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Course:

PUBLIC ECONOMICS

Distance Support Material

TOPIC 4

ECONOMIC IMPACTS OF THE MILITARY AND SECURITY EXPENDITURES

BRNO

2014

Topic 4

Economic Impacts of the Military and Security Expenditures

CONTENTS

LEARNING OUTPUTS

Students will know:

- Basic concepts of military expenditures and its financing theory
- Basic circumstances of military expenditures planning

Students will be able to:

- specify determinants of military expenditure size
- describe factors influencing extent and character of military expenditures impacts on national economy

Students will capable of:

- discussion on positive or negative national economy impacts of military expenditures

ECONOMIC IMPACTS OF THE MILITARY AND SECURITY EXPENDITURES

KEY TERMS

Planning of military expenditure, Defence budgeting, Military expenditure impact, Military inflation,

TIME NEEDED FOR CHAPTER STUDY

4 hours

INTRODUCTION

It is very important but difficult task to balance national security and economic growth. National security is the first priority in each country, but a huge military expenditure can be a large burden for government and the welfare of people. Therefore, the effective budget plan for military spending is required.

Although the military spending was temporarily decreased after the end of Cold War, it has risen since the 1990's. Moreover, this trend is continuing in spite of global economic crisis during the last 10 years. When viewed from this perspective, in most countries, security principle is considered more than economic condition, moving forward with defense policy.

The military expenditures impact on growth is a combination of three effects: (1) increased security — positive impact; (2) diversion of resources from productive investment — negative impact; and (3) pressure for more efficient government policies in response to the external threat — positive impact.

But it is needed to consider this problem in broaded point of view. There are a lot of influencing deferminants of interrelationship between ME and economic growth.

Figure 1 Development of military expenditure in developed and developing countries

Fig. 2 Industrialized countries spending more on health and education, less on military

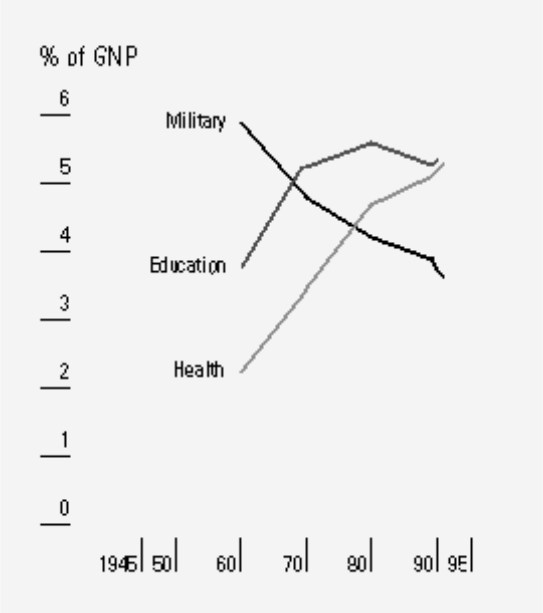
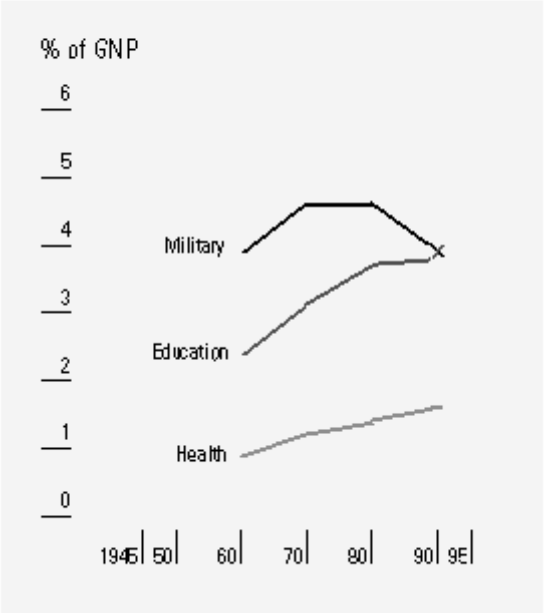


Fig. 3 Public spending on military in developing countries outpaces health funding



Source: Military expenditure -- the opportunity cost. Accessible on: http://www.unicef.org/sowc96/8mlitary.htm

