

Course:

DEFENSE AND SECURITY ECONOMICS

Distance Support Material

TOPIC 13

ECONOMIC EFFICIENCY UNDER CONDITION OF DEFENSE AND SECURITY

BRNO

2014

Topic 13



Economic Efficiency Under Condition of Defense and Security

Contents

INTRODUCTION.....	5
1 BASIC CONCEPTS.....	6
2 EFFICIENCY UNDERSTANDING LEVELS UNDER CONDITIONS OF DEFENSE.....	8
3 DEPARTMENT OF DEFENSE FAILURE IN EFFICIENCY AREA.....	13
4 TOOLS OF EFFICIENCY SUPPORT UNDER CONDITION DEPARTMENT OF DEFENSE.....	22
CONCLUSION.....	31

LEARNING OUTPUTS

Students will know:

- basic approaches to understanding of defense area efficiency
- causes of inefficiency tendency under conditions of defense and its impacts

Students will be able to:

- demarcate of internal and external condition of efficiency under conditions defense department,
- explain importance of factors increasing efficiency under conditions of defence.

Students will capable of:

- Judge range of efficiency conditions fulfilling under conditions of department of defence and suitability of factors increasing efficiency under conditions of department of defense.

ECONOMIC EFFICIENCY UNDER CONDITION OF DEFENSE AND SECURITY

KEY TERMS

Effectiveness, efficiency, economy under public sector and military conditions, Failures of public sector and armed forces within process of rationalization.

TIME NEEDED FOR CHAPTER STUDY

6 hours

INTRODUCTION

National defense is in many ways a public, or “collective,” good, which means two things.

First, consumption of the good by one person does not reduce the amount available for others to consume. Thus, all people in a nation must “consume” the same amount of national defense (the defense policies implemented by the government), although different people may value that common defense policy differently.

Second, the benefits that a given person derives from the provision of a collective good do not depend on that individual’s contribution to funding it. Everyone benefits, including those who pay little or no taxes.

1 BASIC CONCEPTS

1.1 Efficiency

DUAL APPROACH TO UNDERSTANDING OF TERM

Older

Efficiency as a state useful and economy using of economic resources

Newer

Efficiency as part 3E concept,

- Efficiency
- Economy
- Effectiveness

1.2 Defense as public good

National defense, like other public goods, has an important “free-rider” problem. That is, because people benefit whether or not they contribute toward defense, each person has an incentive to wait for others to provide the collective defense good, and thus hopes to get a “free ride.” Also, because a free rider’s consumption does not reduce the amount of defense available for others to consume, even those who pay have little incentive to prevent free riding by others.

As a result of such free riding, individuals acting privately to provide national defense services would produce too little from the standpoint of society as a whole. Each person would provide defense until the incremental benefits to him equalled the incremental costs. But for society as a whole—that is, for all individuals collectively—the incremental benefits would exceed the incremental costs, precisely because once an individual provides some of the collective good, all people benefit from it and no one can be excluded.

This free-rider behaviour yields one of the important traditional arguments for government: By imposing taxes on all individuals and then providing collective goods, government, in principle, can eliminate free rider behaviour and produce the “correct” amount of national defense and other collective goods.

1.3 Defense adequacy

FIRST NOTICE

OLVEY, F. The National Security. New York, 1974

DEFINITION

Defense adequacy is possible to define as current real degree of peace defense doctrine securing possibilities. Defense adequacy is derived from aims and tasks of defense of state during crisis.

Determination of defense adequacy means creation and presentation of proposal:

- Organization structure
- Number of persons
- Number and structure weapons,

In variations, which enable to fulfil the tasks of defense doctrine?

- Nominated variations have to be supplemented by expression its expensiveness.
- Inseparable part of these designs has to be plan of modernisation or armed forces refit.

NOWADAYS PROBLEMS

- Changed security environment
- Question: Possibilities to plan necessary defense capacity versus defense ability.

COMPARISON

Eisenhower told his senior defense team that he wanted the Pentagon cut down to a "Spartan basis,"

2 EFFICIENCY UNDERSTANDING LEVELS UNDER CONDITIONS OF DEFENSE

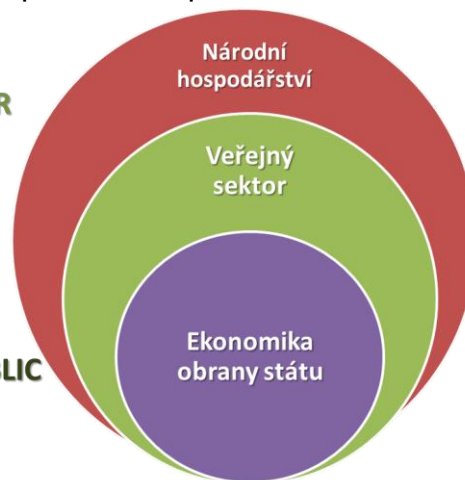
TERRITORIAL DEFENCE IS DEPENDEND ON THREE FACTORS:

- **Extend national resources** reachable today and in future.
- **Share of national resources** allocated for securing national defense (security) aims.
- **Usage Efficiency** of allocated national resources.

