

relevant results and theoretical developments of science
and research in Central and Eastern Europe

3

2013
issue 1

AD ALTA

Journal of Interdisciplinary Research

AD ALTA: Journal of Interdisciplinary Research

Double-Blind Peer-Reviewed

Volume 3, Issue 1, 2013

Number of issues per year: 2

© MAGNANIMITAS. All rights reserved.

MAGNANIMITAS ASSN.

AD ALTA: JOURNAL OF INTERDISCIPLINARY RESEARCH

© 2013 MAGNANIMITAS, ATTN. AND/OR ITS LICENSORS AND AFFILIATES (COLLECTIVELY, "MAGNANIMITAS"). ALL RIGHTS RESERVED. ISSN 1804-7890
ADDRESS: CESKOSLOVENSKE ARMADY 300, 500 03, HRADEC KRALOVE, THE CZECH REPUBLIC, TEL.: 498 651 292, EMAIL: INFO@MAGNANIMITAS.CZ

ETTN 072-11-00001-01-4
ISSN 1804-7890
AD ALTA IS A PEER-REVIEWED JOURNAL OF INTERNATIONAL SCOPE.
2 ISSUES PER VOLUME.

AD ALTA: JOURNAL OF INTERDISCIPLINARY RESEARCH USES THE RIV BRANCH GROUPS AND BRANCHES, BUT THE JOURNAL IS NOT A PART OF RIV. THE RIV IS ONE OF PARTS OF THE R&D INFORMATION SYSTEM. THE RIV HAS COLLECTED AN INFORMATION ABOUT RESULTS OF R&D LONG-TERM INTENTIONS AND R&D PROJECTS SUPPORTED BY DIFFERENT STATE AND OTHER PUBLIC BUDGETS, ACCORDING TO THE R&D ACT [CODE NUMBER 130/2002], THE CZECH REPUBLIC.

A	SOCIAL SCIENCES
B	PHYSICS AND MATHEMATICS
C	CHEMISTRY
D	EARTH SCIENCE
E	BIOLOGICAL SCIENCES
F	MEDICAL SCIENCES
G	AGRICULTURE
I	INFORMATICS
J	INDUSTRY
K	MILITARISM

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MAGNANIMITAS'S PRIOR WRITTEN CONSENT. ALL INFORMATION CONTAINED HEREIN IS OBTAINED BY MAGNANIMITAS FROM SOURCES BELIEVED BY IT TO BE ACCURATE AND RELIABLE. BECAUSE OF THE POSSIBILITY OF HUMAN OR MECHANICAL ERROR AS WELL AS OTHER FACTORS, HOWEVER, ALL INFORMATION CONTAINED HEREIN IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. UNDER NO CIRCUMSTANCES SHALL MAGNANIMITAS HAVE ANY LIABILITY TO ANY PERSON OR ENTITY FOR (A) ANY LOSS OR DAMAGE IN WHOLE OR IN PART CAUSED BY, RESULTING FROM, OR RELATING TO, ANY ERROR (NEGLIGENT OR OTHERWISE) OR OTHER CIRCUMSTANCE OR CONTINGENCY WITHIN OR OUTSIDE THE CONTROL OF MAGNANIMITAS OR ANY OF ITS DIRECTORS, OFFICERS, EMPLOYEES OR AGENTS IN CONNECTION WITH THE PROCUREMENT, COLLECTION, COMPILATION, ANALYSIS, INTERPRETATION, COMMUNICATION, PUBLICATION OR DELIVERY OF ANY SUCH INFORMATION, OR (B) ANY DIRECT, INDIRECT, SPECIAL, CONSEQUENTIAL, COMPENSATORY OR INCIDENTAL DAMAGES WHATSOEVER (INCLUDING WITHOUT LIMITATION, LOST PROFITS), EVEN IF MAGNANIMITAS IS ADVISED IN ADVANCE OF THE POSSIBILITY OF SUCH DAMAGES, RESULTING FROM THE USE OF OR INABILITY TO USE, ANY SUCH INFORMATION.

INTERNATIONAL MASARYK CONFERENCE for Ph.D. Students and Young Researchers

Extend the horizons of science,
scholarship and
research.

vol. IV, 2013

9 – 13 December 2013
www.mmk.econference.cz

CALL FOR PAPER



INTERNATIONAL SCIENTIFIC CONFERENCE INVITATION

DEAR COLLEGES, DEAR PHD STUDENTS,

WE ARE DELIGHTED TO INVITE YOU TO THE 3RD INTERNATIONAL MASARYK CONFERENCE FOR PH.D. STUDENTS AND YOUNG RESEARCHERS ORGANIZED BY MAGNANIMITAS ASSOCIATION, THE CZECH REPUBLIC.

THE CONFERENCE IS INTENDED TO GAIN ACADEMICS AND PH.D. STUDENTS REPRESENTING UNIVERSITIES FROM EUROPEAN COUNTRIES AS WELL AS REPRESENTATIVE OF INSTITUTIONS AND COMPANIES.

THE CONFERENCE PROCEEDINGS WILL BE DIVIDED INTO EIGHT SECTIONS.

THE SUBJECT MATTER OF CONFERENCE SECTIONS INCLUDES:

- BUSINESS MANAGEMENT
- MARKETING
- ECONOMY AND BUSINESS ECONOMICS
- PUBLIC SERVICE
- FINANCING AND ACCOUNTING
- PSYCHOLOGY, SOCIOLOGY AND PEDAGOGY
- INDUSTRIAL ENGINEERING
- INFORMATICS AND INFORMATION TECHNOLOGY

ALL PARTICIPANTS ARE WELCOMED TO SEND THEIR APPLICATIONS BY DECEMBER 3RD, 2012 VIA APPLICATION FORMS THAT CAN BE FOUND AT WEB SITE: [HTTP://WWW.MMK.ECONFERENCE.CZ](http://www.mmk.econference.cz). ALL ARTICLES WILL BE REVIEWED AND PUBLISHED IN A CONFERENCE BOOK WITH ISBN AND INDEXED.

YOURS FAITHFULLY,
CONFERENCE COMMITTEE MEMBERS

TABLE OF CONTENTS (BY BRANCH GROUPS)

A SOCIAL SCIENCES

HOLISTIC MANAGEMENT AND THE SELECTION OF MEMBERS OF CORPORATE GOVERNANCE AUTHORITIES OF ORGANISATIONS IN THE CZECH REPUBLIC JANA BILÍKOVÁ, PAVEL TARABA, VÁCLAV BEZDĚK TOMAS BATA UNIVERSITY IN ZLÍN	8
SURVIVAL RATES OF COMPANIES: THE CASE OF POLAND KATARZYNA BORATYŃSKA WARSAW UNIVERSITY OF LIFE SCIENCES	12
BEHAVIOURAL ECONOMIC THEORY AS A TOOL FOR ECONOMIC ACTION ENLIGHTENING: CASE OF LATVIA RURAL ENTREPRENEURS IGO CALS UNIVERSITY OF LATVIA	15
INTERDISCIPLINARY APPROACH TO BIOLOGICAL THEORIES OF CRIME SLÁVKA DÉMUTHOVÁ, VALENTIN BUCIK UNIVERSITY OF SS. CYRIL AND METHODIUS	18
PROCESSES OF LOGISTIC CUSTOMER SERVICE: BEHAVIOUR OF SENDERS AND RECIPIENTS JOANNA DYCZKOWSKA KOSZALIN UNIVERSITY OF TECHNOLOGY	23
ONE PLUS TWO? TEACHING FOREIGN LANGUAGES TO YOUNG CZECH CHILDREN SILKÉ GESTER TOMAS BATA UNIVERSITY IN ZLÍN	28
SELECTED ELEMENTS OF THE INTERNATIONALIZATION OF SMALL AND MEDIUM-SIZED ENTERPRISES BEATA GLINKOWSKA UNIVERSITY OF LODZ	32
A NEW COMMUNICATION APPROACH FOR THE HOTEL INDUSTRY SANDRA HEIDEN UNIVERSITY OF LATVIA	36
CYBER BULLYING – INAPPROPRIATE ADOLESCENT BEHAVIOUR IN THE 21ST CENTURY KATARÍNA HOLLÁ CONSTANTINE THE PHILOSOPHER UNIVERSITY	40
PERSONALITY TRAITS OF ENGLISH TEACHERS LENKA HRUŠKOVÁ INSTITUTE OF TECHNOLOGY AND BUSINESS IN ČESKÉ BUDĚJOVICE	45
THE ROLE OF DOUBLE TAX CONVENTIONS IN INTERNATIONAL TAX LAW PETER HUBA PAVOL JOZEF ŠAFÁRIK UNIVERSITY IN KOŠICE	50
LEGAL ACTS CHANGEOVERS AS THE REALIZATION OF SUSTAINABLE DEVELOPMENT CONCEPTION. THE CASUAL ANALYSIS ANNA JASINSKA-BILICZAK THE OPOLE UNIVERSITY OF TECHNOLOGY	54
IS IT NECESSARY TO REGULATE FINANCIAL REPORTING OF SMALL AND MEDIUM-SIZED ENTITIES? MICHAL JEŠŠ, MATEJ LEPIEŠ, DAŠA MOKOŠOVÁ UNIVERSITY OF ECONOMICS IN BRATISLAVA	58
ELEMENTS OF SOCIOLOGY OF MUSIC IN TODAY'S HISTORICAL MUSICOLOGY AND MUSIC ANALYSIS KAROLINA KIZIŃSKA ADAM MICKIEWICZ UNIVERSITY	63
ANALYSIS OF INTERGENERATIONAL POLICY MODELS ANDRZEJ KLIMCZUK WARSAW SCHOOL OF ECONOMICS	66
THE ROLE OF ICT SECTOR IN CREATIVE INDUSTRY IN ŽILINA REGION TATIANA ČOREJOVÁ, EMÍLIA MADUDOVÁ, ANGELA PODPEROVÁ UNIVERSITY OF ŽILINA	70
SOME CONSIDERATIONS ON THE INSTITUTION OF A DISPOSAL OF AN EMPTIED MORTGAGE PLACE ANETA MAKOWIEC JAGIELLONIAN UNIVERSITY	75

SELECTED PERSONALITY TRAITS OF YOUNG PEOPLE RELATED TO QUALITY OF EXPERIENCING THEIR RELATIONSHIPS AND LIFE MIČKOVÁ ZUZANA UNIVERZITA SV. CYRILA A METODA V TRNAVE	81
LEGAL FOUNDATIONS OF METROPOLISES AND METROPOLITAN AREAS IN POLAND SYLWIA ŁĘKAWSKA, ANETA PAWŁOWSKA JAGIELLONIAN UNIVERSITY	85
IMPACT OF RECENT SHOPPING CENTER DEVELOPMENTS ON COMMERCIAL REAL ESTATE VALUE IN THE CITY CENTER OF ŽILINA ALEXANDRA POKORNÁ UNIVERSITY OF ŽILINA	91
PLANNING FOR PARTICIPATION IN TOURISM EVENTS – AN EXAMPLE OF SLOVAK CITIZENS KRISTÍNA POMPUROVÁ, IVANA ŠIMOČKOVÁ MATEJ BEL UNIVERSITY	95
SELF – ASSESSMENT OF STUDENTS OF FINE ARTS EDUCATION IN THE CONTEXT OF THEIR PERCEIVED SUBJECTIVE PREDISPOSITIONS AND LEARNING OUTCOMES ADRIANA RÉČKA CONSTANTINE THE PHILOSOPHER UNIVERSITY	100
SEARCHING THE MEANING OF FINE ART EDUCATION IN EDUCATION OF THE STUDENTS - FUTURE FINE ART TEACHERS JANKA SATKOVÁ CONSTANTINE THE PHILOSOPHER UNIVERSITY	104
MANAGEMENT OF ECONOMIC EFFICIENCY IN SMALL AND MEDIUM-SIZED ENTERPRISES JAN ŠTĚPÁNEK MENDEL UNIVERSITY	109
QUALITATIVE CHARACTERISTICS OF FINANCIAL INFORMATION PRESENTED IN FINANCIAL STATEMENTS ACCORDING TO IFSR/IAS VERSUS THE INFORMATION FUNCTION – CONTRIBUTION TO THE DISCUSSION MARZENA STROJEK-FILUS UNIVERSITY OF ECONOMICS IN KATOWICE	114
THE NOTION OF GROSSLY EXCESSIVE STIPULATED PAYMENT IN THE POLISH CIVIL CODE JAROSŁAW MARCIN SZEWCZYK JAGIELLONIAN UNIVERSITY	118
IMPLEMENTATION OF TEAM TEACHING IN ECONOMIC EDUCATION LUDMILA VELICHOVÁ, DARINA ORBÁNOVÁ THE UNIVERSITY OF ECONOMICS IN BRATISLAVA	121
AN OPINION OF COURT EXPERT IN MATTERS OF PROPERTY MANAGEMENT – SELECTED ISSUES MICHAŁ WDOWIAK ACADEMY OF LAW AND DIPLOMACY	124
PUPILS WITH MENTAL HANDICAP IN PEDAGOGICAL COMMUNICATION EVA ZEŽULKOVÁ UNIVERSITY OF OSTRAVA	127

D EARTH SCIENCES

SPATIAL ANALYSIS OF CURRENT MIGRATION DIFFERENTIATION OF MUNICIPALITIES IN CZECH REPUBLIC LINDA KREJNÍKOVÁ CHARLES UNIVERSITY IN PRAGUE	134
--	-----

J INDUSTRY

THE EFFECT OF INTERNAL COOLING ON BLOW MOLDED PRODUCTS PAVEL BRDLÍK, PETR LENFELD TECHNICAL UNIVERSITY OF LIBEREC	138
QUALITY IMPROVEMENT METHODS FOR IDENTIFICATION AND SOLVING OF LARGE AND COMPLEX PROBLEMS JAN KOSINA VŠB – TECHNICAL UNIVERSITY OF OSTRAVA	142

MATHEMATICAL MODEL OF MOBILE ROBOT FOR PURPOSE OF PATH TRACKING OF THE ROBOT
LUBICA MIKOVÁ, RÓBERT SUROVEC, ERIK PRADA, MICHAL KELEMEN
TECHNICAL UNIVERSITY OF KOŠICE

146

A SOCIAL SCIENCES

AA	PHILOSOPHY AND RELIGION
AB	HISTORY
AC	ARCHAEOLOGY, ANTHROPOLOGY, ETHNOLOGY
AD	POLITICAL SCIENCES
AE	MANAGEMENT, ADMINISTRATION AND CLERICAL WORK
AF	DOCUMENTATION, LIBRARIANSHIP, WORK WITH INFORMATION
AG	LEGAL SCIENCES
AH	ECONOMICS
AI	LINGUISTICS
AJ	LITERATURE, MASS MEDIA, AUDIO-VISUAL ACTIVITIES
AK	SPORT AND LEISURE TIME ACTIVITIES
AL	ART, ARCHITECTURE, CULTURAL HERITAGE
AM	PEDAGOGY AND EDUCATION
AN	PSYCHOLOGY
AO	SOCIOLOGY, DEMOGRAPHY
AP	MUNICIPAL, REGIONAL AND TRANSPORTATION PLANNING
AQ	SAFETY AND HEALTH PROTECTION, SAFETY IN OPERATING MACHINERY

HOLISTIC MANAGEMENT AND THE SELECTION OF MEMBERS OF CORPORATE GOVERNANCE AUTHORITIES OF ORGANISATIONS IN THE CZECH REPUBLIC

^aJANA BILÍKOVÁ, ^bPAVEL TARABA, ^cVÁCLAV BEZDĚK

*Tomas Bata University in Zlín, nám. T. G. Masaryka 5555,
760 01 Zlín, Czech Republic*
email: ^abilikova@flkr.utb.cz, ^btaraba@flkr.utb.cz,
^cbezdek@fai.utb.cz

The article is focused on selecting members of the administrative bodies of companies carrying on business in the Czech Republic. It is desirable for the execution of good corporate governance that the members of the administrative bodies of the company have a Holistic Competence (proper attitude, necessary skills and developed knowledge) in the area of corporate governance. The main objective was to determine the level of application of the knowledge of Corporate Governance and Holistic Competence by members of the corporate governance of multinational and Czech joint-stock companies in the territory of the Czech Republic. On the basis of the results of the questionnaire survey recommendations are proposed concerning how to increase the level of corporate governance in the Czech Republic.

