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2013 3(1) september
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Foreword to the ninth issue of peer reviewed scientific Journal of Security and Sustainability Issues
The General Jonas Zemaitis Military Academy of Lithuania

Dear readers,

It is with much appreciation of the contemporary approach to sustainability taken by the Journal of Security and Sustainability Issues that I introduce its third volume, issue 1 (2013). As you read through the different papers included in this volume, you will come to understand that sustainability issues that societies face are interlinked both within the national boarders and across international boundaries. The interdisciplinary and multidisciplinary scope of this journal is reflective of the increasing collaborations among stakeholders from different institutions, from public to private and not-for-profit entities, in addressing sustainability issues of societies’ development.

The world economies have become globalized more than ever. Domestic shocks, even in the smallest economies, now have global consequences. New forms of insecurities have replaced classic ones. Consequently, discussions of alternative approaches to development should be nurtured and encouraged. The Journal of Security and Sustainability Issues embrace a wide range of topics relevant to current sustainability problems. For example, problems related to water and food security, public health and secured infrastructure. It is my believe, therefore, , that this journal will serve as a source of intellectual reference on issues that must be solved in meeting climate security challenges.

With warmest regards,

Prof. Dr. ABEL ADEKOLA
Dean and Dahlgren Professor
College of Management
University of Wisconsin-Stout, USA
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Prof. Dr. Manuela Tvaronavičienė  
Tel.: +370 687 83 944  
E-mail: manuela@vgtu.lt, manuela@post.omnitel.post

JOURNAL OF SECURITY AND SUSTAINABILITY ISSUES  
2013, 3(1)

http://www.lka.lt/index.php/lt/217057/

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DEVELOPMENT FACETS: CHINA VERSUS US IN THE FIELD OF STANDARDIZATION OF INFORMATION COMMUNICATION

Liangyu Yu¹, Maggie Foley², Mohamad Sepehri³

¹Shanghai Jiao Tong University, 800 Dongchuan Road, Shanghai, 200240, China
²,³Jacksonville University, 2800 University Blvd N, Jacksonville, FL 32211, USA
E-mails: ¹iso@sjtu.edu.cn; ²mfoley3@ju.edu; ³msepehr@ju.edu

Received 27 February 2013; accepted 20 June 2013

Abstract. We study the strategy for the development of standard means of communicating information between businesses and governments. At this time, almost all of the funding and activity to develop and enhance a tool for such communication, which is named eXtensible Business Reporting Language (XBRL) is being done by and in the United States. We use China, who competes with the U.S. in the XBRL market, as an example to investigate if sharing the developmental effort by one, or more, additional countries would produce a more optimum result. Based on game theory, we demonstrate that China should increase investment in XBRL. The best achievable performance is when China and the U.S. almost split equally the whole XBRL market, leaving only a small portion to the “Followers”. (Followers are users that utilize XBRL, but have little or no participation in its development.) The paper provides a brief overview of the history and the reality of XBRL. The authors attempt to estimate (1) the benefits for China in the development of XBRL (2) benefits under monopoly (3) benefits under oligopoly and (4) benefits under the extreme condition with two participants equally sharing the market.

Keywords: XBRL, China, United States, monopoly, oligopoly.


JEL Classifications: O2, O38

1. Introduction

XBRL stands for eXtensible Business Reporting Language. As one of a family of “XML” languages, XBRL is a standard means of communicating information between businesses and governments. XBRL is mainly used for communicating business information electronically on the Internet. XBRL is used in many countries for business regulation, stock exchange and securities regulation, revenue reporting, tax-filing and national statistical reporting. Since its debut in 1999, XBRL not only provides major benefits in the preparation, analysis and communication of business information, but also offers cost savings, greater efficiency and improved accuracy and reliability to all users. As an open source program, XBRL has been continuously developing since it was created (Jones and Willis 2003; Boritz and No 2005; Debreceny et al. 2010). However, similar to other “free” computer software, the development of XBRL requires all costs to be borne by its developers, not the end users. This tends to dampen the enthusiasm of the developers of XBRL. The solution for this sort of dilemma regarding public goods is generally with governments taking an active role. Government support is especially important for XBRL, since XBRL has become a world-wide standard for electronic business reporting (Higgins and Harrell 2003; Willis...
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Thus, it is too costly to extend XBRL (Cohen 2009; Ernst & Young, Arthur Andersen, Edgar on Line and Microsoft, jointly set up an XBRL executive committee. Soon, the XBRL executive committee expanded overseas. This XBRL international organization is a non-profit organization dedicated to developing XBRL worldwide. It has branches, such as (1) the XBRL executive committee (2) a standardization committee and (3) nine other groups. Moreover, the XBRL international organization is operated under the XBRL executive committee. So far, there are 24 regional branches, among which seven branches are temporary (Klement 2007; Strand et al. 2001). Further, over 550 members worldwide joined the XBRL international organization. Members include global information networks, government audit organizations, accounting firms, software companies, banks, broker firms, insurance companies and tax agencies, etc. (Kernan 2008). As more and more companies get familiar with XBRL, it is foreseeable that XBRL will soon take over the market to help synchronize the global economy. However, the development of XBRL is not balanced around the world. The main reason is that XBRL allows users to extend its taxonomies as needed, thereby, without a centralized authority, necessary interoperability is almost impossible (Kernan 2008). The lack of adoption of XBRL in many countries reflects the fact that it is too costly to extend XBRL (Cohen 2009; Coffin 2001). In sum, XBRL was originated in the United States based on general accounting rules of the United States. The XBRL executive committee set up the first XBRL standard, the XBRL V1.0 specification and XBRL taxonomy. Even though the U.S. has always been the major contributor for the development of XBRL, China, along with other countries, is catching up quickly.

3. Estimation of Net Benefits for Followers in a Monopoly Environment

Assume China is a Following country, not a major player in the development of XBRL. What is the optimal level of input for China? In this session, we thoroughly evaluate the costs and benefits for Followers and then derive a model based on game theory to answer the above question. To start, we assume that each member determines its own desirable inputs for maximized gains. Next, we further assume that, during the first stage, the only costs for each member come from the expenses in information collection. Of note, the reality is much more complicated than this. Assume that A is the total market value of XBRL, which is estimated to be at least ten billion dollars. Assume that the cost of input from the United States is $C_i$. Thus, \( 1 - \alpha - \frac{B}{C_i} \) represents the U.S. market share, where \( \alpha \) is the market share unrelated to the U.S., \( O(\alpha^1 - \frac{B}{C_i}) \) shows that market share increases with the amount of input from the U.S. Of note, \( O(\beta^A) \).

The total gain from XBRL for the U.S. is as follows:
\[
U_i = (1-\alpha - \frac{B}{C_i})A - C_i.
\]
Let \( \frac{dU_i}{dC_i} = 0 \). Thus, \( C_i^* = \sqrt{A\beta} \).

\[
U_i^* = (1-\alpha - \frac{B}{C_i^*})A - C_i = (1-\alpha)A - 2\sqrt{A\beta}
\]
If inputs from all other Following countries, including China, are \( C_i, C_j, \ldots, C_n \), respectively, then the value of the remaining market is the following, \( B = A - (1-\alpha - \frac{B}{C_i^*})A = \alpha A + \sqrt{A\beta} \)

Where B represents the value of the remaining market. Dividing B by the amount of raw investment of each Follower, the corresponding benefit for each member country is \( \mu_i \).
Let \( \frac{du_i}{dc_i} = 0 \). Thus, the following must hold.

\[
\sum c_i - c_i = \left( \sum c_i \right)^2 / B.
\]

Adding up all of the above \( n \) equations, we get

\[
(n-1) \sum c_i = n \left( \sum c_i \right)^2 / B, \quad \text{or} \quad \sum c_i = B(n-1) / n.
\]

Since \( \sum c_i - c_i = \left( \sum c_i \right)^2 / B \), we thereby get

\[
c_i^* = B(n-1) / n^2 = \left( \alpha A + \sqrt{A\beta} \right)(n-1) / n^2.
\]

Next, we substitute the cost function into the benefit function and get the following equation.

\[
u_i^* = B / n - B(n-1) / n^2 = B / n^2 = \left( \alpha A + \sqrt{A\beta} \right) / n^2.
\]

Comparing the benefit functions for the United States with that of following countries, we demonstrate that the U.S. can easily be the only dominant force in XBRL as long as each following country persistently invests far less than the U.S. At present, the XBRL international organization has less than thirty member countries, but the future membership is expected to be over one-hundred (Kernan 2008).

### 4. Estimation of Net Benefits in an Oligopoly Environment

China’s economy has been growing at roughly 10% annually in the past two decades. At present, China has already overtaken the European Union as the second largest economy in the world. However, the role of China in the XBRL organization is almost neglected as compared with that of the U.S. Imagine that China has become the only competitor of the U.S. in the XBRL market. In such an oligopoly environment, how big is the market and how much input is required?

Assume that the inputs of the U.S. and China in XBRL are \( C_1 \) and \( C_2 \), respectively. Thus, the total market share of the U.S. and China is \( 1 - \alpha' - \frac{\beta'}{C_1 + C_2} \), where \( \alpha' \) represents the percentage of markets that have been locked up by the U.S. Of note, \( \alpha' \leq \alpha \leq 1 \), since \( \alpha \) includes \( \alpha' \) plus the portion of China’s market share. \( - \frac{\beta'}{C_1 + C_2} \) indicates that market share increases with an escalation in outlay. However, increases of market share would be lower under the case of oligopoly than that under monopoly, implying that the following must hold.

\[
O_\alpha \beta \beta' \alpha' \leq \alpha \leq 1
\]

Assume that the U.S. and China allocate markets by input alone. Thereby, the total benefits for the U.S. and China, \( U_1 \) and \( U_2 \), are as follows.

\[
U_1 = \left( 1 - \alpha' - \frac{\beta'}{C_1 + C_2} \right) \frac{C_1}{C_1 + C_2} A - C_1
\]

\[
U_2 = \left( 1 - \alpha' - \frac{\beta'}{C_1 + C_2} \right) \frac{C_2}{C_1 + C_2} A - C_2
\]

To obtain maximized values of \( U_1 \) and \( U_2 \), we assume that the inputs of China and the U.S. are equal, \( C_1 = C_2 \). It is a reasonable assumption since at equilibrium, the following must hold.

\[
\frac{C_2}{C_1 + C_2} = \frac{1}{2}.
\]
Thus, \[ U_1 = (1 - \alpha' - \frac{\beta'}{C_1 + C_2}) \frac{1}{2} A - C_1 \]
\[ U_2 = (1 - \alpha' - \frac{\beta'}{C_1 + C_2}) \frac{1}{2} A - C_2 \]

Let \[ \frac{dU_1}{dC_1} = \frac{dU_2}{dC_2} = 0 \]. The equilibrium solutions are as follows.
\[ C_i^* = C_2^* = \frac{\sqrt{2}}{2} \sqrt{A\beta'} \]
\[ U_i = \frac{1}{2} (1 - \alpha') A - \frac{3\sqrt{2}}{4} \sqrt{A\beta'} \]

The findings tend to suggest that under oligopoly, the U.S. and China are better off not to invest the same amount as that under monopoly. The marginal benefits drop faster than the decreases in outlay. However, China’s total increase in benefits from a Following country to a major competitor under oligopoly surpasses the increase in costs.

Meanwhile, assume all other countries have outlays of \( c_1, c_2, \ldots, c_n \), respectively. They completely share the rest of the market with a value of \( B \), where \( B = A - (1 - \alpha' - \frac{\beta'}{C_1 + C_2})A = \alpha' A + \frac{\sqrt{2}}{2} \sqrt{A\beta'} \).

Further assume that the rest of the market with a value of \( B \) is fairly shared according to each member’s outlay. Thus, the gain for each country is the following.

\[ u_i = (\alpha' A + \frac{\sqrt{2}}{2} \sqrt{A\beta'}) \frac{c_i}{\sum c_i} - c_i \]

Let \[ \frac{du_i}{dc_i} = 0 \]. We get \[ \sum c_i - c_i = (\sum c_i)^2 / B \]. Adding up all \( n \) equations for \( i = 1, 2, \ldots, n-1 \), we get
\[ (n-2)\sum c_i = (n-1)(\sum c_i)^2 / B \], or \[ \sum c_i = B(n-2) / (n-1) \]. Since \( \sum c_i - c_i = (\sum c_i)^2 / B \), we thereby come up with the following equilibrium condition.
\[ c_i^* = B(n-2) / (n-1)^2 = (\alpha' A + \frac{\sqrt{2}}{2} \sqrt{A\beta'}) (n-2) / (n-1)^2 \]
\[ u_i^* = B / (n-1) - B(n-2) / (n-1)^2 = B / (n-1)^2 = (\alpha' A + \frac{\sqrt{2}}{2} \sqrt{A\beta'}) / (n-1)^2 \]

5. Estimation of Net Benefits for China as One of the Two Players

The U.S. as a leader of XBRL controls the market for XBRL. China instead is still a Following member. However, it is possible for China to split the whole market of XBRL with the U.S. only. Under this extreme case, what can China gain? Assume that China and the U.S. equally divide up the total costs of \( C \). Hence, each country’s market share would be \( 1 - \alpha' - \frac{\beta}{C} \), where \( \alpha' \) stands for the rest of the market unrelated to the U.S. and China. Since \( \alpha \) includes China, we get \( \Omega(\alpha' \langle \alpha \rangle(1 - \frac{\beta}{C}) \) implies that market share increases with outlay and that \( \Omega(\beta \langle A \rangle \).

The benefits for the U.S. and China are the following.
\[ U_i = U_2 = \frac{1}{2} \{ (1 - \alpha' - \frac{\beta}{C}) A - C \} \]

Let \[ \frac{dU_1}{dC_1} = \frac{dU_2}{dC_2} = 0 \], then \( C^* = \sqrt{A\beta} \).
\[ U_i = U_2 = \frac{1}{2}(1-\alpha - \frac{\beta}{C})A - C \]
\[ = \frac{1}{2}(1-\alpha)A - \sqrt{A}\beta - \sqrt{A}\beta \]
\[ = \frac{1}{2}(1-\alpha)A - \sqrt{A}\beta \]

For the remainder of the n-1 members as Followers for the remainder of the market with value of B, their outlays are \(c_1, c_2, \ldots, c_{n-1}\) and \(B = A - (1-\alpha - \frac{\beta}{C^*})A = \alpha' A + \sqrt{A}\beta\).

Let \(\frac{du_i}{dc_i} = 0\), thus, \(\sum c_i - c_i = (\sum c_i)^2 / B\). Adding up all \(n\) equations for \(i = 1, 2, \ldots, n-1\), we get
\[(n-2)\sum c_i = (n-1)(\sum c_i)^2 / B \quad \text{and} \quad \sum c_i = B(n-2) / (n-1).\]
Since \(\sum c_i - c_i = (\sum c_i)^2 / B\), equilibrium conditions are as follows.
\[c_i^* = B(n-2) / (n-1)^2 = (\alpha' A + \sqrt{A}\beta)(n-2) / (n-1)^2 \]
\[u_i^* = B / (n-1) - B(n-2) / (n-1)^2 = B / (n-1)^2 = (\alpha' A + \sqrt{A}\beta) / (n-1)^2 \]

In sum, by comparing the costs and benefits in equilibrium under monopoly, oligopoly, and the extreme case with two competitors, we demonstrate that the market values of the two dominant forces under oligopoly are higher than that under monopoly, even though the total costs are the same. The best outcome for two competitors is from the extreme case where the market is almost split by the two countries. Under that scenario, the input is relatively lower but the gains are the highest. Whatever the situation is, the following members are worse off.

Conclusions

Since the debut of XBRL in 1999, the U.S. has been the dominant force to improve and promote XBRL in the world. However, as a “free” public good, it is difficult to get governments involved as main sponsors, unless their potential benefits can surpass the outlays.

In this study, we use China, as an example, to compete with the U.S. for the XBRL market. Based on game theory, we demonstrate that China should invest more in XBRL. The best achievable performance is when China and the U.S. almost split the whole XBRL market, leaving only a small portion to the Following members.

Models derived in this study can be applied in other standardization fields as well. Future study can apply game theory to study dynamic development of the XBRL market.

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Liangyu YU is professor at Shanghai Jiao Tong University, China. His research interests embrace international economics and finance.

Maggie FOLEY is Assistant Professor of Finance at Davis College of Business, Jacksonville University. She obtained her PhD at Texas Tech University. Her research interests include business finance, corporate governance, and institutional investors.

Mohamad SEPEHRI (Dr. Mo) is the Division Chair and professor of Management and International Business at Davis College of Business, Jacksonville University. He has a unique combination of academic and business experience, with extensive background in strategic management/leadership and broad experience in international and global business operations. Dr. Sepehri has extensive scholarly researches that have been presented at national as well as international forums. He has written numerous research papers that were published in professional and refereed journals. Dr. Sepehri has also been recognized by other professional and scholarly bodies. He has been acknowledged in the Journal of Operations Management (JOM) as an "outstanding contributor" on several occasions.
SUSTAINABLE DEVELOPMENT OF PUBLIC SECTOR: THE STATE AND ASSUMPTIONS OF IMPROVEMENT OF FUNCTIONAL REVIEW IN PUBLIC INSTITUTIONS

Živilė Tunčikiene¹, Ilona Škačkauskienė², Adriana Grenčiková³

¹²Vilnius Gediminas Technical University, Saulėtekio str. 11, LT – 10223, Vilnius, Lithuania
³University of Alexander Dubcek in Trenčín Studentska 3, 91150 Trenčín, Slovakia
E-mails: ¹zivile.tuncikiene@vgtu.lt; ²ilona.skackauskiene@vgtu.lt; ³adriana.grencikova@tmuni.sk

Received 15 March 2013; accepted 25 June 2013

Abstract. The quality of the public sector activity may have crucial influence on the social economic status of the state. In order to make public sector efficient, stimulate its contribution into the social economic development of the state, it is rational to apply a management tool which has been tested and proven in business practice – the strategic planning possibilities of realising whose principles are higher if the method of functional review is applied. In order to create a model of effective functional review, it is first of all expedient to fulfil these objectives: to reveal the role of functional review of institutions, to analyse its principles, to show what kind of functional review practice we have in state institutions, to define the directions and preconditions for improving functional review of institutions. This article presents the results of fulfilling such objectives which were received with the help of systematic analysis that allowed to perform a synthesis of the results achieved through research of different spectrum.

Keywords: Strategic planning, functional review, principles, legal regulation, directions and preconditions of improvement, public sector, institution.

Reference to this paper should be made as follows: Tunčikiene, Ž.; Škačkauskienė, I.; Grenčiková, A. 2013. Sustainable Development of Public Sector: The State and Assumptions of Improvement of Functional Review in Public Institutions. Journal of Security and Sustainability Issues 3(1): 11–21.
http://dx.doi.org/10.9770/jssi.2013.3.1(2).

JEL Classifications: H83

1. Introduction

Generally, the following three main functions of a state can be distinguished: addressing economic issues, social issues and other functions. At a lower level all these functions are specified in more detail. For example, the social area covers education, health and social care, welfare, recreation and culture. In order to foster development of policy-making in the economic, the mentioned social and other areas, different public sector institutions have been established to work jointly on the implementation of this goal. The institutions must constantly endeavour to get people use the products of their work and ensure public opinion which binds organisations that allocate financial resources to provide resources necessary for implementation of their further work.

Within the context of the on-going processes (liberalisation of markets, competition that exceeds the boundaries of the farthest countries, social and economic differentiation of the world, change of information technologies, etc.) more active reforms are characteristic of public sector as well as new requirements keep being imposed on the institutions in this sector.
Institutions must base their activity on the market principles, which functions as a regulator of the development of activities. It is obvious that the market does not have so much influence on the activity of institutions as much as on the business entities: the activity of institutions is less dependent on the market, respectively the market determines the expenses of the activities of institutions as well as the efficiency of their activity on a smaller scale. Besides, the extent of applying this principle in the activity of institutions is determined by political factors – institutions that operate in the areas popular from political point of view sometimes are supported and financed well independently of the efficiency of their work. Basic transfer of market economy relations into the activity of institutions means that the principle of the market as the regulator of development of the activity is treated as grounding the activities of institutions on the aspect of the perspectives of its development.

In order to implement the latter principle in the public sector it is advisable to review the functions of institutions. Functional review is oriented towards justifying the necessity of functions of institutions from the point of view of creating the preconditions for implementing the priorities of state development. Besides, such an analysis allows justifying the adequacy of the activities of institutions within the context of constantly changing requirements of their environment.

The context of applying the method of functional review in public sector is poor not only from the point of view of the completeness of the list of the principles of such an analysis (special literature provides single principles of functional review). Scientific works and works written by practitioners do not give answers to the main questions: which components of the model of functional review of institutions are the most important ones, what content should the model components bear, besides, what should be the interrelation of the main components, which methods are purposeful to be applied in order to achieve the main objectives of functional review, etc.? Undoubtedly, reasonable answer to these questions would allow to apply function review as a tool of effective management, or more precisely, strategic planning of the public sector.

In order to create a model of effective functional review which would allow to identify all factors determining the necessity of the functions performed by institutions and their adequacy to the requirements of the environment, to make a comprehensive evaluation of the necessity and adequacy of the functions according to defined factors, to use the results of such analysis purposefully, it is first of all expedient to fulfil these objectives: to reveal the role of functional review of institutions, to analyse its principles, to show what kind of functional review practice we have in state institutions, to define the directions and preconditions for improving functional review of institutions. This article presents the results of fulfilling such objectives which were received with the help of systematic analysis that allowed to perform a synthesis of the results achieved through research of different spectrum.

2. The purpose and essence of the functional review of public sector

Development of public sector had never been an easy task and during the last two decades it has become especially complicated. Political and social reforms, social and demographic changes, public opinion, limited resources of the country, initiatives of international organisations, technological and technical progress, determined increase in reforms in public administration (Butkevičius, Bivainis 2009). The abundance of reforms in public administration shows that increasing the effectiveness of the public sector is an especially important and relevant issue in the activity of the governments of countries. Most, if not all, reforms were undertaken in order to improve administration of public sector, increase the effectiveness of managing financial resources (Afonso et. al. 2009; Borge et al. 2007; Butkevičius, Bivainis 2009; Funkcijų analizės... 2010; Lonti and Woods 2008; Pedraja-Chaparro et al. 2005; Raipa 2008, 2009).

Undoubtedly, the society needed, needs and will need such institutions that prepare, pass and implement efficient decisions on management of the country’s social and political development, institutions that provide qualitative public services and alongside rationally use the budgetary funds. In order to solve the complicated problem of the quality of the products created by the public sector and therewith related expenses, it is prerequisite to intensively apply the management tool that has been tested in business practice and has proven positive – strategic planning (Bivainis, Tunčikienė 2009, 2011). Possibilities of applying the main strategic planning principles are
much bigger if we apply the functional review method when institutions prepare and make the most important decisions on their activities (Tunčikienė, Skačkauskienė 2012).

In order to increase the effectiveness, performance and capacity of institutions to overcome the arising challenges, it is suggested to apply one of the tools of restructuring public administration – functional analysis which in practice is called functional review. Functional review is one of the measures used to decrease the size and expenses of public sector management, increase the transparency, effectiveness and performance of the institutions accountable to the Government (Lietuvos Respublikos Vyriausybė...2011). Therefore, in general sense, functional review in public sector is a tool whose application allows to reasonably determine the status of the efficiency of public sector institutions (in a broad sense) as well as foresee the potential of increasing the efficiency of their work. Implementation of the decision on public sector activities based on the results of functional review creates preconditions for using material resources of the public as efficiently as possible and at the same time meeting its needs, thereby trying to make the public sector of the country more competitive.

