

The Costs of War

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Introduction: the policy issues

Wars are costly. Estimating the costs of war is one of the contributions which economists can make to the overall assessment of any UK involvement in a military conflict with Iraq. The final decision will reflect complex military and political judgements and will be further influenced by legal and ethical issues. Nonetheless, there are no 'free lunches.' War involves the use of scarce resources which have alternative uses, especially for social welfare programmes (eg. schools; hospitals; care for the elderly). The scale of any UK involvement in war with Iraq will reflect its ability and willingness to pay the price of such a conflict.

Typically, decisions about war are based on military and political judgements, with the economic dimension ignored. In some cases, when a nation's survival is threatened (eg. UK in 1940), it might be willing to pay any price to defeat an aggressor. Other types of conflict might be subject to budget constraints, although at the outset of any military conflict, the magnitude of any such constraints is never apparent. In democracies, the electorate will eventually express their views on their willingness to continue paying for a conflict (eg USA in Vietnam). Even here, voting arrangements are only crude mechanisms for expressing voter preferences on a single issue such as war with Iraq.

Inevitably and understandably, debates about war are highly emotional. Military personnel and civilians will be killed and injured; houses, buildings, roads, bridges and a nation's communications infrastructure will be destroyed and damaged. Faced with such costs, there are incentives to search for alternative, less costly and more attractive solutions. Here, the options include diplomacy, international pressure, sanctions and, in the case of Iraq, the return of UN weapons inspectors. Against such a background, it might be concluded that economists have little contribution to make to the analysis of military conflict. Such a conclusion would be misleading and wrong.

The economics of conflict

Once just the domain of political scientists, the study of conflict has now attracted the interest of economists. Since conflict involves strategic interactions between adversaries, there are opportunities for applying game theory with conflicts analysed in terms games of bluff, chicken and tit for tat (eg. deterrence; mutually assured destruction). Alternative explanations of conflict include grievance (the desire for revenge), mistakes, decision makers under stress and the use of military force to achieve a re-allocation of resources (eg. 'theft' of territory; oil; water). There is also an extensive literature on the arms race and whether such races result in war or peace. Overall, economists usually analyse conflict

in terms of its likely benefits and costs for the participants.

Economists have made further contributions to the analysis of conflict. They have examined the belief that democracies do not go to war with each other and they have been used to advise on target selection in military conflicts (eg. Allied bombing of oil fields, ball bearing and fighter aircraft plants in World War II). Furthermore, their analysis of collective action and military alliances applies also to peace as a public good with nations having incentives to 'free ride' on the actions of the alliance leaders. However, despite the large number of military conflicts, there is a relative absence of empirical studies of conflict by economists. Often, empirical work, including case studies of conflicts (eg. World War II and since 1945), has been undertaken by scholars from other disciplines (Sandler and Hartley, 2003).

An economic framework for evaluating conflict

Economists assess conflict in terms of its likely costs and benefits to the adversaries. On this basis and from the UK's perspective, there will be direct military costs as well as costs imposed on the civilian economy and such costs might be short and long-term. Much depends on the scenarios assumed, all of which will be characterised by uncertainty. Conflict with Iraq will incur military costs over its duration followed in the longer-run by possible extra costs to the defence budget as the UK adjusts its defence policy and faces a possible increased threat from terrorism. For example, the 2002 Comprehensive Spending Review announced planned increases in real defence spending of 1.2% per year between 2003 and 2006, some of which was to meet the new threats from international terrorism. Or, in the long run, the UK (and the EU) might be involved in providing a peace-keeping force in Iraq to provide 'stability' following any regime change (cf. Afghanistan).

Conflict will also involve short-run costs for the UK civilian economy, reflected in possible higher oil prices, impacts on such sectors as the airline industry, foreign tourism and share prices, a loss of investor confidence, as well as a possible recession in the world economy. Some sectors will benefit, such as defence industries (eg. orders for ammunition and missiles). In the longer-run, there might be implications for the level of public spending on social welfare programmes. Or, the UK might contribute to a foreign aid programme designed to re-build the Iraq economy after war damage. These types of military and civil costs will be borne by all the parties in any conflict. Table 1 shows such a cost-benefit framework.

Table 1. A Cost-Benefit Framework

£ million			
Country	Military Costs	Civilian Costs	Benefits
UK			
USA			
Other Allies			
Iraq			

Whilst Table 1 presents an attractive framework for assessing any UK involvement in a military conflict with Iraq, placing numbers into the various boxes is far more difficult. Policy-makers will be required to make judgements about the possible benefits to the UK and the valuation to be placed on such benefits. For example, it might be argued that a successful military conflict leading to destruction of Iraq's nuclear, chemical and biological weapons and a 'desirable' regime change will lead to peace and stability in the Middle East and in the world and that such benefits for UK citizens will be realised over a number of years. Alternatively, the estimated costs to the UK of the conflict provide an indication of the *minimum valuation* which must be placed on the likely benefits to the UK from any military action. For example, if it costs the UK, say, £2 billion, then the UK must value the benefits from the conflict at £2 billion or more to make it a 'worthwhile' action.

Estimating the costs of any conflict are also difficult. Estimates and outturns are likely to differ. Experience at estimating the costs of major new weapons programmes shows that they are characterised by cost overruns, delays and poor reliability. Estimating the military costs of conflict are even more problematic and uncertain. There is much experience of false hopes about wars which are expected to be 'over by tomorrow' and conflicts which produce unexpected outcomes. Similarly, estimating the civilian costs of any conflict need to allow for the 'counter-factual': what would have happened in the absence of the conflict? For example, would the economy and the airline industry have experienced a recession without the conflict?