Keywords: Corporate Governance, Corporate Governance Authorities, Holistic management

1 Theoretical background

The first mention of corporate governance dates back to the 17th century, when the power of colonial empires increased and the trade of capital companies developed. In the 20th century ownership was separated from control, by which necessary conditions were created for the formation of corporate governance with corporations of that time (companies with share or stock capital). Hučka, Malý and Okruhlica at present, considerable attention is paid to corporate governance [8]. Subramaniam and Ratnatunga regard the given issues as one of the key themes of the present time [16].

For the purposes of the article the definition of the term “corporate governance” is based on the more comprehensive conception of corporate governance, based on the classical approach of stakeholder groups: *By the term “corporate governance” we understand relationships among shareholders, administrative bodies, top management, and other stakeholder groups (creditors, employees, customers, suppliers, the state, media, and the like).*

The scope of attention paid to the issues of corporate governance exceeds the national level of individual member states of the EU. At the level of the EU the European Corporate Governance Forum (ECGF) and the European Commission (EC) deal with the given issues especially in their action plan *Modernising Company Law and Enhancing Corporate Governance in the European Union – A Plan to Move Forward* [6] and in the so-called modernising Green Paper *Corporate governance in financial institutions and remuneration policies* [4], the Green Paper *Audit Policy: Lessons from the Crisis* [3], and the Green Paper *The EU corporate governance framework* [5].

The principles based on the documents *Principles of Corporate Governance* [12], *OECD Guidelines on Corporate Governance of State-Owned Enterprises*, [11] and *State-Owned Enterprise Governance Reform: An Inventory of Recent Change*, [13] issued by the Organisation for Economic Co-operation and Development have become the basis of the formulation of recommendations to individual states of the EU when applying corporate governance at the national level.

The knowledge of the legal framework of corporate governance and the ability of applying it every day are a prerequisite for increasing the competitiveness of companies in the Czech Republic. The recommendations formulated in the documents issued by the OECD after their adaptation to the conditions of the Czech business environment were published by the Czech Securities and Exchange Commission under the name *Kodex správy a řízení společnosti* (Corporate Governance Code). On the basis of an analysis of the Codex and analyses of the Commercial Code and other collections of laws the situation in

the area of corporate governance at the level of the Czech Republic was mapped.

On the basis of theoretical knowledge acquired we characterize two main approaches to corporate governance, i.e. the shareholder approach and the stakeholder approach.

Within the stakeholder approach the theories of representation and administration are characterized. The theory of representation characterizes a manager as an individual maximizing his or her benefit at the expense of the shareholders [14]. The theory of administration understands a manager to be an individual whose interests do not differ from interests of the shareholders. When maximizing the market value of the company, managers also satisfy their interests and contribute thus to an increase in the performance of the company on a long-term basis [15].

We distinguish between two versions of the stakeholder group approach; the stakeholder version and the classical version. The main objective of the stakeholder version is the growth of the market price of shares which is achieved by improving the performance of stakeholders (e.g. employees) on the basis of satisfying their interests. The classical version of the stakeholder group theory does not consider the maximization of the market price of the shares to be the main objective of an organization, but it aims primarily at maximizing the satisfaction of interests of all stakeholder groups.

There are two main bodies in the one-level management system: the general meeting and the board of directors. In the two-level model, the supervisory board and the board of directors work in the organizational structure of corporate governance in addition to the general meeting [2]. The main emphasis is laid on the German model, the elements of which have become the basis of the two-level model applied in the Czech Republic [10].

The bodies of joint-stock companies in the Czech Republic are the general meeting, the board of directors and the supervisory board and these have an irreplaceable function in the application of the main principles of corporate governance. We consider the level of knowledge of administrative body members to be a critical factor in the competitiveness of Czech companies [9].

The level of knowledge in the area of corporate governance is clearly defined within neither Czech nor foreign literature. Klířová state that members of corporate governance bodies should have at least a basic knowledge in the area of management [10].

The content of the article is limited to the evaluation of knowledge, skills and approaches of corporate governance body members according to the holistic management philosophy.

The holistic competence of subjects of management is expressed as $CQ = VQ, AQ, SQ$ [15].

The members of corporate governance bodies should be holistically competent. They should have the necessary knowledge to execute their functions, which they acquire through education, they should have the necessary skills acquired through training, and, last but not least, their development should be directed towards the only objective – social maturity [14].

2 Research

2.1 Main objective

Determine the level of application of the knowledge of corporate governance by members of corporate governance bodies of multinational and Czech joint-stock companies in the territory of the Czech Republic.

2.2 Data collection method

The data were acquired on the basis of a questionnaire survey among members of corporate governance bodies in the Czech Republic.

Research set: 193 respondents were approached; the final number of the questionnaires processed was 61, i.e. the rate of return was 31.61 %.

Data collection methodology: The questionnaire was sent out by classical mail or e-mail. The questionnaire contained 1 dichotomous question, 3 identification questions, 12 questions where the respondent was to determine the degree of assessment of knowledge, skills and approaches when selecting an administrative body member (1 – Applied, 5 – Not applied).

Data collection took place in the months of April 2011 to April 2012.

Data processing method: The questionnaire was evaluated on the basis of descriptive statistics; the results of the questionnaire were processed in the graphical form and then interpreted. In the next stage, the determined hypotheses were tested on the basis of statistical methods (Chi-square test for goodness of fit and Wilcoxon test for two dependent samples) [1;7].

2.3 Evaluation of the method

Using a questionnaire as a quantitative research method is suitable under such conditions where the author of the questionnaire has the sufficient rate of their return ensured. Under such condition it is an applicable method the main benefits of which are:

- low costs connected with data collection;
- the possibility of covering a large samples of respondents; and
- relatively low time requirements.

In our case the rate of return of the questionnaires was ensured with the help of colleagues and personal contacts acquired over the period of cooperating with practising people which contributed to a large extent to the return of the questionnaires [1].

2.4 Limits of the questionnaire survey

For the success of the questionnaire survey it was necessary to ensure that the respondents were only administrative body members. The lower number of the questionnaires evaluated is also connected with this because this represents specific issues and potential research respondents are considerably busy and their attitude towards the questionnaire survey was mostly negative.

2.5 Hypothesis

H: When selecting corporate governance body members, more emphasis is laid on their professional knowledge and practical skills than on their personal traits (social maturity).

The holistic competence of an individual to exercise functions of an administrative body member and the correct selection of members on the basis of evaluating their capabilities are of great importance to an organization. On the basis of studies of available literature dealing with the given issues we assumed that when selecting corporate government body members, more emphasis was laid on their professional knowledge and practical skills than on their personality traits (social maturity). To test this hypothesis, we used the questionnaire.

2.6 Results

Respondents

Large enterprises have the largest representation within the research (44 %). On the contrary, only 11 % of enterprises (7 enterprises) are micro enterprises. This fact was caused by the

fact that mainly joint-stock companies, which achieved the best results in the Czech Republic, were approached.

Another criterion which was examined within the quantitative part of the research was the area of business activities. The greatest representation was that of industrial enterprises (25 enterprises), trade (10 enterprises) and the construction industry (7 enterprises). Some respondents who stated a different type of company mentioned such responses as information technologies and publishing.

When collecting the data, our effort was to get mainly Czech enterprises in terms of their ownership structure. This criterion was successfully fulfilled because the Czech-owned enterprises represented the 64% portion of the companies the data of which were analysed within the qualitative part of the research. The data from 15 % of companies with the majority of European owners (9 companies) and from 21 % of companies which were considered by respondents to be world ones (13 companies) were also analysed.

Competences assessed when selecting an administrative body member

When selecting an administrative body member, his or her holistic competence to execute the function should be assessed.

When selecting an administrative body member, mainly the knowledge of the organizations which it manages is assessed. Up to 21 respondents (34.43 %) stated that the organizations fully applied this criterion. It is necessary for administrative body members to be informed of the current state of the financial and commercial aspects of the company, of the strategy for its further development, and of possible problems and tasks which are currently solved by the administrative body of the given organization.

The knowledge of the management functions (planning, organizing and controlling) is considered to be the basic knowledge of a manager at all levels of management. The organizations that participated in the research largely assessed the knowledge of the management functions. We can say that almost 70 % of the respondents stated that the given criterion was applied or partially applied when selecting a member for a position.

An important criterion which should be assessed when selecting a new member of an administrative body is also his or her ability to work with information. The average value of the given criterion reaches a level of 2.36.

In the analysed companies, the largest reserves were found in the area of assessing the knowledge about the system approach because the average value of the given criterion reached a level of 2.61.

The research shows that when selecting a member of a body of corporate governance in the Czech Republic, his or her communication skills are assessed the most within practical skills. 38 (62.30 %) of the respondents stated that the given criterion was applied or partially applied in their company. On the contrary, the ability to motivate (the mean value is 2.56) and the self-management and time management abilities (the mean value is 2.51) are assessed the least.

The importance of motivation is mainly the domain of top management but the ability to motivate should not be underestimated even in the case of a supervisory board member. On the basis of the answers of the respondents we draw the conclusion that the ability to motivate as well as the self-management and time management abilities are hardly ever assessed by 14.75 % of the companies and even not assessed at all by 6.56 % of the companies.

It is necessary to draw attention to the fact that up to 9.84 % of the respondents stated that when selecting an administrative body member, the ability to work in a team was not considered at all. This can lead to considerable instability of the

administrative body in the case of determining the strategic direction of the enterprise.

The character and the will are considered to the highest degree within social maturity. Fifteen respondents (24.59 %) fully agreed and 24 respondents (39.34 %) partially agreed with the statement that when selecting an administrative body member, their organization considered just his or her character and his or her will characteristics. The average value reached a level of 2.31. Only a slightly higher average value (2.33) was determined for the cognitive and creative abilities.

When assessing the SQ level of newly taken on members of boards of directors and supervisory bodies in the business conditions of Czech companies, the greatest deficiencies were found in assessing temperament characteristics, even though only one respondent stated that the given characteristics were not considered in their company, the average value of this criterion was 2.54.

2.7 Testing hypothesis

Hypothesis:

We assumed that when selecting corporate governance body members, more emphasis was laid on their professional knowledge and practical skills than on their personality traits.

We described the scientific hypothesis:

H: When selecting corporate governance body members, more emphasis is laid on their professional knowledge and practical skills than on their personality traits.

In the first step we converted the responses of individual respondents to their scores. In case that a respondent fully agreed with the statement that when selecting an administrative body member his or her individual knowledge, skills or approaches were assessed, a value of 1 was added to the score. In case that a respondent did not agree with this statement at all, a value of 5 was added to the score. The score was calculated for all respondents for individual pillars VQ, AQ, and SQ

Subsequently, we tested the VQ and SQ and also AQ and SQ data sets which contained the scores of individual respondents.

The scores of the respondents which take into account the extent to which his or her professional knowledge is assessed when an administrative body member is selected are contained in the data set (VQ).

The scores of the respondents which take into account the extent to which his or her practical skills are assessed when an administrative body member is selected are contained in the data set (AQ).

The scores of the respondents which take into account the extent to which his or her social maturity is assessed when an administrative body member is selected are contained in the data set (SQ).

Test of the VQ and SQ data sets

We expressed the hypothesis H_0 and the alternative hypothesis

H_1 :

H_0 : The respondents' VQ responses are from the same set (with the same median) as the respondents' SQ responses.

H_1 : The respondents' responses for VQ are not from the same set (with the same median) as the respondents' SQ responses.

We took decision on what test we would use to test the hypotheses:

As the data are not from a normal distribution, which we verified by tests in the STATISTICA CZ programme, and the data are dependent on each other (we obtained paired values from one evaluator – respondent), we select the test:

Wilcoxon test for two dependent samples.

We established the critical region – W:

$$W = (\infty, -u_{0,975}) \cup (u_{0,975}, \infty) = (-\infty, -1.96) \cup (1.96, \infty)$$

We established the test criterion:

$$U = 0.68 \text{ (calculated using the STATISTICA CZ programme); the p-value of the test is } p = 0.49.$$

We took decision on the validity of the hypothesis:

$$U \notin W: \text{ We do not reject } H_0$$

On the basis of the test carried out we can draw the conclusion:

We proved at the 5 per cent significance level that the VQ responses are from the same set as the SQ responses.

At the 5 per cent significance level we can state that the respondents' responses to what extent his or her professional knowledge (VQ) is assessed when selecting an administrative body member are from the same data set as the respondents' responses to what extent his or her social maturity (SQ) is assessed when selecting an administrative body member.

Test of the AQ and SQ data sets

We expressed the hypothesis H_0 and the alternative hypothesis

H_1 :

H_0 : The respondents' AQ responses are from the same set (with the same median) as the respondents' SQ responses.

H_1 : The respondents' AQ responses are not from the same set (with the same median) as the respondents' SQ responses.

We took the decision on what test would be used to test the hypotheses:

As the data are not from a normal distribution, which we verified by tests in the STATISTIKA programme, and the data are dependent on each other (we obtained paired values from one evaluator), we select the test:

Wilcoxon test for two dependent samples.

We established the critical region – W:

$$W = (\infty, -u_{0,975}) \cup (u_{0,975}, \infty) = (-\infty, -1.96) \cup (1.96, \infty)$$

We established the test criterion:

$$U = 0.42 \text{ (calculated using the STATISTICA CZ programme); the p-value of the test is } p = 0.67.$$

We took the decision on the validity of the hypothesis:

$$U \notin W: \text{ We do not reject } H_0.$$

On the basis of the test carried out we can draw the conclusion:

We proved at the 5 per cent significance level that the AQ responses are from the same set as the SQ responses.