In special literature the goals of functional review are defined on both more general and more specific levels. Analysis of the goals of functional review, the objectives of their implementation allow one to specify the purpose and essence of such a management tool in the activity of the public sector. According to Lukashenko (2009) the goals of functional review are like general guidelines according to which it is not difficult to determine what the goal of functional review is in essence, the objectives of functional review specify how those goals will be achieved.

The goal of the functional review is to prepare the tools necessary for ensuring the development of public sector, i.e. to enable the institutions foresee the methods of improving the activity of public sector in order to implement the state development goals and priorities (Medvedev 2002; Petrov 2002b; Manning, Parson 2004 and others). Very often improvement of the activity of public sector is understood through the prism of decreasing expenses. Functional review is not limited to decreasing the expenses of public sector by differentiating it according to the role and functions of institutions, it is oriented towards balancing the public administration system or a certain political area (Funkcijų analizės...2010).

In order to ensure a more democratic management of a state, a more efficient distribution and use of the funds allocated for that, the trust of the citizens in their state and similar issues, functional review helps to purify the competence, functions, subordination and accountability of institutions, define how public institutions and state enterprises participate in state governance. Thus, functional review allows eliminate excess functions, neutralise or at least decrease duplication of functions among institutions and state governance levels, provides a possibility to choose the best alternative in order to achieve the goals of public policy. In summary, functional review allows to form the whole set of rationally composed executive institutions in order to create as favourable conditions for social economic development of the country as possible.

Besides, the goal of functional review is to create preconditions for increasing the efficiency of public institutions. It should be noted that higher efficiency may be reached in different ways (Funkcijų analizės...2010). Here functional review is treated as a tool for self-examination application of which allows improve operation processes in an institution and thus increase the efficiency of their operation. Functional review helps to foresee the need for improvement of organising the activity of institutions. It allows to apply new methods of operation as analysis of the functions of institutions includes analysing advanced management methods and best practice. Functional review helps the management of institutions better understand their environment, public service users, strive to reach the consensus among the interest groups regarding the planned changes in the activity of the institution. It enables ensuring the validity of the need of appropriations for implementing the programmes of the institution.

Generally, the list of goals of functional review presented in the works of authors analysing functional review is based on a systematic approach. For example, Petrov (2002a) presents a set consisting of the goal of functional review and the objectives of its implementation. According to the author, functional review is oriented towards creating as efficient conditions for performing public sector functions as possible; therefore, the objectives of this analysis are to be related to defining the need for certain functions of institutions as well as using the possibilities of increasing the efficiency of implementing the necessary
functions. The goal of functional review is to create preconditions for preparing and making reasonable decisions on improvement of the activity of the public sector, foresee the direction of the activity of institutions, determine how to change their organisational management structure, develop human and other resources of institutions in order to modernise public sector and at the same time ensure provision of qualitative public services to the society (Zabolotnic 2007).

Table 1. The goals and objectives of functional review

<table>
<thead>
<tr>
<th>Goal</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>To create preconditions for preparing the measures for efficient implementation of the most important functions of the public sector.</td>
<td>Medvedev (2002)</td>
</tr>
<tr>
<td>To create preconditions for efficient implementing of the most necessary functions of the public sector.</td>
<td>Petrov (2002a)</td>
</tr>
<tr>
<td>To create preconditions for determining the ways of improving the activity of the public sector in order to implement the goals of the reforms of public administration as well as the state development priorities.</td>
<td>Manning, Parison (2004)</td>
</tr>
<tr>
<td>To create preconditions for making reasonable decisions on improvement of the activity of the public sector in order to ensure provision of qualitative public services to the society.</td>
<td>Zabolotnic (2007)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>To foresee the rational entirety of the functions of the public sector, determine the possibilities for restructuring and reorganising institutions, for rational distributions and usage of the resources necessary for performing the functions of institutions.</td>
<td>Medvedev (2002)</td>
</tr>
<tr>
<td>To eliminate the unnecessary functions of the public sector, to eliminate duplicating activities among institutions and within institutions, justify the necessity of new functions, determine the possibilities of organising rational implementation of functions.</td>
<td>Petrov (2002a)</td>
</tr>
<tr>
<td>To determine the possibilities of increasing the economy, efficiency and effectiveness of the activity of the public sector (e.g. possibilities of reducing the costs of activities; possibilities of modifying the activity; possibilities of improving organisation of the activity).</td>
<td>Manning, Parison (2004)</td>
</tr>
<tr>
<td>To determine the expedience of the activities of the public sector institutions, the possibilities of organising the management of the activity of institutions and development of resources.</td>
<td>Zabolotnic (2007)</td>
</tr>
</tbody>
</table>

Summarising the results of analysing the goal of functional review as well as the objectives of implementing it, we may state that functional review is more oriented towards creating the conditions for preparing and making the decisions that determine qualitative changes in public sector activities basing them on the results of analysing the expedience of the activities of institutions as well as rationality and efficiency of their management (Table 1).

3. Principles of functional review of public institutions

Functional review must not only help reveal what institutions do but also answer such main questions: what is and what is not valuable in their work, what the activity of institutions should be like and what should be avoided in their activity?

Most foreign governments confront such questions when modernising public sector, however, in different countries, depending on national context and traditions, different decisions are made. Reorganising institutions the following issues are dealt with:

- should institutions have a lot of goals or only one goal (specialisation)?
- how should different functions, levels and sectors be coordinated (coordination)?
- which functions should be centralised/decentralised and how much (centralisation/decentralisation)?
- what is the optimal size of an organisation (size)?

When conducting a functional review it is rational to consider the general model of the public administration system and follow the principles of improving the system of the executive power of the state as defined in the Concept for the Improvement of the Framework of the Executive System of the state (Funkcijų analizės...2010; Lietuvos Respublikos Vyriausybė...2009):

- separation of policy making and its implementation;
- rationality and expedience;
- more effective use of state budgetary funds;
transparency;
• reducing the administrative burden;
• operational independence;
• deconcentration, decentralisation and subsidiarity.
Considering the mentioned principles, guidelines for functional review were proposed. These guidelines mostly define the requirements for the content of functional review of institutions rather than its process.
These are:
• the principle of separation of policy making and its implementation – the state institutions which are policy makers in the areas assigned to their ministers should not be the ones to implement the policy. State institutions which implement state policy may;
• the principle of the proper implementation place of the function – functions must to assigned to those administrative sectors of the ministries/institutions subordinate to the ministries where they would be implemented in the most efficient way;
• the principle of the optimal scope of functions – the scope of functions should be optimal: performing of a functions should create a concrete product, the department/institution responsible for performing of the function should be capable to create the product without a significant contribution of other departments/institutions;
• the principle of expedience of performing the functions and optimal distribution – the functions performed must be necessary for implementing the goals and objectives of the institution, the functions performed by different institutions can’t overlap/duplicate each other;
• the principle of consistency and conformity to the requirements of the structure – the goals and/ objectives of the administrative departments of the ministry/institutions subordinate to the ministry must comply with the goals and objectives of the governing area, all functions enumerated in the provisions of the ministry must be distributed among the administrative departments, the structure of the administration of the ministry must conform to the requirements imposed on the structure of administration of public administration entities (Law on Public Administration of the Republic of Lithuania, other legislation), subordination of separate administrative units, their constituent parts, institutions subordinate to the ministries (ministers, chancellor of the ministry, vice ministers) must be rational and efficient.
One of the sources of scientific literature (Butkevičius, Bivainis 2009; Lietuvos Respublikos Vyriausybė...2011) states that public sector institutions within defined periodicity must defend the necessity of the functions they perform by analogy with the newly established institutions. Therefore, the unarguable basic principle of functional review in terms of content is the principle of “defending” the functions importance of the functions performed by institutions. Using the results of the analysis of the importance of functions in preparing and making strategic decisions allows implementation of the principles of strategic planning (Bivainis, Tunčikienė 2009, 2011), where the principle of regulating the development of the activity of institutions is defines as the most precise (accurate) one. Besides, we may use the principle of content for treatment of the principle which requires functional review to encourage continuous improvement of performing the functions of institutions. The essence of applying such a principle is to create conditions for permanent increase in the performance (efficiency) of the activities performed by institutions as well as their effectiveness via the prism of possibilities to improve the subsystems of governing the institution and other elements of the institution — economic, technical social, value-system, etc. as well as their interaction.

The principles of validity, rationality and efficiency, versatility, adequacy (flexibility), compatibility of interests, transparency, publicity and other principles may be attributed to the principles of the process of functional review of public institutions and it is suggested to adhere to them while creating the strategic activity plans. As mentioned above, Butkevičius and Bivainis (2009) suggest to prove the necessity of the functions performed by institutions on the principle of analogy, i.e. using the method of comparing the functions among each other. Scientists and practitioners (Butkevičius, Bivainis 2009) foresee in their works a possibility for formalizing functional review and encourage to base the expedience of different activities of the institutions on quantitative calculations. Purposeful formalisation of the method has both positive and negative sides. The positive side is that the data is collected systematically and it can be further classified, compared among each other and carry out other operations. All this helps to avoid speculation, increases the objectiveness of conclusions. The negative side of that is that the received empiric data quite often is identified with the reality,
Besides, formalisation restricts from a deeper knowledge of the object.

In order to make an objective evaluation of the state of the efficiency of implementing the functions assigned to public sector institutions, the principle of versatility must be applied. This principle means that when functional review is performed it is necessary to consider the interaction of institutions and their environment (both the general and specific one), governance of institutions and other subsystems. When conclusions of functional review are drawn, one must identify the problems of the interaction as well as the possibilities of eliminating or at least reducing them as preconditions for possible fundamental solutions. Besides, it should be noted that functional review of institutions should not be a single action. Experience of foreign countries (for example, the United Kingdom (Funkcijų analizės...2010)) shows that the best results are achieved when functional review is conducted on a regular basis. This opinion is approved of by Burkevičius, Bivainis (2009). It is obvious that improvement of operational decisions of institutions is in fact possible if one receives timely reasonable conclusions of functional review that are approved of by most pressure and interests groups.

Understanding the meaning of all the principles of the functional review of the public sector (see Fig.1.) as well as the ability to apply them in the right way is an important condition for ensuring efficient planning of the activities of institutions oriented towards the perspective as well as sustainable development of institutions.

4. Legal regulation of the functional review of public sector institutions

Legal regulation of the functional review of public sector institutions in the country as well as strategic planning are regulated by legislation of different level (Bivainis, Tunčikienė 2009, 2011). One of the main pieces of legislation regulating functional review of institutions is Resolution of the Government of the Republic of Lithuania No. 968 of 17 August 2011 “On the Approval of the Methodology for the Functional Review of Institutions Accountable to the Government”. This resolution provides definitions related to functional review (e.g. what is function, functional review, functional review process, separate functional review types – horizontal, system, vertical functional review), it also provides the aim of functional review as well as the main sources (legislation and recommendations: e.g. Concept of the Improvement of the Framework of the Executive System of the State as approved by Resolution No.1511 of the Government of the Republic of Lithuania, Law on Public Administration of the republic of Lithuania, Recommendations for the Application of the Methodology as approved by the Ministry of Interior) that set the requirements for conducting functional review. Besides, it also overviews the whole process of functional review which is later detailed by naming the main components of the stages of functional review, names the main participants of the functional review types – horizontal, system, vertical functional review, separate
review process and defines their main functions. It should be noted that each of the main functional review stages is characterised by a list of procedures, their conformity through single guidelines and formal aspects of organising functional review.

The provisions of the Methodology for the Functional Review (Lietuvos Respublikos Vyriausybė...2011) define the structure of the proposal to conduct functional review, draft annual functional review plan of institutions accountable to the Government, reports on performed reviews and recommendations, the action plan of implementing them, reports on the progress of its implementation: for example, the report on performed functional review should contain information about the aims of functional review, applied methods, description of the object and context of the functional review, results of analysis of functions and processes, conclusions and recommendations; the plan of measures for implementing recommendations should include recommendations, decision on the implementation of the recommendations, envisaged measures of implementation, timeframe for implementing recommendations, an institution responsible for implementation of the recommendations and the expected results; the report on the progress of implementing recommendations should provide information about the envisaged and implemented recommendations, it shall also contain information on the problems encountered during the implementation of recommendations as well as proposals how to deal with such problems. Besides, provisions of the methodology establish a few requirements for recommendations: they have to be concrete, implementable and efficient.

Additionally to the mentioned points, the above mentioned Government Resolution (Government of the Republic of Lithuania (Lietuvos Respublikos Vyriausybė...2011) sets the time frames for conducting functional review procedures (e.g. deadline for submitting the draft annual functional review plan for consideration, reports on performed functional review, etc.) that have to be coordinated with the process of formation of the State budget of the Republic of Lithuania.

In accordance with the results of the analysis of the legal regulation of functional review, the following conclusions may be drawn: the formal procedures of functional review of institutions are quite well regulated, there is less regulation of its content, however; methodology on functional review provides the principles of functional review of institutions, it defines their essence, however, does not provide the methods for implementing such principles (see Table 2).

**Table 2. Provisions of legally regulated functional review that establish the principles of functional review of institutions in the public sector**

<table>
<thead>
<tr>
<th>Principles of Functional Review</th>
<th>References to the provisions of the Methodology for functional review that establish the principles of functional review (LRV..., 2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The principle of the importance of the functions performed by institutions to the development of the state</td>
<td>Section 1 articles 1, 3, 4; Section 3 articles 17, 22, 25.</td>
</tr>
<tr>
<td>2. The principle of encouraging (initiating) improvement of performing the functions of the institutions</td>
<td>Section 1 articles 1, 4; Section 3 articles 17, 22, 25.</td>
</tr>
<tr>
<td>3. The principle of validity</td>
<td>Section 2 articles 6 (6.1, 6.2), 7 (7.3, 7.4), 8; Section 3 articles 17, 21, 22, 23, 24; Section 4 articles 31 (31.1.3, 31.1.4, 31.2.1, 31.2.3, 31.2.4, 31.2.5), 32, 33, 34 (34.5);</td>
</tr>
<tr>
<td>4. The principle of rationality, efficiency</td>
<td>Section 2 article 9; Section 4 articles 31 (31.2.1), 33.</td>
</tr>
<tr>
<td>5. The principle of variability</td>
<td>Section 2 article 7 (7.3, 7.4).</td>
</tr>
<tr>
<td>6. The principle of versatility</td>
<td>Section 3 articles 17, 22; Section 4 article 31(31.2.2, 31.2.4).</td>
</tr>
<tr>
<td>7. The principle of adequacy (flexibility)</td>
<td>Section 2 article 8 (8.2); Section 3 article 25; Section 5 articles 36, 37, 38.</td>
</tr>
<tr>
<td>8. The principle of conformity of interests</td>
<td>Section 2 articles 6 (6.3), 10, 16; Section 3 article 28.</td>
</tr>
<tr>
<td>9. The principles of transparency and publicity</td>
<td>Section 2 articles 7 (7.5), 9.</td>
</tr>
<tr>
<td>10. The principle of responsibility and accountability</td>
<td>Section 3 articles 18, 20 (20.8), Section 4 article 34, Section 5 article 35, Section 6 article 39.</td>
</tr>
</tbody>
</table>

*Source: compiled by the authors*
5. The process of functional review in public sector institutions

Functional review of public sector institutions is a complicated and long process whose content, procedures and role of participants, as it was mentioned above, are regulated by legislation in order to guarantee coordination of the works performed by all the participants of it. According to the Methodology for the Functional Review (Lietuvos Respublikos Vyriausybė...2011) the process of functional review is the entirety of procedures for functional review planning, organisation, conduct, recommendation implementations and monitoring.

According to the Methodology for the Functional Review (Lietuvos Respublikos Vyriausybė...2011) functional review starts with determining that it is necessary to conduct functional review. It should be noted that analysis of internal or external factors is important here without foreseeing the analysis of combinations of the factors of separate groups. The Methodology provides the list of factors predetermining the need for functional review (reforms implemented by the Government, the need to enhance the performance quality, efficiency and effectiveness of institutions, reorganisation of one or several institutions, changes in the mission of the institution) which is not concrete as to the entities initiating functional review (Government, Prime Minister, ministers, Sunset Commission, coordinating institutions or an institutions accountable to the Government). The content of proposals that are submitted for the coordinating institution is comprised of justifications of the necessity for functional review. According to the results of analysing the proposals for conducting functional review, the coordinating institution prepares a draft annual plan for functional review according to the Form approved of by the Government. The draft annual plan precisely defines the object of functional review in order to choose the appropriate review type. It also takes into consideration the system of public administration entities as well as its need for improvement in order to determine the aims of functional review. The draft plan should foresee the time frame, human and financial resources necessary to conduct functional review in order to choose the appropriate method of conducting functional review. If first the Sunset Commission and then the Government approve of the content of the annual functional review plan, institutions responsible for organising conducting of the functional review set up rationally composed workgroups on functional review (the composition of workgroups is mandatory and recommendatory in character) which start functional review by drawing up an action plan. The content of the latter is defined generally: it should specify the objectives related to conducting of the functional review as well as other objectives, time frames for conducting them, institutions responsible for that, etc.

According to the Methodology for the Functional Review (Lietuvos Respublikos Vyriausybė...2011) there are three stages of conducting functional review of the state institutions the first two of which are more detailed in terms of procedures rather than content: 1) gathering of information necessary to conduct functional review includes defining of the methods for gathering information sources and data, preparation of the measures for gathering information, guidelines for functional review according to which it is advisable to enumerate the aims of functional review, as well as defining the aims of the object of the functional review; 2) functional review conduct comprises allocation of the functions to the ones formulating the state policy, implementation and supporting functions, analysis and improvement of activity processes, determination of the purposefulness, scope and implementation place of functions, if necessary, improvement of the administrative structure of the institution, and also, if necessary, capability of the institution to perform functional analysis. Conduct of functional review is finished by drawing up a functional review report and recommendations (Lietuvos Respublikos Vyriausybė...2011).

The general scheme for conducting the functional review process is considered to be rational due to distinguishing the initial (preparatory), the main and the final stages of the process, however, at separate stages the composition of the objectives set, also the manner of accomplishing the objectives including the sequence, are questionable in terms of rationality. We should mention here the stage of functional review where the foreseen objectives are fragmentally oriented towards neutralising or at least reducing in essence different problems of organising public sector, besides, the problem solution schemes are not detailed, and it is not clear whether and how the results of accomplishing one objective determines accomplishing another objectives at this stage.
At the stage of conducting functional review, classification of functions into policy making and other above mentioned functions according to the defined principle (according to the Methodology (Lietuvos Respublikos Vyriausybė...2011) classification must be made according to the product created by the institution) allows to define its main general purpose that can be specified with the help of setting up the goals of the object of functional review according to the results of the analysis of the documents that are implemented by the institution (usually, the problem is dealt with applying the principle “from the more general one to the more specific one”); besides, the sequence of dealing with other objectives of functional review raises doubts: it is likely that it is more efficient to search for the answers regarding the expedience, scope and suitability of the implementation place having classified the functions according to the defined feature and only then in principle analyse the aspects of performing the functions (according to the Methodology (Lietuvos Respublikos Vyriausybė...2011) having classified the functions, it is obligatory to conduct a thorough analysis of activity processes and define the sequence of really performed functions as well as their correlation in realising a particular activity). In general, this part lacks for analysis of the formation of the bases for the proposals on more rational improvement of the activity of institutions, i.e. the factors determining the efficiency of a more rational activity of institutions (e.g. administrative governance structure, other resources and capabilities) as well as defining the possibilities for improvement of the activity of institutions.

As already mentioned, the content and procedures of the stage of preparing recommendations based on the results of functional review as well as the action plan for implementing them are not specified in the methodology (Lietuvos Respublikos Vyriausybė...2011). Considering the requirements imposed on the recommendations for functional review as well as on the action plan on their implementation, it is rational to perform at this stage an evaluation of alternative proposals (recommendations, the action plan for their implementation) from various aspects in order to choose the most suitable solutions how to improve substantially the activity of public sector.

The content and procedures of the stage of monitoring the implementation of functional review recommendations are neither specified either by the institution which coordinates functional review, or by the institutions accountable to the Government which are responsible for their implementation at different stages. Considering the Provisions for the methodology of functional review (Lietuvos Respublikos Vyriausybė...2011), monitoring at the level of institutions accountable to the Government means comparison of the actual results of implementing the action plan for endorsing recommendations with the expected results, defining the problems of their implementation and the factors determining them, foreseeing the methods for solving the problems of implementing recommendations. The results of solutions of the mentioned objectives are supplied to the coordinating institution to ensure the implementation of functional review, to summarise the problems, results and best practice as well as to prepare a report on the progress of the implementation of functional review recommendations which is to be submitted to the Sunset Commission and State Government.

6. Directions and preconditions for improving the functional review of public sector institutions

We may distinguish a few main factors which determine the need of applying the method of rational functional review in the country. These are external and internal factors such as membership of Lithuania in the EU and constant development of EU politicians and competence areas, which leads to changes in the functions of authorities in member states, the reasons and directions defined in the Concept for Improvement of the Executive Framework of the Executive System of the state determining the improvement of the executive authority system, the objective to reduce governing expenses, thus also to increase the efficiency of the work of institutions.

In order to apply functional review as a tool for efficient management of public sector, systematic research should be performed. One of the most complicated stages in this job is to prepare a principle model of functional review of institutions and specifying its components up to the methods how to accomplish the objectives. In special literature models of functional review vary according to the problems of the public sector, the goals set as well as the objectives of functional review. Some models of functional review are more aggregated, others – mode specified, the thirds ones are combinations of the former and
the latter ones. Besides, models also differ according to the approach how the objectives of functional review are to be achieved (the sequence of fulfilling objectives, methods applied, etc.).

Undoubtedly, the content and character of functional review of public sector institutions have to be related to the components of the model of functional review which would allow to:

1) thoroughly reveal the factors determining the necessity and the adequacy of the functions performed by the institutions to the requirements of the environment and determine how the factors are related with each other;
2) make a complex evaluation of the necessity of functions of institutions as well as their adequacy to the requirements of the environment considering the defined factors;
3) use the results of such an analysis and evaluation purposefully.

Reasonable answers to these questions would allow to use functional review as a tool for effective management of public sector.

Conclusions

Functional review may be treated as a separate means for self-examination of public sector institutions. It, however, gains a bigger value when the objectives of strategic management of institutions are pursued. Functional review allows prepare and make qualitative decisions determining changes in public sector basing them on the results of analysing the essence of the activities of institutions as well as rationality and efficiency their management. Implementations of such decisions are a precondition for sustainable development of public sector.

In order to apply functional review as an effective tool of public sector management, it has to be based on the principles which convey the main requirements for the content as well as the process of functional review. Such principles may include the importance of the functions performed by the institutions to the development of the country, principles of encouraging improving fulfilment of the functions of institutions, principles of validity, rationality, efficiency, variability, comprehensiveness, adequacy, compatibility of interests, transparency, publicity, and other principle.

Functional review similarly to any other activity in public sector is legally regulated. Analysis of legal regulation of functional review can be summarised by the following conclusions: formal procedures of functional review of institutions are quite well regulated, their content, however, is less regulated; the methodology of functional review indicate the principles of functional review of institutions, their essence is revealed, however, the methods of implementing the principles are not provided.

Functional review of state institutions is a complicated process whose content, the role of the procedure and the participating parties are defined by legal acts in order to guarantee coordination of the work performed by all the participants. The general scheme of conducting functional review is to be considered as rational due to distinguishing the initial (preparatory), main and final stages, however, at different stages the content of the objectives set, besides, the character of fulfilling the objectives, including their succession, are questionable in terms of rationality.

In order to apply functional review as a tool for effective management of public sector, systematic research should be performed. One of the most complicated stages in such a work is to prepare a principle model of rational functional review of institutions.

