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Defence Economics and Defence Allocations: Between Consideration of Need and Cost

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In Sweden, it has long been politically acceptable to take certain defence capability risks for the sake of other policy areas. As the security situation rapidly worsens, this acceptability is diminishing. Earlier political decisions and problems with calculating the level of defence inflation have created an imbalance between military capability requirements and resource distribution. Research shows, for example, that a significant amount of current defence policy is not being managed by political decisions, but is controlled by unintended technical financial limitations about which there is little political awareness. As a result, defence and security policy continue to be affected by a high level of unconscious acceptance of political risk. Reducing this political risk-taking will require financial allocations that better match political ambitions and a revised system for compensating the defence for inflation and cost escalations.

A DECREASE IN DEFENCE PURCHASING POWER

The purchasing power of the Swedish Armed Forces, or the amount of financial resources and what they can buy, has been decreasing for some time. Purchasing power shrank by approximately SEK 19 billion between 1999 and 2014 on an annual basis. To obtain the same purchasing power in 2014 as it had in 1999, the armed forces' allocation would have needed to be approximately SEK 61 billion, as opposed to SEK 42 billion.

One way to assess defence purchasing power beyond the level of financial resources is to calculate defence allocations as a percentage of GDP. Assessing the percentage of resources that a society spends on defence allows comparison across different countries. GDP levels can be somewhat deceptive, however, since they say nothing about military requirements or military capability. They should therefore not normally be decisive in decisions on allocations. They can, however, be a useful starting point when comparing the distribution of the economic burden among countries cooperating within

the European Union or among NATO member states. That way, countries will contribute in proportion to their financial capacity. NATO's recommendation that 2 per cent of its members' GDP should be spent on defence is an example of this. Changes in defence expenditure in absolute terms over time probably provide a clearer picture of the development of military capability than the percentage of GDP allocated to defence. Table 2.1 shows the change in defence expenditure in a selection of regions and countries since 2000.

Table 1. Defence expenditure, 2000–2015. Source: SIPRI. Fixed prices USD.

Region/Country	Defence expenditure % change
World	+ 55 %
Europe	+ 16 %
Nordics (excl. Sweden)	+ 19 %
Russia	+ 216 %
USA	+ 44 %
Sweden	- 14 %

Thus, Sweden's defence spending has declined substantially in both absolute and relative terms, which gives a clear indication that its relative defence capability has been significantly diminished.

There are several reasons for this decline:

First, political positions have changed the objectives of the armed forces and therefore the extent of their activities. These changes have gone hand-in-hand with the reductions in allocations. This can be observed in successive budget bills and the subsequent management of the armed forces.

Second, actual purchasing power has been influenced by technical issues linked to how defence costs increase and how the armed forces are compensated for these increases. The issue is a combination of:

• cost changes in so-called *intermediate goods*, such as personnel, materiel and premises;





- how efficiency and productivity changes are treated in the defence sector; and
- the annual recalculation of allocations to compensate for changes in the price of intermediate goods.

Prices and salaries in the defence sector are recalculated according to its own index – *Försvarsprisindex* (Defence Price Index, DPI). The DPI is made up of different official and non-military indices that are used to compensate the armed forces for inflation. The purpose of the recalculation is to ensure that the activities of the armed forces are governed by political decisions and their financial implications rather than by unpredictable fluctuations in prices, salaries, currencies, interest rates or inflation in other countries.

PROBLEMATIC RECALCULATIONS AND THE DEMANDS ON DEFENCE

Ideally, the DPI should ensure that the defence budget is neither over- or undercompensated for changes in the market prices of the armed forces' intermediate goods. Research shows, however, that the DPI has substantially undercompensated the armed forces for price and salary changes. About half of the erosion in purchasing power between 1999 and 2014 was due to this undercompensation. The unintended financial limitations thus stand for approximately half of the financial policy pursued in the defence area.