At the 5 per cent significance level we can state that the respondents' responses to what extent his or her practical skills (AQ) are assessed when selecting an administrative body member are from the same data set as the respondents' responses to what extent his or her social maturity (SQ) is assessed when selecting an administrative body member.

On the basis of these results we can state:

When selecting corporate governance body members, the same emphasis is laid on their professional knowledge and practical skills as on their personality traits.

Conclusion

In the hypothesis verification chapter we did not confirm the hypothesis that when selecting corporate governance body members more emphasis is laid on their professional knowledge and practical skills than on their personality traits (social maturity). It is positive that the personality traits of administrative body members are also significantly assessed

when selecting corporate governance body members. But it is necessary to continue to emphasize the importance of correct human attitudes (the pillar of social maturity, SQ) when selecting potential administrative body members in companies operating in the Czech Republic.

On the basis of our results and studies of professional literature we formulated the following recommendations:

When selecting a member of an administrative body (board of directors and supervisory board) in the two-tier model and (board of directors) in the one-tier model of corporate governance, it is necessary to consider his or her professional knowledge, practical skills, and, of course, social maturity. Informing competent persons of individual pillars is of not negligible importance to the sustainable development of the organization. After all, just the careful selection of administrative body members the organization acquires a basis in the form of highly valuable human capital. The holistic management philosophy represents an important basis of the evaluation of the competency of potential members of administrative bodies and it is therefore necessary to pay attention to informing administrative body members of the holistic competency model.

The pillar of social maturity is placed the first in the didactic sequence because of its importance to the practice. The pillar of social maturity is based on the personality traits of subjects of management (owners, managers, and employees) and consists of the knowledge of character traits and will, cognitive and creative abilities, temperament and emotional characteristics, and, last but not least, somatic characteristics (physiological and mental – spiritual). Just these are the characteristics the importance of which is often underestimated. One of our objectives is to inform members of boards of directors and supervisory boards of organizations in the Czech Republic with the results obtained by analysing available information sources, not only Czech, but especially foreign, concerning a critical impact of social maturity on the success of the whole organization. It is just the selection of members with high social maturity what is an important factor in the competitiveness of every organization in the current turbulent economic environment.

Literature:

1. Chráska, M. *Metody pedagogického výzkumu: základy kvantitativního výzkumu*. Praha: Grada, 2007. 265 p. ISBN 978-80-247-1369-4.
2. Dědic, J., et al. *Akciové společnosti*. 6. vyd. Praha: C. H. Beck, 2007. 920 p. ISBN 978-80-7179-587-2.
3. European commission. *Green Paper – Audit Policy: Lessons from the Crisis*. [online]. 2010b. [cit. 2012-02-15] Available from: <http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0561:FIN:EN:PDF>
4. European commission. *Green Paper – Corporate governance in financial institutions and remuneration policies*. [online]. 2010a. [cit. 2012-02-15] Available from: http://ec.europa.eu/internal_market/company/docs/modern/com2010_284_en.pdf
5. European commission. *Green Paper – The EU corporate governance Framework*. [online]. 2011. [cit. 2012-02-15] Available from: http://ec.europa.eu/internal_market/company/docs/modern/com2011-164_en.pdf
6. European commission. *Modernising Company Law and Enhancing Corporate Governance in the European Union – A Plan to Move Forward*. [online]. 2003-06-05 [cit. 2009-10-08] Central European Corporate Governance Association. Available from: <http://www.cecga.org/sk/onas/kniznica/zaujimave-odkazy>
7. Hendl, J. *Přehled statistických metod: analýza a metaanalýza dat*. Rev. 3. Praha: Portál, 2009. 696 p. ISBN 978-80-7367-482-3.
8. Hučka, M., Malý, M., Okruhlica, F. *Správa společnosti*. Praha: Kernberg Publishing, s.r.o., 2007. 272 p. ISBN 978-80-903962-0-3.
9. Kavalíř, P. *Hodnocení corporate governance v České republice*. Working Paper CES VSEM No. 14/2005. ISSN 1801 – 2728.
10. Klířová, J. *Corporate Governance – Správa řízení obchodních společností*. Praha: Management Press, 2001. 126 p. ISBN 80-7261-052-X.
11. OECD. *Guidelines on Corporate Governance of State-Owned Enterprises*. [online]. 2005. [cit. 2012-03-10] Organisation for Economic Co-operation and Development. Available from: <http://www.oecd.org/corporate/corporateaffairs/corporategovernanceofstate-ownedenterprises/34803211.pdf>
12. OECD. *OECD Principles of Corporate Governance*. [online]. 2004. [cit. 2009-03-10] Organisation for Economic Co-operation and Development. Available from: <http://www.oecd.org/daf/corporateaffairs/corporategovernanceprinciples/31557724.pdf>
13. OECD. *State-Owned Enterprise Governance Reform: An Inventory of Recent Change* [online]. 2011. [cit. 2012-03-10] Organisation for Economic Co-operation and Development. Available from: <http://www.oecd.org/daf/corporateaffairs/corporategovernanceofstate-ownedenterprises/48455108.pdf>
14. Porvazník, J. *Celostní management*. Bratislava: Poradca podnikateľa spol. s r.o., 2007. 539 p. ISBN 978-80-88931-73-7.
15. Porvazník, J., Ladová, J. *Celostní management*. Bratislava: IRIS, 2010. 490 p. ISBN 978-80-89256-48-8.
16. Subramaniam, N., Ratnatunga, J. *Corporate Governance: Some Key Challenges and Opportunities for Accounting Researchers*. In: *Journal of Applied Management Accounting Research*, 2003, 1 (2), pp. 1-8.

Primary Paper Section: A

Secondary Paper Section: AE

SURVIVAL RATES OF COMPANIES: THE CASE OF POLAND

*KATARZYNA BORATYŃSKA

Warsaw University of Life Sciences, Faculty of Economic Sciences, Nowoursynowska 166 St., 02-787 Warsaw, Poland
email: katarzyna_boratynska@sggw.pl

The paper is published within the frame of the scientific project: Przyczyny bankructwa przedsiębiorstw w wybranych branżach przemysłu spożywczego, decision number: UMO-2011/01/B/HS4/00841 financed by Polish National Science Centre

Abstract: This article discusses selected aspects related to survival of enterprises. It specifies the "survival" percentage of entities established in 2006 and monitored in the years 2007-2011 by the Central Statistical Office. It has been stated that survival depends on both internal and external factors, independent of the enterprise. According to research, approximately 30% of the strongest enterprises remained on the market after five years of conducting economic activity. The first of year of economic activity was the most difficult to survive. Enterprises operating in the health care sector (50.1%) were characterized by the highest survival rate after five years of operation, while enterprises operating in the hotel and catering sector (23.1%) by the lowest.

Keywords: survival rates, newly-established enterprises

Introduction

During economic slowdown, the number of enterprises bankruptcy increases. In the economic literature in the current deriving from enterprises organization, it is assumed that the main determinants of survival and development of a company on the market are size and age. The initial period of market operations is particularly difficult for the majority of enterprises. Although the crisis scenario, stages and symptoms themselves are similar for numerous bankrupt enterprises, the process takes place in a different manner in young enterprises and in mature undertakings which have been operating on the market for many years. This problem was noticed by Argenti (Prusak 2010, p. 61). He distinguished three trajectories of bankruptcy: enterprises which have just started business activity, young undertakings and mature companies.

Within a biological theory, bankruptcy is treated as an indispensable part of a functioning system, a natural "evening" of the enterprise's life. However, the transfer of assets and employees taking place as a result of bankruptcy generates costs, which has impact on the pace of economic development. One may distinguish direct and indirect costs of enterprise bankruptcy, with externalities being particularly high. The number of liquidated places of employment in industry in the years 2000-2012 has been presented in Figure 1. The greatest number of places of employment was liquidated in the following sectors: clothing and fur products, machines and devices, food and beverages, whereas the smallest number was in the coke and tobacco industry (Fig. 1).

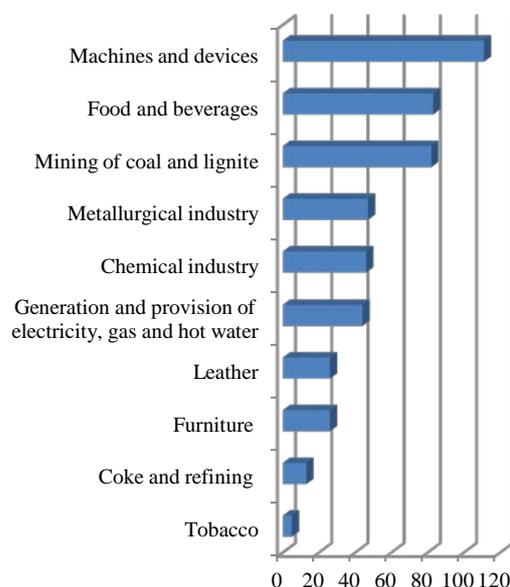
According to the research conducted so far, young enterprises are the most exposed to bankruptcy risk (Mączyńska 2005, p. 13). Research carried out by Professor E. Mączyńska shows that over a half of newly-established enterprises go bankrupt within 4 years, the following 30% within 10 years. The remaining enterprises do operate, however, they frequently utilize their resources in an ineffective manner. High bankruptcy ratio of newly-established companies may decrease entrepreneurs' motivation to set up new entities. For this reason, the analysed research problem deserves a broader examination.

1. Objective and methodology of research

While ineffective entities are liquidated due to increased competition on the market, new entities are set up in their place, which may result in bringing desired results. For this reason, it is possible to perform an analysis of how new economic entities are established ("birth rate") and interpret the enterprises' survival rate ("survival rate"), i.e. the percentage of newly-

established economic entities active after a certain period, for example after a year.

Fig.1. Number of liquidated places of employment in industry in the years 2000-2012 [in thousands]



Source: Przemysł się kończy. Przyszłość pracy jest w usługach. 5.11.2012
http://forsal.pl/grafika/659108,115034,przemysl_sie_konczy_przyszlosc_pracy_jest_w_uslugach.html retrieved 15.11.2012

The objective of the study was to identify the "survival" percentage of economic enterprises established in the year 2006 and monitored in the years 2007-2011. Attention was also paid to methodological aspects related to the examination of the discussed phenomenon. In this scope, the author applied both data and methodology of the Central Statistical Office.

Panel surveys relating to enterprises beginning economic activity were conducted in the Central Statistical Office. The panel character of surveys entailed that monitoring in subsequent years covered the undertakings from the sample selected in the first year of survey (no new undertakings in place of those which closed down were drawn, thereby the size of the sample decreased each year). Data was collected during a five-year monitoring of the same undertakings set up in a given year. The survey provided data related to effects of new enterprises' operations depending on the type and scale of undertaken business activity and external conditions.

As a result, one may attempt to analyse, among others, the probability of new companies remaining on the market in the first years after incorporation, the factors facilitating conducting economic activity for Polish entrepreneurs as well as the barriers which hinder their operations and the ways of dealing with them. The ability to react quickly to changing environment and the ability to maintain competitiveness among newly-established enterprises is the condition for survival and remaining on the market. Undertakings which are not able to meet requirements become ineffective and are driven out of the market. This phenomenon is defined as "creative destruction".

In the first year, the monitoring covered enterprises registered as new ones in the year preceding the survey. Between the second and the fifth year, the survey covered those enterprises from the initial group which conducted economic activity, i.e. remained active, at the time of monitoring. In the year 2011, five surveys of enterprises established in subsequent years 2006-2010 were

conducted concurrently. For the group established in 2006 it was the fifth and last survey, while for the population established in 2007 – the fourth, for the one established in 2008 – the third, for the one established in 2009 – the second, whereas for the population established in 2010 – the first one.

Surveys were made using the representative sampling method. The first sample for each cycle of surveys of undertakings registered in subsequent years 2004-2009 comprised 3 thousand entities. In the survey of enterprises established in 2010, started in 2011, the drawn sample constituted 1.1% of the whole examined group. The sample selection was based on the proportional sampling without replacement scheme with constant fraction and stratification. Given the stratification method, results of survey were presented in basic sections according to legal forms, enterprises' sizes and the type of conducted business activity. The scheme of panel surveys has been presented below, with monitoring conducted in the year 2011 marked (table 1).

Table 1. Panel survey scheme

Year of the survey	Year of an enterprise establishment				
	2006	2007	2008	2009	2010
2007	■	■			
2008	■	■	■		
2009	■	■	■	■	
2010	■	■	■	■	■
2011	■	■	■	■	■

Active undertakings subject to survey

Inactive undertakings not subject to the study

Source: Own study based on: A. Piatek (team leader), T. Grabowski, J. Kotowski, K. Recko: Warunki powstania i działania oraz perspektywy rozwojowe polskich przedsiębiorstw powstałych w latach 2006–2010. Główny Urząd Statystyczny, Departament Przedsiębiorstw, Informacje i Opracowania Statystyczne, Warszawa, 2012. 1-106 p. ISSN 1507 – 126X.

2. Survival of enterprises – theoretical aspects

The phenomenon of enterprises survival may, among others, be analysed using the so-called survival analysis. The analysis assumes that all enterprises create one population, whereas enterprises threatened with bankruptcy are merely "ill" subjects in this population. The survival period, estimated based on financial ratios describing the given subject, is defined for each subject from the population. The survival (or duration) of an enterprise is studied by means of a probability that a company with certain characteristics X closes business in the year t under the condition that it "has survived" until the year t . This probability for small increases of the t period may be assumed as the value of a so-called hazard function.

A variable which is important in the survival analysis is the time which passes between the "entry" and the "exit", i.e. the duration period from the moment of establishment until the end of the company's operations. One may monitor the entire period or its shorter part – as the effect of left- or right-side censoring. The duration is a non-negative random variable T which is usually a discrete variable in economy. The deduction process in the survival analysis theory is usually conducted for a continuous variable. The T distribution function of the variable is marked as $F(t)$, while the density function of that variable as $f(t) = dF(t)/dt$. The probability that duration is not longer than t is expressed by the formula $Pr(T \leq t) = F(t)$. On the other hand, probability that duration is longer than t is expressed by a survival function: $S(t) = Pr(T > t) = 1 - F(t)$. The survival function decreases monotonically from digits to zero. The hazard function has the following form:

$$\gamma(t) = \lim_{\Delta t \rightarrow 0} \frac{\Pr(t \leq T < t + \Delta t | T \geq t)}{\Delta t} = \frac{f(t)}{S(t)}$$

The value of the hazard function is (temporary, for small Δt) the probability of exit from a given state on condition of survival until t time. One may distinguish a single hazard model and a competitive risks model. The application of the above models (Gruszczyński, p. 160) was not presented in this study. Enterprises survival models are an element of business demography, which name has, according to Gruszczyński (2012, p. 159), aroused controversy between statisticians and demographers. Opponents of the term "business demography", e.g. Domański and Szreder (2010), indicate that the term "demography" should be attributed exclusively to studies on the population of people. Supporters emphasize the fact that the tools used in demography may also be useful in other fields (Paradysz 2011) (quotation from Gruszczyński 2012, p. 159).