References


LEGAL REGIMES IN POLICE ACTIVITY AT LATVIAN SECURITY POLICY

Aleksandrs Matvejevs

Parādes Street 1-303, Daugavpils LV–5401, Latvia
E-mail: aleksandrsmatvejevs5@inbox.lv

Received 15 February 2013; accepted 29 June 2013

Abstract: State security in the context of different legal regimes used for state governance has been considered in this article. Administrative juridical regimes have particular role in policing in context of human rights observance.

Different administrative juridical regimes are described in this article. Special attention has been converted to classification of these regimens in dependence of mechanism of coming in force of them. Author pointed that police have rights to take decision of implementations of restrictions in the cases of extraordinary situations. In these situations in democratic states must be observed the principle of proportionality.

Keywords: State government, police, security policy, public service, state security, police law.

Reference to this paper should be made as follows: Matvejevs, A. 2013. Legal regimes in police activity at Latvian security policy, Journal of Security and Sustainability Issues 3(1): 23–30. http://dx.doi.org/10.9770/jssi.2013.3.1(3)

JEL Classifications: K23, F52, F68

1. Introduction

Security serves as precondition of societal development hence various facets of public security are being widely discussed (e.g. Makštutis et al. 2012; Białoskórski 2012; Čepénaitė, Kavaliūnaitė 2013; Kaukas 2013). Establishment of a law-based state, strengthening of legal procedure in Latvia and Europe Union requires considerable increase of efficiency of law enforcement agencies including the police. Increase of efficiency is connected with taking integrated measures. These activities should involve application of the latest scientific achievements. One of the specific features of police activity is characterized by necessity to perform duties in various situations without delay, lengthy evaluation of the situation, analysis and preparation. Resources are often limited and the number of the available staff is unpredictable and their training levels – different. Police activity always has to be within the framework of the law and may not violate human rights of individuals. Both Latvian and foreign police practice indicates that the public does not always recognize dangerousness of a situation and is not sufficiently informed about the imposed restrictions and as a result serious incidents have taken place when the effectiveness and legality of police activity has been doubted.

As one of the main purposes of the police in democratic society governed by the rule of law is maintenance of the public tranquility, law and order in society. The purpose of the police is to protect and respect the individual's fundamental rights and freedoms also (The European Code…2001). The State shall recognise and protect fundamental human rights in accordance with this Constitution, laws and international agreements binding upon Latvia (The Constitution 1992).

Considering the values of democratic society the police must handle their duties in a rational and non-violent way in case of any potential conflict.
The police are empowered by state to use force and/or special powers for these purposes in a number of cases. Police function of state contains contradictions: the police have to protect democratic society by using force and duress in some specific cases, thus disregard the basic values of this non-violent democracy. Thus the police face a paradox: they have to protect the basic rights by restricting them. This paradox must be solved by using the police’s coercion right in a very cautious way within the framework of the law.

Public order and public security can be viewed as objects of the state administration and they form separate legal institutes. Latvian legislation does not define notions “public order” and “public security” and as a result the state administration institutions including the police lack common conception of the content and scope of their activities. Common understanding of legal base of police activities is very important in context of education of police officers. The aim of given article is to analyze legal regulation of police activity in different legal regimes as well as to determine the competence of the responsible institutions and officials.

2. Notions and essence of the state security

The notion “security” means the state being free from danger or injury (Tildes 2013). State security is a very important object of legal protection. It is frequently used in literature and legal acts. “Security” as legal term usually denotes 1) a condition when nothing or nobody is endangered or 2) a guarantee against infliction of harm (Ministry of Defense...2013). The notion “security” is used in many legislative acts of the Republic of Latvia, e.g. the Constitution of the Republic of Latvia, the National Security Law (subsection 2 of section 3), the Police Law and others. In the state security context “security” could be defined as follows: “Security is protection of vital interests of individuals, the society and the state against internal and external threats. Vital interests are a set of needs meeting of which stably provide existence and development of individuals, the society and the state. The objects of security are individuals (their rights and freedoms), the society (its material and spiritual values) and the state (its constitutional system, sovereignty and territorial integrity)”. According to this definition three objects of security can be singled out: firstly, individual rights and freedoms, secondly, material and spiritual value of the society, thirdly, the constitutional system of the state, sovereignty and territorial integrity. In the Soviet legal science there was a special legal institute – public security. This legal institute is retained in the legislation of the Republic of Latvia. Public security can be viewed as a system of social relations that is regulated by legal and technical provisions and which results from application of high-risk objects or as a result of natural disasters or other emergencies. Interpretation of this definition indicates that public security is comprised of some specially regulated relations and public threats do not include all likely threats. Public security differs from individual security; the former is a threat to security of inhabitants of a particular region, district or urban area. It may result from railway, sea, air, vehicle, pipeline transport, lack of proper management of construction, road service and other objects, improper handling of flammable equipment and objects and reckless handling of firearms, ammunition, strong poisons, radioactive isotopes, and other dangerous substances and items. Public security can be endangered by meteorological conditions (e.g., strong wind, blizzards, rainstorms, forest fires), hydrological and hydro-meteorological conditions (e.g., overflowing of rivers resulting from storms, rainstorms, spring tide, floods, avalanches etc.) and seismic conditions (e.g., earthquakes, eruptions).

Public security may also be endangered during poorly managed mass events or as a result of omission or delayed actions of the responsible institutions during spontaneous or provoked gatherings of large numbers of people (e.g., demonstrations, open air meetings, rallies).

Public security is closely connected with enforcement of technical provisions that regulate handling of very dangerous objects and enforcement of public order, for example, during management of road traffic and fire protection. In these cases breaches of safety regulations may obstruct harmonious and rhythmic functioning of the society, inflict feeling of fear and as a result may disrupt public order.

On the other hand, in many cases strengthening of public order is an integral part of maintaining public security. For example, adherence to the rules of human behavior during mass events not only ensures public order, but also helps to prevent threats to human life, health and property.
Opinions of European scientists about security can awake interest also. For instance, Buzan (1991) came to a conclusion that since 1989 radical changes have taken place in the relationship between internal and external security. According to Buzan (1991) termination of opposition between the two military blocs considerably changed the content of threats and created preconditions for revision of the global security system. After the cold war period security consists of a number of elements and can be viewed from various aspects. Firstly, military threat that refers to external security. Secondly, political threats that are related to both internal and external security and include subversive or antidemocratic activities against state institutions, symbols and ideology. Thirdly, social threats created by cultural integration process of ethnic or other socially related groups. Fourthly, economic threats that include threats caused by competition and unemployment. Fifthly, ecological threats that refer to both internal and external security, for instance, cross-border environmental pollution (Buzan 1991).

The European security strategy was drawn up under the authority of the European Union’s High Representative for the Common Foreign and Security Policy, Javier Solana, and adopted by the Brussels European Council of 12 and 13 December 2003. It identifies the global challenges and key threats to the security of the Union and clarifies its strategic objectives in dealing with them, such as building security in the EU’s neighbourhood and promoting an international order based on effective multilateralism. It also assesses the policy implications that these objectives have for Europe. In the context of ever-increasing globalisation, the internal and external aspects of security are inextricably linked. Flows of trade and investment, the development of technology and the spread of democracy have brought prosperity and freedom to many people, while others have perceived globalisation as a cause of frustration and injustice. In much of the developing world, poverty and diseases such as AIDS give rise to security concerns, and in many cases economic failure is linked to political problems and violent conflict. Security is a precondition for development. Competition for natural resources is likely to create further turbulence. Energy dependence is a special concern for Europe.

According the EU security strategy the key threats facing Europe are:

1) **Terrorism.** It puts lives at risk and seeks to undermine the openness and tolerance of our societies. It arises out of complex causes, including the pressures of modernisation, cultural, social and political crises, and the alienation of young people living in foreign societies.

2) **Proliferation of weapons of mass destruction (WMD).** This is potentially the greatest threat to our security. International treaty regimes and export control arrangements have slowed the spread of WMD, but we are entering a new and dangerous period. Advances in the biological sciences may increase the potency of biological weapons. The most frightening scenario is one in which terrorist groups acquire weapons of mass destruction. In this event, a small group would be able to inflict damage on a scale previously possible only for States and armies.

3) **Regional conflicts.** These can have a direct or indirect impact on European interests, regardless of their geographical location. They pose a threat to minorities, fundamental freedoms and human rights. They can lead to extremism and terrorism and provoke state failure.

4) **State failure.** Civil conflict and bad governance - corruption, abuse of power, weak institutions and lack of accountability - corrode States from within. This can lead to a collapse of state institutions. Afghanistan under the Taliban is a well-known example. State failure is an alarming phenomenon that undermines global governance and adds to regional instability.

5) **Organised crime.** Europe is a prime target for organised crime, which has an important external dimension, namely trafficking in drugs, women, children and arms, which does not stop at the Union’s borders. Such criminal activity is often associated with weak or failing states. For example, revenues from drugs have helped to undermine state structures in several drug-producing countries. Organised crime can have links with terrorism. In extreme cases, it can come to dominate the State (European Security Strategy 2003).

Latvian security policy is based on the National Security Concept. The National Security Concept is produced on the basis of the National Threat Analysis, which defines the strategic outlines, priorities and activities for the national threat elimination. The National Threat Concept states that the national security is the state's and its nation's ability to defend and secure its national interests and fundamental values – sovereignty of the Latvian Republic, territorial indivisibility and democratic system as stated in the
Constitution, as well as the state’s internal security, which guarantees the observance of the human rights, public security and public protection. Latvian national interests also include the prerequisites required for ensuring the long-term development of the country and its population: retention of the lingual and cultural identities, maintenance of the defence system, provision of the economic growth and welfare of people. National interests include also the retention of the scientific and technical potential, provision of the endurance of the environmental development, development of the national infrastructure and telecommunications, maintenance of the internal political stability. Latvia’s ability to provide the implementation of the national interests depend on such external factors as global and regional climates of international relations and co-operation, international economic situation and quality of the global ecological environment. National security policy and achievement of its goals is the responsibility of all the state institutions and the society in whole. On September 16, 2006 in the National Academy of Defence was organized seminar “Security Challenges and NATO in the 21st Century” and a new National Military Strategy was presented. The need for state security problem complex solving were stressed and role of police in this context looks very important.

3. Essence and features of a legal regime

Public order and security in a state can be viewed as a set of legal regimes. Word “regime” denotes “precisely set procedure of life, work, rest, sleep etc.” (Tildes 2013).

Respective legal terms are political regime and state regime. The state regime characterizes actual content of functioning and interrelation of the supreme state administration institutions. In modern democracy when various legal regimes are introduced in the state administration, protection of human rights becomes particularly topical. The Constitution of the Republic of Latvia protects several human rights, including rights to freedom and inviolability (The Constitution 1992). At the same time some individual rights (rights to inviolability of privacy, home and correspondence, rights to move and choose place of residence, right to leave Latvia, rights to freedom of speech, freedom of association and freedom to join political parties and other public organizations, to freely choose occupation and job according to ones skills and qualification, rights to collective agreements and strikes) may be limited in cases provided by the law in order to protect rights of other individuals, the democratic state system, public security, wellbeing and morals. The political or state regime is legal when it is stipulated by legal provisions. The Constitution of the Republic of Latvia includes two specific state regimes: a state of exception and state of war (The Constitution 1992). Term “legal regime” is frequently used in some spheres of law, in other spheres it is used rarely whereas in some it not used at all. Legal regime determines framework of legal procedure both in general and regarding a particular time and place, physical and/or legal persons. Latvian legal science applies following definition of legal order: Legal procedure is procedure of public relations that is established by implementation of legality. Legal order is implemented legality (The Constitution 1992).

Therefore legal regime is mean of implementation of legal procedure. If we suppose that legal relations are divided into public and private, then we can divide legal regimes into: 1) public law regimes (constitutional regimes, administratively legal regimes, and criminal law regimes); 2) private law regimes (regimes of regulation of civil law relations and restrictions).

Though separation of public and private law often causes considerable difficulties and it can not always be clearly accomplished, this separation is of major importance. It is connected with establishment of a framework of administrative procedure in relation to evaluation of legality of the issued administrative acts. For example, Latvian legislation strictly stipulates that an administrative act is a legal act passed in the sphere of public law (Administrative). When determining legality of an administrative act in cases when there is doubt regarding separation of private and public law it is advisable to regard the disputable provision a provision of public law, because the primary sphere of activity of an institution (as understood by the administrative procedure) is the public law sphere (Briere 2003).

Bachrach (2000) singles out a general regime of operation of the state administration and special administratively legal regimes. These special regimes mainly represent provisions that prohibit something or establish a duty connected with zoning of territory and fixing of special status of an object (carrier of the regime) and special or thematic laws that introduce additional provisions for ensuring legal procedure. Regimes can be divided into federal, regional and local (Bachrach 2000).

In legislative acts legal regimes are often applied as integrated regimes, e.g., “special legal regime”, “special
regime”, “special protection regime”, “the most favorable regime” etc. Thereby it is stressed that, firstly, these laws comprise several fields of law – administrative, constitutional, international, and, secondly, according to the type of regulation they refer to different rights and obligations of subjects, e.g., a regime of closed administratively territorial formation for the purpose of ensuring public order during mass events, a special regime in a zone of anti-terrorist operation etc. Analysis of different opinions about classification of administrative regimes leads to some conclusions, e.g., an administratively legal regime is a legal regime in the field of administrative law, yet it influences legal relation in other spheres of law, including private law.

Therefore there are two options: 1) to consider all legal regimes in the sphere of state security administratively legal regimes as most Russian scientists do; 2) to consider these regimes as legal regimes in the sphere of state security where the leading part is played by administrative law provisions. In this case it must be noted that other spheres of law except administrative law will be dealt with only as much as it is necessary for exercising administration to ensure state security (to a limited extent).

Establishment of legal regimes for ensuring state security is widespread and reflects the variety of tasks and functions of the state. The more developed system of legal means and the more varied forms of legal activity, the more important is their integration and differentiation according to definite legal features. Legal regimes in the sphere of the state security are quite varied. Each of them is a unique legal instrument with management elements and their aim is to create optimum relations in a concrete, relatively narrow, but relevant sphere that ensures security of individuals, the society and state security.

4. Administratively legal regimes

According to general tasks and functions of administrative law as well as to the fact that today attempts are made to find the best composition of the state administration and self regulation, administratively legal regimes can be divided into two groups: 1) regulatory regimes, 2) protection regimes.

Most administratively legal relations are regulative, i.e., they have a positive character. Legal relations of protection, as important as they may be, play only an auxiliary part in administrative law. Therefore in the system of administrative law they are derived from regulatory relations and their amount is relatively small. Yet recently due to more frequent breaches of provisions of public order and endangering of security of individuals, the society and state security, they start playing a more important role. Thus ensuring of security in various spheres of life is impossible without creating administratively legal regimes.

Legal literature points out that the institutions of public administration often spontaneously establish legal regimes in their own interests thereby causing a negative effect from the point of view of aims and tasks which the state administration has to fulfill in a democratic society. And vice versa in cases when administratively legal regimes adequately reflect peculiarities of processes of the state administration making both objects and subjects reach the set aims, a regime becomes a necessary element of the state administration institutions and an effective instrument of the state administration itself.

Therefore it can be concluded that administratively legal regime is a specific procedure of activity of subjects in various spheres of life in a state. It is laid down in laws and subordinate normative acts and is aimed at purposeful and functional activity of legal subjects in the sphere where it is necessary to utilize additional means for maintaining the required condition in a state. It can also be concluded that administratively legal regimes must be precisely regulated in the constitution, other laws and normative acts and they may not contradict international human rights. The mechanism of possibility for individual to apply in the administrative court with claim to check legality of the issued administrative act helps to guaranteed consideration of human rights in the process of state administration and implementation of different legal regimes.

Administratively legal regimes can be divided into 3 groups. The first group consists of regimes that are mainly meant for ensuring security of individuals, the public and the state. These regimes include administratively legal regime of protection of the state secret, the regime of the state border, the regime of a closed administrative territory etc.

The second group is mainly established for ensuring public security. These include the systems of licenses and permits, the sanitary regime, the customs regime, the regime of road traffic safety etc.

The third group is comprised of integrated regimes
with the aim of maintaining defense ability of the state, public security and safety of individuals during natural, technological and social emergencies.

Depending on jurisdiction – state or self-government – administratively legal regimes may be divided into 2 groups: 1) state regimes that are determined and regulated by the government bodies; 2) local regimes that are determined by local self-governments in their territory. Several regimes refer to both groups of administratively legal regimes: technological emergencies, regimes of specially protected nature territories, sanitary regime during epidemics etc. Then the jurisdiction depends on dangerousness and scale of the emergency.

5. Special administratively legal regimes

Administratively legal regimes in the sphere of state and public security are inevitably connected with emergencies. In legal literature regimes that are established during emergencies are sometimes called extraordinary regimes in opposition to regular or ordinary regimes.

Extraordinary regimes that are frequently called special administratively legal regimes are regimes that are established to ensure life of inhabitants, economic activity and functioning of the state and self-government institutions. They are established in cases of extraordinary situations and authorize the state institutions to utilize extraordinary measures in order to normalize the situation and to restore legal procedure.

The choice of a special administratively legal regime depends on the level of crisis. Therefore following criteria can be set: level of intensity of impact of security threat, time aspect of course of an emergency, scale, complexity of the threat, its influence on public life, and the chain reaction character of an emergency. When evaluating an emergency, a competent authority has to choose a legal measure that will ensure stabilization of the situation, prevention of security threat, restoration of the regular course of life.

As we know emergencies of any type are connected with destabilization of public life, i.e., disruption of the ordinary course of life. Emergencies can be divided into: natural disasters (storms, hurricanes, rainstorms, flood, hail, severe cold, snowstorms, black frost, snow and ice banks, heat, drought, fires, etc.); technological disasters connected with leakage of chemical, biologically active and radioactive substances, electromagnetic and radioactive emission (industrial accidents, explosions, fires in industrial, agricultural or military objects, oil and gas pipelines, all types of traffic accidents, accidents in utility and electrical transmission networks, damage or breaks of dams, crashes of airplanes, missiles, space objects etc.); epidemics, epizooties and extremely dangerous infections; mass disturbances, terrorism; armed conflicts (Stańczyk 2011).

These negative factors because social tension therefore it is necessary to take additional measures for ensuring security and to impose stricter sanctions for breaches of the established order. Therefore extraordinary circumstances that were caused by an extraordinary situation influence character of social relations and require a change of forms and methods of the state administration and consequently an establishment of special administratively legal regimes.

Administratively legal regimes can be classified according to the criteria of “starting mechanism”, i.e., the state institution that passes a legislative act which establishes, abolishes or amends a legal regime.

In this case the first group includes administratively legal regimes that are “started” by the legislator by passing, amending or abolishing a law, therefore a legal regime is enacted simultaneously with a law, but the state administration institutions have a duty to enforce this law and they do not have discretion to decide whether or not to carry out provisions enacting an administratively legal regime.

The second group includes legal regimes that are “started” by the executive institutions. These include two types of regimes. First, they are established, abolished or amended simultaneously with enactment of normative acts passed by the government. Secondly, the government can pass individual legislative acts within the framework of existing laws or normative acts. For example, in Latvia the Cabinet of Ministers proclaims a state of exception. The Parliament has to approve the decision, otherwise it loses validity upon proclamation (The law of Republic of Latvia...1992).

The third group includes administratively legal regimes that are enacted with a decision of a competent state administration or self-government institution. These regimes can be subdivided. Firstly, these cases often necessitate coordination of activity of institutions subordinate to several ministries; therefore the management headquarters of extraordinary situations are established and cooperation with
self-governments is very important. In the Republic of Latvia the relevant institution is the Crisis Control Centre subordinate to the Cabinet of Ministers. The Crisis Control Centre coordinates development of preventive plans of the state administration institutions, civilian – military cooperation and operational measures for prevention and elimination of a crisis.

This subgroup includes regimes which require cooperation among several state administration institutions under the guidance of the responsible ministry. For example, in the Republic of Latvia the Ministry of the Interior controls extraordinary situations connected with dangerous forest fires and other cases that involve civil defense measures. Secondly, an administratively legal regime is established by one responsible state administration institution. In many cases it is the police that are authorized by the law to perform the necessary measures for saving people, detaining criminal suspects, prevention of situations that endanger public security. The administratively legal regimes of this subgroup deserve deeper examination in the context of human rights, especially in those countries where the dominating policing methods are repressive and the police lack public trust.

As extreme conditions require undisturbed enforcement of individual and normative provisions, and maximum submission of an individual’s will to the common aim, sometimes there are necessary special administratively legal regimes which are characterized by a definite prohibitive effect: decrease of means of horizontal coordination and harmonization, decrease of realization of individuals’ constitutional rights in the administrative sphere and increase of coordination duties.

Special administratively legal regime for ensuring security is established when regular legal measures are not sufficiently effective, when it is necessary to unite legal measures in a set of procedures and forms of process, control and supervision functions as well as coercive measures that operate to warn, guard and protect individuals, the public and the state. This is realized by following means: 1) additional prohibitions and duties; the regime not only restricts behavior, but also provides preventive control of implementation of this requirement and special administrative measures that are aimed at establishing and maintaining the regime: state examination, state registration, implementation of economic activities that require prior application for a permission to realize certain rights; 2) a system of control and supervision of realization and requirements of the regime by physical and legal persons and government officials. This procedure is often connected with an opinion of the official who will decide on issuing of a permit (Teivans-Treinovskis, Jefimovs 2012).

The control system is connected with ‘full’ or random check of keeping of the rules, operational investigation measures, preventive measures and responsibility measures, technical and organizational maintenance of the set regimes that allows to effectively prevent and detect breaches of the regime. Such measures include use of vehicles, means of communication and special equipment.

Special administratively legal regimes must be provided for by the legislation. Usually the law stipulates the type of regime and its carrier, rules of establishment, the subject that administrates the regime, measures of the regime. As special administratively legal regimes in security sphere are usually connected with restrictions, coercion and responsibility, in a democratic society they must be formulated in laws and normative acts. If these restrictions are not provided by the law, their enforcement may possibly cause violations of legality and human rights.

The carrier of a special administratively legal regime is territory with an emergency. This territory is determined according to the spread of influencing factors with the aim of preventing further spread of threat. Such territory is designated by description of borders of territorially- administrative formations, but it can be directly connected with the source of threat.

The borders of an emergency situation zone are set by the manager of elimination of emergency by coordinating it with the state institutions in the territory where the emergency has occurred. The object of an extraordinary situation is social relations that influence the extent and character of security threat and public order and life processes. It depends on the type of emergency and the established regime.

The choice of an extraordinary regime for ensuring of security depends on crisis level of the emergency and its elements: level and type of security threat, character of influencing factors, scale and time aspect of the emergency, character of the chain of consequences.

Special administratively legal regimes in security sphere always have provisional character – they are enforced during the emergency. On one hand, the law puts restrictions on duration of emergencies, but on the other
hand the duty of the state institution that has established the regime, is to regularly revise necessity of the regime and to return to ordinary legal regulation.

Conclusions

The function of maintaining order and security in a state is called a policing function. Execution of the policing function is within the jurisdiction of the law enforcement agencies. The maintenance of legal procedure is a precondition for implementation of the doctrine of a rule of law. Legal regime is closely connected with the notion of legal procedure, therefore it is clear that investigation and classification of legal regimes has both theoretical and practical significance.

Law can be divided into public and private law. Legal regimes have the same classification. However in practice the state administration institutions are mostly involved in enforcement of state security, therefore their regulation belongs to the sphere of administrative law. Thus we can point out administratively legal regimes which refer only to the public law sphere. When it is complicated to clearly decide which sphere is involved it must be presumed that it is the public law sphere.

In extraordinary cases when it is necessary to ensure state security, maintain public order and security and restore the regular rhythm of life sometimes the responsible state institutions require additional powers that are enacted according to the law. According to the level of dangerousness of the extraordinary situation several special administratively legal regimes may be established. Under Latvian legislation they include 1) emergency; 2) exceptional situation; 3) state of war. These special administratively legal regimes must be distinguished from administrative legal regimes that are established in less dangerous extraordinary situations, that is, the state administration institutions operate according to regular legislative acts though the situation in its terms is similar to the one when the above mentioned legal regimes can be established.