Figure 1 Relationship between private and public sector

**RELATIONSHIP BETWEEN
PRIVATE AND PUBLIC SECTOR**

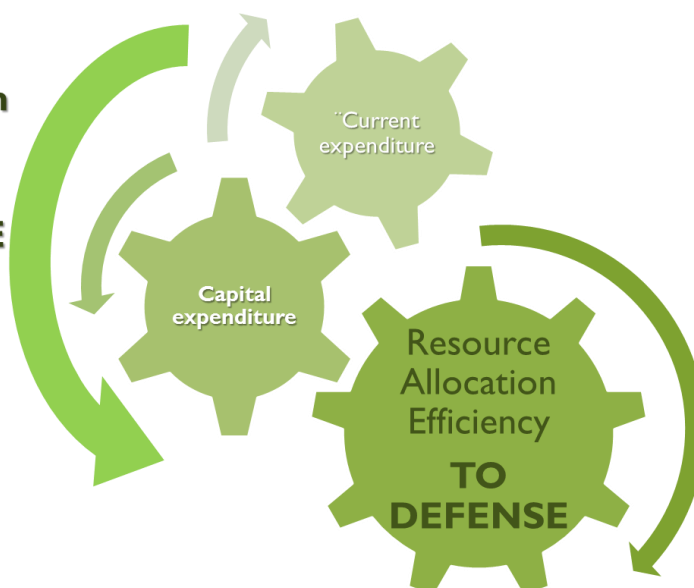
**RELATIONSHIP BETWEEN PUBLIC
SECTOR AND DEFENSE
DEPARTMENT**



Source: Own

Figure 2 Resource allocation efficiency in defense and to defense

**Resource
Allocation
Efficiency
IN
DEFENSE**



Source: Own

2.1 RESOURCE ALLOCATION EFFICIENCY TO DEFENSE

- **What level defense expenditure is still rational in comparison to another social expenditures (trade-offs).**
 - „.... ...our military cannot be built to do “everything.”“ (*Building a Military for 21st century*)
- **Defense expenditure** is needed to understand as a certain form of insurance, which society has to pay for its external security (analogy with mandatory insurance and car/automobile insurance).
- **INTERRELATIONSHIP BETWEEN BENEFIT OF DEFENSE GOOD AND BENEFIT FROM DEFENSE EXPENDITURE !!!**

First, consumption of the good by one person does not reduce the amount available for others to consume. Thus, all people in a nation must „consume” the same amount of national defense (the defense policies implemented by the government), although different people may value that common defense policy differently.

Second, the benefits that a given person derives from the provision of a collective good do not depend on that individual’s contribution to funding it. Everyone benefits, including those who pay little or no taxes.

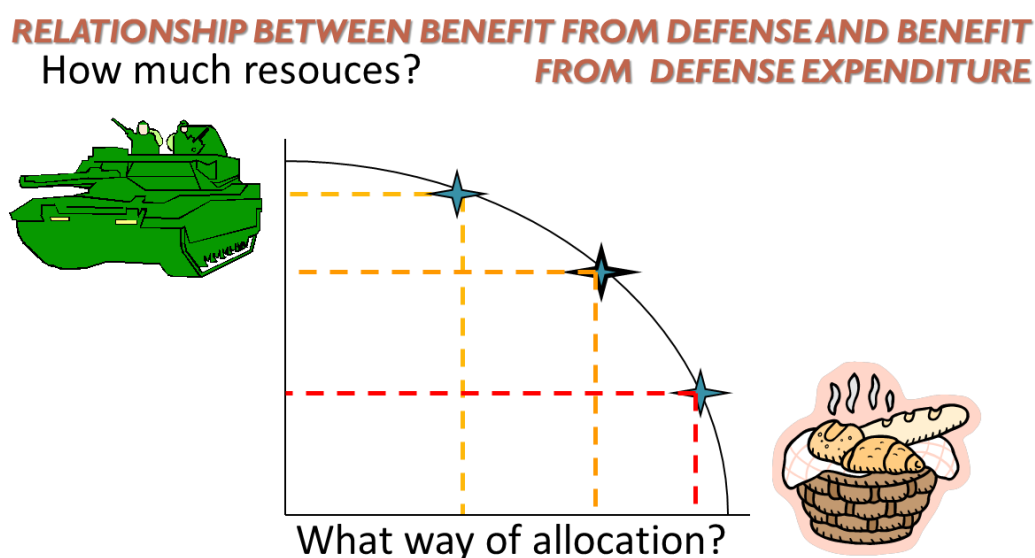
To say that everyone gains from defense is not to say that everyone gains from government expenditures that are labelled “defense.” There is no necessary connection between defense expenditures and actual improvements in protection from foreign threats.

Some defense expenditures may not contribute to such security at all; some expenditures may contribute a great deal; and some expenditures may, by stirring up hornets’ nests, actually reduce security.

National defense, like other PUBLIC GOODS, has an important “free-rider” problem. That is, because people benefit whether or not they contribute toward defense, each person has an incentive to wait for others to provide the collective defense good, and thus hopes to get a “free ride.” Also, because a free rider’s consumption does not reduce the amount of defense available for others to consume, even those who pay have little incentive to prevent free riding by others.

As a result of such free riding, individuals acting privately to provide national defense services would produce too little from the standpoint of society as a whole. Each person would provide defense until the incremental benefits to him equalled the incremental costs. But for society as a whole—that is, for all individuals collectively—the incremental benefits would exceed the incremental costs, precisely because once an individual provides some of the collective good, all people benefit from it and no one can be excluded. This free-rider behaviour yields one of the important traditional arguments for government: By imposing taxes on all individuals and then providing collective goods, government, in principle, can eliminate free rider

Figure 3 Relationship between benefit from defense and benefit from defense expenditure



Source: Own

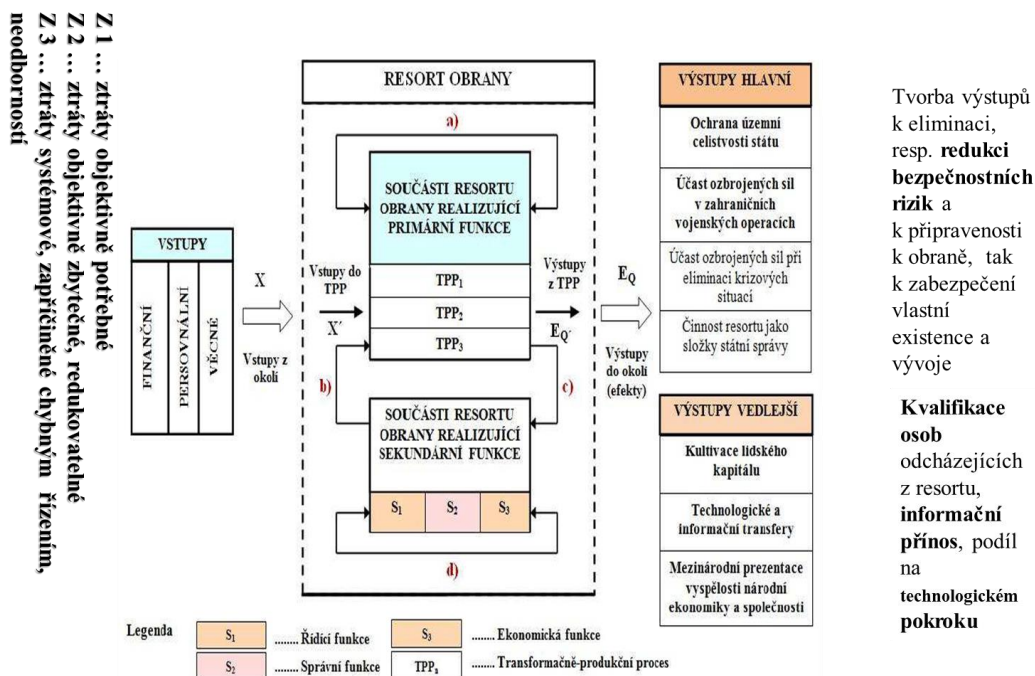
2.2 RESOURCE ALLOCATION EFFICIENCY IN DEFENSE