Furthermore, technical changes in 2012 to the principles by which the DPI is calculated resulted in a reduction in the annual allocation of approximately SEK 1.3 billion at 2015 prices, or at least SEK 6 billion over the period of the subsequent defence bill. The 2015 defence bill contained a political ambition to add at least SEK 10 billion to defence spending in the period 2016–2020. Because of the technical adjustment to the DPI, however, the real boost will be only SEK 3–4 billion.

In addition, the amount of compensation calculated and the actual economic circumstances of the defence sector have very little in common. In the end, it is the capacity and opportunities for political control that suffer. A basic problem is that the DPI is based on civil official indices. This means that the armed forces'

1 The built-in *productivity deduction*, which aims to create "efficiency pressures" on the defence sector, is an exception (see below).

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allocations, and with them views on efficiency and productivity, are by and large based on developments in the prices and efficiency of those markets represented in these civilian indexes. In addition, the DPI has a built-in deduction that has to be matched by internal efficiency savings in defence structures – the so-called *productivity deduction*. This, too, is based on a civil construct: productivity developments in the private services sector.

Even though you can argue that the conditions for productivity are worse in the defence arena, the armed forces are often subject to double productivity and efficiency requirements. This occurs, when politicians' allocation decisions impose new tasks without the corresponding financing and then expect the armed forces to finance the new tasks through rationalisations or efficiency savings. A variation on this theme occurs when the allocation is reduced without reducing the number of tasks, using the same argument about efficiency gains. Politicians do not always grasp that productivity requirements are already embedded in the DPI. The result is that the armed forces end up with two overlapping productivity requirements. The embedded annual productivity requirement has fluctuated between 0.9 and 2 per cent per year, which corresponds to 200-400 full-time and 300-400 reservists to be "rationalized" each year. All this is supposed to be achievable without any effect on defence capability.

There are numerous reasons why the armed forces' cost changes diverge from the civilian assumptions in the recalculation. One important factor is the difficulty of continually rationalizing activities. Other factors include:

- the goods and services in the defence sector are different from those included in index;
- the exposure to various currencies is different from DPI assumptions;
- the markets in which the armed forces obtain intermediate goods are characterized by monopoly and oligopoly;
- activities are characterized by large fixed costs with few opportunities to change materiel systems or personnel, which makes adapting production a slow process;



 the armed forces have to factor in the political climate and political factors, such as regional and industry policies and requests for international cooperation on the procurement of defence equipment, which restricts its freedom of action.

The main differences stem from the fact that the armed forces often use unique resources to produce equally unique products and impacts, which are often difficult to assess. Nonetheless, the consequences of not living up to the requirements of the recalculation can be serious. Shrinking resources force the armed forces to make cutbacks in activity, which eventually reduces their defence impact. This is not the intention of the recalculation.

One example of the differences between the defence market and the civilian market is the cost of defence materiel. Research indicates that rapid cost rises are occurring for defence materiel compared to general inflation. A cautious estimate indicates a growth rate of approximately four per cent above the consumer price index. This means that given the current size of the defence establishment, stocks of defence materiel are going to shrink rapidly if allocations only increase in line with general price inflation. Allocations that are only adjusted in line with general inflation make it impossible to maintain both permanent materiel stocks and the size of the defence organisation.

AN UNDERFINANCED DEFENCE BUDGET?

For many years defence has experienced successive diminutions in capability as a result of reduced financial resources. The 2015 defence bill was a break in this trend, when for the first time in a quarter of a century it called for an increase in defence expenditure and an expansion of purchasing power. The problem is that the starting point for the 2015 bill was the long-term underfinancing of the previous defence bill to the tune of SEK 4 to 6 billion in real terms per year.

There is a substantial risk that the 2015 defence bill has also been underfinanced for achieving the level of political ambition expressed. This is partly due to the "deficit" from the previous defence bill and partly a result of uncertainty about whether the increased ambitions have been completely financed. It is also partly due to the fact that the structural flaws in the DPI recalculation mechanism continue to widen the gap.