During policing public order and public security in the framework of extraordinary legal regimes police must issue many administrative acts. According substance of notion of extraordinary situation police administrative acts didn’t issue in written form. Thereby possibilities for checking of legality of these administrative acts in administrative court is limited and it means that there is heightened level of risk concerning possible violations of human rights.

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Aleksandrs MATVEJEVS works at Daugavpils University (Latvia), the Faculty of Social Sciences, Department of Law, Dr.jur., Associated professor. Research interests: Administrative Law, Police Activity, Public Security.
THE CONCEPT OF INFAMY (INFAMIA) IN ROMAN LAW:
AN ENGINE FOR SUSTAINABLE DEVELOPMENT AND PUBLIC
SECURITY – THE ROMAN EXAMPLE

Allars Apsitis¹, Osvalds Joksts²

¹,²Rīga Stradiņš University, 16 Dzirciema Street, Riga, LV-1007, Latvia
E-mails: ¹allars@inbox.lv; ²osvalds.joksts@inbox.lv

Received 30 January 2013; accepted 20 May 2013

Abstract. The long-term existence of the civilization of Ancient Rome within the framework of one national formation should be acknowledged as a unique example of national sustainability. Such sustainability was also ensured by the successful economic growth, the elements of social policy implemented by state authority etc. However, the particular emphasis should be placed on the role of very effective Roman legal system – it is the legal institutes developed within the framework of this system should be acknowledged as one of the most essential factors ensuring the sustainable development of Ancient Rome and public security. Roman “infamy” (infamia – Latin) is an example of such very important legal institute. Infamy (infamia – Latin) was applied in the situations when a Roman not only broke the law thus facing the criminal or civil liability, but also came into the collision with the society's ethical views on what is good and what is particularly undesirable thus taking a risk to lose the reputation and to have specific restrictions regarding rights. According to the information found in the primary sources of Roman law, the shield of infamy (infamia – Latin) protected a wide range of issues significant for the society (the state military defence, morality, family values, the interests of national economic circulation, an individual’s life, health, economic interests, the right for the just trial and just settlement of individual and property disputes) thus serving as a driving force for the sustainable development of the state and society of Ancient Rome and public security.

Keywords: Roman law, infamy, Ancient Rome, public security, sustainable development.

Reference to this paper should be made as follows: Apsitis, A.; Joksts, O. 2013. The concept of infamy (infamia) in Roman law: An engine for sustainable development and public security – the Roman example, Journal of Security and Sustainability Issues 3(1): 31–41. http://dx.doi.org/10.9770/jssi.2013.3.1(4)

JEL Classifications: K19, K39, N43

1. Introduction
The millennium of Roman civilization (753 B.C. – 476 A.D.) – a thousand-year existence of unitary cultural environment within the framework of a periodically transforming and continuously developing national formation should be certainly viewed as an example of rather unique national sustainability. It should be assumed that several equally important factors formed the foundation for the above mentioned sustainability.

In this case we can speak about, for example, the successful economical growth that, in its turn, ensured the general rise of society’s living standards and the improvement of quality. Besides, it is necessary to point out – it was not only the improvement of life quality for the establishment, but also for tens of millions of countrymen and townsmen. The Roman monuments of material and immaterial culture, the archaeological evidence preserved until nowadays is a doubtless proof that the inhabitants of Rome had a longer life, ate better food, lived in more comfortable homes and used more complicated and qualitative household objects in comparison to their primitive
ancestors and later heirs who lived in the Early Middle Ages. The historians of economics assume that within the period of time from ~800 BC till 200 AD the average consumption of a peasant residing in the region of the Mediterranean Sea had increased by at least 25%, perhaps even by 50%. It is relatively insignificant, if we evaluate according to modern standard, but, no doubt, it was a significant support for people experiencing that. As well as, it is pointed out that there was an increase of the total number of population – around 800 BC in the region of the Mediterranean Sea there lived, probably, around twenty millions of people. A thousand years later – forty millions (Scheidel et al. 2007). It is possible to find also even more optimistic assumptions, according to which, the number of the population of Roman Empire, at the peak of its development, could be from sixty up to even a hundred million. The number of the population of the City of Rome – around a million (Scheidel 2006). The economy of Rome was mostly based on the agricultural production; however, in the course of time, the proportion of people involved in the non-agricultural production and provision of services increased and, respectively, there increased also the volume of non-agricultural production. Thus, the proportion of population involved in the agricultural production became steady at the level of 75% (Temin 2001). There increased the average labour productivity per capita, there increased the amount of taxes collected and the amount of land rent collected (Hopkins 1980). There increased the volume of trade, also the amount of long-range trade and the domestic export of produced products between the different provinces of Roman State (Duncan–Jones 1990) Namely, Ancient Rome, particularly at the peak of its development in 100 – 300 A.D. could be viewed as a rather well-functioning economy.

As an important factor, ensuring the sustainability of Roman State, should be pointed out also the social policy or at least the sources of such policy implemented by governmental bodies. Thus, for example, it is well-known that the state ensured free of charge food subsidies for the inhabitants of the City of Rome (later – also for the inhabitants of Constantinople) (annona – Latin) (Rickman 1980) and organized public tenders for the supply and delivery of agricultural products necessary for the above mentioned subsidies (Sırks 1991).

However, the authors’ point of view is that it is necessary to point out the role of advanced, rather complicated and at the same time very optimal and rational Roman legal system for ensuring the sustainable development of Ancient Rome and its public security. It is generally known that economic activities, generation, accumulation and management of material wealth bring about the necessity for a legal mechanism, for the rules approved and enforced by state that ensure an opportunity for the subjects performing economic activities to generate, accumulate and manage such wealth, as well as guarantee the protection of above mentioned wealth against any illegal encroach. The development of national economy, economic activities bring about the necessity for legal institutes regulating such activities, in its turn, the existence of effective legal institutes facilitates the development of national economy. Thus, the Roman law, well-known to us, could thank the successful development of Ancient Rome and its economy for its perfect and optimal nature, but the Roman legal institutes could be acknowledged as one of the most significant factors that ensured the possibility of the above mentioned development.

Roman “infamy” (infamia – Latin) is an example of such very important legal institute. Besides, here we can address the legal institute with a deep moral and ethical content. Namely, any legislative norm somehow reflects and tries to protect moral and ethical values adopted by the society – to protect and, no doubt, also to impose that the particular society views as being good. In its turn, Roman “infamy” (infamia – Latin), in fact, is a peculiar mechanism, envisaging special and profound responsibility for the violation of ethical standards adopted by the Roman society, thus, serving as a very effective driving force for the sustainable development and public security. It is generally known that the sustainable existence of society is impossible without norms of ethics. The society, whether it is a primitive community of tribes or the most complicated civilization of informatics age, shall be destined to face chaos and destruction, if it has no behavioural norms accepted by the majority of individuals forming the particular society. The norms, based on the views about good that should be supported and protected and the views about bad that should not be accepted and shall be eliminated.

The State of Ancient Rome could establish rather complicated and very successful legal basis for the functioning of a large and – for that time – advanced empire. Besides, legal principles, developed by the Romans,
particularly in the sphere if private or civil rights, have proved to be so successful that they still form the basis of Western and now already the private law of all globalized world. In some places this influence is more direct — in continental Europe and in the former colonies of European countries where there exists so-called Continental/Romano-Germanic law or Civil/Civilian law; in some places the influence is more indirect — in England and Wales, USA and in most of former British colonies where there is Common law. It is generally known that modern Latvia belongs to Continental law, and in our Civil Law, passed in 1937; it is possible to observe direct influence of Roman private law. The authors even find that a person, who is not familiar with and educated on the basic principles of Roman private law, would have difficulties to understand and perceive the Civil Law of Latvia.

Thus the authors believe that their duty is to facilitate the detailed study of the primary sources of Roman law, including the problem of the influence of Roman legal principles on the development of modern, legal institutes, particularly those included into the legislation of the Republic of Latvia. The authors have also always studied the problems related to public security and sustainable development of society. In this case, Ancient Rome with its history of more than thousand years, also can serve as the source of valuable and, probably, useful information. Taking into consideration the above mentioned reasons, the authors performed research the results of which have been presented in this article.

The aim of research — to study information found in the primary sources of Roman law in relation to the legal regulation of infamy (**infamia** — Latin), analyzing the influence of this regulation on ensuring public security and sustainable development.

Within the research there have been studied and analyzed the primary sources of Roman law (**Digesta, Justinianii Institutiones**, as well as **Gai Institutiones**) using the inductive, deductive and comparative methods.

In relation to the primary sources of law used for the research purposes, there should be added the following. It is generally known that nowadays the main available source of law, providing relatively detailed view on the legal institutes of ancient Romans, is so-called Justinian’s codification, also referred to as **Corpus Iuris Civilis** (“Body of Civil Law”). The codification was performed within the period of time from 528 A.D. till 534 A.D. It is related to the political activities of Justinian I (**Flavius Petrus Sabbatius Justinianus Augustus**, 483 A.D. — 565 A.D.), Eastern Roman Emperor or Byzantine Emperor. The military commanders of Emperor Justinian manage to restore the former power of Roman Empire by reconquering western regions of ancient empire ruled by different small barbarian states. In its turn, the codification of rights is used for the cementation of restored super power and strengthening of the authority of state power — it is generally known that a unitary and particularly regulated legal system is a very powerful factor that facilitates the homogenization of state. Besides, at that time, it was difficult to apply the norms of Roman law, which were found in many and different sources, and the consolidation into a unified codification facilitated their application. The work on codification was supervised by Tribonian (around 500 A.D. – 547 A.D.), jurist and the head of Justinian’s personal secretariat (Jolowicz and Nicholas 1972).

Justinian’s codification consists of four parts:

**I. Codex Justinianus** — the Code of Justinian comprises the laws (constitutions) passed by emperors, starting from Emperor Hadrian (**Publius Aelius Traianus Hadrianus Augustus**, 76 A.D. — 138 A.D.) until Justinian himself. It consists of 12 books (**liber**) that are divided into chapters with titles — the titles and into fragments that, in their turn, might consists of paragraphs. An example of quotation: C. 4.37.1 or C. 4.38.12.1 (Kalniņš 1977).

**II. Digesta seu Pandectae** — the Digest (Digesta) a compendium of so-called classical period (-1 – 250 A.D., the first 250 years of the current era) jurists’ works — „a compilation or an aggregation”. It consists of 50 books that have been further divided into chapters with headings — the titles and into fragments with paragraphs. Before the 1st paragraph there might be an introductory text - **principium** (beginning), abbreviated as **pr**. An example of quotation: D.17.2.3 pr. or D.17.2.3.3 (Watson 1985).

**III. Institutiones sive elementa** — The Institutes of Justinian (**Justinianii Institutiones**). They have been envisaged as an elementary textbook on the legal institutes that at the same time have also the force of law. They consist of 4 books that have been divided into chapters — the titles that have been further divided into paragraphs, before the 1st paragraph there might be an introductory text - **principium** (beginning), abbreviated as **pr**. An example of quotation:
A llars A psitis , O svalds Joksts
The concept of infamy (infamia) in roman law: an engine
for sustainable development and public security – the roman example

I.3.25 pr. or I.3.25.3 (Thomas 1975).

IV. Novelle – Novels, laws passed by Justinian already after the ratification of the Code and the Digest – novellae leges (the new laws). In each novel there is an introduction (praefatio), the text of the law has been divided into chapters (caput) with or without paragraphs and epilogues (epilogos). An example of quotation: N.89.cap.12.6 (Kalniņš 1977).

Within the framework of this research there have been mostly viewed The Institutes of Justinian (Iustiniani Institutiones) (Krueger; Mommsen 1928) and the Digest (Digesta) (Krueger; Mommsen 1928). Besides, there have been also used separate fragments from so-called Institutes of Gaius (Gai Institutiones) (Seckel and Kuebler 1938). The work of Roman jurist Gaius (has worked from around 130 A.D. – 180 A.D.) Institutes (Institutiones) had been written around 161 A.D. and was developed as a textbook on Roman legal institutes. It is the most well-known work on rights that have reached us from so-called classical period (~1–250 A.D., the first 250 years of the current era). It consists of 4 books – commentaries that have been divided into paragraphs. An example of quotation: Gaius, inst. 3. 148

2. The Results of Research

According to ancient Romans’ views, an individual’s unethical deed, at least its separate manifestations, were subject not only to gods’ anger and society’s condemnation. For the purpose of public security and ensuring of sustainable development, the one who violated the norms of ethics had to face particular sanctions that mostly meant different restrictions of person’s capacity. Namely, in the sources of law we can find norms that regulate situations directly related to the violation of the norms of ethics adopted by the society of that time. The situations, when a Roman not only broke the law, but also came into collision with the society’s ethical views what is good and what is particularly undesirable. In such situations there were special sanctions applied – infamy (infamia – Latin). Besides, it should be emphasized that these sanctions were applied when a person violated the principles of ethics – in many of the viewed situations the person shall be punished in conformity with criminal law or face civil liability (in most of the cases); however, in addition to the sanction for criminal or civil offence, the person receives also “the stamp” of infamy (infamia – Latin).

Thus, unethical, condemnable deed is not only the reason for serving one’s sentence or facing the duty to pay compensation, but also a cause for losing one’s reputation and facing specific restrictions regarding rights.

According to the Romans’ point of view, the cases of such disrepute were:

Dismissal from the military service because of the undignified actions; the dismissal is performed on the basis either Emperor’s decree or a decree issued by another person who is authorized to dismiss.

Performance of dramatics or declamation in front of the audience.

The practice of a pander – souteneur.

Conviction for the wrongful accusation of somebody.

Conviction for the betrayal of client’s interests to be represented.

Conviction for theft, robbery or for the facilitation of such actions.

Conviction for an unlawful action - outrage (iniuria – Latin) that has caused a property loss to another person or for the facilitation of such actions.

Conviction for the actions against the principles of good faith or for the facilitation of such actions.

Conviction for an intentional malicious action (dolo malo - Latin) or for the facilitation of such actions.

Conviction for a fraudulent action – intentional deceit of other persons or for the facilitation of such actions.

Verdict of responsible regarding claims from the society’s contract, custody contract, assignment contract (mandate) and deposit contract.

If the father untimely marries off his daughter-widow over whom he has power, and marries her off after her ex-husband’s death before the end of prescribed period of mourning.

Groom’s marriage to such widow before there has been received the permission from the person who has the power of the groom.

Giving permission to the groom over whom his father has power for the untimely marriage with such widow.

Simultaneous engagement or marriage to two women/
men, conceding of such action – if the guilty person is under the father's power of responsible person (D 3.2.1).

As we can see, the protecting influence of the institute of infamy (*infamia - Latin*) covered the range of issues important for all society and for the sustainable existence of state.

The spine of Roman State was its army; it was the highly effective and disciplined army that ensured the development of Roman super power and later – also its dominance over all Western Antiquity. Thus, quite logically, violation of military discipline and norms of military ethics was considered to be a particular threat to public security and therefore – as an action that holds the guilty person up to infamy.

Dismissal from the army meant infamy (*infamia – Latin*) for any soldier, starting from the legionary of the lowest rank up to the commanders of the highest rank (D 3.2.2 pr.). Of course, the particular emphasis was placed on the officers’ responsibility (D 3.2.2.1).

There was also emphasized that not all cases of retirement from the military service were related to disgrace and subsequent infamy (*infamia – Latin*). The soldier could retire with honour and Emperor's consent, if he had successfully served the period of time envisaged for the military service. It was permitted to retire before the end of such period of time – if the Emperor permitted the soldier to retire. There was a possibility to be retired due to poor health.

If the soldier was dismissed with disgrace, it was necessary to indicate the reason of dismissal and the soldier’s offence. Similarly to the dismissal due to undignified action, withdrawal of rank meant immediate infamy.

Separately there was viewed the case, when a person had joined the army in order to avoid the fulfilment of civil servant’s responsibilities. The fulfilment of responsibilities related to such positions, mainly at the level of local governments, particularly at the decline of Roman Empire, could be related to great individual and material responsibility, even to a risk – thus there existed motivation to chose military service. If such soldier was retired in order he would fulfil his civil duties, the retired person's reputation did not suffer and such person was no subject to infamy (*infamia – Latin*) (D 3.2.2.2).

If the soldier, in conformity with the specific *Lex Julia de Adulteriis*, was convicted for a wanton action, it meant dismissal with disgrace and infamy (D 3.2.2.3).

Like a sanction for infamy due to the dismissal from the military service, the former soldiers were prohibited to reside in the City of Rome and places where Roman Emperors resided (D 3.2.2.4). Taking into consideration that those were the places, where the main political and economic activities of Roman society took place, the above mentioned meant rather effective outlawry from public and economic circulation.

The Romans considered physical exhibition of oneself, as well as sexually dissipated lifestyle and facilitation of sexual dissipation as factors that degrade society and expose to danger the sustainable existence of society.

As it was mentioned above, all persons, who performed for remuneration, as well as those, who competed for a reward, were considered to be hold up to infamy.

Coming on the stage in front of the audience was considered to be an act that held the person up to infamy and, thus, it was no praiseworthy deed. By stage was meant any public or private place, or just a street, where somebody appeared or moved with an intention to show oneself, or it might be any place, where the persons gathered together to watch any public performance (D 3.2.2.5).

If the person concluded a contract by which he undertook to take part in the public performance, but later he changed his mind, such person was released from the possible infamy, because the violation, however, had not been so severe, in order the intention to act in such way shall be punished (D 3.2.3).

There were also several exceptions from the general principle. The athletes – sportmen were protected against the infamy. They were not considered to be actors, because their aim was only exhibition of their strength. Similarly, for the sake of general usefulness, musicians, wrestlers, drivers of carts at the horse races, persons who took care of race horses, and others who fulfilled different responsibilities to ensure the sports games were not considered to be held up to infamy (D 3.2.4, pr.). The above mentioned was mainly related to the religious significance of sports games – as
we know, the sports games were usually held within the framework of the events of religious cult as a specific festivity in honour of different gods etc.

Besides, the supervisors of public performances, who fulfilled their duties for the state and society, and not exhibited themselves, were also protected against the infamy (D 3.2.4.1).

In relation to panders – souteneurs it was indicated that they are of two kinds: there are those who benefit from the employment of slaves and those who make money by using free persons. “The employers” of both categories were considered to be contemptible. Besides, it was not important, whether this “trade” was their principal occupation or the way of gaining additional profit – in addition to keeping a pub or an inn – with the purpose to attract additional clients and gain additional profit. The same was related to the owners of public baths who used to employ in such a way slaves whose basic responsibility was to take care of clients’ clothes. (D 3.2.4. 2) If, instead of a free person, a pander was a slave, who employed other slaves in such a way, he was held up to infamy in the case, if he regained his freedom (D 3.2.4. 3).

In relation to prostitutes there was a condition that a woman, who was forced to work as a prostitute for money, while she was a slave, shall be protected against the infamy (D 3.2.24).

Public security, social stability and sustainable development of society cannot be achieved, if the state power cannot ensure the sufficient protection of inhabitants’ lives, health and material values they possess or control in any other lawful way against any threat and illegal encroach. Thus, in conformity with the Roman legal and ethical principles, the following persons were considered to be hold up to infamy: convicted thieves, robbers, wrongdoers (inuria – Latin) and the persons who have acted against the principles of good faith (bona fides – Latin), as well as all convicted facilitators and supporters of above mentioned actions (D 3.2.4.5), because the person who supports the offence shall be considered as a person who has committed the offence (D 3.2.5). By support the Romans meant also the refusal to bring an action against the offender, thus succumbing to persuasion, bribery or pressure (D 3.2.6.3). All convicted deceivers were held up to infamy; besides, it was not important, whether they were the subjects of criminal prosecution or they had lost at the court proceedings (D 3.2.13.8).

For each offence there were particular sanctions envisaged, but “the reward” for the ethical aspects of offence was “the stamp” of infamy. In some cases the person could be protected against the infamy by an attestation (oath) with the confirmation that the person has done nothing wrong, because the attestation (oath) itself, to a certain extent, can serve as a proof of innocence (D 3.2.6.4). Such position characterizes

3 A theft (furtum - Latin) was considered to be the misappropriation and/or devastation of another person’s property without the owner’s consent. It might be overt, obvious – the person has been caught in the act together with the stolen property, or covert – the guilty person has already managed to leave the place he has committed the crime. In conformity with the principles of Roman law, initially the theft was no criminal offence, but a private delict – namely, for committing the theft the guilty person was not the subject of public persecution performed by state authority, but the victim had the right to bring a charge against the guilty person by applying to court and claiming for compensation – for the overt theft – the fourfold amount, for the covert theft – the double amount. The victim could also claim the stolen property from any person through court, besides it was not important, whether the property was found at the person who committed theft or at any other illegitimate possessor. More on theft you can see in I 4.1.

4 A robbery (rapina – Latin) meant the disposition - misappropriation of another person’s property by force. (A shameless theft”). Initially robbery was a private delict (see the explanation on the theft), the amount of compensation – the triple value of property, irrespective of the fact, whether the guilty person had been caught in the act or he had not been caught in the act. Besides, like in the case of theft, the victim had the right to retrieve also the stolen property. More on robbery you can see in I. 4.2.

5 Iniuria was the performance of different types of humiliating wrongdoing – fisting or bludgeoning, scourging of somebody, mis-calling in public, divestiture of property stating without any reason that the victim is a guilty person’s debtor, writing of insulting poetry or composing of insulting music and multiplying of such works, the facilitation of above mentioned actions, harassing to married women or minor persons, and other similar actions. In the case of iniuria the person could be punished as having committed a criminal offence, as well as in the case of a private delict. The amount of compensation had to be determined individually, taking into consideration the situation. More on Iniuria you can see in I 4.4.

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2 On freeing slaves (manumissio – Latin) you can see in I 1.5.-7.
the Romans’ moral and ethical views, which, as an original legal tradition, has survived until nowadays – sworn advocates, certified auditors etc.

The principle of good faith (bona fides – Latin), developed by Roman jurists, shall be considered as a legal, as well as moral and ethical category, which has been recognized as one of the basic elements of modern legal ethics. According to the Roman jurists’ views, the action and activities of a person (a contracting party, a possessor of a thing etc.) shall not comprise any elements of fraud and injustice. Besides, irrespective of the fact, whether fraud has manifested as an active deed or a passive withdrawal from the actions (Smith 1875).

It was important to prove the person’s conviction that there were no elements of fraud or malice in this person’s action. For example, a possessor of a thing was considered to be a possessor in good faith, if he could prove that he was really confident that he and only he had the right to be the possessor of the thing and he really did not know that he had purchased a stolen property (I 2.6. pr., I 2.6.1-2). But the thief shall be considered to be a malicious possessor, because he certainly knows that he possesses the property he had stolen (I 2.6.3).

Another fundamental principle of modern legal ethics, which has been influenced by Roman law, is the condition that nobody shall be considered as guilty, prior to conviction by court and before the respective verdict has come into force. The same principle functions in the case of infamy. The person was not held up to infamy prior to the verdict of guilty in the case duet to which the person would deserve to be held up to infamy (whether it was a theft, a robbery or any other offence. Besides, if the verdict was appealed – there was an appeal submitted, there had to be waited until the final verdict came into force. If the appeal was rejected, the announcement of the first verdict of guilty was considered as a moment, when the convicted person was held up to the infamy (D 3.2.6.1).

