in civilian numbers is due to the transfer of industrial staff from the public to the private sector, including 34,000 staff in the Royal Ordnance Factories and Royal Dockyards during the 1980s.

The only major cut in the range of the UK's military capabilities is the abandonment of the RAF's sub-strategic nuclear capability which it will lose when their existing free-fall bomb becomes obsolete. The replacement missile programme (TASM) was formally dropped in November 1993, saving £1.8 billion from the long-term equipment budget provisions. The next major investment in equipment will be Eurofighter 2000 (EF2000) which has been likened to the Trident project in terms of magnitude. Peak funding for EF2000 will be early in the next decade. Other major procurement projects that have been approved recently include a £2.5 billion order for 67 Apache attack helicopters, an £850 million order for an extra 259 Challenger 2 tanks (on top of the 127 already ordered), an invitation to tender for two amphibious assault ships (worth about £600 million), a similar invitation for three Type 23 frigates (worth about £400 million), at least five minchuners costing £200 million, and an upgrading of the RAF's Tornado bomber fleet (costing between £500 and £750 million depending on how many aircraft receive the improved equipment). Two further programmes expected to receive approval shortly are the Advanced Anti-Armour Weapon (AAAW) and the Conventionally Armed Stand-Off Missile (CASOM). A final element of future defence planning is, of course, the continued commitment to strategic nuclear weapons. Trident D5 submarines, the first of which became operational in 1995, will require an extensive military support structure, including anti-submarine surface vessels, conventional submarines and patrol helicopters to ensure the safe passage of the submarines to and from deployments.

Some savings on shipbuilding are likely, particularly as spending on Trident has now peaked, but the planned new European frigate - one of the most complex warship procurements ever undertaken by the MoD - is expected to cost up to £5 billion in development and production costs. The figure of 25% is a broad estimate of additional spending required as a result of probable underestimates in the cost and the time required to complete projects already in the pipeline. The historical precedents are referred to in note 30 above. In addition, the growing reliance on upgrades (and the technical complexity of integrating new technology into old systems) is also likely to lead to underestimates - as suggested in the NAO's Major Projects Report for 1993.

The recent takeover battle between GEC and BAe for control of VSEL, the UK's leading naval contractor (augmented by some armaments work), illustrates that consolidation within UK defence sector is set to continue throughout the 1990s. BAe viewed the acquisition of VSEL as a logical step in their attempts to develop an overall systems capability for naval vessels and related equipment, while GEC was already involved in frigate production at its Yarrow shipyard in Scotland. GEC's successful bid of £830 million represents one of the biggest defence takeovers in the UK. There is also much speculation that the battle over VSEL is only the prelude to the eventual merger of GEC and BAe defence divisions, creating a giant national champion, although concerns exist about the impact on the MoD's competition policy. The takeover is also likely to lead to another series of redundancies depending on the scale and distribution of future naval orders.

There are a few cases of successful diversification: Rosyth Naval Dockyard refurbished London Underground trains and undertook other civil engineering work; Dowty Aerospace produced landing gear for Airbus; a GEC-Marconi subsidiary moved into the production of TV satellite dishes; and on a smaller scale at VSEL, the company gained some civil work in offshore oil equipment.

Surplus nuclear weapons present rather different problems. In early 1994, seven decommissioned nuclear submarines were waiting for disposal at Devonport and Rosyth and although their reactors have been defuelled, the contaminated reactor compartments prevent any profitable re-use. Plans to sink them at sea were abandoned when the Government reluctantly accepted an international ban on dumping nuclear waste at sea. As a result, the reactors will eventually have to be cut up and buried on land along with Britain's other military and civil nuclear waste.


In the period 1987-88 to 1992-93 inclusive, gross receipts from UK MoD sales of second-hand equipment totalled £320.7 million at current prices. The net figure after deduction of disposal costs was £237.8 million. However, annual gross receipts fell from £83.7 million in 1987-88 to £33.9 million in 1991-92 before rising again to an estimated £65.4 million in 1993-94. Overseas sales of major capital equipment (predominantly ex-Royal Navy warships) have been the most financially rewarding, accounting for 42% of gross receipts over the six year period. And it is the trough in sales of major capital equipment (caused in part by the diversion of effort to the Gulf conflict), that accounts for the fall in receipts between 1987-88 and 1991-92. The steep
increase in receipts in 1993-94 probably reflects the start of the anticipated high level of disposal activity associated with Options for Change.

39 For 40 years, the UK presence in Germany comprised the British Army of the Rhine (BAOR) and Royal Air Force Germany (both assigned to NATO), with an additional infantry brigade and RAF elements stationed in Berlin. Following sweeping organisational changes, the NATO focus in Germany is now the Allied Command Europe Rapid Reaction Corps (ARRC), for which the UK provides the commander, the bulk of the headquarters staff and administrative and logistic support. As a result of these changes, between April 1992 and April 1996 the number of British Army personnel in Germany will have been cut from over 55,000 to 24,500. Similarly, the number of RAF personnel will be cut from 8885 in April 1992 to 6290 by April 1995. The number of RAF bases in Germany have been halved (from four to two), with one of the remaining bases also due to close by 1999. The RAF headquarters in Germany is also due to be disbanded on 1 April 1996.