3. Results of the survey¹

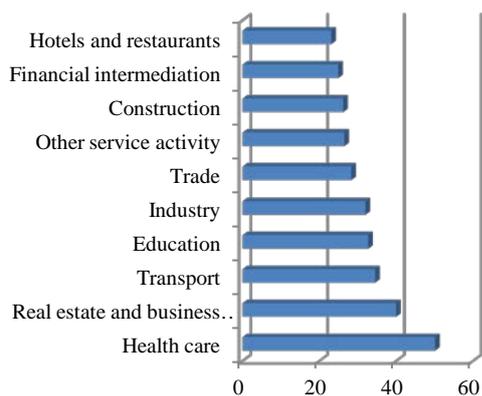
From among 241.4 thousand entities established in 2006, 75.5 thousand entities remained on the market after five years, which constituted 31.3% of the examined group. Definitely, enterprises which hired workers were more stable than enterprises without hired workers (survival rates 55.4% and 24.8% respectively) and legal persons than natural persons (survival rates 58.0% and 29.7% respectively). For comparison, the survival rate for examined entities after 4 years of business activity (i.e. in 2010) was 36.2%. The first year of business activity was the most difficult for enterprises established in 2006. 66.5% of undertakings remained on the market until 2007. The survival rates of enterprises established in 2006 were higher in the following four years, while the ratio decreased in the fifth year of operating i.e. in the year 2011.

Entities operating in the health care sector were characterized by the highest survival ratio (50.1%). The rate for sectors such as real estate, services for business, transport, education and industry was higher than average. The rate for other sectors was lower than average, with enterprises operating in accommodation and catering services being the weakest – only 23.1% of entities remained on the market after five years (Fig. 2).

Survival rates for enterprises established by men and women were similar. 46.1% of companies established by men and 43.8% of companies established by women remained on the market. A considerably greater diversification of survival rate was observed in particular groups distinguished based on the owner's personal characteristics. Entities of the youngest entrepreneurs (up to 29 years old) were the least stable, whereas companies established by people aged between 40-49 were more stable. Over five subsequent years, a half of companies established by persons with higher education and one third of companies established by persons with primary education survived on the market.

Fig. 2. Enterprises established in 2006 according to the principal activity – survival rate until 2011 [in percentage]

¹ This part of the paper was drawn based on data and results of survey contained in the publication: A. Piatek (team leader), T. Grabowski, J. Kotowski, K. Recko: Warunki powstania i działania oraz perspektywy rozwojowe polskich przedsiębiorstw powstałych w latach 2006–2010. Główny Urząd Statystyczny, Departament Przedsiębiorstw, Informacje i Opracowania Statystyczne, Warszawa, 2012. 1-106 p. ISSN 1507 – 126X.



Source: Own study based on: A. Płatek (team leader), T. Grabowski, J. Kotowski, K. Rećko: *Warunki powstania i działania oraz perspektywy rozwojowe polskich przedsiębiorstw powstałych w latach 2006–2010*. Główny Urząd Statystyczny, Departament Przedsiębiorstw, Informacje i Opracowania Statystyczne, Warszawa, 2012. 1-106 p. ISSN 1507 – 126X.

56.5% of companies which undertook investment activities in the first year of operation remained active until 2011. Whereas 42.0% of companies which did not incur investment expenditures remained on the market. 27.5% of active entities registered in 2006 undertook investment activities in the year 2011. 50.7% of entities which did not report difficulties in conducting and developing business activity in the first year of operating remained active until 2011.

In the year 2011, both enterprises generating profit and those incurring loss noted a drop in survival rates in relation to previous years. In the case of enterprises generating profit, survival rates in 2010 were higher than in 2011, at the same time, for enterprises which generated negative financial results, the year 2011 was worse than 2010 and 2009. In the majority of sections, entities generating profit were characterized by higher survival rate than in the case of enterprises incurring loss.

84.9% of all enterprises generated profit in 2011. 48.8% of entities which noted profit and 39.2% of those which incurred loss in 2007 remained on the market. Almost 90% of natural persons and 60% of legal persons established in 2006 generated profit in 2011.

Excessive competition and related decreasing of prices by competitors were indicated as a barrier in developing business by the greatest number of enterprises established in 2006 and still active in 2011. Insufficient funds were the main problem for the majority of companies.

Summary and conclusions

Establishment of new enterprises, their survival on the market and development are processes depending on numerous factors. Those include both internal conditions related to potential entrepreneurs' predispositions and external ones. Such conditions determine whether they achieve success or fail. Survival depends on the market conditions in which enterprises are set up, the funds which they have at their disposal, the profile of business activity which they intend to conduct, access to external financial resources, the scope of business activity, the ability to deal with individual barriers and the ability to generate profit. 30% of the strongest entities remained on the market after five years of business activity. The first year of activity was the most difficult to survive for enterprises. Experience obtained by entrepreneurs helps them to survive.

Literature:

1. Gruszczyński, M.: *Empiryczne finanse przedsiębiorstw. Mikroekonometria finansowa*. Difin. Warszawa, 2012. 158-165 p. ISBN 978-83-7641-581-9.
2. Mączyńska, E., (red.): *Ekonomiczne aspekty upadłości przedsiębiorstw w Polsce*. Materiały i Prace Instytutu

Funkcjonowania Gospodarki Narodowej, Tom XCII, SGH, Warszawa, 2005. 13 p. ISBN 0239-9512.

3. Płatek A. (team leader), Grabowski T., Kotowski J., Rećko K.: *Warunki powstania i działania oraz perspektywy rozwojowe polskich przedsiębiorstw powstałych w latach 2006–2010*. Główny Urząd Statystyczny, Departament Przedsiębiorstw, Informacje i Opracowania Statystyczne, Warszawa, 2012. 1-106 p. ISSN 1507 – 126X.
4. Prusak, B.: *Ekonomiczna analiza upadłości przedsiębiorstw. Ujęcie międzynarodowe*. Wydawnictwa Fachowe CeDeWu, 2010. 61 p. ISBN 9788375563689.
5. *Przemysł się kończy. Przyszłość pracy jest w usługach*. http://forsal.pl/grafika/659108,115034,przemysl_sie_konczy_przyszlosc_pracy_jest_w_uslugach.html retrieved 15.11.2012.

Primary Paper Section: A

Secondary Paper Section: AH

BEHAVIOURAL ECONOMIC THEORY AS A TOOL FOR ECONOMIC ACTION ENLIGHTENING : CASE OF LATVIA RURAL ENTREPRENEURS

¹IGO CALS

*University of Latvia, Riga, Faculty of Economics and
Management, boulv. Aspazijas 5, Riga, Latvia, LV-1050
email: "igo.cals@vaderstad.com; igo@inbox.lv*

Abstract: The task of every scientific theory is to explain the observed practices and to forecast possible development trends of the researched object. Hence, economics theory has to provide a theoretical support to those processes that are carried out by economic activity units on daily basis. The neo-classical economics theory encompasses a belief system of both economical processes and a rational choice model of separate economic entities explaining an economic activity as an attainment of maximum financial results within given resources. However, empirical data studies demonstrate the fact that economic decisions made by enterprises cannot be substantiated through rational choice theory which has been appropriated by classical economics theory. Behavioural economics is an instrument that can theoretically explain real economic practices of agents and rural entrepreneurs serve as an excellent proof of a theoretical concept of behavioural economics working in practice.

Keywords: *Behavioural economics, rural entrepreneurs, economic practices, rational choice.*

1 Introduction

Theoretical stance of behavioral economics does not contradict paradigms of classical economics. In principle, behavioural economics disputes a single postulate of classical economics that economic actors are rational in making every economic decision. Classical economics treat economic activity subjects as indisputable rational beings whose decision making is a purposeful process. The essence of entrepreneurship according to classical economics is expressed as a desire to attain maximum income within restricted resources. However, one should pose a question: Does entrepreneurship always set a goal to maximise financial income and, consequently, make every decision accordingly? Is rationality solely linear? Behavioural economics poses the following arguments:

- First, the notion of rationality is a relative one. The comprehension of a rational behaviour significantly differs among different subjects;
- Second, rationality has got a restricted nature: its comprehension depends on a person's knowledge, experience, intuition and the environment where decisions are made;
- To a great extent, economic activity decisions by subjects are not only determined by economic and financial parameters but also by a social field where the subject operates and where normatives are adopted;
- Declared values (socially adopted by the society) are not always accepted by economic entity subjects and, consequently, decisions can essentially differ from the perceived rational norms;
- Socio-economic decision makers have got different personalities. Whereas the classical economics discourse ignores the notion of personality, real practices affirm the impact of individual comprehension in making economic decisions. Consequently, economic activities of similar economic subjects have got expression forms that substantially differ since each individual has got a different comprehension of work and life values.

The classical economics theory acknowledges the given problem; however, it avoids its institutionalization. Yet, it is impossible to come to a unified economics theory paradigm without inclusion of the given discourse under behavioural economics concept (Ariely, 2008).

According to the classical economics theory, an individual is not a personality with its flaws, mistaken views and undefined values but a "superrational" subject lacking human behavioural norms. Behavioural economics treat a person as a real human being acting both rationally and irrationally, whose decisions are often irrational and have not been modelled in the past.

Consequently, economic processes cannot just be explained by exact definitions and linear extrapolation; instead, they are subjected to individual decisions of different economic actors that have got a common vector of progress but with substantial individual deviations.

Social norms is another essential factor determining behavioural stereotypes of a single person, including economic decisions. The objective of entrepreneurship is not merely to ensure economic benefits but also to present a social status and to gain a higher position within the hierarchy of the social network. Through economic activities, an entrepreneur attempts to multiply not only financial, but also social and symbolic capitals.

Behavioural economics concept analyses economic activity according to this complex comprehension. Thanks to such specific factors of entrepreneurial environment as a finite social field, attachment to a certain location, specific regulations by public administration and transparency of entrepreneurship, rural entrepreneurs are a successful analysis object of economic decisions in the context of behavioural economics theory.

2 Behavioural Economics as Theoretical Tool

Behavioural economics is a sub-division of economics theory that studies the effects of social, cognitive and emotional factors on the economic decision of individuals and institutions. (). The study of behavioral economics includes how market decisions are made and the mechanisms that drive choices.

"Bounded rationality" concept (Simon, 1955, 1957, 1991) presented a novel treatment of economic processes: humans acted according to their knowledge, assumptions and experience. Rationality is not an absolute but a relative category. Cognitive power is limited and certainly non absolute, especially in the context of a separate economic activity subject. Consequently, the neo-classical economics theory has got limitations as it does not allow relativity of rationality.

2.1. Herbert Simon's "Bounded Rationality"

Herbert A. Simon was granted the Nobel Memorial Prize in Economic Sciences in 1978 for his decision making process studies in economic organizations. Instead of analysing available resources and decision making consequences in a scrupulous way, actors mainly think of the decision's impact upon themselves and hereto, in a short term perspective. The decision making is impacted by a numerous number of factors with boundless possibilities for analysis. Therefore, a decision is made on the basis of a "bounded rationality", not an absolute one. While explaining actions of economic subjects, one has to realize that the value system is personalized and that the rationality is determined by a complex ambiguous number of factors and, more importantly, the cognition power is limited due to human biological and social factors. Herber Simon's concept started a whole new trend in economics science and laid foundations of behavioural economics perspective and socio-economic processes. Instead of a theoretical science, economics became an applied science providing real explanations of economic decision making practices.

2.2. Symbolic Capital by Bourdieu

The notion of symbolic capital can be derived from the social capital theory (Bourdieu, Putnam, Coleman) where symbolic capital is an important capital type, along with culture and knowledge capitals, and social ties. The researchers could not ignore the fact that a successful economic activity was ensured not only by an access to financial capital, technologies and suitable labour resources (as stressed by neo-classical economics theory) but also a series of social factors that are available to an entrepreneur.

Nowadays, nobody challenges the importance of social capital in ensuring a successful and sustainable entrepreneurship. Social capital is the expected collective or economic benefits derived from the preferential treatment and cooperation between individuals and groups. The social capital's essence can be treated either from individual viewpoint (Bourdieu) or through a set of social ties in the respective social field (Coleman, Putnam). One of the key elements forming social capital is symbolic capital which has been most precisely described by Bourdieu (1984).

Symbolic capital accumulates primarily from the fulfillment of social obligations that are themselves embedded with potential for prestige. Objects may also possess symbolic capital. Hence, decisions about purchasing different manufacturing tools carry not only a financial weight but also a symbolic value. The symbolic angle enriches the purchased product with social capital and creates an additional immaterial value.

$$\Omega = f(Y; Y_c; Y_s) \quad (1)$$

Utility (Ω) is a function not only of individual utility Y but also Y_c which stands for the criteria by which the individual views the welfare of his community (Georgescu-Roegen, 1960) and Y_s which shows social capital gains in one's community (Bourdieu,).

$$Y_s = f(\Sigma(Y_{sym}, Y_{cul}, Y_{know}, e.t.c)), \quad (2)$$

Where social capital is made of different interconnected capital forms such as symbolic capital (Y_{sym}), cultural capital (Y_{cul}), knowledge capital (Y_{know}) and other relative capital forms (Bourdieu, 1984).

According to Time-inconsistent theory (Laibson, 1997), consumers prefer benefits that can be gained in the shortest possible time. Out of all variable, uncertain and interrelated capital forms, symbolic capital can be presented in the shortest possible time by purchasing status goods relevant to one's social field. Possibly bigger future financial gains are rated lower than symbolic assets that raise one's social status.

Solely behavioural economics' conceptual comprehension provides explanation behind real practices when, for the purposes of economic activities, entrepreneurs purchase manufacturing tools of both high efficiency and symbolic value that is transformed into social capital.

2.3. Prospect Theory

Prospect theory can be regarded also as a part of behavioural economics, with Daniel Kahneman (The Nobel Memorial Prize in Economic Science, 2002) and Amos Tversky (1979) being the biggest contributors. Prospect theory is a behavioural economic theory that describes the way people choose between probabilistic alternatives that involve risk, where the probabilities of outcomes are known. The theory states that people make decisions based on the potential value of losses and gains rather than the final outcome (Kahneman; Tversky, 1979). Throughout the course of the decision making and under equal probability, fear to suffer a loss is proportionately bigger than desire to make a maximum profit. On the one hand, such approach stops people from taking an increased risk; on the other hand, a possibility to gain additional income from investments into economic processes is un-proportionately underrated. Such decision making process can be explained with the aid of theoretical concepts of behavioural economics.

2.4. Summary : Theoretical Concepts and Practices of Rural Entrepreneurs

Agricultural industry is strictly regulated in the European Union. It is seemingly one of the national economics' industries with the highest impact of public administration upon economic decisions of economic entities. Through its public power and financial regulations, the state attempts to coordinate the industry's

sustainable development to the interest of entire national economics. Agricultural entrepreneurship is specific due to its territorial attachment and farmer location in a certain social field – a social territory where social values have got a special meaning. The land as the key manufacturing agent cannot be relocated. Rural entrepreneurs often combine economic manufacturing with rural lifestyle (Georgescu-Roegen, 1960). In its turn, through applying different instruments such as subsidies, support programmes and aid in infrastructure maintenance, public administration influences both rural entrepreneurial processes and rural lifestyle as a certain value.