The advanced economic circulation cannot exist without the use of services provided by authorized representatives. The societies, oriented towards the sustainability, could be also characterized by certain level of social maturity, which means also existence of mechanisms that ensure defending of vulnerable society members’ individual and economic interests. Thus, in conformity with the principles of Roman

law, infamy was not attributed to those who faced a just loss at the court proceedings while representing other persons’ interests – a representative/an official (procurator – Latin) and a defender (defensor – Latin)⁶, as well as a guardian (tutor – Latin)⁷ and a trustee (curator – Latin)⁸, if this person performed his responsibilities dutifully, he was protected against the risk of infamy (D 3.2.6.2).

But, if somebody lost at the court proceedings that resulted from his duties as being a fiduciary (assignee/mandatary) in conformity with the assignment contract (mandatum – Latin)⁹, this person was hold up to infamy (D 3.2.6.5). Taking into consideration the fact that the fiduciary’s responsibilities were to be inherited, the fiduciary’s heir also could face the infamy (D 3.2.6.6).

The infamy could not be applied in relation to a former slave, who, before he was freed from slavery and appointed as a heir by his master, was unsuccessfully defended by his master at the court proceedings regarding the losses caused by the slave, because, although the slave was found responsible for the offence, at the moment of his conviction the slave still

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⁶ On representatives and defenders you can see in D 3.4.

⁷ Guardianship (tutela – Latin) was established over the minor men who had no father – father’s power (patra potestas – Latin) (up to 14 years of age) and unmarried women. The interests of such persons were represented by guardian (tutor – Latin), who acted instead of them and on behalf of them on the basis so-called authoritative collaboration (auctoritatis interpositio – Latin) that, in fact, meant the guardian’s control over the ward’s personal life (“moral behaviour”) and property. Usually guardian’s responsibilities were performed by a close relative of the ward - an adult man; however, these responsibilities could be also delegated to a non-relative – as a public duty to be performed obligatory. More on guardianship you can see in I 1.13.-15., I 1.17.-22.

⁸ Trusteeship (cura – Latin) was established over the minor persons (14 – 25 years of age), some categories of mentally ill persons, embezzlers and handicapped persons. Their interests were defended by trustee (curator – Latin) whom with whom there had to be coordinated business regarding property of the person over whom there was the trusteeship established. The validity of business done without the trustee’s consent could be litigated. More on trusteeship you can see in I. 1.23.

⁹ By assignment contract (mandatum – Latin) one party – the person who assigns the task (assignor/mandator), assigned, and the other party – the fiduciary (assignee/mandatary), undertook to perform the task in the interests of the person who assigned the task. For example, to lend money to a third party or to perform the duties of a doctor, a surveyor or a defender of rights. The mandate was a contract without compensation that did not envisage any remuneration for the fiduciary’s efforts. However, the fiduciary could claim to a payment for costs and the person who assigned the task had the right to grant the fiduciary “honorary rewards” in the form of a fee (honorarium – Latin). More on mandate you can see in I 3.26., as well as in D 17.1.
was possessed by his master and he himself was no the subject of rights (D 3.2.14).

Very important for ensuring the sustainability of Ro-
man society was a very special social status of a Ro-
man family (familia – Latin) and, as a result, the high
developmental degree of the institutes of Roman
family rights – the family performed there not only
the function of the basic unit for the society’s repro-
duction, but also the function of economic manage-
ment. Besides, the Roman ethical and religious views
envisioned a very respectful attitude towards the dead,
ancestors, traditions, heritage of the past that served
as a significant element for cementing the society.
At the same time, the legal regulation was relatively
realistic and meeting the society’s everyday needs.
Thus, for example, in relation to the case, when the
father was held up to infamy due to untimely mar-
ying off his daughter without observing the envis-
aged period of mourning for the death of his former
son-in-law, there was particularly indicated that the
period of mourning shall begin from the actual mo-
moment of son-in-law’s death. Thus, if the informa-
tion about the son-in-law’s death was received already
after the end of the period of mourning, the mourning
could be started, held and ended on the same day
(D 3.2.8). Rather pragmatic approach! Particularly,
when the ethical aspects of the case are being evaluat-
ed. Besides, the period of mourning could be ignored
at all, if there was received the Emperor’s permission
for marriage (D 3.2.10 pr.).

It was also possible to enter into a new marriage im-
imEDIATELY, if the woman had a child (D 3.2.11.2).
The husbands had no the duty to mourn for their
dead wives (D 3.2.9 pr.).

It was not necessary to mourn for the dead betrothed
(D 3.2.9.1).

The person was allowed to become engaged during
the period of mourning (D 3.2.10.1).

Mourning for the dead child or parent was no obsta-
cle for entering into marriage (D 3.2.11 pr.). In confor-
miTY with the general principle, the person had
to mourn for the death of parents and children of
both sexes, as well as for the death of other relatives
as much as they each deserved; if somebody refused
to mourn, this person was not held up to infamy (D
3.2.23). In the case, when the dead husband turned
out not to be worthy of mourning, the widow had no
the responsibility of mourning, although she was not
allowed to enter into a new marriage before the end
of the envisaged period of mourning (D 3.2.11.1).
However, a son had a duty of mourning for his dead
father even if he had been deprived of legacy. The
same was related to the mourning for a dead mother
even if her property was not inherited by her son
(D 3.2.27 pr.).

It was obligatory to mourn for the killed at the battle-
field even if their bodies were not found (D 3.2.27.1).
The Romans had no custom of mourning for their
enemies, the convicted for the treason and persons
who had committed suicide “not because they were
tired of their life, but due to their guilty conscience”
(non taedio vitae, sed mala conscientia – Latin)10; how-
ever, if a man entered into marriage with the widow
of such a husband, his deed meant infamy for him
(D 3.2.11.3).

However, the new husband was protected against the
infamy, if he could prove that, when he entered into
marriage, he knew nothing about such facts, because
“lack of knowledge regarding the law shall not be for-
given, but lack of knowledge regarding facts might
be forgiven” (ignorantia enim excusatur non iuris, sed
facti - Latin). A husband was also protected against
the infamy, if he entered into marriage not on his
own initiative, but obeying the order of the person
who had the power over him, or if he had received
the permission from such person11 - then the infamy
was held up to the person who gave the order or permi-
sion. (D 3.2.11.4) Besides, if a son had entered into
marriage according to his father’s order and wanted
to retain the marriage also after he had got free of his
father’s power, the son was not held up to the infamy

10 There is a contradiction between the pre-Christian views in rela-
tion to the person’s rights to take such decisions and the conditions
of Christian ethics that leaves up to Supreme Power to decide re-
arding life and death, thus not admitting possible any justification
for committing suicide.
11 According to the Roman legal views, the persons were divided
into two categories – “the persons in their own rights” (personae
sui iuris – Latin) and “the persons with other’s rights” (personae
alieni iuris – Latin) or persons over whom somebody else had the
power. The above mentioned was mainly related to the order in
the Romans’ patriarchal family (familia – Latin), where the head of the
family - father (paterfamilias – Latin), was sui iuris (Latin), but the
other family members, as alieni iuris (Latin), were under the father’s
specific paternal power (patria potestas – Latin). The capacity of
those over whom the father had power was restricted in relation to
do business regarding property, to marry and establish the family –
it could be done with the father’s consent and mediation - repre-
sentation. In conformity with the general principle, the father had
almost absolute power over the other family members. (See Gaius,
inst 1.48. and further, I. 1.8.-9.).
(D 3.2.12). The father also could avoid infamy, if he could prove that he had given no prior order, but just confirmed marriage that has already taken place and that he had no knowledge about the facts compromising his son's wife at that moment (D 3.2.13 pr.). A person (for example, a father) could be held up to the infamy, if he simultaneously had two engagements with two brides or two grooms on behalf of a man or a woman over whom this person had the power. If this was done on behalf of the persons over whom the organizer of engagement had no power, the organizer of engagement was not held up to infamy (D 3.2.13.1.). Then the groom or bride was held up to infamy. There was particularly emphasized that the word “simultaneous” meant the situation, when two engagements existed at the same period of time, but not the fact that two engagements were organized at the same moment (D 3.2.13.2).

If a woman was engaged to one man, but, without the corresponding cancelling of engagement 12, she entered into marriage with another man, she had to be punished (D 3.2.13.3).

Similarly, if a man entered into marriage or engaged with a woman with whom he had no rights to enter into marriage (for example, a freedman – former slave or an actor engaged with a senator's daughter (D 23.2.42.1.) or marriage turned out to be illegitimate (for example, a woman was already married to another man (I 1.10.7)), he had to be held up to infamy (D 3.2.13.4).

In conformity with the Roman hereditary principles, for the expected, but not yet born child ("who is going to be born" - nasciturus - Latin), shall be reserved the rights for his part of legacy left by his father. 13 Thus, some cases of infamy were related to the malicious use of this principle – a woman who was appointed as a possessor of her dead husband's legacy on behalf of yet unborn child, because she, with the malicious intent, had pretended as being pregnant, was held up to infamy (D 3.2.15). The same was related to the situation, when the actual father of the child was not the dead husband, but another man (D 3.2.16). Particular emphasis was placed on misinformation of a praetor – the representative of state authority (D 3.2.17).

If a woman had convinced herself and was in the firm belief that she was pregnant, and that her specific confidence could be proved – the woman was “in good faith” (on the principle of good faith you can see above), it was considered that she had acted without any malicious intent and shall not be held up to infamy (D 3.2.18).

Besides, it was particularly emphasized that it was possible to hold up to infamy only a woman in relation to which there has been a judicial decision taken. There has been a decision taken that she has been appointed as a possessor of legacy by fraudulent and malicious actions. The same was related to the woman's father who, on the basis of his power that he had as a father, had given a permission for the malicious appointment of his daughter as a possessor of the dead husband's legacy on behalf of as if there would be expected, but yet unborn child (D 3.2.19).

As regards to the issue of taking any judicial decision and conviction in any case, where there was possible to hold the person up to infamy, a general principle was effective – the infamy could be applied only in the case, where the decision was taken by a judge who was appointed by state authority. If the decision was taken by judge chosen by parties involved in the dispute – an arbitorator, the case, in any situation, could not serve as a basis for infamy (D 3.2.13.5).

The Romans’ right for the just trial and receiving of the assistance of court was recognized as a very important factor for ensuring the sustainable existence of society and state. For example, the litigants, who lost in the proceedings as a result of a counter claim brought against them, were not the subject of infamy (D 3.2.6.7). Namely, if a person – the claimant had brought an action – a direct claim (actio directa – Latin) – against the defendant for the offence that envisaged also holding the guilty person up to infamy (for example, a claim for the theft), and the defendant, in his turn, had brought a counter claim (actio contraria – Latin) against the claimant, finally, when he won at the proceedings, the claimant was not hold up to infamy.

Because the counter claim is based only on the

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12 Engagement ( sponsalia – Latin) was the proposal of future marriage and mutual promise. It could be concluded with the parties being present, as a well as through the mediator. The periods of time were determined according to the necessity, and they could last even for several years. In conformity with the general principle, engagement was not considered to be the marriage contract; it was the subject of unilateral revocation and could not serve as the justification for the claim brought to court on the obligatory marriage. More on engagement you can see in D 23.1.

13 See D 25.4-6
convenience, instead of being based on the disagreement regarding the observation of the principles of good faith, and the result, anyway, depends only on the opinion of court (D 3.2.6.7).

The litigant also had an opportunity to avoid infamy, if, instead of being based on the violation of claimant’s rights, the claim of infamy brought against him resulted from the mutual agreement – a contract of parties, and the parties achieved the settlement (D 3.2.7). Namely, the person was sued for the not fulfilment of mutual contract, but not for the violation of claimant’s rights (for example, for theft, robbery or doing a mischief), and the claimant and the defendant agreed on some kind of compromise.

Because in such cases, unlike the court proceedings on the violation of rights, the compromise was no infamy (D 3.2.7).

Infamy was not applied in relation to the witnesses whose justified testimonies were not taken into account by judge, when making a decision on the case. Besides, it was not important, whether the verdict was found to be just or unjust and respectively revocable (D 3.2.21).

The application of a corporal punishment, although being sufficiently humiliating, did not mean infamy; the person was hold up to infamy only, if it was envisaged for the particular offence. This principle was applied in relation to any type of punishment (D 3.2.22).

The person could not be hold up to infamy, when the guilty person was sentenced to more severe punishment than provided by the law. There was a point of view that by undertaking more severe punishment the guilty person saves his face to a certain extent – for example, by undertaking to pay greater sum of penalty or compensation (D 3.2.23).

If any person, by the verdict, was found to be a defamer – a person who performs unfounded accusation in relation to another person, the guilty person was the subject to infamy. It is interesting that it was not only the fate of those, who performed unfounded accusations, but also those, who during the court proceedings deliberately betrayed the interests of people them represented, and they betrayed these interests in favour of the opponents of those whom they represented. They derogated from their clients’ interests without any reason and thus, in fact, they started to work in favour of the opposing party (D 3.2.4.4). Such action was considered to be particularly unethical. In their turn, persons convicted as being instigators for the unfounded accusation of others were considered as having exposed themselves to disgrace; however, they were not the subjects to infamy (D 3.2.20).

**Conclusions**

Having evaluated the conception of Roman infamy (*infamia* – Latin) on the whole, we can see rather complicated and detailed normative regulation that comprises relatively wide range of issues important for the sustainable development of society and public security. Starting from ensuring the state military defence, the protection of citizens’ morality and, thus, also the protection of society’s reproductive abilities, ensuring of the successful functioning of a family institute and finally – the protection of an individual’s life, health and economic interests, the facilitation of economic circulation and protection of vulnerable society members’ individual and economic interests. Thus, also ensuring the population’s right for the just trial and efficient state ensured mechanism for the settlement of individual and property disputes. Of course, when viewed according to modern situation, some Roman legal and ethical views could seem to us archaic, others, perhaps, not topical at all, some of them – contradictory or even unacceptable at all. However, it is impossible to deny the fact that Roman State, classical Roman civilization ruled all the region of the Mediterranean Sea and most of the modern Western Europe more than 1000 years. Within this period of time there was achieved the unprecedented economic development and there were created significant cultural values. Many of the Roman created values have proved to be sufficiently optimal to serve as a foundation for the achievement of material and spiritual culture of later periods. The institutes of private law created by the Romans nowadays form the basis for the global legal standards. The system of religious views adopted and consolidated by the Romans has become one of the world’s greatest religions. After all, the Roman State (the Republic, and then – the Empire) existed more than 1000 years! Even for 2000 years, if we take into account also Greek Byzantium period. The colonial empires of later periods known to us – the colonial empires of Spain, Russia, France, even the most efficient among them, the British Empire - around 300 – 500 years!
Of course, around 1500 years that lie between nowadays and the Ancient Rome is a long period of time, and the society’s views on the practice in force, including also the views on “good” and “bad”, have the tendency to change and develop; however, on the whole, we can only draw a conclusion: the system of legal and ethical views created and maintained by the Romans, obviously, has been very effective, and one of its established institutes “infamy” (infamia – Latin) has rather successfully served as a driving force for the sustainable development of Ancient Rome and its society, as well as for public security.

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ANALYTICAL STUDY AND MODELING OF STATISTICAL METHODS FOR FINANCIAL DATA ANALYSIS: THEORETICAL ASPECT

Lukas Giriūnas¹, Jonas Mackevičius², Romualdas Valkauskas³

¹,²,³Vilnius University, Saulėtekio al. 9, LT-10222, Vilnius, Lithuania
E-mails: ¹lukas.giriunas@ef.vu.lt; ²jonas.mackevicius@ef.vu.lt; ³romualdas.valkauskas@ef.vu.lt

Received 15 February 2013; accepted 5 June 2013

Abstract. In order to achieve the main objective – to facilitate the analysis of financial reports and assessment of company’s financial condition and activity, the analysis and modelling of usage of statistical methods becomes one of the tasks. The statistical analysis may also be treated as one of the main assessment modes of the company’s financial condition or activity, which can facilitate the work of analysts significantly. The conducted analysis of scientific literature allows stating that the usage of statistical methods in the assessment of company’s financial activity has not been widely analysed; besides, there are no assessment models, which would allow analysing the company’s finances sufficiently precisely and quickly. Thus the objective of the scientific research presented in this article is to identify and to define clearly the theoretical aspects of modelling of statistical methods within the context of financial analysis. Therefore it is meaningful to prepare a theoretical model of financial analysis with the help of statistical methods, on the basis of which the scientists, managers of the company or other interested persons would be able to conduct the company’s financial analysis sufficiently precisely and easily.

Keywords: Financial analysis, modeling, hiring subsidies, methods of statistical analysis, taxation, financial ratios.


JEL Classifications: M21, M40, M41, M49

1. Introduction

In the modern conditions of complex and competitive business it is very important to have as much comprehensive information on the company’s financial condition and activity results as it would make possible to assess objectively the current place of the company in the market and its future competitive possibilities, thus the assessment of financial condition gains more and more importance. Therefore even if majority of companies have not been showing interest in the financial analysis and importance of data it provides, now they are already interested. However, according to Director (2012), Bragg (2012), not all the accountants, bookkeepers or managers of the company may conduct the company’s financial analysis successfully, purposefully and in certain direction, because it is possible only when people have enough knowledge and analytical skills. This problem is analysed by many foreign and Lithuanian scientists, among which is Mackevičius (2006, 2008, 2011), Mackevičius, Valkauskas (2010), Mackevičius et al. (2007), Bivainis, Garškaitė (2011), Rees (1995, 2003), Gibson (2008), Dzikevičius, Šaranda (2011) and others.

It should be noted that only comprehensive analysis of the company’s financial condition allows orienting more reliably in the dynamic business environment, making reasonable management decisions with regard to the activity of the company or its structural departments in order to prevent mistakes, which appear while assessing the financial results or diagnosing the activity’s perspective, and taking risks in
unstable financial market and competitive environment. Thus, according to Huang et al. (2003), the usage of various computer programs or statistical methods, which are easily applicable in practice, has been getting more and more popular with regard to the company’s financial analysis.

So the objective of this research is to form a conceptual model of usage of statistical methods in the company’s financial analysis, which would allow the employee, who does not have special skills and knowledge, conducting the financial analysis sufficiently precisely and quickly.

- To identify the analysis’ components, i.e. elements of the financial analysis;
- To determine the meaning and direction of the usage of statistical methods for financial analysis;
- To form a conceptual model of financial analysis.

The object of research – financial analysis of the companies.

Work covers the analysis of scientific works of Lithuanian and foreign scientists, empirical surveys and economical literature, and practical study regarding the questions of the company’s financial analysis and its results interpretation.

2. Usage of statistical methods in the financial analysis

It should be noted companies financial analysis is important not only for managers of the companies, but also for investors and shareholders in order to learn, in which business it would be more profitable to invest, the shares of which companies it would be worth acquiring, as well as for other interested persons (Vogel 2010). However in order to use properly the information provided by financial accountability, it is necessary to be able to analyse it – to calculate certain indexes, to group them, to systemize, to determine the factors affecting their changes, to present conclusions, etc. However, it has to be stressed that not everyone is able to do this, thus recently according to Kaufmann et al. (2001) the usage of various statistical methods has been encountered more and more often in the financial analysis. When the statistical or mathematical methods are used, the efficiency of the companies’ financial analysis increases, the duration of analysis gets shorter, the accuracy of calculations is guaranteed, and the solution of new multidimensional tasks of analysis is secured.

However, according to Bagdžiūnienė (2005), in order to use the mathematical methods for financial analysis, it is necessary to create the complex of such mathematical models of economics, which would reflect the quantitative characteristics of economic processes; to improve the system of economic information about the corporate activity; to have technical means, which would help to accumulate, store, process and convey the information; and to organize the group of analysis from the economists, manufacturers, specialists of mathematical modelling of economics, and calculation technique, etc.

The modern financial analysis is based on mathematical methods, which allow substantiating the passed decisions by objective facts. It has to be noted that the mathematical statistical methods are applied when the change of the analysed indexes is a statistical process. The most frequently applied mathematical statistical method is the double and multidimensional correlation. According to Mackevičius, Poškaitė (1998), there are two main measurement methods in the measurement theory:

- Measurement is the attribution of various values to the set of objects after the measurement scale has been fixed;
- Measurement is the determination of value of certain directly non-measured variable with regard to the values of directly measured variables. When this measurement method is chosen, it is necessary to pre-determine the dependency of latent variable on indicators, and this is quite difficult.

Although both methods are often interrelated in practice, the differences may be also encountered: the first method enables to assess only the quantitative aspects of the financial analysis, while the second is applied for the qualitative ones, as well. When the first measurement method is used for the econometric researches, the official data of various statistical organizations or accounting data are taken as the base of initial data, thus the subjects of economic measurement are closely related to the statistical and accounting problems. However, it is important to note that according to Teo and Tan (1999) when the economic processes are measured, the essential problem to be solved is that the measurement scale has to be defined unambiguously, and it is most frequently done by the following:

- relations;
- intervals;
- grades;
• names.

The first two scales are used to measure the quantitative variables, while the third and the fourth are used to measure the quantitative and qualitative variables. Thus in order to form a conceptual model of financial analysis, all the qualitative variables will be assessed in the quantitative expression, because according to Kloptchenko et al. (2004), the financial analysis becomes more delicate when we have a statistical situation, where the indexes are assessed qualitatively and not quantitatively.

3. Formation of the conceptual model of financial analysis

It is meaningful to start forming the assessment system of the company’s financial condition from the determination of indexes – to form such set of the indexes that would allow assessing the financial condition comprehensively. Such data characteristics as sufficiency, significance or character of value distribution have visible influence on the results of majority of statistical algorithms, thus when proper methods of data analysis are applied, the accuracy of results may be often increased through the improvement of set of analyzed variables. If insufficient number of variables is included into the data analysis, the risk exists that the data set will not allow assessing the internal control system and its effectiveness properly. However, according to Quek et al. (2009), if too big amount of data is analyzed, the negative effect of information of little significance may be manifested, thus it should be noted that the determination of features, which allow assessing the company’s financial condition may have effect on stability and results of the company’s activity. It is not a simple task; therefore the variables assessing the company’s financial condition are defined by the function:

\[ SR = f(x, Q) \]

where: \( x \) – set of indexes reflecting results of the financial condition;

\( Q \) – matrix of weights.

Thus we have two important tasks: to form a set and to determine weights. The first path allows taking into account the fact that the companies differ by their activity or traditions of the activity and that the things important to one company are of smaller or no importance to other. In other words, the priority of formation of index system is the peculiarities of commercial economic activity of the companies. According to Huang et al. (2008), the second path is more comprehensive: it provides the formation of universal index system, where it is possible to distinguish the minimal and maximal set of indexes. The minimal number of indexes is obligatory, while the maximal number is the supplemented minimal variant taking into account the peculiarities of company’s activity. The list of essential items defines the company’s financial condition. It is in some way obligatory. The maximal variant of practically used system is supplemented by internal and external factors affecting its activity.

In order to form the conceptual model of financial analysis, such statistical methods and financial indexes are chosen, which can be used to assess all the companies, thus the model has to have clear and logical structure:

- groups of dimensions of general assessment;
- groups of features describing dimensions;
- assessment criteria of features;
- indexes for assessment of criteria;
- calculation methodology;
- formula to calculate final result.

The tree-type hierarchical structure was chosen as the most suitable structure method for the scheme of assessment of the company’s financial condition. The tree’s hierarchical structure of four levels was formed for this purpose. It consists of the following elements:

- dimensions;
- features;
- criteria;
- indexes (see Fig.1).
It has to be noted that dimension is the top group in the hierarchical structure that links certain groups of company’s features. The dimension covers wide thematic area and presents the final evaluation of the assessment readings in certain area. According to Milligan (1981), a feature is the group of certain criteria that reflects the assessment of certain environment and represents the composition of dimensions. Each dimension consists of numerous features attributed to it, which may reflect some particular dimension the best, and which may be measured by particular values using the results of the criteria. Thus it should be noted that the feature’s value consists of the mean of defining criteria’s values. According to Vendramin et al. (2010), a criterion is the assessment of certain peculiarity of the company, which is meant to define certain part of the feature, thus the feature consists of numerous criteria, and their numerical values are provided by indexes. An index is the lowest link of the hierarchical structure that provides main data for numerical assessment of information. The assessment scale of strips is meant exactly for values of indexes.