• Capital expenditure

- What extent does Capital expenditure help to react and destroy existing or newly appearing threats?
- What to some extent does acquisition system able to secure the needs of armed in optimal relation between price and required qualitative and quantitative attributes.
 - Problem of time (life cycle of new weapon system development)
 - Problem of lobbying interest groups (corruption, requirement of new up-to-date non-existing attributes).
- Problem of „**Tribalism in Defense**“ (PAUL CORNISH AND ANDREW DORMAN *National defence in the age of austerity*)

• Common expenditures

- To some extent does common expenditure secure adequate condition for functioning of armed forces and adequate training of all sorts of troops?



Source: Own

- **Efficiency** could be result in real structuration and evaluation cost, effects and losses.
- **Objectivity, responsibility and transparency** as partial aspects of efficiency could be result in:
 - Refusal subjective dogmatic approaches and opinions including rejection of „critical“ investment projects.
 - Creation of normative basement and correct relationships within process of economic management.

THREE BASIC PROBLEM OF EFFICIENCY

- **Problem I** – How much is enough? (optimal level of defense)?
- **Problem II** – Which tools can we use for decision making about defense (economic analysis)?
- **Problem III** – How can we reach efficient allocation in all levels (In defense and to defense)?

3 DEPARTMENT OF DEFENSE FAILURE IN EFFICIENCY AREA

Today's literature explains failures in public sector by failures of public governments and inefficiency tendencies in public sector (J. E. Stiglitz 1997, Y. Strecková 1998).

Government failure and department of defence

- Limited information, which government has to use and operating.
- Limited control on private sector reaction in connection on government activity.
- Limited control on its own bureaucracy.
- Restriction resulted from origin of policy decision making process.

3.1 Government Failure and the Defense Department

J. E. Stiglitz in his book *Economics of the Public Sector* states: “.... We can identify four main reasons for systematic failures of governments seeking to achieve set targets: limited information available for governments; just partial control over private sector responses; limited government control of bureaucratic machinery and last but not least, limitations resulting from the nature of political processes.”¹ Under our conditions, all the four factors can influence development in the Defense Department.

Limited information available for the Government, eventually Cabinet members. This factor is perceived more generally. Governments or their members can never manage to have all information available, relevant to their decisioning. This reality forms a presumption for failed and allocation inefficient decisions. For instance, the process of reorganization and redislocation of the Czech Armed Forces can be indicated as a “never-ending story”. It is unnecessary to specify all the losses and damages that have been generated in the course of this process. Theory also speaks of the so-called centralization losses. These come forward when a center determines certain level of consumption (e.g. when the Department level decides to calculate costs of military units – many events are non-recurring and each unit is unique

¹ STIGLITZ, J. E. *Ekonomie veřejného sektoru*. Praha: Grada, 1997. 560 p.

in some sense). Any change, any decision implemented by a center refers to all components of given system; paradoxically, also those that were not really affected by the original malfunction. This is caused by lack of information available for managers who cannot distinguish the relatively well functioning organizational components from the nonfunctional ones.

Limited control over private sector responses. Military public contracts belong to the most lucrative ones. In particular, purchasing new weapon systems, wheeled equipment, aircraft etc., eventually their modernization is linked to a relatively high risk connected with their final price. Decision-making authorities are unable to estimate how successful bidders will act after succeeding in a tender, if any “unforeseen circumstances” occurred during a contract implementation that force its price up compared to original estimations. Another possibility is defaulting delivery dates or infringement of required reliability and quality criteria agreed by a contract. These authorities have only very limited chances to prevent this sort of risk. Problems related to the L-159 purchase or T-72 modernization projects are great examples to support these statements.

Limited control over bureaucratic machinery. Under the term of bureaucratic machinery we understand mainly government officials and employees (indeed, bureaucracy exists not only at the central government level). The basic characteristic of management in the sphere of state administration is the principle of subsidiarity and superiority. It predominantly consists of line organizational structures characteristic by fast decisioning and relatively high operational suitability. However, this applies to small organizations only with single level of management. Structures of ministries and their subordinate components do not meet this requirement. These are multilevel management structures.

The problem of control over executive machinery (bureacracy) rests mainly in the fact that bueracrats – as any other economic entities – maximize their

benefits under given external limitations. Theory of bureaucracy defines the following maximizing goals:²

- Maximizing agency budget;
- Maximizing agency prestige;
- Preserving agency;
- Eliminating conflicts with groups that are in a position to influence social status of the agency;
- Preserving agency autonomy.

First, “efficiency” of any agency functioning depends on the extent to which the assigned missions correspond with the above-mentioned goals (i.e. to what extent the agency will identify itself with these assignments). Secondly, on public “visibility” of the goals achievement and last but not least, on how important it is to achieve the assigned goals for the authority, which is superior to the agency and which can influence its social status. Increasing “the agency efficiency” from the position of a politician, who usually represents a superior authority, is often a difficult task for bureaucracy takes advantage of having more information available than politicians do. It often happens that it is just the bureaucracy, which is able to speed up replacement of a politician – more frequently than oppositely.

A good example can be found in the publication “Hodnocení veřejných zakázek a veřejných projektů (Evaluation of Public Contracts and Projects)” by professor Ochrana: *“... previous reforms and reorganizations of the Department proceeded by forming a working commission consisting of personnel of the Department, the first effort of which was “designing boxes”, i.e. organizational charts regardless of actual needs and scope of action of the Department. Still today, it is possible to prove that members of these commissions “designed” organizational charts mainly to implement their power ambitions. Such a reorganization resulted in designing an organization, which was simply*

² STIGLITZ, J. E. *Ekonomie veřejného sektoru*. Praha: Grada, 1997. 560 p.

unable to function and therefore it was necessary to proceed with further reorganizations.”³

Limitations resulting from the merit of political processes. In fact, democracy is a continuing process of public choice. These processes involve adopting of more or less successful decisions contributing to economic prosperity in society. Democracy also means alternating of government representation as a whole, eventually its individual members. Let us simply analyze periods of individual politicians in the office of the Czech Republic Minister of Defense. The question is whether the time they spent in this office was long enough to ensure conceptual management of the Department (Table 3).