Taking into account the above written, the comprehension of the classical economics theory can be inadequate when analysing rural entrepreneurship. To explain true reasons behind economic decisions of rural entrepreneurs, it is very important to comprehend behavioural economics since the rationality of economic decisions, and its social and symbolic meanings can be only understood through the comprehension of behavioural economics concepts. Public administration whose impact upon rural entrepreneurial environment is essentially important still bases its actions on paradigms of neo-classical economics. Both parties have got a different comprehension of rationality and, consequently, their collaboration is relatively complicated.

The given thesis addresses the problem that decisions made by rural entrepreneurs can be exclusively explained by concepts of behavioural economics whereas public administration consistently adopts comprehension of classical economics rationality.

3. Research Methodology

Behavioural economics, in difference to classical economics, mostly applies qualitative research methods. Through the course of this study in the time period between autumn 2011 and April 2013, 44 representatives of Latvian rural farms were interviewed by applying in-depth and unstructured interview methodology. The total size of the farm land of researched farms exceeded 300 hectares and in a country like Latvia, those farmers could be regarded as major entrepreneurs. The unstructured interview was held as a discussion on the company's long-term development prospects. The farm owners were sole representatives in 27% of cases, with their family members and also employees joining them for unstructured interviews in the rest of cases. All farms were selling their produce in the marketplace; hence, they could be classified as follow:

- Rural entrepreneurs and
- Manufacturers for natural consumption.

A bigger part of the interview was devoted to the discussion of rural lifestyle being a non-material income factor for rural entrepreneurs; however, it has not become a focus of this study. All farms receive funds from the state and international rural development organizations and additionally make real income out of rural entrepreneurship.

Throughout the study, 5 respondents representing Rural Support Service, an institution regulating rural entrepreneurship, were interviewed. Those respondents gave their evaluation of rural entrepreneurship's aspects from a controversial viewpoint of transactions. Nevertheless, representatives of regulatory bodies equally belong to the common social field of rural entrepreneurship.

4. Discussion and Findings

The qualitative part of the study indisputably confirms that both parties impacting economic processes of rural entrepreneurship employ different paradigms towards their comprehension of a real situation in agriculture.

On 37 occasions corresponding to 84% of all respondents, one of the main discussion topics covered an ability of entrepreneurs to accommodate value systems set by the state regulatory bodies in

order to gain income that could be converted into different non-financial capital forms, with symbolic capital occupying a special place. An example is an application for grants towards the purchase of a new equipment where the key criteria set by regulatory bodies is a necessity to obtain the cheapest possible equipment that is capable to carry out analogical technological operations. Rural entrepreneurs, however, revealed that they had carried out all possible (including fictitious) transactions in order to obtain grants for the purchase of the most expensive and most prestigious rural equipment. The course of discussions confirmed that rural entrepreneurs regarded such economic indices as profitability, depreciation norms, technology productivity and even the price as less important than the brand of the equipment, a possibility to purchase luxury extras and especially their own value in the eyes of neighbours. It was the added social value that impacted the choice of the equipment. Only 7 or 16% of all respondents saw a potential future risk from the more expensive technology or investments. Despite an attempt to structure the discussion of the interview with the use of economic indices, it was clearly obvious that rural entrepreneurs had a relatively short term approach towards economic development and a superficial knowledge on economic categories. Furthermore, they preferred such capital forms as social and symbolic capitals to a possibility of attaining bigger financial results with cheaper resources. The qualitative study indisputably revealed the value system of Latvian rural entrepreneurs and their respective economic decisions subjected to the conceptual basis of behavioural economics.

The outcome of discussions with representatives of the state regulatory body confirmed that their value system certainly belonged to classical economics viewpoint. The representatives of the state regulatory body declared that the objective of economic activities of rural entrepreneurs was to make a maximum income through applying minimum resources and that the objective of support programmes was to promote entrepreneurship through the given aspect. The representatives of the regulatory body having an essential impact on the industry tried to ignore the fact that real practices of rural entrepreneur did not always correspond to the classical economics viewpoint.

5. Conclusion

The agricultural production in the European Union countries has not historically been a free market and different national and international regulatory bodies have been impacting the development of the particular industry with a help of different support programmes and subsidies.

Rural entrepreneurs and representatives of regulatory bodies are the main actors of the rural entrepreneurship's social field. Unfortunately, they have got a completely different comprehension of economic and life value systems. Whereas economic activity expressions of rural entrepreneurs can be analysed by concepts of behavioural economics, representatives of regulatory bodies regard economic processes from the classical economics viewpoint. A contradiction arises between these belief systems.

Due to the fact that a numerous amount of public resources are used towards the support of agriculture, conceptually different approaches to entrepreneurial values create a contradiction between objectives of granting means and motives of utilisation. It cannot be hidden from the society resulting in incomprehension.

The methodology and belief system of behavioural economics is an instrument explaining real economic practices of rural entrepreneurs.

Literature:

1. Ariely D. (2008) *Predictably Irrational: The Hidden Forces That Shape Our Decisions*. New York: HarperCollins.
2. Bourdieu, P. 1984. *Distinction: A social critique of the judgement of taste*, Harvard: Routledge

3. Georgescu-Roegen, N. (1960), "Economic theory and agrarian societies", *Oxford Economic Papers*, new series, Vol. XII pp.1-40.
4. Simon, H.A. (1955), "A behavioral model of rational choice", *Quarterly Journal of Economics*, Vol. 69 No.1, pp.99-118.
5. Simon, H.A. (1957), *Models of Man*, Wiley, New York, NY.
6. Simon, H.A. (1991), "Bounded rationality and organizational learning", *Organization Science*, Vol. 2 No.1, pp.125-134.
7. Kahneman, Daniel, and Amos Tversky (1979) "Prospect Theory: An Analysis of Decision under Risk", *Econometrica*, XLVII (1979), 263-291.
8. Laibson, D. (1997), "Golden eggs and hyperbolic discounting", *The Quarterly Journal of Economics*, Vol. 112 No.2, pp.443-477.

Primary Paper Section: A

Secondary Paper Section: AC, AH, GA

INTERDISCIPLINARY APPROACH TO BIOLOGICAL THEORIES OF CRIME

^aSLÁVKA DÉMUTHOVÁ, ^bVALENTIN BUCIK

*Department of Psychology, Faculty of Arts and Sciences,
University of Ss. Cyril and Methodius, Nam. J. Herdu 2, 917 01
Trnava, Slovakia*

email: ^aslavka.demuthova@ucm.sk, ^bpsychologia@ucm.sk

Abstract: Current trends in biological conceptions of crime differ from their initial theories. Even though they still stress the fact that biological factors have the potential to affect behaviour significantly, they accept also other areas of aetiology. Such an approach brings new possibilities to the science development. Communication between disciplines and benefitting the mutual interconnections when solving the problem of crime leads to the new – interdisciplinary – theories. The paper shows the examples of these theories by introducing the Developmental theory of T. E. Moffitt, Biosocial theory of D. H. Fishbein, Somatic marker hypothesis of A. R. Damasio, and Evolutionary ecology of B. J. Vila. Further on, it presents the vertical and horizontal approaches to integration of different kinds of knowledge.

Keywords: interdisciplinarity, theories of crime, aetiology of crime, biology

The twentieth century in psychology was characterised by a boom of various theories, concepts, schools and new ideological streams. This tendency resulted in the formulation of dozens of theories also in the area of criminal aetiology. Intensive research and efforts to verify these theories by empirical studies has led (except the controversial results) to the finding that a specialized focus in examining the problem helps to analyze it in detail from the specific perspective, but at the same time such an approach is limited by its own boundaries (Klein 1990). Scientists came to a point where they were not able to explain the mechanisms within their specialization without the knowledge of the principles of functioning belonging to other areas/specializations. The need to use knowledge from other related scientific disciplines resulted not only in mutual communication and help, but also created new explanatory areas of studied problems.

Current trends in biological conceptions of crime differ from their initial theories. Even though the biological explanations of crime still stress the fact that biological factors have the potential to affect behaviour significantly (as well as its socially undesirable forms), they accept also other – psychological, environmental etc. aetiologies. This enriched view does not mean that they retreated from their positions in order to maintain its own existence in changing world and "collaborated" with competitive theories. Such an approach brings new possibilities to the science development. Some authors even state that axioms from one area of scientific research may successfully support the validity of statements from the other one by creating one unified net of propositions (Démuth 2013). Communication between disciplines and discoveries of interconnections when solving the common problem leads to new – interdisciplinary – theories of crime. The outcome can have a different background – it can be a result of a union of two equal points of view, a discovery of some integrating meta-level of two originally different views, or even a completely new concept, which uses knowledge from several scientific areas, but results in a brand new original theory.

Of course, these integrations and interdisciplinary communication are not always easy. They meet a lot of problems with communication based on the different language and terminology of scientific areas with terms denominating slightly or extremely different things. Also, the methodology used in various scientific disciplines is not always compatible and therefore the results gained in different areas can't be smoothly compared. There are also other complications (see e.g. Schleifer 2000), however, the growing body of new interdisciplinary approaches and theories proves, it is a very productive and efficient area of scientific approach nowadays.

1 Developmental theory of Terrie E. Moffitt

One of the theories of criminality that integrates elements from different perspectives is Terrie E. Moffitt's developmental

theory. The basic factors of development are maturing and learning – both of these aspects are interlinked and mutually influence the ontogenesis. While maturing is tied more to the internal environment of the body and is genetically determined, learning reflects influence of the external environment. Moffitt's crime theory assumes that based on these presumptions there are two taxonomically very different types of crime – one is dependent on the intrinsic characteristics of an organism and continues throughout life, while the second type is bound to a shorter period of ontogenesis and reflects the specifics of an individual's environment (Moffitt 1993).

Life-course-persistent antisocial behaviour (LCP) is based on the presence of neurological deficits that cause problems with the behaviour of an individual. These deficits manifest themselves already in early childhood particularly in boys (ratio of LCP boys and girls is 10:1 – Moffitt, Caspi 2001) and have typical behavioural symptoms e.g. infants tend to be restless, irritated, and inconsolable, they show more dissatisfaction and more intense crying. Parents often declare failures in efforts to reassure them, they handle their children with difficulties. Later on, the problems with their socialization emerge; children with LCP antisocial behaviour fail to fit into social groups and have problems establishing contacts with peers. During pre-school age they are already often being diagnosed with hyperactivity, or impulsivity. The frequency and severity of antisocial behaviours increases with age; at school they start to break rules, outside the school they gain their first police records. The typical feature is their inability to acquire socially desirable patterns of behaviour and inclination to problematic peer groups. Their repertoire of responses to environmental stimuli is limited and inappropriate. In adolescence first arrests appear and the severity and frequency of offences increases with age. In adulthood, the criminal activity is more severe, aggressive and chronic (Moffitt 1993).

Despite the apparent fatalism in the development of LCP, Moffitt notes that the dysfunctions of the central nervous system should not be regarded as purely deterministic. They should be considered as individual variants of the nervous system, and represent the basic material for the interaction between the individual and the environment during life. LCP antisocial behaviour is thus not purely caused by neurological deficits, but acquires its typical features in conjunction with a specific (in this case criminogenic) environment (Moffitt 1993). The interaction between the environment and genetic predisposition may be present on various levels. The inheritable character of this behaviour also means that the risk of an incidence in parents of having such a child is much higher than in the normal population. The consequence is that also parents will exhibit similar problems with coping with situations linked to CNS dysfunction. For such parents the upbringing of the child with CNS dysfunction therefore represents a greater burden than for those who do not suffer from these abnormalities. Furthermore, these parents are not likely to provide model behaviour for appropriate, non-pathological coping with problem situations. Raising a child with neurological deficits by parents suffering with dysfunctions often leads to failures and critical situations which worsen the family climate and represent a less favourable developmental environment than in intact families.

The second type of antisocial behaviour is called Adolescence-limited antisocial behavior (ADL) and is linked to the period of adolescence. It occurs mainly in the period between biological and social maturity and affects (compared to LCP) only slightly more boys than girls with a ratio of 1,5:1 (Moffitt, Caspi 2001). Adolescence is a turbulent developmental period typified by revolt against authorities, searching for own identity, rejecting parents' models and ideals, preferring peer groups and abandoning family, testing own abilities and limits and also curiosity about the reactions of others to behavioural provocations (Macek 2003). The transition from childhood to adulthood therefore characterizes also naturally increased tendency to break the rules of society and behave delinently.

According to T. E. Moffitt, ADL antisocial behaviour occurs at this time and is characterized by the absence of previous antisocial tendencies during childhood. In its nature, such behaviour is temporary, learned and it occurs in the repertoire of reactions because of the principles of conditioning. Individuals with ADL exhibit antisocial tendencies only if they appear to be beneficial to them and – unlike the LCP – they are able to reject such behaviour if the prosocial tendencies lead to a better reward. ADL individuals are thus able to control and regulate their behaviour depending on benefits (Moffitt 1993). In LCP subjects the prosocial tendencies in the repertoire of behaviour are usually completely lacking or they are just minimally present. Another significant difference is that the in ADL subjects the vast majority of inappropriate behaviour disappears spontaneously after reaching adulthood. Also, during the period of adolescence the offences do not tend to progress - neither in frequency nor in severity and they have mostly a nonviolent character. There are also periods when adolescents do not commit offences at all. In addition, biologically conditioned LCP antisocial behaviour has close links to education and environmental factors; also ADL crime shows some potential to a genetic connection. Recent analysis revealed that ADL crime manifested through non-aggressive, rule-breaking behaviour is related to the occurrence of genetic polymorphism on His452Tyr and DAT1 (Burt, Mikołajewski 2008).

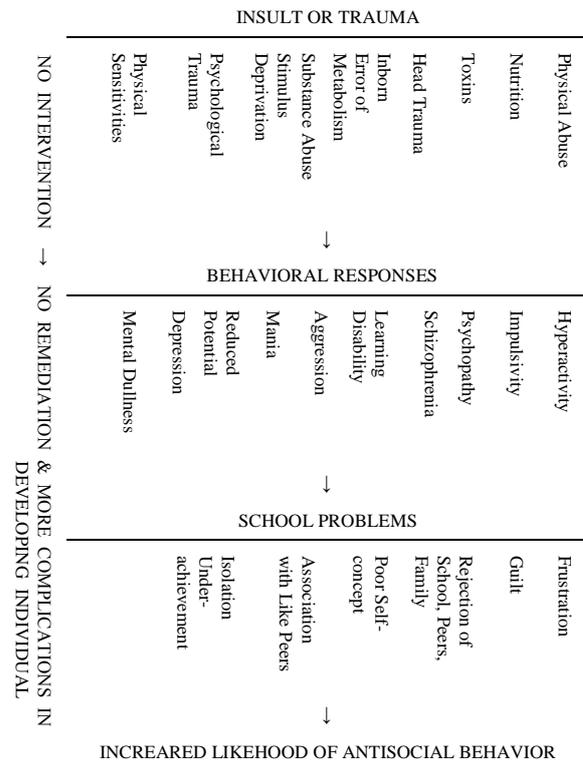
2 Biosocial theory of Diana H. Fishbein

Biosocial theories of crime basically connect two main approaches to the causes of crime - biological and social. Biological markers are considered to be (within the view of these concepts) the factors that either increase or reduce the tendencies to criminal behaviour, but are not able to neither evoke nor eliminate the criminality with full certainty (Beaver 2010). The process of formation of antisocial behaviour is also affected by other factors that have its roots in the social environment.