It should be noted that each element of the lowest hierarchical level is characterized by the variable $X_{dpki}$, i.e. the value of the $i$th index of $k$th criterion of $p$th feature of $d$th dimension. According to Ruppert (2010), the value of the $k$th criterion is calculated using this formula:

$$X_{dpk} = \begin{cases} 1 & \text{if } i \text{ is significant} \\ 0 & \text{if } i \notin \text{ not significant} \end{cases}$$

The value of the $p$th feature is calculated using this formula:

$$X_{dp} = \frac{\sum_{k=1}^{K} X_{dpk}}{K}$$

The value of the $d$th dimension is calculated using this formula:
Such division allows analyzing in detail the company’s financial condition – to perform the financial analysis and to present it in numerical expression. Following the defined conceptual model’s scheme, the structure of the model of the company’s financial analysis is completed. In order to achieve this goal and to assess the company’s financial condition comprehensively, the assessment system is suggested that consists of the partial, integrated and complex index. Such system of indexes formed using the hierarchical principle creates preconditions for comprehensive assessment of the company’s financial condition (see Fig.2).

<table>
<thead>
<tr>
<th>Indexes</th>
<th>$X_{dok} = \begin{cases} {1 \mapsto 5}, \text{if } i \text{ is significant} \ 0, \text{if } i \text{ is not significant} \end{cases}$</th>
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<tr>
<td>Criteria</td>
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<td>3. ...</td>
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<td>Features</td>
<td>1 group</td>
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<td>2 group</td>
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<td></td>
<td>3. ...</td>
</tr>
<tr>
<td>Dimensions</td>
<td>Group of partial ratio and it’s indexes</td>
</tr>
<tr>
<td></td>
<td>Interpret ratios</td>
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<td></td>
<td>Total ratio</td>
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</tbody>
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**Fig.2.** Conceptual model of the company’s financial analysis

*Source: prepared by authors*

When this methodology of analysis of the company’s financial condition is applied, the most difficult thing is to form the compounds of indexes. The absolute financial indexes describing financial condition and relative financial indexes differ by their substance and roles in assessments. Their generalization is related to general problem of data standardization and analysis. When the formed conceptual model of the analysis of the company’s financial condition is generalized, it has to be noted that it is typical for it to create the possibilities to form the absolute and relative complex indexes first of all, and thus it is possible to use the hierarchical principle with regard to both – absolute and relative indexes. Thus it is possible to state that it is not only characterized by the new attitude to the usage of statistical methods, but that it also may facilitate the company’s financial analysis and its course, and not only for analysts.

**Concluding remarks**

The analysis and generalization of scientific literature with regard to financial analysis allows stating that the financial analysis is the tool to learn the economic processes, which goal is to assess objectively the current financial condition of the company so that it was possible to make adequate management decisions and to project the perspectives of business development. Following the performed analysis of scientific works and practical study with regard to search for usage possibilities of statistical methods, it is possible to say that the most suitable composition method for the assessment scheme of the company’s financial condition is the tree-type hierarchical structure. Therefore the hierarchical structure of tree of four levels was formed during the research, and it consists of dimensions, features, criteria and indexes. The presentation of the latter ones in the quantitative expression is exactly the thing that allowed creating the model, which has one total summary index of
quantitative and qualitative features that allows assessing the company’s financial condition comprehensively. Thus it is possible to state that the made conceptual model is characterized not only by new attitude to the usage of statistical methods, but it is also able to facilitate and simplify the quite complex financial analysis of the company.

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Lukas Giriūnas, Jonas Mackevičius, Romualdas Valkauskas
Analytical study and modeling of statistical methods for financial data analysis: theoretical aspect

Lukas Giriūnas, doctor of social sciences in economics, lecturer.Research interests: accounting, finance analysis, audit, internal control

Jonas Mackevičius, habil. doctor of social sciences in economics, professor emeritus. Research interests: accounting, international accounting, financial analysis, audit.

EMOTIONS AND ITS MANAGEMENT IN NEGOTIATIONS:
SUSTAINABILITY AND STABILITY ASPECTS

Kęstutis Peleckis
Vilnius Gediminas Technical University,
Saulėtekio str. 11, LT – 10223, Vilnius, Lithuania
E-mail: kestutis.peleckis@vgtu.lt

Received 15 February 2013; accepted 21 June 2013

Abstract. The article analyzes the expression of emotions and their management in negotiations in the aspect of coherence and stability. Even in the first half of the twentieth century and in the middle, negotiations meant modest, reserved conversation of unfeeling gentlemen, assuming that all behavior associated with the negotiation is rational from the beginning to the end. Emotions were seen just as a brake of the negotiation process and effectiveness. An attempt was made to create a rational negotiating environment in which there is no place to emotions. The research shows that emotions can play a crucial role in negotiating communication and in decision-making (about 80% of the decisions are adopted on the basis of emotions). It is therefore necessary to learn how to manage emotions in negotiations – both tactical and strategic and ensuring consistency and emotional stability of behavior. The paper based on the analysis of scientific literature, systematic, comparative, logical and synthesis methods tries to disclose the key aspects of the emotional expression in negotiations, justifying the need, opportunities and ways to manage the emotions of the negotiating process.

Keywords: Sustainability, stability, emotions in negotiations, emotional expression, the negotiator’s emotional needs, emotional control in negotiations.

http://dx.doi.org/10.9770/jssi.2013.3.1(6)

JEL: M16, M54

1. Introduction

Sustainability means harmony – true relationship of all the parts with the whole (e. g. Grybaitė, Tvironavičienė 2008; Tvironavičienė et al. 2009; Balkytė, Tvironavičienė 2010; Korsakienė, Tvironavičienė 2012; Lapinskienė, Tvironavičienė 2009; Tvironavičienė, Grybaitė 2012; Lankauskienė, Tvironavičienė 2012). Even in the first half and in the middle of the twentieth century negotiations meant the conversation of modest, reserved, unfeeling gentlemen, assuming that the whole with negotiations associated behavior is rational, from the beginning to the end. Emotions were seen as a brake of the negotiation process and its effectiveness. However, emotions are an integral part of people’s life – we do not just think, but also we are feeling. Ignoring emotions can be associated with two aspects (Robbins 2010). The first of these – the myth of rationality. According to Robbins (2010), from the end of nineteenth century and the rise of science of management, organizations were purposefully modelled in a manner that could in any way to control emotions. A well-structured organization was considered as one which successfully removes the frustration, fear, anger, love, hate, joy, sadness and similar feelings. Such emotions were considered to be opposites of rationality (Robbins 2010: 155). Though has been known that emotions are an integral part of human life, it was tried to
create a rational negotiating environment in which would be no place to emotions. And the second aspect – the belief that any emotion is the obstacle. Emotions were rarely considered as productive, constructive or facilitating a more efficient job (Robbins 2007: 58). While some emotions, such as anger, fear, hatred can sometimes interfere the negotiators to do their job effectively, but it is not possible to escape from them, you cannot ignore them. Emotions often play a crucial role in negotiating communication and bargaining decision-making. It is therefore necessary to learn how to manage emotions in negotiations – both tactically and strategically, ensuring behavior consistency and emotional stability.

The object of investigation – emotions and their management in negotiations by coherence and stability aspects of the implementation. Aim of the article – to disclose expression of emotions in negotiations, and describe the need, opportunities and ways to manage them in bargaining process. Research methods – systematic, comparative, logical analysis and synthesis of scientific literature.

2. Emotions in negotiations: the essence and expression

Emotions are defined as the body’s reaction to certain objects, people, irritants or stimuli. As pointed out by Scherer (2003), emotional juxtaposition of rationality goes from Plato’s and Aristotle’s philosophical arguments. Primacy of rationality against emotions and instincts also declared Ch. Darwin (he said: the emotions – the vestige of instinctive action, and emotion expression–residues of useful moves should disappear with the development of psyche) and S. Freud (who greatly admired Ch. Darwin and emotion down to the source of biological craving and argued that personality development occurs higher feelings) (Hochschild 1979: 353–355). It was later concluded that emotions are an integral part of our lives – they are intertwined with rationality and makes us human. All the emotions, that people are going through everyday life in one or another degree occurs in the everyday work, as well as in negotiations and the negotiating process. Caruso and Salovey (2004: 9–22) provided six principles underlying emotional significance in our daily life and work:

Emotions are a source of information. Emotions arise not chaotic or random. They occur due to certain factors that are important to us; we are annoying, irritating or stimulating. At the most aggregate level, emotions are described as follows: they occurs due to changes in the environment; starts automatically, quickly generates physiological changes, changes in our approach to focus on the object and what we thought about it, prepares us for the functioning of the individual creates feelings; disappear quickly, helps to cope difficulties to survive and move forward. Emotion is always a signal – so by listening to it and understanding its essence, it is possible to escape from difficult situations to reach a positive outcome. Usually the strongest emotions arise from interpersonal relationships. Emotions differ from moods. Emotions are short–term, transient, and the mood has no the stimulus of the context and is the prevailing internal state, much longer lasting than the emotion, it is the subjective emotional state, operating at that moment to the approach of the environment and its perception. Sometimes after an emotional shock the appropriate mood can survive when a man cannot feel himself.

Emotions can be ignored, but they will not go anywhere. You can try to ignore the emotions, but they never go away, they manifest in different ways and forms. Baumeister and Vohs (2011) research found that the emotional manifestation of depression reduces the information storage capabilities, as the suppression of emotion takes away energy and attention that would otherwise be paid to listening and information assimilation. Other researchers (Neale et al, 2008) research shows that if a person fails identically to express their emotions, all of which goes into uncontrollable outbursts of anger, into communication problems. This does not mean that our emotions can flow freely. Instead, we can look for ways to express these emotions and shapes tactics that are not hindered by their occurrence, it would be appropriate to the situation and damage to interpersonal relationships. One of those ways – emotional reassessment, looking at the matter in a broader context, trying to reformulate them in a more constructive and more appropriate form. So, we can look into the situation as a challenge that must be resolved, or try to get a lesson from the situation. The emotional strength can be used as a springboard for success, and productive activities.

Emotions can be hidden, but it is not always possible to do this so good, as we want. Often, trying to hide how we really feel, in order to protect ourselves and to protect others. We say that everything is good
while in reality it is not. We argue that we do not worry, even though everything is bubbling inside. Emotional control and restriction of their expression severely affects organizations. Working people are forced not only to hide their emotions, but also to show the exact opposite – display of “working a smile”, played by anger that everyone knows what’s “real boss” – this is just a small part of those performances that involve working people. How this ultimately ends? Research has found that emotions, especially negative attenuation determines both physical and mental health effects, employees concerning the permanent emotional suppression are losing their motivation to work, experiencing emotional burn-out; there are common cases when emotions poured out on innocent people or situations that are not directly related to the origin of these emotions. The results of research linking facial expressions and lies showed that it is possible to recognize a lie by observing breaks in human speech, speech errors, and short-term emotional manifestations. Thus, our desire to hide our emotions or engage in purely rational aspirations at work can lead to failures in decision making and to create a climate of mistrust, because there will always be people who will read our emotions and feelings.

In order to be an effective solution, it is necessary to take into account the emotions.

Our emotions affect us personally and others – we like it or not. Simply: no decisions are made without emotion. Even today, a very common view is that the human personality twofold: a rational being (including consciousness, rational thought) has counter irrational impulses (arising in our bodies characterized by an emotions). We do not rely on emotions as irrational and unwanted impulses, which will return us back to a lower level of evolution. In fact, emotions must be welcomed, accepted, understood and properly utilized. Scientific research shows that emotions affect our thinking in different ways. Studies have shown that positive emotions (happiness, joy), a good mood determined by the fact that:
- we think more widely, we can think about a few things at once;
- there are new and creative ideas;
- consideration of diverse possibilities, alternatives.

Positive emotions encourage us to explore the environment, new ones, and this leads to the diversity of our behavior. Meanwhile, negative emotions (fear, anger):
- leads to greater focus on concentration,
- requires us to analyze the details;
- to look for mistakes and glitches.

Negative emotions signal that we need to change something, and narrow our focus and understanding of the field and leads to a situation that we choose the right way to respond. Thus, the aim should not be to get rid of emotions, but to use them, they provide information in order to make better decisions. It is said that there is a time for peace – for positive emotions, and there are times of war – the negative emotions. Effective business negotiations require a broad spectrum of emotions, it is therefore unnecessary all the time to smile happily and avoid conflicts.

Emotions obedient to laws of logic. Emotion does not come from nothing. Their emergence, growth and intensification are determined by the irritant, stimulus, and motive. Distinction is made between positive and negative emotions. Positive emotions: joy, happiness, love, ecstasy, euphoria, and so on. Negative emotions: rage, jealousy, hatred, aggression, and so on. Every positive meets negative emotion: joy – sadness, love – hate, etc. According to Plutchik (2002) emotions, feelings are of different intensity. Plutchik (2002) proposed the model of emotional intensification, which accurately reflects the continuity – when it goes gradually from a lower to a higher level. Plutchik (2002) argues that emotions are feelings of different intensities. The most intense emotions are anger, ecstasy, alertness, admiration, terror, surprise, grief and hatred.

According to Plutchik (2002) the achievement of joy as the primary emotion associated with secondary emotions: an invigorating, fun, enthusiasm, satisfaction, optimism, admiration, and others. To emotion of anger leads the secondary emotions: irritation, annoyance, abomination, jealous, suffering, and so on (See Fig.1.). The longer and more intensive the stimulus act – the more intensifying are emotions. For example, failure to comply with a given word, repeated and unjustified delay in implementation time can lead to the manifestation of anger emotion. However, in this intensification of emotions are involved the rational mind, the logic: every time we take records in timing compliance of execution, various false, unjustified use of arguments.

Gradually, the emotion we felt is growing and can result in a very intense form.
There are both universal and specific emotions.

Customs, manners, ethics, and morality differ in different continents, regions, countries, nations. But with the emotions are otherwise — there are universal emotions that both in Europe and in Madagascar have interpretation in the same way. Happy face all over the world will be interpreted as a happy face, and surprised face — as a surprised face. Happy and sad face though everywhere is equally understandable, but that does not mean that we are showing it in the same way. Our public culture teaches us how to show when everything goes well and what to do when things are bad. Emotional display rules are in the form of hidden knowledge. It is the knowledge that we rely on, but do not know how they were acquired. However, recognizing other people’s emotions expressed there are important and specific elements of emotional expression. Emotional display rules are different in the organization also. Expression of emotions depending on the organization, the country’s customs, culture and morality are often different. For example, people in the capital city operating in modern marketing and advertising agency, may be encouraged to communicate directly, freely express their emotions and thoughts, and in university — conservative and reticence, the attitude of self-expression, reserved emotion expression will be of great value. Different cultures also have different emotional display rules.

For example, if the owner in France with the guests saying goodbye kiss on both cheeks — are normal, while in the U.S. it would be considered bad emotional display, but in France the following acceptable to express feelings. In Japan, for example, even when up on your upset, but would still be in the face a smile. An important influence on emotions have sex. Studies have found that women are more emotional, their emotional intelligence is higher. Acceptable when a man is aggressive, but if a woman is as follows it is said that she is manly. If a woman leader shows the joy, then it is a “typical woman” that she is “soft”. Gender roles in the workplace say that what is for men, not always suitable for women. Considering that in negotiations earlier was emphasis on rationality (for example, to separate people from the problem by Fisher and Ury 1981), the negotiations were

Fig.1. The circle of emotions

Source: Plutchik (2002)
practically the business of men. Increased women's emotionalism in negotiations was considered useless or even harmful to their success.

Although more research reveals the emotional impact on the process of the negotiations and the efficiency (Barry et al. 2006; Li and Roloff 2006), some are the works about the positive and negative emotions in negotiations (Kopelman et al. 2006, 2007, 2011; Kopelman and Rosette 2008, Mayer et al. 2008; Potworowski and Kopelman 2008), we can firmly state that emotional management in negotiations – is still very low researched area. Research and practice show that experienced negotiators are able effectively manage their emotions; emotions predict demonstration results and their potential impact on the final results.

The emotions shown in non–time and in the wrong place can lead to a negative outcome of the negotiations. To learn how effectively manage emotions in negotiations you need to have a substantial practical negotiating experience – to experience and manage emotions in the real context of the negotiation. Negotiating behavior including emotional behavior, simulation in workshops by exercises can influence more or less the negotiating capacity–building, but the real importance of practical experience in the business cannot be replaced because that any interpersonal communication in real bargaining process takes place in a unique environment, with a unique personality, using a unique strategy for negotiating objectives, selecting appropriate tactics, etc. The negotiators are reaching the highest negotiating competencies on average after about 10,000 hours of real bargaining (having about 10 years of negotiating experience). It is clear that depending on the particular individual, his personal qualities and other things these limits can change both the one and the other side (Ericsson et al. 1993; Ericsson 2006). Acquired knowledge in real negotiating activities, skills, abilities as a negotiator competence elements form the basis of personal skills development: enables the identification of a new situation, to identify the new (compared to the earlier deal with situations) parameters and to choose the means and working methods that master the situation. Here occurs not only the knowledge, skills, abilities, but also the practical situation experience. Negotiating activities – is a way to gain experience during certain subtleties of showing justification, arguing with contra arguments, persuading, manipulating, in response to manipulation of the suggestion. So, in a real negotiating activity negotiator learns and develops their negotiating competencies in order to master the more methods of influencing, including and emotional.

The negotiator, as well as many modern workers performs physical, mental and emotional work. Emotional work – an organization’s desired expression of emotions in dealing with people (Robbins 2007: 59, 346). This concept had introduced A. R. Hochschild in 1979. He divided at work demonstrated into felt and disclosed emotions (Hochschild 1979). Felt emotions are the real experienced by person emotions. In contrast, the emotions shown are those that actually not survive, and are played in, learned to demonstrate more or less convincingly. It is obvious the negotiator, representing the organization, the company performs an emotional work, showing or hiding certain emotions.

Emotions in negotiations – are feelings arising at some moment and showing how the bargaining negotiator is assessing the situation in relation to his own or represented organization’s needs and according to possibilities of satisfaction at that time. Emotional expression – is set of mental, somatic and behavioral changes after the impact of certain irritant or stimuli. Emmy van Deurzen (2009) states that any person going through the emotion has both a positive and negative effects. Emotions – felt or played by and demonstrated in the bargaining may have some impact:

– to the opponent, to the interviewer;
– to the other side of the negotiation (if negotiating team);
– to negotiating team.

Emotional expression in the bargaining process, besides close verbal and written communication, is the most important tool for negotiators to understand each other and has a substantial impact on the results of the decision–making performance. Smart use of emotions in negotiations can help negotiators to deal with the problems much more effectively and more quickly, to gain more influence over the other side of the negotiation. The ability to use emotions in the place and in time during the bargaining process can be a strong element of impact, ensuring the efficiency of negotiations.

Theoretically, expression of emotions (both positive and negative) in the negotiations may have the following effect on the performance of the negotiations:

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– expression of positive emotions can have a positive impact on the efficiency of negotiations;
– expression of negative emotions can have a negative impact on the efficiency of negotiations;
– expression of positive emotions can have a negative impact on the efficiency of negotiations;
– expression of negative emotions can have a positive impact on the efficiency of negotiations;
– expression of emotions may not have any impact on the efficiency of negotiations.

As pointed out by Stephen P. Robbins (2007: 59) the emotions felt and displayed often differ. Some people find it easier to separate felt and displayed emotions, while others naively believe that displayed emotions are indeed what these people feel (Robbins 2007: 59–60). Felt emotions may be disclosed to the other side of the negotiation, or with a greater or lesser degree concealed. Become angry – facial muscles contract, and felt that satisfaction – facial muscles relax, the man is smiling. On the given irritant or stimulus perception physiological response arise agitation (shaking, flushing, sweating, rapid heartbeat, and so on.). So emotional reaction characterized by impulse (irritant or stimulus), the physiological agitation and cognitive assessment of the situation at the same time. Emotions negotiations can occur when the opponent’s behavior, environmental events are seen as a significant causing emotional stress, which can be attributed to the opponent, or environmental factors. Emotion is determined by assessment of the situation, granting it one or another meaning. This determines the strength of the emotion and character. The situation in the course of negotiations can be evaluated as threatening or as favorable or even as funny (for example, the case of misguided bluffing). It is not always possible to predict whether or not the situation will cause emotions of the other party, because it depends on how the opponent subjectively will evaluate the situation. Demonstration of emotions can be used as an integral part of the negotiating tactics. For example, “good guy” and “bad guy” negotiating team – the “bad guy” showing anger, rage, frustration, and a “good guy” is tactful, calm, pleasant, sometimes criticizing, shaming “bad guy”. But in fact, they are negotiating team, which in advance have distributed the roles of emotional show. In another tactic – the “better offer” – when one side of the negotiation shall submit its proposal, the other side of the negotiation states that already have another purchaser’s (seller) proposal and even better. Here is also necessary to demonstrate a convincing emotion. Third – the “frown” – tactics, when one side of negotiations request of the relevant price for the product or service the other side of negotiations play a very unpleasant astonished, shocked, overlooking the distrust, frown of surprise, retreating a few steps, etc. This tactic approach requires a good performing arts and expressive emotions. When trying to implement many negotiating tactics it is necessary to show, to demonstrate stronger or weaker emotions. Sometimes one side of the negotiation has a purpose – to irritate his opponent and cause emotions, which do not concentrate on the purpose, to act rationally and effectively to achieve the targets set in the negotiations.

Positive emotions which are emitted by the two negotiating sides increase the chances of reaching an agreement. Negotiators experiencing positive emotions in the bargaining process, use less aggressive tactics, are more creative, show respect for the opponent, his aims and prospects. In case of positive emotions even improves the cognitive, sightseeing, logical expression of the negotiator’s skills. In the atmosphere of positive emotions negotiators are willing to help one another, to enhance communication, they are more empathetic. However, such negotiations, which often take place in the atmosphere of high enthusiasm and intensity – may be too risky. Such emotional instability should cause concern. Nevertheless you should try to create a calm and stable climate for negotiations. The atmosphere of warm feelings in negotiations is possible, but bargaining should be based on logical assertions conclusive and rational decisions. In our opinion, if we want to achieve our goals and solve complex problems, we must reduce the degree of emotionally and ensure emotional stability.

In contrast, negative emotions have a negative effect in negotiations. And the bargaining process that occurs in the negative emotional atmosphere leads to the fact that one party becomes antithetical to the other and wants to take revenge, even for minor opponent’s negative emotional displays. Such an emotional bargaining atmosphere can interfere the debate; there it is difficult to negotiators to deal constructively. Therefore, in such situations it is appropriate to use tactics eliminating emotional tension. For example, one of these tactics may be – to declare in negotiations pause and go out for a walk with the negotiators.
Leaving the area of negotiations allows you to change the environment. It provides opportunities and space for switching to common to all mankind relationships, take a break, relax and re-charge themselves. Walking next replace personal space field, while walking alongside people are looking at the same direction are in equal positions, and people do not fight eyes war as sitting against one another opponents who share something.

3. Managing emotions in negotiations: tactical decisions in the coherence and stability approach

During the negotiation, the negotiator feels that his opponent may have more or less impact on the attainment of his objectives, or shall not permit him to get what he had planned – his emotions often begin express themselves ever more intense. Some level of conflict is inevitable. The more important situation is – the more intense emotions. Confrontational situation can turn into a destructive direction. When negotiators give up emotions, this is what happens: they do not focus on the objectives, benefits, needs, or the effective communication but they are seeking revenge, retribution, punishment to the other side. The transaction does not take place objectives are not met, and none of the parties do not satisfy their needs. Negotiators are losing the ability to concentrate on the essentials, are losing the ability to make rational, informed decisions. And eventually the results of negotiations are miserable.