In estimating the military costs of conflict, the focus need to be on the additional costs incurred by the defence budget as a result of the conflict. The UK makes annual payments for its Armed Forces of some £30 billion (resource basis), so any conflict with Iraq needs to estimate the additional costs which will arise. These include the extra use of ammunition and missiles, the extra wear and tear on equipment, the additional costs of transporting forces and of accommodating them in the Gulf. There are possible losses of equipment and their replacement. However, if the lost equipment is surplus to requirements, then it will not be replaced and should not be included as a cost (ie. it is a sunk cost). There will also be human capital losses in the form deaths and injuries to military personnel. Here, there

are issues about the valuation of human capital losses where the economic valuation would be based on estimates of the lost future earnings stream. For example, for the US involvement in the Vietnam War, it was estimated that by the early 1970s, the total value of the human capital losses from the War were some \$6 to \$12 billion (1968 prices: Kiker and Birkeli, 1972). In contrast, for the Gulf War, it was estimated that for the USA, the human capital costs of the War were small when compared to civilian life. By remaining in the USA, more young people would have died as civilians from accidents, suicides and homicides: hence, the surprising conclusion that young people “..were much safer in combat than in civilian life” (Wolfson and Smith, 1993, p 301).

The costs of past conflicts

The UK's 1998 Strategic Defence Review aimed to provide the capability to respond to a major international crisis of a similar scale and duration to the Gulf War or to “undertake a more extended overseas deployment on a lesser scale (eg. Bosnia) while retaining the ability to mount a second substantial deployment ...” (SDR, 1998, p23). The UK's involvement in both the Gulf War and Kosovo provides evidence of the possible costs of similar operations against Iraq. Table 2 presents cost data for four military conflicts involving the UK.

Table 2. The Military Costs of Conflict

£ million		
Conflict	Costs to UK	Notes on costs
Falklands	3814 (957+)	Costs are campaign costs and garrison costs over period 1982-92. Figure in brackets shows campaign costs only over period 1982-92. In 1996, garrison costs were £66m. Estimate in 1996.
Bosnia	429.5	Costs for 1992-97. Some costs recovered from UN and other UK Government Departments. Estimate at 1996.
Kosovo	866 (342)	Total estimated costs for 1998-2003. Figure in brackets shows costs for 1999-2000. Some costs recovered from other UK Government Departments and from NATO and UN (estimated at £10.6 million). Estimate at 2000.

Gulf War (Operation Granby)	2500	Estimate at 1991. Cash contributions from other governments estimated at £2028 million.
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Note: All costs are in current prices at the time of the estimate.

Sources: SDE (1991); HCDC (1996); NAO (2000)

The figures in Table 2 need to be treated carefully. They are for military costs incurred by the UK. For the Falklands, the costs are total rather than additional costs; the campaign costs are a more accurate indicator of the costs of this conflict. The costs are in current prices at the time of the estimate. For Bosnia, these are annual costs aggregated over the years 1992-97 with the estimate provided in 1996. Similarly, the Gulf War costs are in 1991 prices which up-dated to 2001 prices would be equivalent to over £3 billion. In some cases, other UK Government Departments contribute to the costs of the conflict (eg. Foreign Office for peace-keeping in Bosnia), although these remain costs incurred by the UK; elsewhere, foreign Governments might contribute to the UKs military costs (eg Gulf War). In the most recent example, namely, Kosovo, a National Audit Office Report on the operation commented on the “...scale of uncertainty regarding future costs...” (NAO, 2000, p24). For example, the Ministry of Defence estimated that in 1999-2000, Kosovo costs for the UK would be some £620 million; but in July 1999, this estimate was revised down to £442 million for 1999-2000 and by February 2000, the estimate was further reduced to £342 million (NAO, 2000, p22). Moreover, the basis of the cost estimates leaves much to be desired. For Kosovo, some of the costs of the operation (eg. munitions consumption) were not included until orders were placed for replacement: hence, the figures for Kosovo are under-estimates of the true resource costs of the conflict. For other conflicts where there are UK military casualties, the human capital losses are either ignored or vastly under-estimated. Nor do any of these costings include estimates of the likely economic impacts of conflict on the UK civilian economy.

Conclusion

Possible UK involvement in a war with Iraq will require scarce resources which could be used for alternative social welfare programmes. Typically, this cost dimension is ignored in debates about conflict. Understandably, Governments do not wish to reveal their cost estimates since it signals their assumptions about the scale and magnitude of the resources committed to the conflict. Moreover, the Ministry of Defence annual budget statements are inadequate for Parliament and voters to attempt a costing exercise. On this basis, evidence from past military conflicts provides broad orders of magnitude. If the UK mounts either a Kosovo or Gulf-type operation, the likely military costs are in the range of £ 875 million to over £3 billion (2001 prices). These are likely to be under-estimates. Nor do such costs include the costs to the USA, other allies and the costs imposed on Iraq.

Overall, the economic dimension of any UK involvement in a war with Iraq cannot be ignored. The economic issues are complex enough. Governments have the unenviable and difficult task of including the economic dimension alongside military, political, legal and ethical aspects in reaching a final decision.

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