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THE ECONOMICS OF EUROPEAN DEFENCE

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*The views expressed here are solely those of the authors.
They do not reflect the views of any organization.*

Comment

Since the British referendum result in June 2016 and the US election in November, greater political effort has been channelled into ways of increasing EU defence cooperation, and creating a solid European defence industry. The EU's toolbox includes a number of existing means of doing so, many made available by the Lisbon Treaty in 2009 – European defence policy comprises a series of policy measures related to a Common Security and Defence Policy (CSDP), a Single Market for defence equipment, the European Defence and Technological Industrial Base (EDITB) and offsets. But in a constrained budgetary context, it is difficult to overlook defence economics as a driver of European defence policy. This paper suggests a number of avenues for efficiency improvements in European defence spending.

“SOMETHING HAS TO GO”: THE DEFENCE ECONOMICS CONUNDRUM

In recent years, the defence budgets of European nations have declined in both real terms and as a share of GDP. These limited defence budgets have to buy defence equipment which is both costly and whose unit costs in real terms have continued to rise. For example, real intergenerational cost escalation has been estimated at some 3.5% for naval vessels and 5% to 6% per annum for aircraft and tanks. (Davies, *et al*, 2011). Defence budgets have failed to match such cost escalation leading to reduced production quantities and reduced numbers of equipment for the armed forces. There have even been forecasts of a single ship navy, a single tank army and Starship Enterprise for the air force (Augustine, 1987)!

Falling or constant defence budgets in real terms and continued cost escalation mean difficult defence choices cannot be avoided: something has to go. Some nations have already confronted such choices and have abandoned a major capability: for example, New Zealand abandoned its fighter aircraft capability and European nations have abandoned manned strategic bomber capabilities. Defence choices have to recognise costs and efficiency considerations. Here, economists can contribute since efficiency is central to their discipline.

IMPROVING EFFICIENCY: SIX ECONOMIC PRINCIPLES

There are some guiding economic principles that European defence policy could usefully consider, with a view to improving efficiency. In assessing these principles, it is helpful to distinguish between the armed forces and defence industries.

- **Principle (i): Competition**

Rivalry between firms promotes efficiency. In contrast, monopoly leads to higher prices, higher profits and poor innovation. Applied to defence, this principle would promote competition for services typically undertaken by the armed forces. Hence the case for military outsourcing of such activities as training, management of bases and air tanker functions. Similarly, competition would allow free entry to European defence equipment markets.

- **Principle (ii): Specialisation**

International trade based on specialisation by comparative advantage is highly efficient. In the military realms this would entail that each nation's armed forces specialise in specific functions. For example, Germany might specialise in armoured forces, France in combat air forces and The Netherlands could provide naval escort forces. Similar specialisation could apply to European defence industries. On this basis, France would specialise in supplying combat aircraft, missiles and helicopters whilst Germany would produce tanks and Italy might supply defence electronics.

- **Principle (iii): Scale**

Large scale output allows firms to achieve lower unit costs from economies of scale and learning and larger outputs enable 'fixed' R&D costs to be spread over greater numbers. This suggests the case for exports and for the pooling of national orders, as applied when four European nations purchased the US F-16 aircraft. Orders are also pooled for international collaboration projects which allow nations to share costly R&D and to combine their national orders to achieve economies of scale and learning. However, European collaborative projects have been characterised by work-sharing and bureaucracy which has created inefficiencies. Efficiency improvements in European collaboration require the application of the above principles of competition and comparative advantage as the basis for future work-sharing (Hartley, 2014).

- **Principle (iv): Club goods**

Some defence assets are what economists call 'club goods'. Civilian examples include clubs for golf, fishing, swimming and gymnasiums. Defence examples include anti-missile defence systems protecting all European nations; air borne radar providing early warning protection; air tanker operations; and strategic air transport. Club goods are a form of public good which differ from private goods where consumption is characterised by rivalry and excludability.

- **Principle (v): Substitution**

Competitive economies are continuously searching for alternative and lower cost solutions. For example, they will replace labour with machines, they will adopt new

technologies even though it might lead to major changes in the organisation of firms, and they will shift production to lower-cost regions and countries. Defence examples include attack helicopters replacing tanks; land-based aircraft replacing carrier-borne aircraft; maritime patrol aircraft replacing anti-submarine warships; reserves replacing regulars; civilians replacing military personnel; women replacing men in military roles (e.g. front-line combat); and nuclear forces replacing large-scale conventional forces. Some of these substitutions affect the traditional monopoly property rights of the armed forces. For example, the army operating surface-to-air missiles might replace manned fighter aircraft operated by the air force (Hartley, 2011).

- **Principle (vi): Output**

Major reviews of defence usually focus on inputs rather than defence outputs. Inputs in the form of the numbers of military personnel and numbers of combat aircraft, tanks and warships dominate debates. This is the wrong method – the focus should be on the contribution of inputs to defence output in the form of peace, protection and national security. Admittedly, there is an absence of money values for defence output, but the output focus is economically correct. Moreover, there should be an additional focus on the effects of small changes in inputs on defence outputs. For example, what are the effects of a smaller or larger air force on defence output; similarly for a smaller or larger army and navy?

THE ECONOMICS PERSPECTIVE

These economic principles are designed to identify solutions to difficult defence choices, which apply to all nations. They are not without their problems. For example, armed forces based on specialisation by comparative advantage requires massive commitments of trust in other nations (e.g. that they will turn-up in any conflict). Proposals for more competition will be modified by producer groups who will argue for ‘managed’ competition providing everyone with work shares. Proposals to share costly assets will encounter ‘free riding’ as nations will prefer to benefit without paying for such assets. Applying economic principles to European defence policy (and to any nation’s defence policy) will be controversial. There will be gainers and losers, but tax payers will be better-off. ■

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The Armament Industry European Research Group (Ares Group) was created in 2016 by The French Institute for International and Strategic Affairs (Iris), who coordinates the Group. The aim of the Ares Group, a high-level network of security and defence specialists across Europe, is to provide a forum to the European armament community, bringing together top defence industrial policy specialists, to encourage fresh strategic thinking in the field, develop innovative policy proposals and conduct studies for public and private actors.

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