Also the type of electoral system can strengthen limitations resulting from the uncertainty of political processes. Majority electoral system opens more space to fulfill election promises, which can be substantially reflected in the effort of majority governments to implement their statements of policy.

Table 1: Defense Ministers of the Czech Republic in the Years 1992 - 2005

Defense Minister of the Czech Rep.			
Surname and First Name	Term of Office		
	Period in the Office	Duration	
		Years	Months
Antonín Baudyš	30.1.1992 - 21.9. 1994	2	8
Vilém Holář	22.9.1994 - 3.7.1996	1	10
Miloslav Výborný	4.7.1996 - 2.1.1998	1	6
Michal Lobkowicz	2.1.1998 - 17.7.1998	-	6
Vladimír Vetchý	22.7.1998 - 4.5.2001	2	10
Jaroslav Tvrdík	5.5.2001 - 8.6.2003	2	1
Miroslav Kostelka	9.6.2003 – 3.8.2004	1	2
Karel Kuhn	4.8.2004 – to date	17 months	

Apportionment election system generally aims at forming coalition governments where none of the political parties involved is in majority.

³ OCHRANA, F. *Hodnocení veřejných zakázek a veřejných projektů*. Praha: ASPI Publishing, 2000. 195 p.

Coalition governments deplete their efforts in lengthy struggles seeking to achieve unity of their policies. These might end up with their internal crises and disintegration or with replacements of Cabinet members in better cases. Another limitation can be the budgetary process itself and the resulting volume of defense spending guaranteed by the government. The government ability to ensure a stable volume of funds for national defense is also uncertain. This statement can be supported citing the words of the former Chief of the General Staff of the Czech Republic LT GEN Jiří Šedivý: *"It is uncertain whether the upcoming Government established after the Parliamentary Election says once again: Our plans have changed."*⁴ The following experience can serve as a very inspiring example: *"...the decision to professionalize the Belgian Armed Forces was made in 1992 and the last conscripts left the military in March 1995. From the very beginning of the project, politicians promised to maintain military spending at the level required by the Ministry of Defense till 1997. However, in the initial phase of the professionalization process, i.e. in the years 1994 through 1997, the Belgian defense budget "froze" at the level of approximately BEF 131 bn. The share of defense expenditures decreased from the level of GDP 1.7 % in 1994 to just 1.3 % in 2002."*⁵

3.2 Tendencies of Public Sector to Inefficiency in Defense

Prof. Y. Strecková focused one chapter of her course book "Veřejná ekonomie pro školu i praxi" ("Public Economics for School and Practice") on the issue of economic efficiency in public sector. First, she specified fundamental reasons of public sector inclination towards inefficiency. For the Defense Department and the Czech Armed Forces represent an integral part of the Czech Republic public sector, we can expect that these reasons shall have their effect also here. Same as the entire public sector the Czech Armed Forces are a part of the so-called non-profit sector (Figure 2).

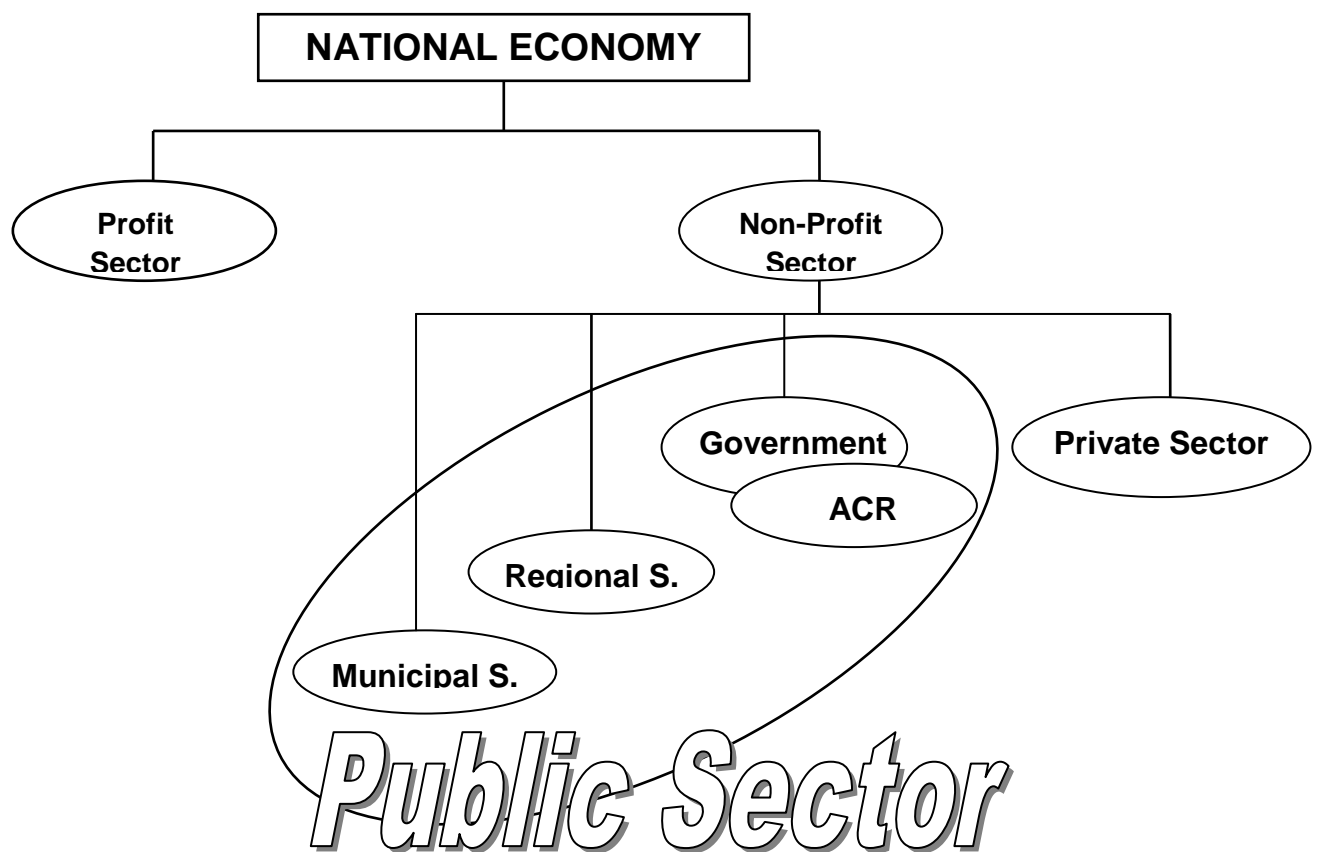
⁴ GAZDIK, J. *Sbohem armádo? Začínají se ptát Češi. Mladá fronta Dnes*, 14. 10. 2003, p. C/6.