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In the armed forces budgetary assessment for 2018, the commander-in-chief has highlighted an additional requirement of at least SEK 6 billion in the current (2015–2020) defence bill period. This need is mainly a consequence of unfunded price increases. Some of these are the result of currency effects tied to procurement decisions, such as the JAS 39 Gripen E. The statement can be seen as an indication that as long as the DPI ignores the actual price and costs of armed forces procurement, financial resource allocation will continue to fall behind and never catch up with need. Politicians will therefore have to choose between allocating extra resources to the armed forces or accepting that the armed forces' deliverables will never correspond to political demands. A new Defence Agreement was achieved between the political parties in August 2017. It addresses the deficiencies identified in the armed forces budgetary assessment and provides the funds needed to cover the remainder of the current defence bill period. While this obviously improves the situation in the short term, it does not remedy the deterioration in defence capability caused by long-term underfunding. In addition, the DPI risks blowing new holes in defence spending by continuing to undercompensate for price increases.

DEFENCE RESOURCES: A QUESTION OF RISK-TAKING

Political decision-making on defence-related resources is ultimately about agreeing on the level of acceptable risk. Security allocations, that is, those means that are distributed to defence, must be balanced against the uncertain costs of not being able to manage serious future threats or events. The question then arises: which risks are acceptable in relation to which policy areas and what people are willing to pay? The problem lies in the need to build up military capability before serious events occur, if they are going to be useful in any meaningful way. This means that politicians must divert resources for managing hypothetical potential threats and risks, at the expense of immediate needs in other policy areas. The temptation to underestimate risks, and thereby free up resources for other things, is obvious. The similarities with home insurance are clear; it is bought because of the risk of fire, but the premium takes resources away from actual and immediate needs.



The political calculation, and thereby the risk of getting it wrong, lies in the question of how great the consequences of a serious event might be to still be acceptable, compared to the amount of resources that a reduction in risk can be allowed to cost.

Ideally, this process of setting priorities and risk levels will be a conscious one that is subordinated to explicit political decision-making. If the purchasing power of defence shrinks, this should be a function of how politicians consider that the risks have decreased or of society being willing to accept greater risks. Research shows, however, that major aspects of actual decision-making are handed over to automatic technical mechanisms to recalculate allocations. In other words, major parts of political risk-taking lie beyond direct political or parliamentary control. When there is also a systematic tendency to undercompensate for actual increases in prices and costs in the defence sector, the result is that risk-taking exceeds stated political intentions. In addition to raising allocation levels, it should therefore be of the utmost importance to examine the construction of the price and salary compensation in the DPI, with the aim of making it more consistent with actual price, cost and salary changes.

Inadequate defence capabilities mean that politicians must expect risks to manifest themselves to a greater extent in unwanted events, while at the same time such events will become more serious. Even if it is difficult to put a price tag on this, it must still be considered a price - in the worst case an existential one - that over time will have to be paid. The costs of managing a defencerelated risk arise in terms of kronor and the state's budget. The costs of ignoring such a risk are incurred in the form of reduced political room for manoeuvre, a decrease in the influence of democratic freedoms and rights, a weaker international system, threats to the nation's existence, and shortcomings that affect the lives and health of citizens. If the costs of risk management fall short of the costs of leaving risks unaddressed, it is socio-economically rational to redistribute resources to an increase in defence capability.

Ultimately, the choice, in terms of defence finances, is about finding a way for the political demands for capabilities to keep in step with the allocation of financial resources. Historically, there has been a tendency for resources to fall behind compared with

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political ambition concerning defence capability. The time lag between ambition and money has traditionally been one defence bill period of five years. This time, too, it is evident that an increase in allocations is needed to match political ambitions. Perhaps new allocations will be needed during this defence bill period, even though the recently added allocations have improved the economic situation of the armed forces. More than anything, a substantial increase in defence spending is needed for the defence bill period 2021–26. Otherwise, it is unlikely that politicians will be given the defence capabilities they expect, with the associated costs this entails in terms of increased security risks.