1 BASIC CONCEPTS

1.1 Integrated model of defense expenditures;

1.2 Evaluation military expenditures impacts;

1.3 Classification of military expenditures impacts;

1.4 Inflation and military expenditures

2 MILITARY EXPENDITURES PLANNING, BUDGETING AND MANAGING

2.1 Foreign-political level of defense expenditure planning

– defense budget

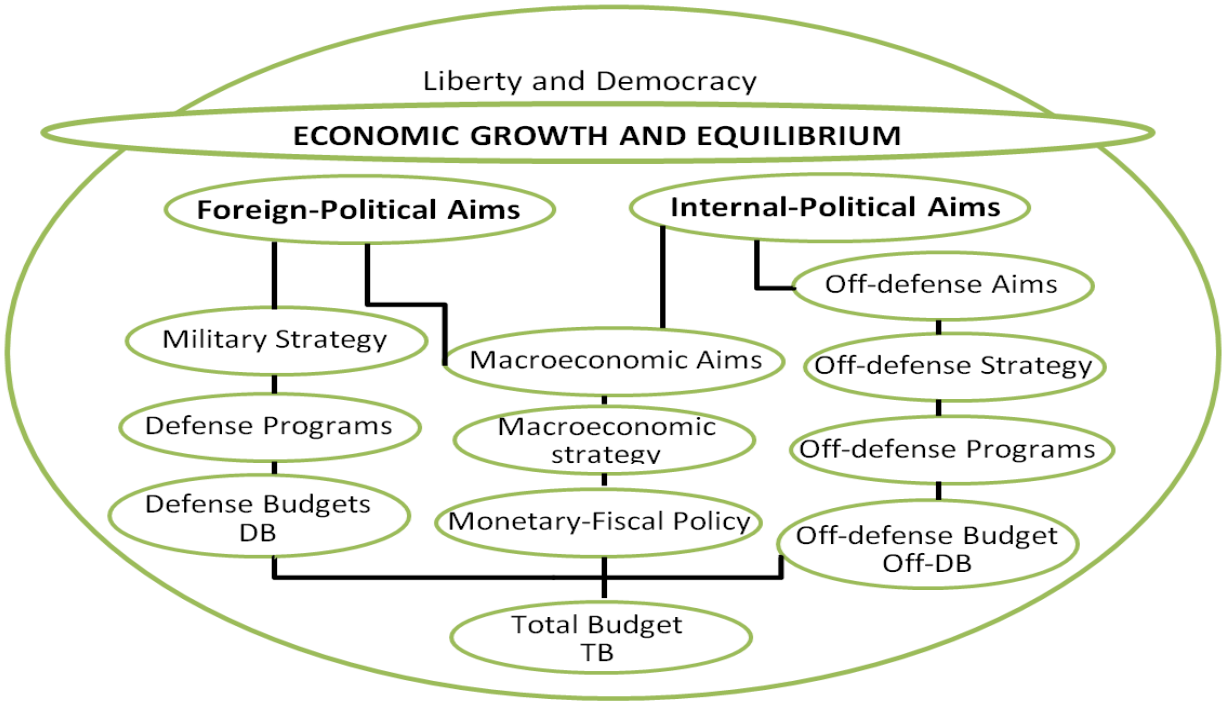
2.2 Internal-political level of defense expenditure planning

– fiscal and monetary policy

– off-defense budget

2.3 Integrated model of military expenditures planning

Figure 2 Planning of military expenditure



Detailed information *Krč, Miroslav. Vybrané kapitoly z ekonomiky obrany státu. Brno: Univerzita obrany, 2004.*

2. 4 Defence budgeting

Defence budgeting is the process of allocating financial resources for defence ministry equipment, personnel, infrastructure and programs. Its final product is the defence budget, which provides an itemised estimate of projected resources and operating expenses for the ministry of defence and associated agencies over a set period of time. In some countries, foreign military and other security assistance is also included as part of the defence budget.

Defence budgets help ensure that:

- public funds are earmarked for defined priorities;
- funds are spent accountably; and
- domestic constituencies, neighbouring states and other international actors are appropriately informed about the intentions of the government in defence matters.