Diana H. Fishbein deals in her investigation of crime with several issues – she is studying the intersexual differences of antisocial behaviour, neurocognitive influences on delinquent behaviour but also the possibilities of prevention and treatment of criminals. However, the most remarkable is her concept of Biosocial theory, which principles were formulated in two key works (Beaver 2010) – in the article "Biological perspectives in criminology" (Fishbein 1990) and in the monograph "Biobehavioral Perspectives in Criminology" (Fishbein 2000). The main outcome resulting from reconsideration of biological influences of crime that previously absented in social theories was, that the customary strict differentiation between biological and social factors (nature vs. nurture/genes vs. environment) lost its meaning and the vast majority of experts dealing with crime have accepted the need to connect the biological and social elements when explaining antisocial forms of behaviour (Beaver 2010). The model of development of maladaptive behaviour (see Figure 1) shows the wide range of factors from both – biological and environmental areas that are included in the idea of formation of antisocial behaviour.

Fishbein considers the criminality and maladaptive behaviour as a result of inadequate handling of the problems occurring during ontogeny, especially in its early stages. Biologically relevant symptoms such as malnutrition, head trauma, metabolic disorders, damage due to toxins or other risk factors are compounded by suboptimal social and environmental conditions. These factors have a strong potential to cause excessive reaction of an individual – either in the form of increased irritability, aggressiveness, or weaker performance in school, etc. The problem is that these early „seeds“ of antisocial behaviour are often not recognized as complications that warrant intervention, or they are ignored/ inappropriately treated. The absence of appropriate intervention causes their further development and accumulation therefore their severity rises and becomes more serious in adolescence and adulthood. „According to this "developmental course" model of human behaviour, criminal behaviour is virtually always secondary to an underlying problem(s)“ (Fishbein 1990, p. 29).

Figure 1
Developmental course model (The developmental stages of maladaptive behavior – Fishbein 1990, p. 31)



3 Somatic marker hypothesis of Antonio R. Damasio

A year after Terrie E. Moffitt published her groundbreaking work, Antonio R. Damasio introduced the Somatic marker hypothesis (Yang, Raine 2010). The key idea of Damasio's „somatic marker hypothesis“ is that decision-making is a process that is influenced by marker signals that arise in bioregulatory processes, including those that express themselves in emotions and feelings (Bechara, Damasio 2005). At its core, it is an integration of knowledge of the mechanisms of decision-making, functioning of emotions, learning principles and functioning of brain structures. It provides a „systems-level neuroanatomical and cognitive framework for decision-making and its influence by emotion“ (Bechara, Damasio 2005, p. 336). It enriches the theories of criminality with the explanation why criminals repeatedly commit crimes even if such behaviour is being punished and should be strongly associated with aversive actions of society.

One of the tasks of the nervous system is to elicit the responses to somatic states as reactions to certain stimuli (Damasio 1994). The consequence of this feature is that some set of stimuli (situations) is connected with specific (positive or negative) reactions. The creation of these "associations" as well as their functioning (arising in appropriate situations) may be accessible to consciousness, but can be also unconscious. Most people (and scientists) believe that when deciding rationally they weigh the options that are available and according to the expectations of their consequences they choose the best one (Bechara, Damasio 2005). But Damasio argues that in most cases such decisions are not so simple – the situation is either too complicated, the options are unclear or their consequences are unknown, or possible decisions result in ambiguous or conflicting outcomes (Yang, Raine 2010). The emotions generated by the nervous system in response to the situation become therefore an important element in the decision making. Feeling of pleasantness / inconvenience which we are experiencing when thinking about the particular solution represents a key element in

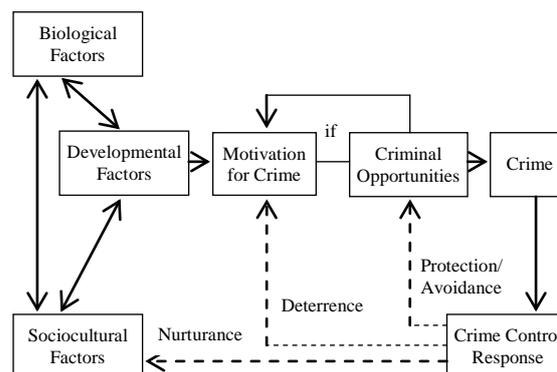
our decision making. The basis for creating these "keys" (Damasio called them somatic markers) are innate mechanisms leading the organism to avoid the pain or damage and to prefer those actions/reactions which bring the pleasure or rewards (Damasio 1994). Somatic markers are thus crucial keys that help us in the decision-making process by giving information about consequences (in the emotional sphere) of our previous decisions. For (psychically) healthy subjects this process allows them to categorize experiences, learn from past mistakes (Yang, Raine, 2010) and avoid those decisions which led in the past to negative consequences. The decision-making process is therefore not only a matter of rationality, but the emotions in it play an important role. This was the reason why Damasio called his groundbreaking work "Descartes' Error: Emotion, Reason, and the Human Brain" (1994) and spoke out against Descartes' idea of dualism with a strict separation of mind and body, rationality and emotions. Damasio understands emotions as a set of changes in arousal or activation of the body, or (alternatively) as the representations of these changes in the nervous system (Colombetti 2008).

The biological basis of this hypothesis lies in the importance of several brain structures in developing somatic markers. Damasio (1996) emphasizes mainly the function of the ventromedial prefrontal cortex, which is a substrate for the formation of associations between certain types of situations and physiological responses (including responses in the form of emotional states), but the overall process includes also other areas (Bechara, Damasio 2005). Numerous research proved that damages in the area of the ventromedial prefrontal cortex cause the dysfunctions of the whole process of assigning the somatic markers to relevant stimuli (Slavkovský 2013). Such affected individuals with intact intellect and undamaged other cognitive functions have problems with planning, choosing appropriate friends, partners and activities. The plans they carry out, the people that they choose for cooperation or life; activities they realize etc. often lead to financial losses, losses of status, friends, and family support. The choices they make are not beneficial for them; they are socially inadequate and different from those exhibited by individuals before the damage of certain brain areas (Damasio 1996). This defect is due to the failure to activate somatic states associated with reward or punishment which were previously associated with specific social situations (Damasio, Tran & Damasio 1990). Inability to anticipate the negative consequences of antisocial behaviour and negative decisions resulting from malfunction of somatic markers causes the repeating of antisocial behaviour and the criminality has a tendency to relapse. The importance of the ventromedial prefrontal cortex and consequences of its damage confirms several studies documenting the subsequent failure of moral judgment, perception of social rules (Anderson, Bechara, Damasio et al. 1999), sociopathy (Damasio, Tranel, Damasio 1990), social defects, loss of control over behaviour but also crime (Anderson, Damasio, Tranel et al. 2000). Damasio also stresses the fact the cause of antisocial behaviour may be not just the defective brain but the disturbances in associating the somatic markers can be caused also by a defective culture (e.g. by rewarding perverse individual reactions) (Damasio 1994). Assigning somatic markers to stimuli is in fact a learning process, which is undoubtedly influenced by the environment, too.

4 Evolutionary ecology of Bryan J. Vila

Bryan J. Vila posits his Evolutionary ecological theory of crime on the foundations of Cohen & Machálek's Expropriative theory. However, within his concept it is possible to identify a number of other key ideas and theories of crime - it integrates the theories of pressure, control, labelling, and learning (Barak 2002). Through a specific approach of focusing on particular biological, developmental and environmental factors of criminal behaviour he seeks a holistic approach to the understanding of criminality (see Figure 2).

Figure 2
Evolutionary ecological paradigm for understanding criminal behaviour (Vila 1997, p. 6)



The left part of figure represents the interaction between biological, socio-cultural and developmental factors that allow us to gain diverse experience, knowledge, skills, strategies, attitudes... during the life of an individual (Vila 1997). B. J. Vila admits that - on one hand - criminal behaviour can occur due to "chronic criminality of an individual", i.e. as a result of his/her personal characteristics and unique features that act as pathological factors of chronic offending. These characteristics may be partly the outcome of genetic transfer (biological factor). On the other hand, there is a great amount of evidence that crime is affected by a specific situation, characteristics of the community and the wider environment in which the individual grows up (socio-cultural factor) (Savage, Vila 2003). The influence of environment leads not only to behavioural changes at the individual level; environmental conditions, ecology, culture etc. interfere with human response in the same way as genes. Culture is the medium which allows transferring learned behaviour, attitudes, opinions etc. from one generation to another, especially those that appear to be important for survival. As a consequence, certain behaviours and strategies (successful in terms of survival) are extended and more frequent in the environment (ecological niche) in subjects, while others (less successful) are less frequent or disappear. The frequency of extension of certain behaviour in the population depends on previous success, the ability to face new challenges, but also on its relative abundance within the population (ibid). B. J. Vila also stresses an importance to gaining experiences and to environmental influences in childhood (developmental factor), especially those that have the potential to affect the expansion of biological characteristics and upbringing styles to future generations (Vila 1997).

This model of understanding crime continues with an assumption that mutual interaction between biological, socio-cultural and developmental factors affects not only an individual's ability to gain resources, but also the values that individual attaches to them. Therefore, the motivation of an individual to commit a crime is determined not only by mentioned factors, but also by the attractiveness of opportunity for illegal ways of acquiring resources. If the motivation is strong enough and there is an opportunity, criminal behaviour is very likely to appear. However, it is not accepted socially, and thus results in disagreement of individuals, groups or societies who try to intervene through various control mechanisms. They can be either successful - in this case the individual waives unlawful conduct and modifies his own behaviour, or they have only partial impact - an individual commits other crimes or uses other ways of criminality, or they may fail completely with no effect. Vila (1997) highlights two particular mechanisms of influence on crime - through intimidation (the deterrence strategy) or action on education (the nurturant strategies). Deterrent strategy influences mainly the motivation to commit a crime and uses punishment to prevent crime in individuals that act illegally. Educational strategies focus more on the prevention of crime and try to act in the way of preventing the development of illegal features in the behaviour.

The evolutionary ecological approach thus explains how biologically changeable individuals interact with the environment and other organisms, how they adapt to external changes, gain specific physical and behavioural characteristics, and how they spread them in the population through culture and genetics (Vila 1997). It also assumes that any outcome of human behaviour (including crime) is consistent with the tendency of humans to act in order to increase their chances for survival, reproduction and offspring support (Vila 1994). If such benefits can be acquired by illegal activities, then the occurrence of such behaviour is considered to be "natural". However, this does not exclude the fact that some (pathological) individuals due to various factors (heredity, education) tend to prefer unlawful strategies to a greater extent than others (Savage, Vila 2003).

5 Conclusion

The developmental theory of Terrie E. Moffitt, Biosocial theory of Diana H. Fishbein, Somatic marker hypothesis of Antonio R. Damasio, and Evolutionary ecology of Bryan J. Vila were just a few examples of successful and beneficial integration of different approaches to the explanation of criminal behaviour. This kind of integration is the outcome of very common recognition of the fact that the processes involved in forming behaviour leading to crime are so interconnected that it is not fully possible to understand the existence and functioning of one without the presence of the other. Nicole Hahn Rafter (2008) describes this "symbiosis" in the example of connection of environmental and biological factors using the picture of the river and the country - biological effects are seen as a strong stream, which form and shapes the country leaving indelible marks on it, but also - it is a country (acting as influencing factor of the environment) which allows (or disallows) the river to flow through a certain area, regulates the stream flow, its speed, and direction. The interaction of biological and social is obvious - in many cases they cannot be clearly separated from each other and it is not possible to decide whether a certain characteristic of behaviour was caused by genes or environment.

The interdisciplinary approach described in the previous theories represents the explanation of crime based on a combination of knowledge from several disciplines. It is a horizontal approach to integration - one problem (e.g. crime) is grasped by several disciplines at the same level and outputs of their research are combined into a new multi-disciplinary perspective. In this way, insights of e.g. sociology, psychology, psychiatry etc. can be combined. However, interdisciplinary theories of crime can be an outcome of a vertical approach to integration. In this case, knowledge about a certain problem from different levels of explanation is connected into the final complex view. A typical example of such an approach represents e.g. the demonstration of the presence of a specific genetic mutation, which at the next level needs to mention and describe the atypical level of neurotransmitters which subsequently give rise to functional changes in the brain regions that are followed by different reactions to stimuli, and thus change the behaviour. The whole model progresses from lower/deeper levels and continues with showing the implications for higher and higher levels. Finally, it integrates all findings from several levels of explanation into the conception describing the whole phenomenon. It is not even impossible to combine both - the vertical and horizontal model, too. The final knowledge gained from an integrative approach can be explained by biologists, neurologists and psychologists from their certain point of view and affiliation to a certain science discipline.

Similarly, the vertical approach can be applied on the timeline - when studying a crime the hereditary factors followed by intrauterine ones, those present at birth, or operating throughout life until the point when the crime manifests (so called the "concept of the lifepath") can be tracked. There are many ways how to combine different knowledge (see, e.g. works by Gregg Barak 2002, 2009); it even happens that the cooperation between disciplines creates a completely new framework. As an outcome, a new interdisciplinary approach is created that is not only the

connection of branches of knowledge, but a new separately functioning space for scientific investigation. Probably the most serious argument why the interdisciplinary theories are important for explanation of the crime is the fact they notably enriched the knowledge base with brand new findings. In this case the gestaltic phrase "The whole is greater than the sum of the parts" applies. The interdisciplinary approach leading to integrative concepts of crime does not connect only what is already known, but this connection enables us to bring new, original, and important knowledge.

Note: The contribution is based on and enriches the text: *Integratívne koncepcie* [Integrative conceptions] in Démuthová, S.: *Biologické koncepcie criminality* [Biological conception of crime]. Trnava, Univerzita sv. Cyrila a Metoda v Trnave 2012, 188 p. ISBN 978-80-8105-273-6.