⁵ PERNICA, B. *Bez peněz se branců nevzdávej. Hospodářské noviny*, 21.11.2003, p.10.

What are the roots of the Defense Department inclination towards inefficiency?

The category of “profit” is not the dominant goal. From our point of view, this fact is one of the fundamental reasons why individual components of the Defense Department incline towards inefficiency. These entities are mainly organizational components of the Government or allowance organizations.

Figure 4 *Place of the Armed Forces in the Non-Profit Sector*



Source: Own

These organizations are then fully or partially dependent on budgetary redistribution processes. Nature of this funding causes (a resultant of effects of certain specific factors in this case) that existence of these organizations does not depend on profit making. That is why spontaneous rationalization

processes, leading to an optimized relation between inputs and outputs of certain activity are eliminated. The example below illustrates the main effects of this factor.

The military disposes of certain number of repair and maintenance units. Maintenance personnel are remunerated for their work by a wage per hour. If there is no work for them, there is no performance to pay them for. This results in unemployed capacities. A rationally thinking manager would ask the question why. The answer is simple – existence of these units is profit independent. They have a fixed budget. Remuneration of their personnel does not depend on their activities. Employment of capacities is not based on economic but uneconomic factors. It just depends of activity of management, which has no incentive to behave economically. Could any business operating in market sector behave like this? No, for unemployed capacities immediately show in decreasing profits.

Certainly, it is legitimate to argue that missions of these units do not consist in making profits but in accomplishing of set assignments and objectives. This argument cannot stand in a situation when the antimony of requirements and real capabilities increases and when tightness of public budgets is alerting. Also in the Defense Department it is necessary to measure outputs and inputs always when e.g. the share of consumption of labor can be prescriptively valued by means of wages.

It is **impossible in public sector to determine efficiency by measuring inputs and outputs expressed in commensurable units**. In market sector effects are expressed by profit ratio. In public sector, i.e. also in defense, this category is inapplicable and is replaced by the category of benefit. Outputs of public sector are not being sold at market prices. It generates the problem of how to express and measure their value. Therefore, the Defense Department has to find an answer to the following question: What benefits shall it provide and how to express it and measure? Public sector is forced to operate with measuring of goods production cost against the benefits resulting from these goods. The main problem is the ambiguity of the criterion, according to which particular

allocation decisions are to be evaluated as successful or efficient. In case of market environment, this criterion is clearly defined and demonstrable. Costs and earnings of individual variants are predictable. Although these predictions bear certain risk levels, they can be captured and assessed ex post. In case of non-market environment, when deciding on selection of individual variants of budget spending the ex ante uncertainty is exactly the same but ex post information on prices of inputs and outputs is insufficient as well.

Y. Strecková highlights another reason of failures in achieving economic efficiency: “.... *In market sector buyers force the level of utility themselves through deciding to buy or not to buy certain goods. In public sector, intensity of this influence is highly intermediate and therefore weak. There is a **high degree of intermediation between the moment of payment and the moment of consumption.***”⁶ Defense as purely public goods satisfies one of many social needs – the need to protect territorial integrity of the nation. In terms of efficiency of spent resources, there is no real interest to increase this need. It represents a service evoked by negative effects of activities of humans living in society. Due to this reason we can expect rather minor social attention paid to defense connected with allocation of limited amounts of resources. Subsequently, this has to lead to increasing of internal quality and searching for intensification and rationalization solution. We can document this using the discrepancy showed by the public opinion poll (“Názory na obranu a vzájemné vztahy mezi ČR a NATO” - Attitudes to Defense and Relationships between the Czech Republic and NATO) conducted by Mr. Ján Mišovič within the scope of the Project “České veřejné mínění v evropských souvislostech” - Czech Public Opinion in European Context). (Table 4) Respondents clearly declared that: “National sovereignty must be defended.” This was the answer of 87 % respondents. Majority also supported the following requirement: “Our Armed Forces have to achieve the level of western forces.” Approximately 70 % of participants involved in the research agreed with this statement. In this context, the most interesting finding was that nearly 60 % supported the thesis that: “Defense costs excessively burden national budget.”

⁶ STRECKOVÁ, Y. *Veřejná ekonomie pro školu i praxi*. Praha: Business Books, Computer Press, 1998. 190 p.

Table 2: Attitude to National Defense (in %)

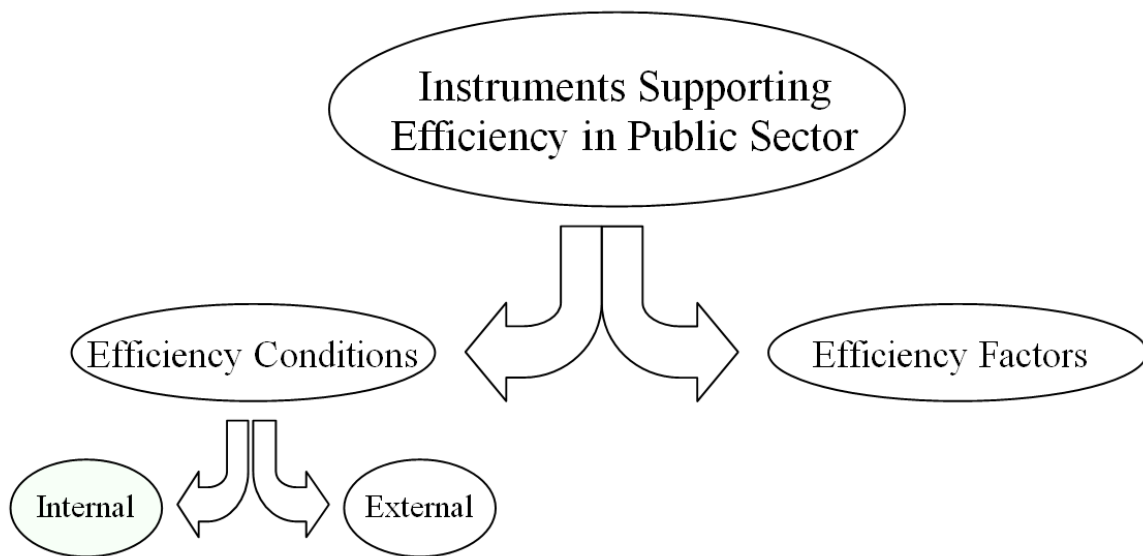
	1992 yes/no	1993 yes/no	1996 yes/no	1997 yes/no	1999 yes/no	2001 yes/no	2002 yes/no
National sovereignty must be defended	86/10	89/7	87/7	85/10	87/8	81/13	87/9
Great powers determine role of small nations	59/35	58/33	62/30	65/28	62/32	68/25	61/30
We would not be able to defend ourselves, if necessary	62/29	65/26	67/22	69/22	63/28	67/22	62/34
Defense costs unreasonably burden the Budget	54/41	55/38	52/40	51/41	44/51	59/34	57/37
Our Armed Forces must achieve the level of western nations	-	-	-	57/31	72/18	48/39	70/21