40 National Audit Office (NAO), Ministry of Defence: British Army in Germany - Drawdown of Equipment and Stores, Report by Comptroller and Auditor General, April 1994.

41 One of the more simple proposals being considered is the sale of some of the radio airwaves used by the military, which could raise up to £1 billion. The Guardian, 2 November 1995.


43 In 1992, for example, the National Trust (NT) bought Orford Ness - a five mile stretch of Suffolk coastline that formerly housed an atomic weapons research centre - from the MoD at a cost of £292,500. It then cost the NT a further £2.7 million over the next three years to restore the area and to set up an endowment to run it.

44 Under a 1988 Defence Costs Agreement, Hong Kong contributes 65% of the cost of British troops stationed in the colony, so the remaining troop withdrawals will have little impact on the UK defence budget.


47 Other security-related sectors will also be affected. After the first 12 months of the cease-fire, for example, a survey among the construction industry suggested that building output was down 20%. Richard Thomas, 'Businesses wary despite benefits to economy', The Guardian, 1 September 1995.


49 In the first six months of 1995, tourism had risen 56% on the previous period, and major retailers such as Sainsbury's and Tesco were moving into the Province. The Guardian, 1 September 1995 and 20 February 1996.


51 This compares with a pre-1969 level of three or four resident battalions.

52 Following the cease-fires three army units (about 1,400 troops in total) were withdrawn from Northern Ireland, reducing army levels in the Province to around 17,000 - and these were eventually withdrawn to barracks. With the resumption of hostilities, however, the troops have returned to the streets of Belfast and a further 500 troops were redeployed in February 1996.

53 Amelioration of the economic and social dislocation caused by reductions in defence spending, is thought to require a planned process of arms conversion (or economic conversion as it is known in the US). Conversion is understood as the transformation of military resources into civil activities and production, and implies that a defence company will stop making military products altogether. This should not be confused with defence diversification which usually means that companies are reducing their reliance on military contracts, either by selling military divisions (which simply means that the defence capacity is maintained by the new owners) or by acquiring civil companies (which may reduce the overall dependency on defence work at the corporate level without affecting its defence activities).

54 The Government's response to the defence sector mirrored its ideological approach to manufacturing generally. Thus, throughout the 1980s and early 1990s, when the governments of virtually all industrial countries were taking an active and interventionist stance towards ensuring their industrial futures, the UK (and the US, pre-Clinton) adopted a 'hands-off' approach to industrial restructuring. Recently, however, industrial representatives have been calling for the government to take a more active role, mainly because of concerns that reductions in defence expenditure are seriously jeopardising the UK's competitiveness in the
aerospace and electronics sectors. Several industrialists from the defence sector, for example, argued in their evidence to the House of Commons Select Committee on Trade and Industry that the government should develop a long-term strategy for technology acquisition across government departments with, in particular, increased support in areas like R&D. But despite the Select Committee’s recommendation that the government set up a study of international conversion efforts and their potential application in the UK, it is doubtful whether any policy change will occur under the present administration.


56 See the two reports by the Parliamentary Office of Science and Technology (POST): Relationships Between Defence & Civil Science and Technology, POST May 1991; and Conversion and Diversification of Defence Technology and Manufacturing, POST October 1992.


58 The aim of the individual departmental mission statements is to make government’s use of R&D funds more explicit and open, clearly an objective not shared by the MoD.

59 It seems, however, that the setting up of dual-use centres within the institutional context of the DERA is simply an attempt to encourage the old spin-off paradigm that failed under the Defence Technology Enterprise Scheme. Dual-use technologies are largely derived from civil programmes driven by commercial market forces, such as economies of scale and cost disciplines. By focusing on technological characteristics and custom production (which typifies technologies defined under military specifications), the MoD’s dual-use strategy appears to represent nothing more than business as usual.


61 Because reliable data on the defence industry’s own funding of R&D are not available, it is difficult to verify whether or not the private sector is meeting this government ‘shortfall’ in defence R&D expenditure. The indications are, however, that the private sector is not making up this shortfall. According to a large scale survey by the Central Statistical Office (Survey of Business Enterprise R&D 1993, Central Statistical Office, London: HMSO 1993), spending by companies on defence R&D in 1993 was down 36% in real terms on the 1989 figure, while companies’ civil R&D increased by 7% over the same period.

62 If defence companies are investing a greater proportion of their own resources in defence R&D, this has implications for government defence procurement and arms control. On the one hand, the companies will want a return on their R&D investment, which can only be achieved by long production runs and the maximisation of sales. The government, on the other hand, is looking to make substantial cuts in the equipment procurement budget and will therefore be seeking smaller production runs. This shortfall in domestic demand is likely to be met by increased arms exports.

63 Again, however, some of the best initiatives are coming from local government where, for example, a few local authorities are using European funding to establish technology centres. In Lancashire and Wiltshire, for example, considerable effort has gone into establishing a network of such centres as the basis for retaining high-technology skills and industry. The Preston Technology Management Centre is probably the most advanced, having opened in 1993. Situated in a converted factory on a former BAe site, its main focus is on a Regional Spin Out Programme which allows larger companies to release product development ideas to smaller companies. A similar centre opened in Blackburn in late 1994, and a further centre is planned for Pendle.

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