These reasons can evoke emotions in negotiations (Stuart 2010):

– one of the parties is obviously blatantly lying, concealing or distorting the facts, provides incorrect complaints;
– one of the parties violates the commitments or agreements, incur obligations, or does not come to an agreement;
– one party devalues the other side, insults it threatening her, treats it hostility, hampers to be themselves, accuse her longbow, talks behind her back, doubts its power and reliability;
– one of the parties is a greedy, selfish – puts excessive demands exceed their mandate does not in good faith or fail to reciprocate to manifestations of good will;
– one party is non–disciplined – are not adequately prepared to negotiate, is not consistent in its action;
– one of the parties does not meet the expectations of the other party – did not come to talks, behaves incorrectly with the other side.

Negotiators, like any other people have the relevant emotional needs. For example, they want to be treated fairly by their actions, or want to get for their actions the recognition, or want to get the membership of a particular social class feel. Emotions as intangible needs are part of the negotiation. The two sides always want to feel emotionally comfortable, want to be heard, to have opportunities to express their views, concerns and, in the end, want to create a good deal. However, in negotiations if these needs are not taken into account will probably not be achieved agreement. Clever use of emotions in negotiations can become a big advantage and superiority against an opponent who does not use efficiently the emotions and unable to control them, as it would have been useful. Studies show that experienced negotiators know how to manage their emotions and are able to assess their effects on the results. Negotiators, manipulating emotions, simulating them often underestimate the long–term effects of the relations between the parties. After development manipulator, often such relationships are lost. Often negotiator simulating the emotions, imitating is seen as a cheater who wants to extend the benefits of himself. Some negotiators even like to talk about how they used the emotion simulation during the negotiations and how this approach has borne fruit. The problem is that this approach is too risky and unpredictable in terms of results. In addition, it is cynical and untrustworthy negotiating tactics act as ruining relationships.

Studies show that the ultimate statements, enriched with emotions, increases the rate of unsuccessful negotiations end (Stuart 2010). Another side of the negotiation frequently understand these requirements, as a manifestation of dishonesty, and sometimes refuse profitable deals – only because to resist against ultimatum. Studies have also shown that deals are accepted only by about half of the negotiators, if they are presented in the background of negative emotions (Stuart 2010). Meanwhile, the mutual trust in the negotiations is a huge asset. If one side of negotiations see that the other side represents false emotions in order to affect it in such a way, it may be that in future it will never want do business with it, if it just will be practically possible. An important problem in the use of emotions in negotiations is that the more
frequently emotions are used; the less effective they are (Stuart 2010). If we shall raise your voice one time or another – this can be very effective. If we are shouting constantly we shall be surname loudmouth and will lose confidence. The same can be said about withdrawal from the negotiations. Tone change may give a spectacular effect when this action is used occasionally. If we are normally a calm people, we can sometimes raise your voice. And if we are willing to talk a strong powerful voice, sometimes we say the words gently and quietly. However, such behavior must be carefully considered and weighed.

Many of negotiators believe that a threat – is one of the most of reasonable and justifying negotiations techniques. But, in fact, intimidation tactics are least effective. Threats cause emotions of another side of negotiations for which it has less chance to see the whole clearly and objectively.

Due of emotions negotiators can give up their benefits and make decisions that are not useful for them. Thus, they may not provide adequate interest to another side threats. Studies have shown that negotiator who use threats, have successfully negotiated twice less than those who do not use threats in such situations (Stuart 2010). So why the negotiators use threats? Due to the fact that they miss the negotiating skills or experience. Many of negotiators simply do not have ideas on how to negotiate effectively to meet their needs. In the attempt to force us to do something – we feel that it is encroaching on our self–esteem and self–worth. Then, in response to threat or an ultimatum – resistance to opposing player – performing the opposite action than required.

So, how to manage emotions during the negotiations? First of all, you need to think about both sides of the negotiations – about ourselves and companion. Below we discuss how to deal with our emotions. If we are very agitated, emotional – we will not get benefit in the negotiations at the time. If we feel that our emotions are growing – we need to stop, take a break – we need to rest and relax. If we unable to do so – then we are not the most right person for negotiations, at least at this time. It is appropriate to take a break, maybe a little longer break that can calm down, or we need to try to obtain aid from other people. If we are trying to negotiate when we are depressed, angry, or experiencing any other strong emotions – we will soon forget their negotiation goals and needs – and will find ourselves in trouble. Also, we can try to eliminate the problems saying to opponents, the interviewers: “I am frustrated, emotionally irritated – so I can tell you one other slightly sharper word. Please, heavily do not respond to this”.

This method works best when the other side of the negotiating behave with compassion. Thorough preparation – is a good tool not loses focus on your negotiating purposes. Put down rising emotions can contribute to analysis of material prepared for negotiations or focus attention to other things, thinking about pleasant things. Trying emotions not to turn during bargaining – you can reduce the expectations associated with the negotiation. If we will go into negotiations thinking that the other side is unfair, harsh, will attempt to cheat us – we probably will not be disappointed, and do not survive strong emotions at the meeting. When we reduce the expectations of the negotiating – negotiations are rarely frustrated, but often we can be pleasantly surprised. It is important to prepare correctly ourselves psychologically. Let’s not forget one important phrase: “Revenge – is a dish that is served cold”. When all around us are angry, it is best not to be similar to them – it will not help. Let us not allow their feelings “spill–over” to us. We can say to ourselves, “They’re trying to distract me from my goals”. Do not let others manipulate us. If we are angry on something – we are destroying our goals. Do not let the other side of the negotiations to compel us to hurt yourself. We are able to control our own emotions more or less. How to manage the emotions of the other side of the negotiation? The first step to effectively manage the emotions of others – is to feel and understand when our negotiating opponent is overwhelmed by emotions. It is not always obvious, it is not clear at first glance. According to the culture of their people, for example, such as the English and the Finns are less expressive than the Spaniards and Italians, but that does not mean that they are less experiencing emotion. Some people are calm on the outside, but internally are vibrant. The key thing to capturing the opponent’s emotional frustration – to set the moment when he is already beginning to undermine his interests, needs and goals. In such a state people are limited and does not listen what was told for them. In such a situation it is necessary to activate the opponent’s ability to hear, as if he does not listen – he cannot be convinced by any rational argument (Stuart 2010). This should be done due to the fact that stable, harmonious organized and managed (and therefore predictable)
negotiations are always effective.

R. Fisher's and D. Shapiro's book “Beyond Reason: Using Emotions as You Negotiate” (Fisher, Shapiro 2005) states that negotiators often do not know how to react and how to deal with rising emotions during negotiating – both with their own emotions as well as the opponents. The authors argue that emotions are complex and ever – changing, and in the end, passing – so attempts to capture their expressions and understand their significance takes a lot of time and effort. The authors propose to focus on five core concerns of both your and opponents during negotiating time, generating a negotiating atmosphere: the recognition of personal relationships (partnerships), autonomy, status and role. They argue that the core concern of these negotiations is not less important than the subject of negotiations or material interests of the negotiating parties (Fisher Shapiro, 2005: 15). Each of these five requirements has some impact on the overall emotional climate of the negotiations and the other negotiating party (Table 1). Depending on the circumstances of the negotiations, the context in the first place may raise one or the other negotiator's emotional need and it is therefore not surprising. According to the authors, the process of negotiations needs to watch through the prism of the five basic needs. During the negotiations we must constantly make sure that we take into account the opponent’s emotional needs, in accordance with the situation. In order to understand how we are doing, helps external signs how our basic concerns are met, we experience joy, pride, we feel raise – we are in a state of inspiration to work productively with the negotiation opponent and believe in their willingness to engage in joint decision–making. If our concerns are ignored, then, as a rule, we feel the tension, frustration, anger, or even hatred. The result – beginning to lose confidence in an opponent, trying to do everything themselves alone and do not agree with the proposals, which are fully in line with our interests.

The need for recognition, their personality and a positive evaluation of the results has a significant impact on people and their behavior. If we feel the great respect for negotiating opponent – we feel free about it him, we have to say. Because until we did to him supposition – he will not know how we appreciate. When we know that we are valued we are in more diligent and tend go on to the cooperation. In order to improve the negotiating atmosphere, it is necessary to try to see the positive side of what makes the opponent on the other side of negotiating. If we disagree with the opponent – we try to recognize the opponent’s right in your approach. If difficult for us to do so for our beliefs – we can take the “impartial observer’s” role. And most important: recognizing opponent’s right to their own reasoning, we do not necessarily agree with those arguments.

Personal relationships (partnership), relations with the opponent are also very important. If to the opponent in negotiations we look as at the enemy – this attitude only harms the overall performance. It is necessary to seek common ground. The importance of such an approach is often devaluated, despite its crucial importance for the success of negotiations. Developing togetherness relations with the negotiation opponent it is necessary to search for things that connect the two negotiating parties. Is necessary to learn about negotiating opponent as much as possible – maybe you learned together, maybe you come from the one country, maybe you have the same hobby, maybe “sick” on the same basketball team, maybe children simultaneously are learning, etc. Pay attention to the similarities of opponent at the beginning of the negotiations.

The need for autonomy is associated with the ability to control your own lives, make decisions independently, without any pressure. Another side of the negotiation must have its own personal space. Sometimes, it is trespassing into the opponent’s territory, prompted by the decision option, etc. But need try to keep the balance between submitting proposals we can ask the opponent therefore present its alternative solutions. The brainstorming techniques can be applied of both negotiating parties. If our activities are related to other people, such as the head of the negotiating team, before making a decision, it is appropriate to consult, negotiate with them. Maybe not all team members have valuable suggestions, but they will feel important, will be able to express their views.

As is known, a higher status enhances self–esteem gives to the words “weight” and has a greater impact on the opinions of others. Therefore, the negotiating parties in all sorts of means try to prove that their status is higher. But such behavior lies in some of the dangers. The struggle for higher status may cause friction between the partners and reduce their willingness to cooperate. Personality is not constant – it can change depending on the communication situation. Therefore, it is necessary to be polite and respectful to all. It should be noted that any person can have a high position in his field.
Role determines the direction of our business, and gives it meaning. Being head of the negotiating team will have to conduct one activity and the other – being an ordinary member of the negotiating team, but with the appropriate role of a team. Play a role we need to understand what goals we need to achieve and what we need to techniques available for use. Any the role includes not only the necessary steps, but also gives some space – we can use it in support of role in my own personal qualities and do. What you pay for the best. Observing the opponent of negotiations need to find out and understand his role in the negotiations. It may be that some people oppose simply because he wants to play its role. We can help him to look at his position from a different angle and different understanding of his role. For example, let’s unfulfilled negotiating opponent ask for advice on discussed topic. Thus, we propose an opposing player to move from the role of a cranky child to an adult advisor role. Ability to move to a higher position, which requires self–restraint and wisdom, can change the opponent’s approach to a more favorable direction for us. Negotiations, sometimes we have to be a good listener – sometimes a mediator and sometimes sceptic.

Table 1. The Five Core Concerns

<table>
<thead>
<tr>
<th>Core Concerns</th>
<th>When the Concern Is Ignored…</th>
<th>When the Concern Is Met …</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appreciation</td>
<td>Your thoughts, feelings, or actions are devalued</td>
<td>Your thoughts, feelings, and actions are acknowledged as having merit</td>
</tr>
<tr>
<td>Affiliation</td>
<td>You are treated as an adversary and kept at a distance</td>
<td>You are treated as a colleague</td>
</tr>
<tr>
<td>Autonomy</td>
<td>Your freedom to make decisions is impinged upon</td>
<td>Others respect your freedom to decide important matters</td>
</tr>
<tr>
<td>Status</td>
<td>Your relative standing is treated as inferior to that of others</td>
<td>Your standing, where deserved, is given full recognition</td>
</tr>
<tr>
<td>Role</td>
<td>Your current role and its activities are not personally fulfilling</td>
<td>You so define your role and its activities that you find them fulfilling</td>
</tr>
</tbody>
</table>

Source: Fisher, Shapiro 2005:17

Fisher and Shapiro (2005) claims that these five basic emotional needs if they are satisfied, they motivate negotiators, strengthens relationships and improves the outcome of the negotiations. So, in order to create a positive atmosphere in the bargaining, we try to be polite, positively assessing ideas of other side, its hobbies, thoughts, behavior, status, roles, provide the other side of the negotiating autonomy, including the right to take independent decisions.

Conclusions

Feeling of own and the opponent’s emotions, understanding their cause, ability to control or display them , can play a crucial role in bargaining and negotiating communication, in decision–making (for example, research show that about 80% of the decisions are accepted on the basis of emotions). While some emotions, as anger, fear, hatred may interfere the negotiator carry out his work efficiently, but since they cannot escape, they cannot be ignored, because they never go away, they still manifest in different ways and forms.

Research and practice show that experienced negotiators are able effectively manage their emotions; emotions predict demonstration results and their potential impact on the final results.

The emotions shown in non-time and in the wrong place can lead to a negative outcome of the negotiations. To learn how effectively manage emotions in negotiations you need to have a substantial practical negotiating experience – to experience and manage emotions in the real context of the negotiation. Negotiating behavior including emotional behavior, simulation in workshops by exercises can influence more or less the negotiating capacity–building, but the real importance of practical experience in the business cannot be replaced because that any interpersonal communication in real bargaining process takes place in a unique environment, with a unique personality, using a unique strategy for negotiating objectives, selecting appropriate tactics, etc.

Acquired knowledge in real negotiating activities, skills, abilities as a negotiator competence elements form the basis of personal skills development: enables the identification of a new situation, to identify the new (compared to the earlier deal with situations) parameters and to choose the means and working methods that master the situation. Here occurs not only the knowledge, skills, abilities, but also the practical situation experience. Negotiating activities – is a way to gain experience during certain subtleties of showing justification, arguing with contra
arguments, persuading, manipulating, in response to manipulation of the suggestion. So, in a real negotiating activity negotiator learns and develops their negotiating competencies.

Positive emotions which are emitted by the two negotiating sides increase the chances of reaching an agreement. Negotiators experiencing positive emotions in the bargaining process, use less aggressive tactics, are more creative, show respect for the opponent, his aims and prospects. In case of positive emotions even improves the cognitive, sightseeing, logical expression of the negotiator’s skills. In the atmosphere of positive emotions negotiators are willing to help one another, to enhance communication, they are more empathetic. However, such negotiations, which often take place in the atmosphere of high enthusiasm and intensity – may be too risky. Such emotional instability should cause concern. Nevertheless you should try to create a calm and stable climate for negotiations. The atmosphere of warm feelings in negotiations is possible, but bargaining should be based on logical assertions conclusive and rational decisions. In our opinion, if we want to achieve our goals and solve complex problems, we must reduce the degree of emotionally and ensure emotional stability.

Negative emotions have a negative effect in negotiations. And the bargaining process that occurs in the negative emotional atmosphere leads to the fact that one party becomes antithetical to the other and wants to to take revenge, even for minor opponent’s negative emotional displays. Such an emotional bargaining atmosphere can interfere the debate; there it is difficult to negotiators to deal constructively. Therefore, in such situations it is appropriate to use tactics eliminating emotional tension. For example, one of these tactics may be – to declare in negotiations pause and go out for a walk with the negotiators. Leaving the area of negotiations allows you to change the environment. It provides opportunities and space for switching to common to all mankind relationships, take a break, relax and re-charge themselves. Walking next replace personal space field, while walking alongside people are looking at the same direction are in equal positions, and people do not fight eyes war as sitting against one another opponents who share something.

Clever use of emotions in negotiations can become a big advantage and superiority against an opponent who does not use efficiently the emotions and unable to control them, as it would have been useful. Studies show that experienced negotiators know how to manage their emotions and are able to assess their effects on the results.

Thorough preparation – a good tool for avoid losing focus on your negotiating purposes. To calm rising emotions can help the negotiations for an analysis of the focus on other things, thinking about pleasant things. Trying emotions not to turn during bargaining – you can reduce the expectations associated with the negotiation. If we will go into negotiations thinking that the other side is unfair, harsh, will attempt to cheat us – we probably will not be disappointed, and do not survive strong emotions at the meeting. When we reduce the expectations of the negotiating – negotiations are rarely frustrated, but often we can be pleasantly surprised. It is important to prepare correctly ourselves psychologically.

References


Emotions and its management in negotiations: sustainability and stability aspects

Kęstutis Peleckis


Kęstutis PELECKIS lectures at Vilnius Gediminas Technical University, Department of International Economics and Management. He is author of more than 10 publications in business management area, focuses his research in business negotiation problems.
ISSN 2029-7017/ISSN 2029-7025 online
2013 Volume 3(1): 61–71
http://dx.doi.org/10.9770/jssi.2013.3.1(7)

COMPETENCY ASSESSMENT OF PROFESSIONAL MILITARY SERVICE IN LITHUANIAN ARMED FORCES

Jurgita Raudeliūnienė¹, Živilė Tunčikiene², Ramūnas Petrusevičius³

¹, ²Vilnius Gediminas Technical University, Saulėtekio str. 11, LT- 10223, Vilnius, Lithuania
¹, ², ³The General Jonas Žemaitis Military Academy of Lithuania
Šilo str. 5 A, LT-10322 Vilnius, Lithuania
E-mails: jurgita.raudeliuniene@vgtu.lt¹; zivile.tuncikiene@vgtu.lt²; ramunas.petrusevicius@mil.lt³

Received 5 March 2013; accepted 25 June 2013

Abstract. Due to a dynamic environment, human resource competency evaluation and factors influencing its outcome are in constant change. Evaluation of human resource competency and factors influencing its quality are widely discussed subjects in scientific literature with ample controversial viewpoints. Various definitions, points of view and models makes it difficult to choose the best option when evaluating human resource competency and may be the source of the following problem: how to know that the chosen competency evaluation method will convey reality and deliver objective results that could be used as a basis for human resource development related decision making in the future. This study analyses different scientific views on the human resource competency evaluation process. The purpose of this study is to develop a conceptual model for competency evaluation of professional military service in the Lithuanian armed forces that would allow for human resource potential evaluation and form a basis in human resource development related decision making processes in organization. Multiple criteria assessment methods were used for identification and evaluation of factors influencing human resource competency. As a result of conducted research, authors developed the conceptual complex model for competency assessment of professional military service in the Lithuanian armed forces, which enables objective identification of human resource competency influencing factors and forms the foundation for decisions related with development of human resources in organization.

Keywords: Competency, armed forces, decision making, multiple criteria assessment.

Reference to this paper should be made as follows: Raudeliūnienė, J.; Tunčikiene, Ž.; Petrusevičius, R. 2013. Competency assessment of professional military service in Lithuanian armed forces, Journal of Security and Sustainability Issues 3(1): 61–71. http://dx.doi.org/10.9770/jssi.2013.3.1(7)

JEL Classifications: D8, D83, M12.

1. Introduction

The growth of economic and social welfare of the state is tightly interconnected with capital and natural resources, but only few countries around the globe have that kind of superiority. As an example could be mentioned Russia, Middle East countries and USA. These countries have abilities to form their future because of resources owned. Lack of resources and increasing demands for social and economic progress in Western European states amplify the importance of human resources as assurance for continued growth of states’ welfare. Constant transformations tend to amplify the meaning of human resource management in public administration and business sectors. Effective management of human resources is frequently seen as an efficient means to improve performance. Development of competitive abilities that cannot be quickly and easily imitated guarantees high market value. In order to ensure market success the organization must effectively manage human capital. Outstanding performers (organizations) must
develop their abilities to manage fundamental and exclusive competencies of human resources. Effective organizations must continually strive to improve current knowledge levels and develop abilities for creation of new knowledge at lowest costs possible. Today, it is widely acknowledged that an organization's long-lasting competitive advantage depends primarily on the competency level of its human resources. Competent human resources are seen as capital of organization and are able to make difference for particular individuals, organizations, countries and regions. The competitive advantage of Scandinavia, Finland, and Germany in the global environment is often linked to its human resources potential.

Lithuania, like other Baltic states, has limited natural resources at its disposition. The improvement of the social and economic welfare of the state greatly depends on a human resource preservation and development policy. The growth of human resource potential in a dynamic environment should be secured by timely identification, procurement and application of important knowledge, capabilities and skills. Constant search for new teaching applications and possibilities for its implementation, promotion of life-long learning concept should be a part of a national human resource potential improvement policy. Change in the conception of human resource competency and its assessment is influenced by economic, social and technical progress. The assessment of human resources becomes a tool that not only enables one to measure potential of human resources owned, but makes assumptions for human resource potential development related decisions. Historically, competency assessment was rooted in the business sector, because privately owned organizations are more concerned about performance efficiency. Business organizations are used to accumulate experience of human resource competency assessment and development. These organizations are more open for innovative competency assessment and development methods, while human resource competency assessment in public administration organizations is often very formalized and subjective, lacking effective methods for human resource potential assessment and development. Human resource competency assessment is an integral part of the Lithuanian State Defense System. This study involves only competency assessment of professional military service. According to current procedures, competency of military service members is assessed by their immediate superior. Knowledge, capabilities, personal qualities of professional military service is rated according to criteria defined in a soldier's assessment certificate. Despite the fact that Lithuanian State Defense System incorporates many different types of professional military service soldiers (could be mentioned: different kinds of technicians, lawyers, medics, shooters, etc.), there is only one type of competency assessment certificate for all military personnel. Scientists have been studying human resource competency assessment for more than one decade. Nevertheless, there is no unified approach on how one should objectively assess employees' competency. Conception of competency is a complex and ambiguous research subject, sharing different point of views in scientific literature on how one should identify and evaluate factors influencing competency. Lack of objectivity and efficiency is encountered in the competency evaluation process of professional military service members in the Lithuanian armed forces. Nevertheless, it could be mentioned that this process is formalized and lacks complexity. The aim of this study is to develop a complex concept for competency assessment of professional military service in Lithuanian armed forces. This would make it possible to evaluate the potential of human resources and serve as basis for human resources potential development related decision making. Presenting the topic of human resources competency assessment, its meaning and systematizing factors influencing competency in this research were used methods of theoretical analysis, comparison and summation. Expert and multiple criteria assessment methods were used for complex identification and evaluation of factors influencing human resource competency.

2. Theoretical aspects of factors influencing human resource competency

Competency is composed of knowledge in combination with human capabilities and it is perceived as completeness of particular knowledge, capabilities and skills. Many scientist including educationists, sociologists, philosophers, psychologists, economists and management specialists have been examining definition of competency, nevertheless there never have been reached consensus about the meaning of this complex objective. Many scientists and business practitioners associates definition of competency with perspective, experience, proficiency, specialization, intelligence, problem solving ability and efficiency of human being. According to D. C. McClelland
individuals’ traits that have been shaped under long years and are not easy to identify have greater influence for successful workplace performance. These, with bare eye unseen, individual traits were named as competencies (McClelland 1979). L. M. Spencer and S. M. Spencer have proposed definition of competency that included far more than one could identify or measure with bare eye. Knowledge and skills are only the part of competency’s definition. In order to show the complexity of the subject Spencer and Spencer introduced so called „Iceberg model“. Model consists of five parts that have different importance levels to human beings competency related outcomes: skills, knowledge, self-knowledge, personal traits (characteristics) and motives (Spencer and Spencer 1993).

Definition of competency can be used both in singular and plural forms. Singular form of competency’s definition is more likely to be used when describing competency owned by a person, plural is more likely to be used when describing subject specific competencies required for particular position: technical, social, practical etc. Definition of organizations’ competency can be encountered in scientific literature as well, which usually describes organizations ability to perform as structural unit (Whiddett and Hollyforde 2003). According to R. E. Boyatzis performance efficiency describes competency best. This statement author associates with theory of contingency, which states that best performers are those which has hobby or talents similar to work related tasks. In other words if an individual has talent or hobby that is similar to his work tasks, performance results tend to be better, because he is more interested in subject (Boyatzis 2008). R. Adamonienė distinguishes two aspects of competency relevance. First of all human competencies are tools that enables individual to reach his goals and at the same time makes it possible for organizations to implement their policy and reach their defined goals (Adamonienė and Ruibytė 2010).

