European Defence Policy: An Economic Perspective

https://www.e-ir.info/2013/09/20/european-defence-policy-an-economic-perspective/

KEITH HARTLEY, SEP 20 2013

European nations are faced with major economic and financial problems requiring cuts in defence budgets. In addition, defence equipment is costly and costs are rising. For example, a modern aircraft carrier might cost some $10 billion per copy and the development costs for a new combat aircraft might be £13 billion with unit production costs of almost $130 million.

Unit costs are also rising between each generation of equipment. Cost growth for combat aircraft and main battle tanks has averaged some 6% per year with major warships showing annual cost growth of some 3-4%. For example, the unit cost of UK Hunter fighter jet which entered service in 1955 was £4.3 million compared with the unit cost of the latest Typhoon fighter of £66.6 million. High cost levels, rising unit costs and falling defence budgets mean that a nation's Armed Forces cannot avoid the need for difficult choices. Something has to go and the question is what goes and why?

Criteria for Defence Budget Cuts

Economists approach defence budget cuts by starting from the fact that Armed Forces are subject to budget constraints. They do not have access to unlimited resources so that they are not immune from the standard economic problem of choices. There are some general economic principles for assessing the efficiency of defence spending. These include:

i) *The principle of final outputs*

All too often debates about defence budget cuts focus on inputs rather than final outputs. Typically, controversies surround cuts in the numbers of warships, infantry regiments, aircraft squadrons and the numbers of military personnel. This is the wrong focus: it addresses inputs. Instead, debates about defence budget cuts should focus on final outputs and the contribution of the various inputs to achieving different defence outputs. But immediately there is a major problem in that defence output is only defined broadly and vaguely in terms of peace, protection and security: there is a lack of any measure of the value of defence output. Traditionally, defence output was measured using inputs. More recent efforts to improve output measurement have used military capabilities; but, capabilities lack a valuation so that no comparison can be made between the costs of defence and the valuation of its final output.

ii) The principle of substitution

This means that there are alternative methods of achieving defence each with different costs. For example, in the private sector, competition and the search for profits leads firms to substitute cheaper methods of production for more expensive methods (e.g. machinery replacing labour). Applied to the Armed Forces, the substitution principle suggests that defence equipment might replace military personnel. For example, nuclear forces replacing large-scale conventional forces. Similarly, within equipment, attack helicopters might replace tanks and close air support aircraft; UAVs are replacing manned aircraft in combat and surveillance missions; and cruise missiles have replaced artillery and strike aircraft. Substitution also applies to military personnel. Reserves can replace regular military personnel; women can replace men; and private contractors can replace 'in-house' military units (e.g. repair and maintenance of defence equipment; depot management; training tasks). Inevitably, some substitutions mean an attack on the

traditional monopoly property rights of the Armed Forces. For example, attack helicopters operated by the army might be a threat to some of the roles traditionally undertaken by the air force.

iii) The principle of competition

Improved efficiency requires competition within both the Armed Forces and national defence industries. Faced with budget cuts, the Armed Forces are likely to resort to collusion offering 'token' cuts in their forces. Examples include cuts to support units and reserve forces. Instead, real competition between the Armed Forces would use major budget cuts to force them to compete for a limited budget by exposing the true costs and effectiveness of their front-line forces and their latest new equipment programmes. For example, in a competitive environment, the army would soon criticise the plans of the air force for a new combat aircraft and the navy's plans for a new aircraft carrier. Such criticisms would be designed to expose to Defence Ministers the true costs and effectiveness of different force structures so enabling Ministers to reach informed judgements on defence policy. Competition can also be applied to a nation's defence industries. Protectionism is costly and opening national defence markets to competition offers substantial cost savings.

Inefficient European Defence Markets

European defence markets are dominated by inefficiency in both their Armed Forces and defence industries. Within the Armed Forces, there is duplication of forces, bases, training and support functions. Similar duplication exists within Europe's defence industries where the focus on nationalism leads to duplication of costly development programmes and small production runs for national markets. These are costly inefficiencies. Possible solutions include the sharing of costly military assets, role specialisation and the development of a European defence industrial base.

Cuts in defence budgets and rising equipment costs mean that Europe's defence industries are too large. Advocates of a European defence industrial base suggest the need for a more integrated defence industrial base achieved through industrial re-structuring, harmonisation of equipment needs, co-ordinated defence research, the protection of critical military technologies in Europe and an emphasis on security of supply. Such proposals resemble 'magic wand' economics. The rhetoric needs to be subject to careful and critical economic analysis.

First, the concept of an integrated European defence industrial base needs to be defined, starting with a clear definition of a defence industry. At one extreme, defence industries comprise firms developing, producing and maintaining lethal equipment (e.g. combat aircraft; tanks; warships). Problems arise once we depart from this simple definition. For example, firms with no current sales to the national Defence Ministry might be part of the defence industrial base by providing capacity which is only used in national emergencies (e.g. air transport; shipping). Nor is it sufficient to focus on the major prime contractors (e.g. BAE Systems; EADS; Thales; Finmeccanica). There exists an extensive network of suppliers and sub-contractors which also form the defence industrial base. Typically, little is known about the supply chain for each type of major air, land and sea system.

Second, the requirement for industrial re-structuring is more difficult to implement. Will such re-structuring be left to private firms or will it be determined by national governments, the European Commission and the European Defence Agency? Re-structuring left to private firms would require privately-owned firms and open capital markets allowing mergers and take-overs based on profitability. Government-determined re-structuring means 'managed markets' with re-structuring based on political factors such as 'fair and balanced shares' of industrial capacity and capability.

Third, harmonisation of equipment requirements and co-ordinated defence research requires national governments and their Armed Forces to agree on harmonisation and co-ordination. But such agreements can be costly to negotiate. There are transaction costs of doing business with strangers and these costs increase with more nations involved in any international agreement.

Fourth, the protection of critical military technologies in Europe and security of supply are not costless. The critical military technologies have to be agreed and the costs of their protection have to be shared between the partner

nations. If nuclear technology is deemed to be critical, will all European nations willingly contribute to retaining the nuclear industrial capabilities in France and the UK and how will the cost burdens be shared? Nor is security of supply easily achieved. Does it require all European arms suppliers to guarantee delivery in all circumstances? For example, would Spain guarantee to continue supplying arms to the UK in the event of an armed conflict over the Falklands?

Conclusion

European defence policy cannot ignore its economic dimensions. The defence economics problem of falling defence budgets and rising costs means difficult choices for both Armed Forces and national defence industries. Economics suggests efficiency-improving policies. However, at the European level, efficiency-improving defence policies based on sharing and pooling military and industrial assets and capabilities also require trust between sovereign nations. Whilst international agreements might form the basis for trust, they are not guarantees that a nation will abide by the agreement. In defence, nations cannot rely on international agreements when their national interests are threatened. Whatever the international agreement, no nation can rely upon other nations to always turn-up when faced with military threats to their survival. Inevitably, nations 'solve' such problems by taking risks and selecting a combination of national defence policy and membership of international military alliances.

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