Literature:

1. Anderson, S. W., Bechara, A., Damasio, H., Tranel, D., Damasio, A. R.: Impairment of social and moral behavior related to early damage in human prefrontal cortex. *Nature Neuroscience*, 1999, 2 (11), p. 1032-1038, ISSN 1097-6256.
2. Anderson, S. W., Damasio, H., Tranel, D., Damasio, A. R.: Long-term sequelae of prefrontal cortex damage acquired in early childhood. *Developmental Neuropsychology*, 2000, 18 (3), p. 281-296, ISSN 1532-6942.
3. Barak, G.: Integrative theories. *Encyclopedia of Crime & Punishment*. Sage Publications 2002. [Online], Access: <<http://www.greggbarak.com/custom2.html>> [cit. 2011-06-20].
4. Beaver, K. M.: Fishbein, Diana H.: Biosocial Theory. *Encyclopedia of Criminological Theory*. Sage Publications 2010. [Online], Access: <http://www.sage-reference.com/criminologicaltheory/Article_n92.html> [cit. 2011-07-04].
5. Bechara, A., Damasio, A. R.: The somatic marker hypothesis: A neural theory of economic decision. *Games and Economic Behavior*, 2005, 52 (2), p. 336-372, ISSN 1532-6942.
6. Burt, S. A., Mikolajewski, A. J.: Preliminary evidence that specific candidate genes are associated with adolescent-onset antisocial behavior. *Aggressive Behavior*, 2008, 34 (4), p. 437-445, ISSN 1098-2337.
7. Colombetti, G.: The somatic marker hypotheses, and what the Iowa gambling task does and does not show. *British Journal for the Philosophy of Science*, 2008, 59 (1), p. 51-71, ISSN 0007-0882.
8. Damasio, A. R.: *Descartes' Error: Emotion, Reason, and the Human Brain*. 1. issue. New York: Putnam Publishing 1994, 312 p. ISBN 978-0-399-1384-2.
9. Damasio, A. R.: The somatic marker hypothesis and the possible functions of the prefrontal cortex. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 1996, 351 (1346), p. 1413-1420, ISSN 1471-2970.
10. Damasio, A. R., Tranel, D., Damasio, H.: Individuals with sociopathic behavior caused by frontal damage fail to respond autonomously to social stimuli. *Behavioural Brain Research*, 1990, 41 (2), p. 81-94, ISSN 0166-4328.
11. Démuth, A.: *Philosophical Aspects of the History of Science*. 1. issue. Krakow: Towarzystwo Słowaków w Polsce - FF TU 2013, 96 p. ISBN 978-83-7490-599-2.
12. Démuthová, S.: Biologické koncepcie criminality [Biological conception of crime]. 1. issue. Trnava: Univerzita sv. Cyrila a Metoda v Trnave 2012, 188 p. ISBN 978-80-8105-273-6.
13. Fishbein, D. H.: Biological perspectives in criminology. *Criminology*, 1990, 28 (1), p. 27-72, ISSN 1745-9125.
14. Fishbein, D. H.: *Biobehavioral perspectives in criminology*. 1. issue. Belmont: Wadsworth 2000, 152 p. ISBN 978-0534547424.
15. Klein, J. T.: *Interdisciplinarity: History, Theory and Practice*. Detroit, Wayne State University Press 1990, 331 p. ISBN 978-0-8143-2088-0.
16. Macek, P.: *Adolescence*. [Adolescence]. 1. issue. Praha: Portál 2003, 142 p. ISBN 80-7178-747-7.
17. Moffitt, T. E.: Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy.

- Psychological Review*, 1993, 100 (4), p. 674-701, ISSN 0033-295X.
18. Moffitt, T. E., Caspi, A.: Childhood predictors differentiate life-course persistent and adolescence-limited antisocial pathways among males and females. *Development and Psychopathology*, 2001, 13 (2), p. 355-375, ISSN 0954-5794.
 19. Savage, J., Vila, B.: Human ecology, crime, and crime control: Linking individual behavior and aggregate crime. *Social Biology*, 2003, 50 (1-2), p. 77-101, ISSN 0037-766X.
 20. Schleifer, R.: The difficulties of interdisciplinarity: Cognitive science, rhetoric, and time-bound knowledge. *Stanford Humanities Review*, 2000, 4 (1) [Online]. Access: <<http://www.stanford.edu/group/SHR/4-1/text/schleifer.commentary.html>> [cit. 2010-10-10].
 21. Slavkovský, A.: *Rationality and Human Cognition*. 1. issue. Krakow: Towarzystwo Słowaków w Polsce - FF TU 2013, 88 p, ISBN 978-83-7490-598-5.
 22. Vila, B.: Human nature and crime control: Improving the feasibility of nurturant strategies. *Politics and the Life Sciences*, 1997, 16 (1), p. 3-21, ISSN 0730-9384.
 23. Yang, Y., Raine, A.: Neurology and crime. *Encyclopaedia of Criminological Theory*. Sage Publications 2010. [Online], Access: <http://www.sage-reference.com/criminologicaltheory/Article_n184.html> [cit. 2011-03-25].

Primary Paper Section: A

Secondary Paper Section: AN

PROCESSES OF LOGISTIC CUSTOMER SERVICE: BEHAVIOUR OF SENDERS AND RECIPIENTS

³JOANNA DYCKOWSKA

Koszalin University of Technology, The Economic Science Faculty, Kwiatkowskiego 6E, Koszalin, Poland
email: "jdyczkowska@wp.pl"

Abstract: This article presents the process as an instrument of marketing and the manner to execute a logistic process by those enterprises that provide logistic services. Owing to the relational marketing, TSL enterprises maintain long-lasting and close contacts with forwarders and are directly interested in knowing the opinions on services, procedures and customer service, which are described by a number of elements. The behaviour of consumers on the market of logistic services depends on those entities that provide logistic services, and the customer has a direct contact with the carrier. The present article covers the results of a survey concerning the level of the evaluation of the customer service provided by TSL enterprises.

Keywords: customer service, behaviour of customers, logistic process, TSL enterprise

1 Introduction

The processes of the creation and provision of the service constitutes an element of the marketing-mix. The process of service in the customer's opinion is the component of the service itself. A continuous improvement of the process of the customer service process is a success on the part of logistic operators. These processes involve procedures, work schedules, mechanisms and activities as a result of which the customer receives a commodity or a service.¹ The key role in the customer service is attributed to logistic processes for the purpose of fulfilling their continuously changing needs and expectations. The logistic service realized by TSL enterprises may constitute the basic instrument to gain and maintain customers, which is connected with ensuring the continuity, promptness and reliability of deliveries including an appropriate level of communication in the entire logistic chain. The purpose of the article is to present the processes of the logistic service of individual customers and to analyse the behaviours of the forwarders and recipients of parcels sent with logistic operators together with an assessment of their services. The research method applied for the purpose of this study is an indirect poll measurement method with the use of a questionnaire form technique. The application and improvement of the processes of logistic customer service may contribute to the achievement of an advantage on the competitive market and may involve changes to the management of an enterprise.

2 Logistics service process

An efficient logistic process allows an enterprise to acquire a competitive advantage in relation to other TSL enterprises. Provision of a logistic service can differ due to the elementary division of service products: parcels, packaged cargo and partial loads in the case of overland transportation on the territory of a country, in inter-modal transport, the shipment of loading units, i.e. containers. In the transport or logistic services according to the criterion of Ch. Lovelock², the service process is distinguished as one concerning the consumer's property; it does not require a lot of commitment on the part of customers in the process of the provision of a service. The participation of customers is limited to the ordering of a service and making a payment on the part of the sender or the recipient. Depending on the fact whether this is a transport from place A to B (a non-compound process) or whether this concerns consolidation, packaging, storing and then transport, we deal with a compound process. Services provided by logistic operators are characterized by a great diversity³. Operators try to adapt processes to the sector they provide their services to and the customer's needs. The development of information technologies

has increased the possibility to form the type of contacts with customers and the extent of their contribution to the service provided: on-line orders, shipment tracking or writing out of bills of lading. For the sender of a parcel, it is only the receipt of the shipment that is noticeable and the result of the shipping process: a confirmation of the consignment note or a transfer of the cash for the commodity. For the recipient, what is visible is the process of the transport of the shipment, and there exists a possibility to track the route. From the position of the customer, the service process is invisible in connection with the loading, transfer between terminals and the sorting office as well as the changes concerning the composition of the shipment itself. The customer does not require any knowledge concerning the course of the service or the role of the individual units or of the employees of a forwarding enterprise. Customers are not fully familiar with the procedures involving the supervision over the shipment, and the resources and abilities essential to the provision of a logistic service are assessed in the form of a subjective quality evaluation. The roles in the logistic service process are attributed both to customers and the employees of a logistic operator and to the carrier that acts as a subcontractor. The forwarder's duty is to prepare the parcel in such a way that it should not be damaged in the process of transport and handlings, to mark the bottom and the top of the parcel in a visible manner and, in the case of some commodities, to provide appropriate labelling, e.g. glass, ADR or a liquid. If a forwarding company has not been commissioned to write out a transport document in the form of a letter including the recipient's data, these details should be put in a visible place on the packaging (the coded address of the unloading terminal is also provided in the form of a barcode including the weight of the parcel). The recipient should sign legibly the bill of lading and, in the case of any damage to the packaging, they should mark this in the document. The bill of lading may include the delivery date including the hour and the details of those who are responsible for the unloading of the commodity from under the car loading ramp (e.g. carrying the commodity into the shop or onto the fifth floor in a block of flats). In the logistic service process, we divide the waiting time into the following periods:

1. Arrival of the carrier to collect the parcel;
2. Transport time;
3. Delivery of the shipment to the recipient (receipt confirmation).

Too long waiting time for the arrival of the carrier can complicate the work in the sending company due to the limitation of the company's working hours, e.g. till 4:00 p.m., or it may result in engaging warehouse workers in other work in the company in the time foreseen for other tasks. The customer expects reliability in the case of the receipt of the shipment, a short delivery time of 24 hours on the territory of Poland, a convenient delivery to the recipient: in the afternoon in the case of individual customers, and communication not only in the case of difficulties but also an entire system of on-line information in the process concerning the provision of a logistic service. The main task of a logistic operator in the management process is to reduce the time in the transport process: 48 hours is assumed, and in practice the time is frequently on the level 72 hours on the territory of the country. This can be changed from the real time into the time perceived: we accept the first day of sending as 0, the day of transport including the delivery time: day one, or in the case of an error, day two. In this event, there are no 72 hours for the delivery of the parcel in the logistic service process but only 24 or 48 hours. The executors of specialist services, such as the transport of dangerous, haematogenous or frozen goods enjoy a greater freedom in taking decisions, which allows a larger individualization of the service according to the customer's needs. The selection of a decision-making procedure can become the source of a competitive advantage of the logistic operator but also that of the customer who the service is dedicated to.

¹ A. Payne, *Marketing usług*. PWE, Warszawa 1997, p. 210.

² Ch. Lovelock, *Service Marketing*. Prentice Hall International, London 2010, p. 30.

³ A. Czubała, A. Jonas, T. Smoleń, J. Wiktor, *Marketing usług*. Wolters Kluwer, Kraków 2006, p. 153.

3 Customer service

In logistics, the customer service is in the focus of attention. It is perceived as a skill or ability to fulfil the requirements and expectations of customers according to the 7W rule, with the use of all and any available forms of logistic activities including transport, storing, management of supplies, information and packaging. These days, customer service is frequently referred to as customer logistics due to the activities dedicated to the customer and logistic processes that are specially designed according to the service system of a given company⁴. In the logistic perspective, the customer service focuses above all on the area of the physical distribution of goods, which is realized according to the abovementioned 7W rule⁵. The customer service can be understood very widely and its perception involves the following⁶:

- a defined conception concerning the formation of relations with customers,
- a system of direct and indirect contacts with customers,
- a set of specified functions in the company,
- a set of decisions that determine the usefulness of the place and time of the product,
- a system of the flow of the streams of goods, information and capital to the customer,
- a part of the distribution system,
- an integration of marketing and logistic processes.

The customer service is treated differently in the case of partner marketing, according to which the market success of a company depends on long-term and partner relations with the participants of the market⁷. The purpose of this conception is to provide customers with the logistic operators of value over a long period of time. For this purpose, long-term contracts are signed, where the logistic operator builds a storehouse for the needs of services provided a given company and has logistic services guaranteed for a period of 25 years. According to M. Christopher, A. Payne and D. Balantyne, customer service is in the centre of marketing-mix instruments⁸. A company that wishes to compete on the market frequently provides services to fragmented customers who buy small quantities in a dispersed area. In connection with this, delivery based on outsourcing is commissioned to those logistic operators whose representatives are often equated with those who sell given products (services). The customer service process should be carried out efficiently and in a way which ensures satisfaction to all the parties over a long period of time. Ch. Grönroos interprets the marketing of relations as a creation, maintaining and enriching the relations with the customer and other partners of the company in a way which ensures the achievement of the goals to both parties through the joint exchange and realization of the promises made⁹. Logistic operators aim at the creation of bonds with their environment. Websites include information on the social responsibility of such enterprises as DB Schenker and DP DHL; they focus on the integration of three elements: marketing, quality and customer service. Owing to the relation marketing, TSL enterprises maintain long-lasting contacts with those customers who send parcels, are interested in knowing directly opinions on the services, procedures and customer service. It is only through an identification of the customers' needs and preferences that they are able to prepare a well-tailored service which enables building a competitive advantage on the market.

The following are the most important elements of the logistic customer service¹⁰:

1. Delivery time: the time that passes from the moment of placing the order till the moment the customer receives the shipment; in accordance with the procedure, this includes: the time of order placing, the preparation time of the information included in the order accepted, the preparation time of the products ordered for shipment and the transport time of the products ordered.
2. The availability of the products in the stock: the availability of the supply which can be immediately realized from the stocks remaining in the sender's storehouse. Those enterprises that compete for the customer service guarantee and maintain the readiness to realize orders in accordance with the previously established procedure.
3. Flexibility of deliveries: the ability to adapt time, size, assortment and the method of delivery to the expectations of the customers (recipients). A high flexibility of deliveries is dependent on the cooperation with a logistic operator: deliveries at 8am or at 8pm. Handling of outstanding orders is a solution to problems in such a sphere as those orders which are not realized on time, shipments with a shortened delivery time, buffer shipments, material and product substitutions.
4. Frequency of deliveries: the number of deliveries over a given time period; this depends on the kind of products delivered and the organization system of deliveries. With a higher frequency of deliveries, the recipient keeps smaller product stocks. A correlation is taken into account between the costs of the maintenance of stocks, the ordering costs, storage and transport costs. The number of deliveries in time is considered to be one of the major measures of the customer service level achieved.
5. Reliability of deliveries: a correct realization and punctuality of the expected deliveries, that is the promptness of deliveries and the maintenance at a specified and relatively low level of losses, depletions and, in particular, human errors. An obligation to notify customers in the case when a delivery cannot be realized in the time specified on the part of a logistic operator.
6. Completeness of deliveries: an ability of deliveries to realize a complete specification of the products ordered. The consequence is an incomplete delivery: the forwarding company is fully responsible for this; it is only in the case of a loss of the parcel or damage that the logistic operator is held responsible.
7. Accuracy of deliveries: an assortment related compliance of the delivery with the order; in the case of the completion of the shipment by TSL enterprises, the operator is responsible for the realization of this element and for the punctuality of deliveries. This element of customer service indicates what the efficiency of the company's logistic system is, or what the efficiency of the chain of deliveries in the customer service is.
8. Convenience of order placing: in the case of logistic services, companies use an on-line system. When accessing the operator's server, they enter the direction and parameters of the shipment, which is to facilitate the further process of the completion of the transport by the booking the place in the line between the terminal and the sorting office.
9. Convenience of documentation: the sender writes out the bill of lading using the programme of the logistic operator. It is only the spaces connected with the parameters of the shipment and the recipient's address that are displayed. The standard document is adapted to the valid legal regulations.