Lithuanian education law amendment states that competency is an ability to perform particular task in accordance with knowledge, skills, experience and moral values owned (Lithuanian education law, No. XI-1281). Other definitions related to competency are capabilities, experiences and skills. Capability – is a physical or psychological power to act in particular manner, perform particular task. It is a premise and consequence of action performed. Capability emerges when something is learned, later term of know – how could be implemented. Physical foundation for capability – individuals health; psychological – aptitude, developed abilities, intellect; pedagogical – knowledge, proficiency (experiences), skills; social – right to perform etc. (Jovaša 1993).

Ability – aptitude which is developed by learning or studying, know – how to perform intellectually or physically under particular circumstances in particular scope (Laužackas 2005). Proficiency – is ability to use knowledge, sensory and practical experience in order to perform particular theoretically and practically defined actions (Jovaša 1993). Skill – it is automated action that combines mind, practical and material experiences or just action developed to the automatic manner. It is ability that is developed through countless repetitions of the same action (Jovaša 1993). Competency can be analyzed at individual, group, organization level. At the individual level competency is often divided into profession related, methodological, social, personal, management (leadership), intercultural (Raudeliūnienė et al. 2012). Profession related competency is defined as capability to perform in several duties and it has direct ties with education, qualifcation and experience of individual. Profession related competence can be divided into two dimensions: branch (describes the branch where individual is competent and performs efficiently) and quality (describes performance efficiency according to particular range). Methodological competency shows one’s ability to perform particular activity independently of its professional content taking advantage of appropriate methods, means and measures to its accomplishment. Social competence describes personal behavior and in its broadest sense expresses individual’s ability to adapt and function efficiently under particular social circumstances. Criteria of individuals social competence are social skills, ability to set and reach goals and (or) quality of individuals interpersonal relationships. This type of competency is like a prolongation of profession related competencies, which can be described as capability to cope with work fellows, chiefs, users and ability to create proper working climate. Personal competency – first of all it is a self-assessment, decision to perform efficiently, motivation, usage of own capabilities. Management (leaders or leadership) competency – is described as an efficient usage of profession related, personal, social, methodological competencies or its combinations in order to perform well in particular position. Intercultural competency – is individual’s ability to use
particular knowledge, skills, experiences and moral values in order to perform efficiently in multicultural environment. R. Boyatzis (1982) is dividing competencies into basic (fundamental) and professional. Basic competencies could be best described as individuals’ inborn skills to perform particular actions meeting minimum requirements. Meanwhile professional competencies diverge from above mentioned only in quality of results reached. Professional competencies are developed to meet higher standards and enables individual to perform faster and gain competitive advantage. R. Boyatzis distinguishes four groups of basic (fundamental) competencies that every individual possesses: intellectual, motivational, emotional, and social. According to the author difference is only in the development level of these competencies (Boyatzis 1982). R. Jacobs (1989) propose to divide human resource competencies into “hard” and “soft”. According to above mentioned author, analytical and organizational competencies are classified as “hard”, meanwhile creativity, communicational skills – as “soft”, last – mentioned have huge influence on behavior of individual and are easier to measure in comparison with “hard” ones. However both “soft” and “hard” competencies of human resources are equally important for outstanding performance (Jacobs 1989). There could be encountered hierarchical classification of management competencies in scientific literature. Essence of management hierarchical competency classification is a pyramid of management specialist. Every step of management career is defined by particular set of tasks that should be performed when working in certain position. Successful performance can be guaranteed with a possession of different combinations of competence (Saquib and Malik 2012).

Many Lithuanian and foreign scientists have conducted researches related to management (leadership, leaders) competency. More comprehensive studies concerning competency subject have been performed by scientist R. E. Boyatzis (1982). Many research papers on this topic highlight that management (leadership, leaders) competency is multiple and integrated concept related to effectiveness at both individual and organizational levels. Actuality of management competency research is mostly determined by globalization and transformation processes, technological and social changes influencing needs of society, structures and forms of business and public administration organizations. Leaders role and his/her competency composition are at the state of constant change because of the following reasons: equal importance is usually set on both efficiency and social responsibility of decision outcomes, taking into account interests of society and long term welfare. When making decisions leader should take into account and understand importance of systematic transformation changes and their controlling means of in undefined conditions. It means leader should be able to figure out how his decision could influence changes in organization and its close vicinity. Leaders competencies are immediately related with concept of efficiency looking from individual and organizational perspectives: beginning with individual leaders level and successful his/her career planning process, further strategic organizational level when competencies needed for mastering changes in uncertain conditions, solving problems in the complex manner and making both efficient and socially responsible decisions. Efficacious mastership of management competencies enables leader to act more precisely in dynamic environment, spot effective tools for mastering development of organizations creative potential (Raudeliūnienė et al. 2012). Competency of human resources is classified as sophisticated and complex social phenomenon, because it is influenced by many interconnected factors that are used to work in opposite directions. According to V. Podvezko sophisticated values could be evaluated by using complex multiple criteria assessment methods. Multiple criteria assessment methods enable quantitative appreciation of every sophisticated phenomenon that is expressed by many different indexes (Podvezko 2008). R. Ginevičius points out that evaluation process of sophisticated and complex phenomenon is usually made pursuing following multiple criteria assessment stages: formulation of research problem, objective and goals; composition of list of factors influencing research objective; establishment of factor quantification for research objective; formalization of factors for research objective, establishment of significances and its normalization; selection of model for defining factor weights and definition of factor weights; selection of method for joining research objective factors into one summative size; decision making in order to improve the state of research objective (Ginevičius and Podvezko 2005). According to R. Ginevičius and V. Podvezko (2003) essence of this method is to set partial indicators of research objective, compute their values and weights
then join all factors into summative size, which integrates set of partial criteria. An integrated criterion is calculated in accordance with following formula:

\[ R = \sum_{i=1}^{n} \omega_i \cdot R_i \]  \hspace{1cm} (1)

here: \( \omega_i \) – weight of partial criteria, \( R_i \) – normalized values of partial criteria.

Since different factors have uneven influence on research objective, substantial step is to assess factor weight when using multiple criteria assessment methods. Methods of criteria weight assessment could be divided into objective and subjective. When subjective method of criteria weight assessment method is used, criteria weights are defined by experts, when objective methods are used weights are defined in accordance with objective information source for example mathematical calculations and etc. (Podvezko 2008). When determining criteria weights according to the scale of measurement of criteria weights, scales of measurement with various intervals (for example \([0, 1]\), \([0, 100]\) and ect.), grades, points, percentage are used. Most commonly used is criteria weight scale ranging \([0, 1]\) (Ginevičius and Podvezko 2005). As a conclusion when summarizing results of scientific studies conducted on research subject could be stated that human resource competency is sophisticated and complex phenomenon which is affected of many interconnected factors. Under analysis of scientific literature 98 factors having influence on human resource competency were identified. List of initial assessment criteria was delivered for experts for evaluation. Complex multiple criteria assessment method is a suitable tool for assessing human resources competence factors because these factors cannot be expressed in one unified value. The one is not bound to one type of criteria when applying multiple criteria assessment and this gives opportunity to determine each factor significance to the final result, compare values of partial criteria one with another.

3. Identification of competence assessment factors for Professional military service soldiers in Lithuanian armed forces

Today formalized personnel competency assessment interview, where participates both assessor and evaluative (-s) is growing in popularity. This tool of competency evaluation gives possibility for assessor and evaluative to discuss results reached and deficiencies identified during evaluation period. Assessment interview is a part of targeted approach for the personnel assessment which marks the end of one and beginning for another evaluation period. This practice also is applied when assessing professional military service members in Lithuanian armed forces (Lithuanian Ministry of Defense regulations 2012). Under the current arrangements, which came into force from 1st January 2013 (Lithuanian Ministry of Defense regulations 2012) competency (personal qualities and duty task evaluation) of professional military service soldiers is assessed by their immediate superiors. Competency assessment in Lithuanian armed forces has a tendency to be subjective, because professional military service competency assessment is performed by single person (immediate superior) only, when modern organizations of nowadays in order to minimize risk of subjectivity are trying to use at least 3-5 evaluators. Following personal qualities are assessed in latest edition of professional military service competence evaluation arrangement which came into force in the beginning of 2013: patriotism, bravery, self-denial, honesty, devotion, respect, honor, integrity. These personal qualities are assessed on YES/NO basis in other words assessor determines if evaluated person possesses the personal quality or not. Furthermore assessment of personal qualities does not influence final score of whole evaluation. The third part of above mentioned document gives possibility for assessor to judge following aspects of professional military service member: employment of profession related knowledge and skills, management capabilities, ability to cooperate and work in team, operational efficiency, initiative and self-sustainability, stress management, leadership, responsibility and reliability, ability to make decisions, communication and discretion, ability to self – expression orally and in writing form, physical fitness. Physical fitness is one of ten factors assessed which possesses different evaluation range and has no influence on final evaluation score. Latest edition of professional military service competency evaluation if compared with its predecessor (Lithuanian Ministry of Defense regulations 2004) is supplemented with assessment of personal qualities and thorough description of assessment factors. The latest part is usable for evaluator, because it describes content of assessment factors and introduces unified standards for professional military service competency assessment.

Analysis of currently valid professional military
service competency assessment system in Lithuanian armed forces made it possible to frame essential areas of development:

- validity and relevance of assessment factors for nowadays organization and its separate units;
- assessment objectivity, because whole competency evaluation appeals to opinion of only one evaluator;
- evaluators readiness for competency assessment process, since there is lack of knowledge about peculiarities of competency evaluation process among leading personnel;
- different evaluation ranges of competency assessment factors (for example personal qualities are judged on YES/NO basis; physical fitness is judged "passed", "not passed", "not carried out").

In summary could be stated that competency assessment of professional military service members in Lithuanian armed forces is lacking complexity and objectivity (because evaluation is performed by one assessor only). In order to avoid all above mentioned problematic areas competency assessment model of professional military service members in Lithuanian armed forces have been created using multiple criteria assessment method, which incorporated expert and quantitative evaluation methods. Research was conducted in order to identify factors influencing human recourse competency assessment. List of initial competency assessment criteria have been created by analyzing internal and external document sources:

- external sources: scientific literature, legal documents of foreign countries, documents describing professional military service competency assessment and assessment certificates of US, Canada, Sweden, experience of professional military service competency evaluation in foreign countries;

List of initial competency assessment criteria for professional military service in Lithuanian armed forces consisted of 98 factors. Authors found and eliminated from the list 42 initial competency assessment factors that were similar one to another by its content. After the removal of similar items, list of initial competency assessment criteria consisted of 56 factors, which were divided into four groups according to its content (Table 1):

- personal (24 factors): views, personal values, motivation, self-arrangement, personal qualities (Adamoniene and Ruibyte 2010);
- moral (11 factors): willingness to stand for ones believes, behave in the accordance to values declared even when it can lead to unfavorable consequences, persistence and ability to act understanding all consequences in situation filled with indeterminacy (Doctrine for the armed forces of United states 2009);
- management (16 factors): capabilities related to leadership in profession area or organization, effective way of distributing tasks and teamwork (Butkeviciene and Vaidelyte 2009);
- profession related (5 factors): operational field specific capabilities, skills and experience based knowledge which allows for one to fulfill tasks assigned in perfect manner (Kalesnykas and Dieninis 2012).

It was arranged structured survey for experts in order to qualify list of initial competency assessment factors (56 factors). Experts could express their opinions about each competency assessment factor using modified Likert scale (strongly favorable, favorable, unfavorable and strongly unfavorable). Experts in this survey were high ranking officers having not lower but majors military rank, because their experience in armed forces were greater than 10 years. According to Lithuanian president decree (Lithuanian president 2012) which determines the highest numbers of personnel in Lithuanian armed forces for five years to come (year 2012-2017) general population of this study consisted of 496 Lithuanian high ranking officers (major and above). Respondent sample were made of 81 military experts, having not lower than major military rank.
International expert survey was organized in such manner that every expert received e-mail letter with a link to electronic survey tool (which was translated into Lithuanian, English, and Swedish). More than 300 recipients who met above described criteria received electronic letters. Totally 103 experts from four different countries participated in this survey: Lithuania (71), USA/Canada (23), and Sweden (9). Survey was conducted in September – December 2012. This above mentioned survey was aimed to qualify list of initial competency assessment criteria for professional military service in Lithuanian armed forces. Mean values and rating distribution of initial competency assessment factors were counted in order to fine the list. Mean values of personal competency factor survey results were computed in order to clarify which of personal competency factors was most significant (1 – highest value, 4 – lowest value). According to experts most significant personal competency assessment factors are: flexibility of mind, performance, knowledge, proficiency, situation assessment. While least significant are: spontaneity, obstinacy and questioning. Respondents rated proficiency as the most important and second most important competency assessment factor (Table 2). According to the experts most significant moral competency evaluation factors are: responsibility, honesty, respect, setting example, and honor. While least significant are: patriotism, bravery, self - denial.

Table 2. Importance and ratings of personal competencies

<table>
<thead>
<tr>
<th>Importance of personal competencies</th>
<th>Rating of personal competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexibility of mind (1,31)</td>
<td>1 place Proficiency (28 %)</td>
</tr>
<tr>
<td>Performance (1,31)</td>
<td>2 place Proficiency (16 %)</td>
</tr>
<tr>
<td>Knowledge (1,31)</td>
<td>3 place Sense of duty (10 %)</td>
</tr>
<tr>
<td>Proficiency (1,32)</td>
<td>4 place Flexibility of mind (9 %)</td>
</tr>
<tr>
<td>Situation assessment (1,39)</td>
<td>5 place Emotional stability (11 %)</td>
</tr>
</tbody>
</table>

*Source: the authors*
Table 3. Importance and ratings of moral competencies

<table>
<thead>
<tr>
<th>Importance of moral competencies</th>
<th>Rating of moral competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibility (1,16)</td>
<td>1 place</td>
</tr>
<tr>
<td>Honest (1,23)</td>
<td>2 place</td>
</tr>
<tr>
<td>Respect (1,43)</td>
<td>3 place</td>
</tr>
<tr>
<td>Setting an example (1,44)</td>
<td>4 place</td>
</tr>
<tr>
<td>Honor (1,51)</td>
<td>5 place</td>
</tr>
</tbody>
</table>

Source: the authors

According to the experts most significant management competency evaluation factors are: decision making, leadership, teamwork, planning, and initiative. While least significant are: knowing foreign languages, networking, experimenting. Respondents rated analytical thinking as the most important and decision making second most important competency assessment factor (Table 4).

Table 4. Importancies and ratings of management competencies

<table>
<thead>
<tr>
<th>Importance of management competencies</th>
<th>Rating of management competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decision making (1,21)</td>
<td>1 place</td>
</tr>
<tr>
<td>Leadership (1,23)</td>
<td>2 place</td>
</tr>
<tr>
<td>Teamwork (1,34)</td>
<td>3 place</td>
</tr>
<tr>
<td>Planning (1,34)</td>
<td>4 place</td>
</tr>
<tr>
<td>Initiative (1,35)</td>
<td>5 place</td>
</tr>
</tbody>
</table>

Source: the authors

According to the experts the most significant profession related competency evaluation factor is: professional military education (1,32). While least significant is: physical fitness. Respondents were asked to rate actuality of each competence group (personal, moral, management, profession-related) for professional military service separately. According to the experts most significant competency group for professional military service profession-related (1,23), less importance have (in descending order) management (1,35), personal (1,38), moral (1,43). After analysis of expert survey data was completed 24 competency assessment factors were chosen to the newly qualified competency assessment factor list, which later with expert advice was complemented with two more factors suggested during the survey. Final competency assessment factor list consisted of 26 factors: personal – 7, moral – 7, management – 7, profession related – 5 (Table 5). In the next stage of this study, expert group of high ranking officers in Lithuanian Air Force Air Space Surveillance Command (further LAF ASSC) was composed, which consisted of 10 experts. In February – March 2013 LAF ASSC experts were asked to determine importance of initial and partially integrated competency assessment factors. Groups of profession – related (0,33), management (0,27), personal (0,215) competencies were determined as the most important for LAF ASSC personnel. While least important for LAF ASSC personnel was moral (0,185) competence group. Most important competency assessment factors in personal competency group were proficiency (0,206), knowledge (0,156), and emotional stability (0,154). Setting example (0,183) and responsibility (0,182) were evaluated best in moral competency group. Most important competency assessment factors in management competency group were analytical thinking (1,82), planning (0,161). Professional military education (0,320) and knowledge integrity (0,245) were highlighted in profession related competency group (Table 5).

Table 5. Weight of professional military service competency assessment factors in LAF ASSC

<table>
<thead>
<tr>
<th>Weight of partial integrated evaluation criteria</th>
<th>Weight of initial assessment criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sense of duty (0,146)</td>
<td>Proficiency (0,206)</td>
</tr>
<tr>
<td>Flexibility of mind (0,114)</td>
<td>Emotional stability (0,154)</td>
</tr>
<tr>
<td>Situation assessment (0,114)</td>
<td>Knowledge (0,156)</td>
</tr>
<tr>
<td>Empathy (0,110)</td>
<td></td>
</tr>
<tr>
<td>Moral (0,185)</td>
<td></td>
</tr>
<tr>
<td>Honest (0,160)</td>
<td>Responsibility (0,182)</td>
</tr>
<tr>
<td>Respect (0,125)</td>
<td>Honor (0,166)</td>
</tr>
<tr>
<td>Influencing others (0,104)</td>
<td>Tolerance (0,080)</td>
</tr>
<tr>
<td>Setting an example (0,183)</td>
<td></td>
</tr>
<tr>
<td>Management (0,27)</td>
<td></td>
</tr>
<tr>
<td>Decision making (0,159)</td>
<td></td>
</tr>
<tr>
<td>Planning (0,161)</td>
<td></td>
</tr>
<tr>
<td>Leadership (0,122)</td>
<td></td>
</tr>
<tr>
<td>Team work (0,136)</td>
<td></td>
</tr>
<tr>
<td>Analytical thinking (0,182)</td>
<td></td>
</tr>
<tr>
<td>Initiative (0,140)</td>
<td></td>
</tr>
<tr>
<td>Creativity (0,1)</td>
<td></td>
</tr>
<tr>
<td>Profession related (0,33)</td>
<td></td>
</tr>
<tr>
<td>Professional military education (0,320)</td>
<td></td>
</tr>
<tr>
<td>Integration of knowledge (0,245)</td>
<td></td>
</tr>
<tr>
<td>Military attitude (0,140)</td>
<td></td>
</tr>
<tr>
<td>Modern military skills (0,160)</td>
<td></td>
</tr>
<tr>
<td>Physical fitness (0,135)</td>
<td></td>
</tr>
</tbody>
</table>

Source: the authors
Assumptions of professional military service competency assessment model were prepared in accordance with competency assessment experience of foreign countries, international expert survey and suggestions from LAF ASSC experts.

4. Concept complex competency assessment model of professional military service in Lithuanian armed forces

Data collected from international and domestic studies made it possible to create concept complex competency assessment model of professional military service members in Lithuanian armed forces (Fig.1). Following stages are essence of newly created concept model:
- analysis of internal and external sources in order to identify factors influencing competency assessment of human resources; list of initial assessment criteria for professional military service in Lithuanian armed forces is based on data collected from above mentioned sources;
- creation and qualification of initial competency assessment list for professional military service in Lithuanian armed forces;
- evaluation of competency assessment criteria values for professional military service in Lithuanian armed forces;
- evaluation of competency assessment criteria weights for professional military service in Lithuanian armed forces;
- calculation of competency assessment integrated criteria estimates for professional military service in Lithuanian armed forces;
- formation of competence improvement solution sets for professional military service in Lithuanian armed forces;
- evaluation and selection of decisions related to competence improvement solution sets for professional military service in Lithuanian armed forces;
- implementation of competency improvement related decisions for professional military service in Lithuanian armed forces.

![Fig.1. Concept complex competency assessment model of professional military service soldiers in Lithuanian armed forces](image)

*Source: the authors*
Suggested concept complex competency evaluation model for professional military service in Lithuanian armed forces employs more objective and accurate evaluation process and makes it possible not only comprehensively assess factors influencing competency but even determine weak and strong points of ones competency. Data accumulated by this competency assessment model allows easy formation of competency improvement sets for professional military service in Lithuanian armed forces.

**Conclusions**

Competency is composed of knowledge in combination with human capabilities and it is perceived as completeness of particular knowledge, capabilities and skills. Definition of competency was objective of their research for many scientists, though complexity and sophistication of this phenomenon made it difficult to reach unified opinion when defining the subject. Scientists working with factors influencing human resource competency construe them differently and pays little or no attention at all to assessment of competency factors. Today many organizations are experiencing same problem and can’t define which method of competency assessment is capable to create results that are easy to understand for decision making chain and exactly points out problematic competency areas of assessed ones. Multiple criteria assessment method complemented with expert assessment was chosen in this study to solve problem. Initial competency assessment criteria list for professional military service in Lithuanian armed forces was composed of 98 factors. Initial competency assessment factors that were similar by their meaning (42 factors) were eliminated from the list. After removal of similar factors list consisted of 56 factors, which later was divided into four competency groups according to their content: personal, moral, management, profession related. Structured expert survey was made in order to qualify list of initial competency assessment criteria (56 factors). Requirements for experts were: not lower than majors military rank and greater than 10 years experience in the military branch. One hundred and three (103) military experts from USA, Canada, Sweden and Lithuanian armed forces participated in international expert survey. Analysis of data collected from international experts showed that most significant personal competency factors were: flexibility of mind, performance, knowledge, proficiency, situation assessment. Most significant moral competency factors were: responsibility, honesty, respect, setting the example, honor. Decision making, leadership, teamwork, planning, initiative were named as most significant management competencies. Professional military education was assigned as most significant factor in profession related competency group. Qualified competency list consisted of 26 factors of which personal (7), moral (7), management (7), profession related (5). There were created group of LAF ASSC experts consisting of 10 high ranking officers in the next study stage. Experts were asked to determine weights of partially integrated and initial assessment criteria. Most important competency group for LAF ASSC experts was profession related competencies, less important management and personal competency group. According to LAF ASSC experts least important competency group was moral. As a result of accomplished study concept complex competency assessment model was prepared for professional military service in Lithuanian armed forces. This model can be used in all units of Lithuanian armed forces, public administration organizations or private companies in order to assess human resource competence in objective manner and later form competency improvement solution sets based on data collected during assessments.

**References**


Jurgita RAUDELIŪNENĖ is an Assoc. Prof. Dr. of social sciences at Vilnius Gediminas Technical University, Faculty of Business Management and The General Jonas Žemaitis Military Academy of Lithuania. Her research interests are related to knowledge management, formation and evaluation of competitive strategic decisions.

Živilė TUNČIKIENĖ is an Assoc. Prof. Dr. of social sciences at Vilnius Gediminas Technical University, Faculty of Business Management and The General Jonas Žemaitis Military Academy of Lithuania. Her research interests are related to strategic management of public sector.

Ramūnas PETRUSEVIČIUS is a master student at the General Jonas Žemaitis Military Academy of Lithuania, employee at Lithuanian Air Force, airspace surveillance center. His research interests are related to the knowledge management, competency evaluation.
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The text of the article should be printed with single intervals on 210x297 mm format pages with the print area of 150x255 mm each. The length of the article should not be less than 8 pages and cannot exceed 25 pages.

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The name and surname of the authors should be printed in small letters of 11 pt bold type and should be centered. Below the author's surname, the name of the institution (represented by the author or co-authors) must be printed in 10 pt italic; its address and the author's e-mail written and centred.

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