Note: Remainder to 100 % for each pair of data represents the answer “don’t know” , random statistical discrepancy ranges in the interval of +/- 3 %. The table shows coupled answers “surely yeas, rather yeas” and “rather no, surely no”.

Source: České veřejné mínění v evropských souvislostech – Czech Public Opinion in European Context (www.czechopinion.soc.cas.cz)

All reasons mentioned above can give rise to inefficient behavior, either on the central or local level of management in certain sphere of public sector. It explicitly reveals itself as a lower intensity of accenting continuously increasing of benefits and decreasing of costs. This finally results in particularly weak innovative activities when searching for alternatives in the process of satisfying social or individual needs. Is there any real chance to reduce or eliminate effects of these undesirable factors? Is it possible to fight against the inefficiency tendencies? We think so.

4 TOOLS OF EFFICIENCY SUPPORT UNDER CONDITON DEFNSE DEPARTMENT



4.1 Condition for Evaluation Efficiency Into Department of Defence

Y. Strecková states that to achieve efficiency it is necessary to meet efficiency conditions in given area as well as implement adequate efficiency factors (See Figure 3).

Y. Strecková divides efficiency supporting tools into several groups according to the intensity level of public sector influence on their structured and contents. She states that this intensity level is lowest for external efficiency conditions and highest for efficiency factors. This means that utilization of efficiency factors is mainly influenced by an organization itself or management of a particular segment of public sector while external efficiency conditions can be influenced by the organization or segment management just minimally.

4.1.1 External conditions of efficiency of public sector are:

- Political organization of society,
- Functioning market sector..

4.1.2 Internal conditions of efficiency of public sector are:

- Comprehensible and sufficiently clearly formulation of organization mission and aims,
- Competitiveness of environment inside of public sector,
- Financing of public sector by benefits and performance,
- Public Control.

Efficiency conditions form the essential framework enabling to achieve assigned objectives. At the same time, efficiency conditions help to consider whether given segment, department or organization in public sector has established preconditions for its efficient functioning.

4.2 Factors Increasing Efficiency Of Department Of Defense

Provided that public sector complies with the above-mentioned conditions, we can expect that it will be subsequently possible to make use of the system of efficiency factors as well. These factors include:⁷

Efficiency Factors:

- Science and technology factor,
- Knowledge of all activities structure,
- Usage of all division of labour forms,
- Qualification of workers,
- Initiative of workers,
- Management system.

Efficiency factors, adapted from their private sector forms to public sector conditions, can be used to increase efficiency of a segment or directly an organization of public sector. Nevertheless, application of these factors

⁷ STRECKOVÁ, Y. *Veřejná ekonomie pro školu i praxi*. Praha: Computer Press, 1998. 196 p.

explicitly depends on management at all levels of the organization as well as segment of public sector.

Failures of the Defense Department over the last ten years were caused by government failures on one hand and by general reasons causing public sector malfunctions on the other hand. We can raise a presumption that development in the Defense Department was influenced by the fact that the above-mentioned efficiency conditions and factors were underestimated and therefore were insufficiently implemented and applied in this Department. Let us try to very simply confirm this hypothesis and at the same time to answer the following question: “To what extent conditions and factors have been applied and implemented?”

The following examples represent only few elements of the relatively complicated military system. However, some of them are of crucial importance.

4.3 Impact of External and Internal Efficiency Conditions on the Department of Defense

4.3.1 Impact of External Efficiency Conditions on the Department of Defense

Positive influence of **political arrangement of the society** on the Defense Department efficiency can be achieved only if this society will be democratic. We can state that from the November 1989 the Department of Defense went through a number of positive changes connected with pluralistic nature of the society – civilian Department management, greater openness, public control of the military etc. Have these changes really positively influenced the Department and have these been fully utilized?

Civilian management – the Defense Minister is a civilian but the question is whether all the former ministers were competent for this appointment? Civilian and military component of the Department of Defense – did these two components really mutually cooperate and communicate?

Greater openness – the Defense Department is connected with national defense and security, therefore it is impossible to provide all information.

Public control over the military – professional (abandonment of the “Inspector General” project: Why?) and laic – is it acceptable in the Defense Department or not?

Market sector has started to function in our country but its establishment and development was connected with a number of negative lessons that could result in a lower willingness to make use of it as a mirror of performance and efficiency. There are many functions and appointments which scope of employment is the same both for market and public sector (accountants, buildings maintenance, catering services, medical care etc.).

Has anybody tried to ask the question: “Is labor productivity of these conforming activities in the Defense Department the same, lower or higher than in market sector. For instance, how many accountants are required for wages accounting in private sector and how many accountants are required to manage the same activity in the Defense Department? Has anybody tried to calculate what economic impacts will result from the decision to transfer some of the activities previously performed by the military to private contractors (repairs, cleaning, laundering and supporting agricultural activities)? Is the system of dual-entry accounting fully utilized? Are the data that can be gained from this system really analyzed?