The budgeting process must take a multitude of factors into account, including the strategic environment, the level of financial resources available and possible participation in military or peace support operations. However, while these factors may rapidly change, defence capabilities normally take many years to develop, since the procurement of equipment and training of personnel both require significant amounts of time and resources. Unexpected fluctuations in the budget may also have an adverse impact on ongoing programmes. For these reasons, while budgets are usually approved annually, they need to be embedded in a multi-year planning process, preferably linked to a national security policy or defence white paper that lays out a long-term military strategy.

2.5 Managing defence expenditure

There are four crucial, inter-related components to managing defence expenditure:

- identifying the needs and key objectives of the security sector as a whole,
- determining what is affordable,
- allocating scarce resources according to priorities both within the defence sector and between defence and other sectors, and
- ensuring the efficient and effective use of resources.

The flowchart on the following page illustrates the feedback loop between policy, planning and budgeting which is essential for sound and sustainable fiscal management. Once again, the sequence in which reforms are introduced and the pace at which they proceed will vary from country to country, as will the policies, structures, and practices developed to implement the basic principles of public sector management.

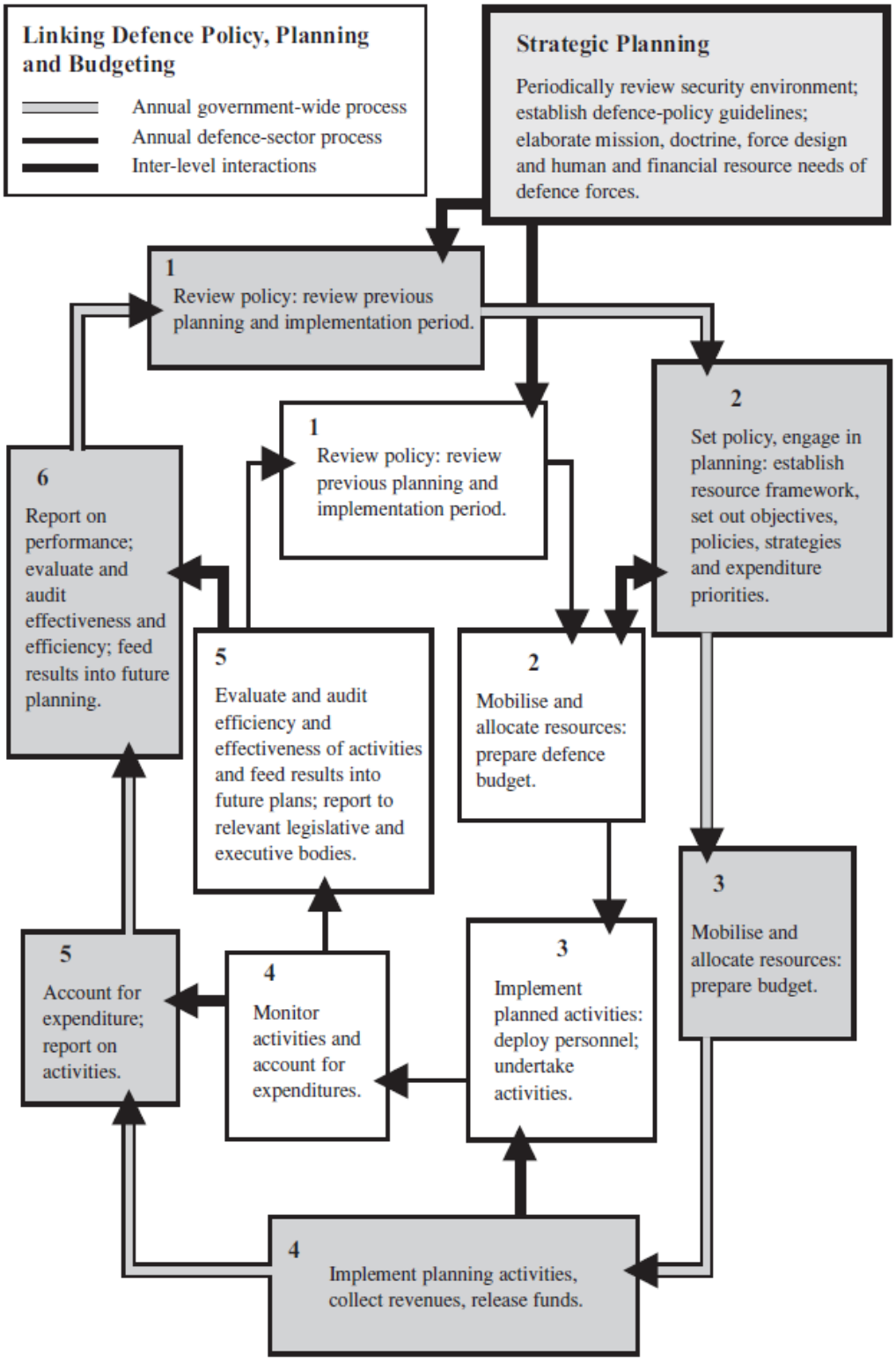
As in other parts of the public sector, defence budgets should be prepared against a sectoral strategy. For the defence sector, key elements are:

1) an evaluation of a country's security environment,
2) broad policy guidelines based on the principles underpinning the country's approach to security on which the key stakeholders have reached consensus, and
3) a detailed elaboration of the mission, doctrine, force design, and human resource needs of the defence forces.

The strategic environment and the policy guidelines are generally set out in a policy paper. The organisational evaluation is intended to help to operationalise the policy guidelines.

Policy papers and organisational reviews involve not only the defence forces and defence and foreign affairs ministries, but also other relevant ministries with a mandate for national security, bodies such as the office of the President/Prime Minister, the office of a national security adviser, relevant legislative committees, and the finance ministry or budgeting offices. The policy and organisational review processes should ideally be as transparent and inclusive as possible. In so far as they are based on a broad consultation among the relevant stakeholders, and if the final product is made public, possibly through the publication of a White Paper, their legitimacy will be strengthened.

Figure 3 Linking Defence Policy, Planning and Budgeting



Source: Security Sector Reform and the Management of Military Expenditure: High Risks for Donors, High Returns for Development. London: Department for International Development, 2000.

3 ECONOMIC IMPACTS OF MILITARY EXPENDITURES

Military expenditures spending cause two effects:

- Reaching required level of defensiveness state securing, quality of armament and readiness of armed forces.
- Influencing other components of social life through reducing certain amount of scarce resources, which could be used in these next areas.

For national defense securing is needed to spend necessary factors of production to some extent.

We face problem of influence defense expenditures on individual factors of economic development analysis.

3.1 Basic factors influencing economic development:

a) Degree of involved workers into production process and level of their productivity (human resources, human capital),

b) Growth of capital reduces and its efficiency (tangible capital and financial capital),

c) Scientific-technical progress and effectiveness of its results implementation into production practice.

In connection above mentioned, It is very important ask the question about military expenditures influence extent on separate item of economic development (negative or positive).

a) Military expenditure influence on human capital;

b) Military expenditure influence on tangible and financial capital;

c) Military expenditure influence on scientific-technical progress.

Do Military expenditures help economic success of state or cause a downturn of economy?

What is important to be considered within evaluation process of military expenditures influence on national economy current state and future development?

3.2 Basic approaches to considering military expenditure impacts

A) Short-term view and Long-term view (short run x long run)

Within short run **(to one year)**

- increase of military expenditures produces economy growth because ME are considered as a part of government expenditures thereby come in calculation of GDP (economic growth);
- increase of military expenditures give birth to increase economy output and employment. At the same time it cause crowding out effect and impact on balance of trade.

Within long run it is possible to see negative and positive impact on growth of economy.

- **Positive influence** – impact on production – not only volume of production, but directly influence possibility of production process given economy.
  - Economy reorganization, concentration and centralization of capital, securing of international cooperation.
  - Impact of positive externalities.
- **Negative influence**
  - Diminishing of market forces.
  - Decreasing of business efficiency.
  - Downgrade of international competiveness.

B) Economy on production-possibility frontier x Economy under production-possibility frontier

C) **Influence of military expenditures on developed countries /developing countries –** difference

D) **Own defense technological and industrial base/** existence and non-existence

E) Country as exporter/importer of arms

F) Country is /is not recipient foreign or military assistance

G) Crowding out effect – crowding out private investment by public investment problem.