Evident from the above-mentioned external efficiency conditions, the Defense Department can in no way influence their quality. This is unambiguously true when developing a pluralistic system. The Department should be able to make use of the potential hidden in market sector. It means to learn to utilize its natural pressure on performance and economy. **External efficiency conditions are fulfilled but their effectiveness has been weakened by the fact that both the market sector and emerging democracy have passed through early stages of their development.**

4.3.2 Impact of Internal Efficiency Conditions on the Department of Defense

The condition of the ability to explicitly formulate the mission and objectives of the Defense Department has not been fully fulfilled yet. But it belongs to the essential prerequisites. Provided that an organization is unable to define its mission and objectives meeting this mission and if it is unable to assign particular activities to these targets, it has no right to exist and consume public funds. This requirement is of particular importance in public sector, which manages funds collected from private entities that are usually able to use and allocate resources in a better way. Therefore, it is a commitment of public sector entities (including the Defense Department) to use these resources at least in the same or better way. Under conditions of the Armed Forces, we often faced situations of **missing political concept – absencing political targets**.⁸ Then it was unclear what the Government, Department of Defense and the Armed Forces seek to achieve. This situation became critical at the beginning of the year 2001 when the so-called “Council of Generals” was established trying to solve problems in this area. More than likely, this deficiency has not been fully solved yet. Warning statements of a group of experts represented by I. Gabal and A. Raška confirm this: “..... if the Government does not finally tell the Armed Forces, what the Czech national interests are, generals cannot make the decision how many soldiers, tanks and airplanes are necessary for national defense and any attempts to reform the Armed Forces will be hazardously similar to a costly and dangerous game losing the reasons why the Czech Republic needs its Armed Forces.”⁹

Competitive environment inside the Defense Department. Here we cannot speak of a “standard” competition but of a competition in relation to gaining and using resources for individual activities. R. Kunc dealing with this issue stated: “*Certain level of autonomy of subordinate components along with their autonomous economic management can establish competitive environment within the Defense Department. It increases focus on implementation of set*

⁸ KRČ, M. *Problematika obrany z ekonomického hlediska (Několik poznámek)*. Vojenské rozhledy, No. 2, 2002, p. 54-57.

⁹ GAZDIK, J. *Sbohem, armádo? Začínají se ptát Češi*. Mladá fronta Dnes, 14.10.2003, p. C/6.

*objectives and – if supported with motivation factors – leads to generally increasing efficiency of the organization.”*¹⁰ Defense Department has applied this condition only to that extent, which has established competition only at the input to public sector (private bidders competing for public contracts in defense. However, their practice has showed negative results and sometimes had devastating impacts on the Czech Armed Forces as a whole. The system of public procurement shall contribute to higher efficiency both in allocation and implementation. Nevertheless, other factors often play more important role, e.g. preservation of certain industry know-how, employment. This subsequently adapts the process and scope of public contract (as for instance in the project of L-159 subsonic fighters). The problem is that nobody considers the lessons learned from the past even in today's practice and therefore the same failures can repeat even in the future.¹¹

This competitive environment produces the required effect only when another condition – **benefit and performance based funding** is met as well. A promising approach can be the implementation of management system introduced in various forms to several NATO nations. It is the so-called Planning, Programming and Budgeting System where financial flows depend on assigned objectives and missions instead of requirements of individual Arms and Services. It is based on measuring costs and benefits of various allocation variants fulfilling the objectives based on political specifications. In our perspective, functioning of this system has been impaired by the already mentioned absence of clearly specified outline of defense policy as well as certain discrepancies between the program and budget phase of the system.

The last efficiency condition is **public control in the Defense Department**. Public control can be implemented as a professional or laic one. Professional control is conducted by bodies capable to assess whether the examined reality does or does not correspond with the required state. Laic control does not possess these competencies but has the privilege to give notice, ask questions

¹⁰ KUNC, R. *Resort MO ČR se znaky byrokratické organizace. In: Ekonomika, logistika a ekologie v armádě – Sborník 2. mezinárodní konference*. 2001. p.58.

¹¹ RYCHETSKÝ, J. *Vojenské zakázky jsou v křížové palbě*. Report of the ČTK from the 25 November 2003.

and require explanations of realities that can – from laic point of view – seem far to be legitimate or optimal. Generally speaking, public control in defense has substantially improved and developed over the recent years. An important element in the Armed Forces control implemented by the Parliament either through the National Budget, legislation or its bodies (Defense and Security Committee of the House of Representatives etc.). Parliament through its initiatives achieved that the Defense Department introduced dual-entry accounting, which contributes to higher transparency in defense funding (although, as mentioned above, this potential has not been fully utilized yet) or enabled study of civilian students at military colleges. Specifics of the Defense Department do (probably legitimately) not allow the public to know everything. It is interesting that in case of control of the Defense Department management of public funds by the Supreme Audit Office (SAO), most of the audit reports are not available for broad public. Out of nine audits over the years 1998 – 2001, only one was published in the SAO Press Release. The remaining eight reports containing “restricted” information were provided only to bodies specified in the Art. 30, Par. 1 of the Act No. 166/1993 Coll. So, the public has no information available to learn whether the Defense Department manages public funds appropriately. It is another example why the intensity of the pressure on benefit maximization is lower in public sector than in private sector. Consumers and at the same time payers of taxes, from which public goods are financed, often cannot access information about management of these funds.

Efficiency conditions can help to create an environment contributing to overcome the handicap inherent to public sector. However, certain particularities in defense can impede complete application of some of them.

4.4 Applicability of Efficiency Factors in Defense

Science and Technology Factor. We can state that in the Defense Department technology factors were preferred rather than scientific ones. Another issue is availability of computer technology – hardware and software – at individual military units. Certainly, the technology factor is of special importance in the Czech Armed Forces but underestimating or absence of the science factor

became heavily evident e.g. in failing to make use of the knowledge of management theory when projecting control and information systems or when developing defense research.

Underestimation of understanding of the structure of all activities implied duplications or even triplications in control structures (e.g. Structure of the Ministry of Defense and the General Staff). From the point of view of economic management, it is strange if a control element does not have accurate information about global financial flows on certain controlled territory where competencies of several independent entities (e.g. Military Domains) converge. Another problem is disrupting of mutually interconnected activities and their assigning to several control elements.

Awareness of all forms of division of labor, which subsequently leads to appropriate specialization. This factor is broadly applied in the Armed Forces however, there is maybe one exception proving the rule. A good example is the establishment, development and subsequent liquidation of the environmental protection system in the Czech Armed Forces. Generally, these systems are fully functioning abroad. In our case, the conclusion was that the function of military ecologist is redundant and that other military specialists can manage his assignments. This area showed a reversed development – from a reasonable specialization towards integration.

Similarly as the public sector generally, the Defense Department efficiency depends also on another factor - ***personnel qualification***. The recently terminated substantial delays in the needed reform of the military educational system can be mentioned as one of many painful lessons. We have to stress that the ongoing Reform of the Armed Forces does not support the level of this factor. Resources spent on education and training are wasted when graduates from military colleges or personnel, who completed their education in a distance form in order to meet new qualification criteria, have to leave the military.

Initiative of personnel in public sector is a product of their moral maturity rather than a corresponding financial remuneration. Tendencies in remuneration for work in public sector are not always motivating for personnel initiative although the Defense Department has established better conditions in this area compared to other segments of public sector. Employees in public sector must be initiative in searching for the optimum way of providing public service. In our conditions, also commanders should be initiative in searching for new ways of streamlining military training, they should think consider potential ways leading to the best possible utilization of existing capacities, of the best utilization of available funds. However, are they motivated to do so? The existing management and economic system does not motivate them. On the contrary, it forces them to spend all planned expenditures without any remainders. As to the motivation of commanders, the Defense Department is far to reach the optimum state.

Management system represents the most important factor of efficiency improvements also in public sector. This is caused mainly by the fact that exploitation of this factor directly influences the way and intensity of utilization of all preceding efficiency factors. Exploitation of this factor also represents lowest additional costs. So far, the Defense Department has not managed to utilize all potentialities of this factor. This reality primarily shows in the still insufficiently developed economic management of the Department at all its management levels.

Potential of all factors described above is substantially influenced by the fact that the management system as the dominant efficiency-increasing factor has not been accordingly and fully utilized.

CONCLUSION

The DoD's own incentives for efficient operations are weak relative to those in the private sector.

Department of Defense, "cannot reset the current force, modernize and transform in all portfolios at the same time. Choices must be made across capabilities and within systems to deliver capability at known prices within a specific period of time."

In order to make these important decisions, the government will first have to evaluate the current state of the military; examine the current composition of the Defense budget; and define the threats, challenges, and role of the military in the 21st century.

After considering the state of fulfillment of external and internal efficiency conditions in the Defense Department, we can argue that fundamental rules have been established but have not become fully functional. **Environment established in the Armed Forces and the entire Defense Department creates no real preconditions to practically tendencies of the Department to inefficiency.** Subsequently, we can deduce that this fact substantially impacts utilization of all efficiency factors.

Further realities impeding elimination of the Defense Department tendency to inefficiency include the problem of the **role of an economically thinking commander**. His/her difficult position is influenced at least by two aspects:

- He/she must fight against the contempt for economic thinking, have strong will to come over the contempt for his/her showed by his/her colleagues who want nothing else but a sufficient funds in their budgets.
- He/she must incentive scheme that motivates his/her colleagues to think in the relation cost-benefit and to make them partners in achieving common goals.¹²

The today's **level of autonomy** of a military unit commander in managing financial assets is rather **limited**. Real economic behavior needs certain space, which is not the case of the Czech military.¹³

The Defense Department is also afflicted by the **disease of formalism**. On one hand, departmental guidelines and directives speak of economy and efficiency but on

¹² STRECKOVÁ, Y. *Teorie veřejného sektoru*. Brno: Masarykova universita, 1997. 200 p.

¹³ TŮMA, S. *Velitel – manager v AČR neplatí? In. Ekonomika, logistika a ekologie v armádě – Sborník 2. mezinárodní konference*. 2001. p. 103.

the other hand, we cannot operate with these terms for we are still enabling to accurately express real *costs of certain purpose, activity, program*.¹⁴

The Defense Department tends to its inefficient behavior for many reasons. This chapter defines essential aspects of these tendencies. The main reasons include:

- Nature of needs and goods that the Defense Department satisfies and produces.
- Government failures.
- Absence of profit as a rating category.
- The fact that consumers cannot directly confront their consumption benefits with costs of production of the goods consumed (in our case, except of the case of a real armed conflict, there is no possibility to adequately confront these variables).

Internal and external efficiency conditions significantly influence the level of the Defense department efficiency. These conditions have not been fulfilled in all aspects and therefore, over the examined period the Defense Department substantially tended to its inefficient functioning. Application of efficiency factors could not improve the situation for these factors were not applied optimally due to insufficiently established conditions.

¹⁴ KUNC, S. *Náklady v resortu MO ČR.. In: Ekonomika, logistika a ekologie v armádě – Sborník 2.mezinárodní konference*. 2001. p. 63.

TASKS FOR SELFSTUDY



1. State basic problems which are connected with optimal level of resources allocation within defense area (allocation into and allocation in defense). Show suitable examples.
2. Try to implement internal and external factors of efficiency into specific conditions defense department. (Streckova Yvonne, Maly Ivan. Public Economics for school and practice).
3. Point out on examples of inefficiency, ineffectiveness and ineconomy under conditions of department of defense. Try to explain causes and show impacts these cases.
4. Is it possible successfully faced to inefficiency, Ineffectiveness and ineconomy? What do possibilities and tools exist in fighting these inappropriate behaviour of defense environment?
5. Try to explain the main subject of Economics of destruction. Which connection does this subfield of Economics have with problem of efficiency?

REFERENCES



1. Building a Military for the 21st Century New Realities, New Priorities Lawrence J. Korb, Peter M. Juul, Laura Conley, Major Myles B. Caggins III, Sean E. Duggan December 2008
2. Defense by Benjamin Zycher, Lebrary of economics and liberty.
3. Defending Defense. Washington: The Heritage Foundation, 2010. 11 p.

ADDITIONAL STUDY RESOURCES



1. Eisenhower Library (Defense Spending) Remarks as Delivered by Secretary of Defense Robert M. Gates, Abilene, KS, Saturday, May 08, 2010
2. Debt, deficits and defense. A way forward. Report of the sustainable defense task force. 2010.
3. CORNISH, Paul. Strategy in Austerity. The security and defence of the United Kingdom. London: Chatman House, 2010.
4. CORNISH, Paul., DORMAN, Andrew M. Breraking the mould: the United Kingdom Strategic Defence Review, 2010.