H) **Military expenditure Share on GDP, relationship of military expenditure pace compare to pace of GDP** growth (Faster rate military expenditures increasing in comparison with GDP growth will cause diminishing rate of growth of economy).

I) Structure of military (defense) expenditures.

J) Influence on human capital.

K) Influence on material and financial capital.

L) Technology.

M) Public debt.

4 DETERMINANTS OF MILITARY EXPENDITURES SIZE

Size of Military expenditures is determined (Collier and Hoeffler – 2002) by next factors:

- the need for security
- the lobbying of interested parties
- the financial resources of government
- neighbourhood arms races
- external relationships
- technology
- inflation

Source: Paul Collier, Anke Hoeffler, Military Expenditure: Threats, Aid and Arms Races. CSAE, Oxford University and International Peace Research Institute Oslo, World Bank.

Military expenditure is motivated partly by the need for security, partly by the lobbying of interested parties, and partly by the financial resources available to the government.

4.1 The need for security

The most evident need for military expenditure is during periods of active warfare. International war raises expenditure by 2.5% of GDP, and civil war by 1.8% of GDP. We next introduce proxies for the risk of international warfare while at peace. We use three indicators of external threat during peacetime: the actual history of previous involvement in international conflict, the military expenditure of neighbours, and the population of the country. Previous participation in international conflict is likely to be interpreted politically as indicating a need for military expenditure whether or not it reflects an actual risk of invasion.

The inclusion of the military expenditure of neighbours allows us to investigate regional arms race effects. We now turn to the analogous risk of internal rebellion. The incidence of civil war is now around ten times greater than that of international war, and so the risk of rebellion is potentially considerably more important as an influence on military expenditure than is the fear of international war.

The predicted risk of conflict is not only correlated with the occurrence of conflict but with its scale. Potentially, the predicted risk of conflict may therefore be correlated with the level of military expenditure not because governments raise military spending prior to conflict in response to objective levels of risk, but simply because spending is higher in larger conflicts.

4.2 The lobbying of interested parties

In addition to security needs, military expenditure may be influenced by lobbying. The most evident beneficiary of military expenditure is the military itself. A high level of expenditure enables a larger size of the military, implying better prospects of promotion, higher salaries, and larger bureaucratic empires. While the interest of the military in military expenditure is probably broadly similar across societies, the ability of the military to influence budgetary decisions differs considerably.

It possible to expect that the greater the political power of the military interest, the higher would be military expenditure. The actual expenditures incurred as a result of such influence may have little or no relation to military capability. For example, during a long period of military government in Nigeria the navy gradually accumulated more admirals than it had ships. This high expenditure on admirals is more plausibly explained by the position of senior naval officers in the government than by the distinctive operational needs of the Nigerian navy.

4.3 The financial resources of government

Finally, we turn to proxies for the ability to pay. There is no reason to expect military spending to rise proportionately with per capita income. Superficially, security might be expected to be a necessity, so that it would rise less than proportionately with income. In fact, security appears to be a luxury. The share of GDP devoted to military spending is strongly increasing in the level of per capita income. This is less surprising than it might first appear. Military spending is a component of government expenditure, and total government expenditure as a share of GDP is strongly increasing in income. The explanation for this may simply be that the capacity for the state to tax and to borrow increases with development.

5 MILITARY EXPENDITURES AND INFLATION

5.1 Inflation of military expenditures

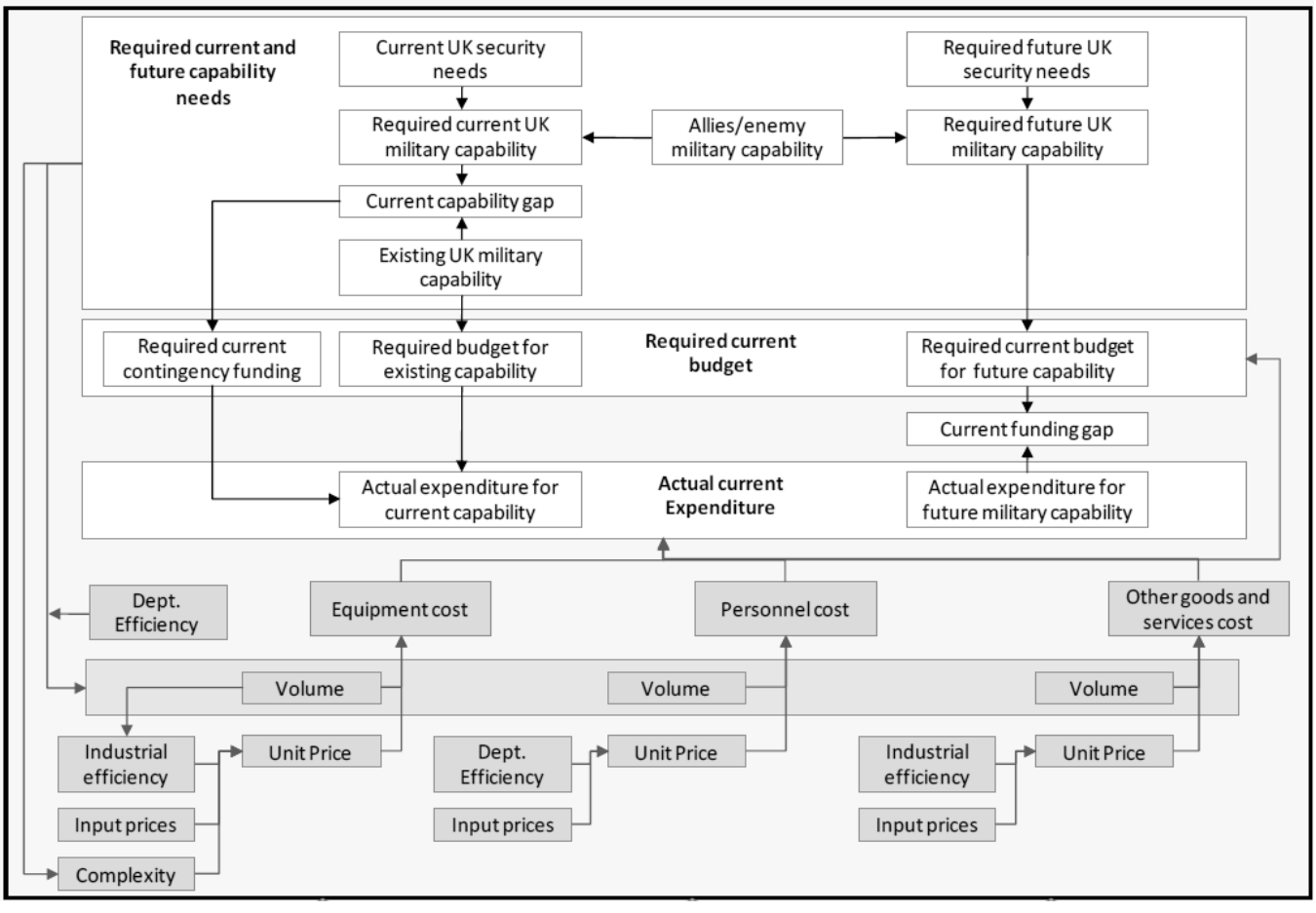
We propose that the fundamental definition of defence inflation should be:

"The annual increase in the defence budget which is necessary to deliver a constant level of national security"

Classical economic description

"The annual rate of change in the prices of goods and services which are marketed within a national economy

5.2 Impacts of military expenditures inflation



5.3 Existence – non-existence of this phenomenon?

Blíže k tomuto problému viz.:

David Kirkpatrick. **Is Defence Inflation Really as High as Claimed**? RUSI, 2008

Malcolm Chalmers, John Dowdy, David Kirkpatrick, Robbin Laird. **Defence Inflation: Reality or Myth?** RUSI, 2009

FOR BETTER UNDRSTANDING PROBLEM

Inflation in the defense budget can be measured in more than one way. One view would be that when the Congress proposes to allow the DoD budget to grow by 3 percent per year, after adjustment for inflation, it intends the value of DoD appropriations to grow by 3 percent in terms of what the funds would buy generally in the economy (in economists' parlance, the "opportunity cost" of defense). From this perspective, the appropriate basis for forecasting inflation is the expected increase in the GNP price index, which is the broadest available measure of general inflation. Historically, however, inflation in defense purchases has been measured by the average change in the prices of the specialized mix of goods and services that DoD buys. To be consistent with this measure, price forecasts for the defense budget should provide sufficient budget authority to enable each of the military services and DoD agencies to increase the quantities of the items it buys by 3 percent, if that is the intent of the Congress.

If both measures of price change gave the same result, it would not matter which view prevailed. Unfortunately, they have not in the past and cannot be expected to in coming years. Since 1972, the overall index of the prices of defense goods and services--as measured by the Department of Commerce's Bureau of Economic Analysis (BEA)--has risen at a compound average annual rate of 7.9 percent, versus

a 6.4 percent rate for the GNP price index. Thus, over the period 1972-1985, BEA found that the mix of things DoD buys became relatively more expensive, on average, than other goods and services produced in the United States.

Several factors contributed to the observed difference. Since fuel purchases command a higher share of DoD purchases than is true for the economy as a whole, the major increase in petroleum prices between 1972 and 1980 had a greater influence on the index of DoD prices than it did on the GNP price index. But more recently, most of the difference between inflation rates for defense products and inflation in the GNP was accounted for by major weapons systems (which are about 26 percent of the DoD budget for fiscal year 1986). Over the period 1978-1985, the increase in major systems prices averaged 8.5 percent per year according to BEA, two percentage points higher than the average increase in the GNP price index.

Why have DoD weapons prices grown more rapidly than prices in general? Should DoD receive additional funding to compensate for this differential? These important issues are likely to be the subject of Congressional debate. Supporters of the differential argue that it arises from the special character of major systems acquisition.

In the defense industry, it has been noted, some of the normal rules of economics are reversed. 3/ Defense prime contractors operate their plants at lower rates than do civilian firms, resulting in relatively high unit costs, and DoD bears the costs of maintaining unused capacity in order to be able to expand production rapidly in an emergency. Because defense producers typically operate in the output range where average costs are declining, a reduction in demand by DoD will increase, not decrease, prices of equipment. Moreover, in design competition firms often compete on the basis of performance, not price. Finally, because of buy-American provisions, DoD contractors are restricted in their ability to seek out the lowest prices worldwide for parts and materials. All these factors not only explain why prices of defense equipment are higher than civilian goods, but also, in the view of many, help to explain why they tend to rise more rapidly in a period of inflation.

Others argue that the inflation differential results from measurement errors in the price indexes that DoD uses. Admittedly, creating an index of prices for the constantly changing mix of defense goods is difficult. This study reviews technical questions that have been raised about BEA's price indexes for major weapons systems.

A third distinct point of view accepts the validity of the price indexes and the historically observed differential they depict, but argues that the differential will not persist in the future. In this perspective, the differential arose from a special combination of circumstances that no longer exists. If so, there is no longer any reason to expect defense inflation to exceed that of the economy in general, and no

reason to use a higher forecast of defense inflation in the budget. These differences over the appropriate measure of inflation play a key role in defense budgeting.

Source: PENNER Rudolph G. Budgeting for defense inflation. Washington: The Congress of the United States, Congressional Budget Office, 1986. 62 p.

CONCLUSION

Influence military expenditures on national economy is determined broad scale of circumstance, which are interwoven and mutually affected. Its positive or negative impact on national economy is not proven positively due to above mentioned determinant.

TASKS FOR SELFSTUDY

1. Explain meaning of the military expenditure term. Try to identify differences among the most frequent definitions of military expenditures. Try to gain as much as possible official definitions.
2. Describe recent trends in world military expenditure. What are the major spender countries in you chosen year(-s) (You can use following internet source: http://www.sipri.org/research/armaments/milex/resultoutput/trends).
3. What are the major factors which can influence size and structure of country military expenditure?
4. What are opportunities costs, explain and give examples in case of military expenditure? (Internet source: www.costofwar.com; http://costofwar.com/en/tradeoffs/)
5. Describe military expenditure development in chosen country(-ies) and demarcate main factors which drive it (i.e. USA, China, developing coutries /Africa/, Russia, and so on). (Internet source: http://www.sipri.org/research/armaments/milex/publications/unpubl_milex; http://www.sipri.org/research/armaments/milex/publications/other_sipri_publ;) This question can be chosen more than once.
6. Explain the term “hidden” military expenditure. Which problems are connected to its description? What other additional problems are linked with them?

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