The elements of customer service indicate the role of the logistic operator in the handling process of each order and customer. Service procedures are formulated in writing and are submitted to the customer in the form of a declaration of service, which protects a TSL enterprise from unreal expectations.

⁴ D. Kempny, *Logistyczna obsługa klienta*, PWE, Warszawa 2001, p. 15.

⁵ R. Matwiejczuk, *Zarządzanie marketingowo – logistyczne. Wartość i efektywność*. C.H. Beck, Warszawa 2006, p. 30.

⁶ I. Dembińska-Cyran, J. Holub-Iwan, J. Perenc, *Zarządzanie relacjami z klientem*. Difin, Warszawa 2004, p. 36.

⁷ R. Furtak, *Marketing partnerski na rynku usług*, PWE, Warszawa 2003, p. 44.

⁸ M. Christopher, A. Payne, D. Balantyne, *Relationship Marketing: Bringing Quality, Customer Service and Marketing Together*. Butterworth-Heinemann, Oxford 1991, p. 20.

⁹ Ch. Grönroos, *Service Management and Marketing. Moments of Truth in Service Competition*. California State University, Wiley 2000, p. 138.

¹⁰ D. Kempny, *Logistyczna obsługa klienta*. PWE, Warszawa 2001, p. 19-24 and D. M. Lambert, J. R. Stock: *Strategic Logistics Management*, Cram101 Incorporated, Boston 2006, p. 113-116.

4 Behaviour of customers and satisfaction

The behaviours of customers on the market are defined as a total of reactions of the organism to stimuli from the environment taking a position in relation to this environment¹¹. The most frequently presented criteria which diversify those factors that form the customers' behaviour on the market include the following:¹²

1. Sources of the origin for factors divided into economic and non-economic factors;
2. Scope of the activity of factors: external and internal ones;
3. Dependence of factors from social and economic as well as cultural conditions in a given country divided into objective and subjective factors;
4. Force of the influence of factors on the diversification of consumer behaviours, divided into direct and indirect factors.

The behaviour of consumers on the market of logistic services depends on those entities which provide logistic services. The consumer has a direct contact with the carrier that represents the logistic operator. Competitive struggle is conducted not only in the scope of the price and promotion but in a widely understood customer service. Hence, there is a need for a better recognition of the behaviour of the senders and recipients of shipments; of those mechanisms that are decisive for the selection of a service and those factors that build their satisfaction and loyalty towards individual entities. It is the satisfaction from a given service that determines whether the customer will use it again. The model of their behaviour should be explained. Satisfaction can be interpreted as an emotional reaction to comparative processes that are initiated by the customer and which consist in a comparison of the customer's experiences and feelings in connection with the consumption of a product or service with expectations, individual norms or a specific model of evaluation¹³. The experiences and impressions in connection with the consumption of a given product or service constitute the function not only of the quality of the product itself or the technical quality of the service but also the quality of service as well as the contact and communication offered to the customer¹⁴. Satisfaction results not only from an evaluation of a service in accordance with a certain previously accepted or formed model, but it results from an evaluation of the course of the service provision process itself. Both these dimensions of satisfaction will be different in the perspective of the formation of a relation between the sender and the logistic operator as well as between the logistic operator and the recipient of the shipment. Satisfaction connected with the service may build loyalty towards the brand or a given logistic operator. On the other hand, its non-presence may provoke specific behaviours, such as complaints, a change of the contractor or an expression of negative opinions¹⁵. Behaviours in logistic services do not concern the registered office or the infrastructure; in the majority of cases, the customer has no contact with these. Satisfaction connected with the process of service may constitute a source of loyalty towards a given logistic operator. From the perspective of the contractor operating on the TSL market, the knowledge of expectations on the part of the sender and recipient in connection with the service process is especially important. Efforts at the fulfilment of these may constitute a significant way to build a competitive advantage on the TSL market and to create a positive relation in the whole chain of deliveries. In the concept of the marketing of relations, it is to be stated that one of the key objectives of a TSL enterprise is building long-term relations with the senders of parcels on the market to provide them with increasing benefits and satisfaction resulting from these. The

creation and maintaining of relations focuses on keeping customers, as logistic operators often adapt their line systems to the service of customer groups, e.g. food producers in deliveries supermarket chains. In this way, a food producer starts cooperation with a specific logistic operator who takes over cargo streams and wins their loyalty. The appreciation of senders so that they should think that they are in the centre of attention is the crucial element in the conception of relation marketing. The basis of the conception is the assumption of the possibility and necessity to maintain direct contacts between the contractor and the client. Logistic operators seek possibilities of competitive advantage and a market success. The consumer's behaviour is not only a decision-making process but also a widely understood pre-transaction, transaction and post-transaction behaviour. The decision-making process commences with the recognition of the problem of the sender, who initiates a search of those alternatives which can fulfil a specific need. Once the possible solutions have been listed, there follows an assessment of the carrier with the use of an appropriate decision-making rule, individual variants and the selection of one which corresponds best to the customer's expectations from the perspective of this customer. The customers of the TSL market present the following expectations in the decision-making process:

1. Duration of the process: on the territory of the country, the majority of logistic operators declare transport within 24 hours; due to the high value of the product transported, longer periods or product specifications (over-dimensional goods) are acceptable.
2. Information context of processes: customers do not know the logistic system of a TSL enterprise; communication over the Internet, on-line ordering of services, tracking the shipment over the Internet, contact with a logistic operator's employee.
3. Set of alternatives: a specific number of alternatives is expected, too small a number worsens the assessment of the process, the customer wishes to know the differences between the alternatives and the benefits offered.
4. Possibility to realize additional objectives, ones which are not directly connected with the functions realized by the service: packaging and customizing of products, labelling of products or testing of new channels of distribution.
5. Sense of certainty or risk connected with the process: a guaranteed timely delivery, a risk of the documents or goods not being delivered involves penalties or the loss of the recipient who perceives the delivery through the prism of the logistic operator.
6. Operational efficiency of the logistic operator: ensuring clear and transparent information on the service and the rules of its provision, availability of the service, reaction to customers' queries and expectations, also the competences of the personnel.

The process of taking decisions by companies in logistic services is usually very complex. It is realized on many planes. Customers themselves present a wide spectrum of behaviours connected with the selection of a logistic operator.

5 Results of a survey among the customers of TSL enterprises

From the perspective of the concept of logistics, logistic service is the key indicator of the orientation towards the customer. It constitutes the basic instrument to gain and maintain customers, which is connected with ensuring the determinants for the logistics of distribution to meet the recipients' expectations. Guaranteeing an adequate level of the service is possible through the provision of a service which is consistent with the customer's needs and by the provision of an added value in an integrated chain of deliveries¹⁶. The survey was carried out in the period from January to February 2013 with the method of indirect poll measurements among those customers who collect parcels delivered by TSL enterprises. 109 people who had been selected

¹¹ P. Gajewski, *Zachowanie się konsumenta a współczesny marketing*. Uniwersytet Łódzki, Łódź 1994, p. 7.

¹² J. Kramer, *Badanie rynkowe i marketingowe*. PWE, Warszawa 1994, p. 266.

¹³ K. Mazurek-Lopacińska, *Zachowanie nabywców i ich konsekwencje marketingowe*. PWE, Warszawa 2003, p. 305.

¹⁴ E. Rudawska, *Loyalność klientów*. PWE, Warszawa 2005, p. 91.

¹⁵ A. Jachnis, *Psychologia konsumenta. Psychologiczne i socjologiczne uwarunkowania zachowań konsumenckich*. Oficyna Wydawnicza Branta, Bydgoszcz-Warszawa 2007, p. 208.

¹⁶ R. Matwiejczuk, *Orientacja na klienta w logistyce a zmiany zarządzaniu przedsiębiorstwem*. „Logistyka” 1/2013, p. 21-22.

with the non-random sample selection method participated in the survey. Those people who do not use the services of TSL enterprises had been previously eliminated. The respondents were adult people who reside on the territory of Zachodniopomorskie Province. The research tool was a specially construed questionnaire form. The selection of the respondents was coincidental, but the sample did not meet the requirements of a representative sample due to the area limitations, yet the survey results show specific dependences. The participants were as follows: 53.21% women and 46.79% men, who are the residents: of towns with over 100 thousand residents: 31.25%, of localities from 50 to 100 thousand residents: 12.84%, of localities from 20 to 50 thousand residents: 15.6%, of localities from 5 to 20 thousand residents: 3.67%, of localities from 2 to 5 thousand residents: 7.34% and of villages: 29.36%. The age range was as follows: below 20 years: 1.83%, from 21 years to 30 years: 64.22%, from 31 years to 40 years: 33.03% and above 40 years 0.92%. In the case of the individual customers, the majority of them are the recipients of parcels: 91.74%, and the senders constitute 17.43%. A part of the respondents perform the role of senders and recipients. 2.75% are intensive users of the services of forwarding companies, those who use their services very frequently. Average customers constitute 37.61% (they send or receive parcels a minimum once a month). The majority of the respondents are occasional customers: 59.63% who rarely use services provided by forwarding companies. The weight of shipments is as follows: parcels up to 1 kg: 56.88%, parcels from 1 kg to 5 kg: 36.7% and above 4 kg: 6.42%. The respondents most frequently used the following TSL enterprises: DP DHL: 52.29%, Poczta Polska: 45.87%, Siódemka: 22.02%, UPS: 13.76%, DPD: 3.67%, OPEK: 2.75% and others: 0.92%.

With the selection of a TSL enterprise, the respondents would be guided by the following criteria:

- time of completion: 70.64%;
- price of service: 62.38%;
- no damages: 33.94%;
- quality of services provided: 33.03%;
- low percentage of complaints: 8.26%;
- comprehensiveness of the offer: 4.59%.

The respondents evaluated those companies that provide transport services in the scale ranging from 1: very low, 2: low, 3: average, 4: good, 5: very high, whereas 0 meant no opinion on this issue. Table 1 presents the distribution of marks and the result.

Table 1. Criteria of the evaluation of services provided by TSL enterprises and evaluation

Criterion of service	Average mark	0	1	2	3	4	5
Time of completion	4.16	0	0	5	13	61	30
Reliability of completion	4.01	1	0	2	25	51	30
Availability	3.94	0	1	7	21	48	32
Convenience	3.97	1	3	4	19	44	37
Hours of delivery	3.55	1	3	14	29	45	17
Communication with employee	3.67	5	2	13	24	43	22
Communication over the Internet	3.89	6	3	7	20	41	32
Quality of realization	4.06	2	0	5	19	47	36

Source: Author's own study on the grounds of the survey conducted in the period from January to February 2013

The time of deliveries, the quality of the completion of the service and reliability ranked the highest: above the good mark. The delivery hours and communication with an employee ranked the lowest. This also results from the fact that 31.19% of the

respondents collect the parcel at the courier's office and 68.81% receive the parcel via the courier. In the case of the evaluation of the level of customer service on the part of TSL enterprises, the average of marks is considerably lower. This is presented in Table 2.

Table 2. Evaluation of the level of customer service by TSL enterprises

Level of customer service	Average evaluation	0	1	2	3	4	5
Knowledge and competences, professionalism, knowledge of substantive issues	3.5	5	2	10	36	46	10
Ability to cooperate: friendly procedures, realization of unconventional orders, personal manners	3.71	2	4	68	28	48	21
General quality of service, openness, kindness, commitment	3.68	1	3	63	30	52	17
To what degree do you evaluate the transport of parcels in undamaged condition?	3.98	1	1	68	18	52	31
How you evaluate the quality of services by courier companies on the Polish market?	3.7	2	0	69	29	63	9
How you evaluate the use of the Internet by the forwarding company?	3.83	6	2	82	21	46	26

Source: Author's own study on the grounds of the survey conducted in the period from January to February 2013

The same grading scale was used as in the previous survey. The knowledge and competences as well as the professionalism of employees in the TSL enterprises ranked the lowest. The transport of parcels in an undamaged condition ranked the highest. The evaluation of the use of the Internet by the forwarding company is also above the average: 74.31% of the respondents declare that they track the route of the parcel over the Internet. Only 7.34% of the respondents had never submitted a complaint. The main causes include damage to the commodity: 54.13%, a delayed delivery: 35.78% and missing parcels: 28.44%. There are no complaints concerning the price of the freight and the quality of the service.

6 Conclusions

Those logistic companies which operate the market of parcels seek to guarantee the highest quality of their services. However, the survey results obtained indicate continuously increasing demands on the part of customers. When choosing a company, customers are above all guided by the time of completion, the price of the service, no damages in the process of transport and the quality of the services provided. Individual customers are little interested in the comprehensiveness of the offer in connection with the type of parcels sent. The respondents assessed the completion time of a specific service on the level of 4.16, the quality on the level of 4.06 and the reliability of the service on the level of 4.01. The respondents evaluated the lowest the hours of delivery (3.55), which are not adapted to the B2C market operated; hence, as many as 31.19% of the respondents collect parcels in the office of the shipping company. The communication with an employee (3.67) ranked the lowest, as well. Communication over the Internet comes out considerably better: on the level of 3.83. 74.31% of the recipients declare that they track the shipment on the websites of a logistic operator.

Unfortunately, there was a very low evaluation of the employees of TSL enterprises, such as their professionalism, ability to cooperate, and such features as openness, kindness and commitment. TSL enterprises are making efforts to improve the process of logistic customer service, yet the requirements are constantly increasing. As shown by the results, it is the recipients of parcels who in particular deserve an improvement of the quality of the service which is not adapted to their group. In spite of the fact that it is not them who pay for the service in the majority of cases, they can decide about the selection of a logistic operator. In connection with this, efforts need to be undertaken aiming at an improvement of the entire process in the chain of deliveries.

Literature:

1. Christopher M., Payne A., Balantyne D.: *Relationship Marketing: Bringing Quality, Customer Service and Marketing Together*. Oxford: Butterworth-Heinemann, 1991. 20 p. ISBN 0-750602589.
2. Czubała A., Jonas A., Smoleń T., Wiktor J.: *Marketing usług*. Kraków: Wolters Kluwer, 2006. 153 p. ISBN 83-7484-020-X.
3. Dembińska-Cyran I., Hołub-Iwan J., Perenc J.: *Zarządzanie relacjami z klientem*. Warszawa: Difin, 2004. 36 p. ISBN 83-7251-430-5.
4. Furtak R.: *Marketing partnerski na rynku usług*. Warszawa: PWE, 2003. 44 p. ISBN 83-208-1472-3.
5. Gajewski S.: *Zachowanie się konsumenta a współczesny marketing*. Łódź: Uniwersytet Łódzki, 1994. 7 p. ISBN 83-7171-023-2.
6. Grönroos Ch.: *Service Management and Marketing. Moments of Truth in Service Competition*. Wiley: California State University, 2000, 138 p. ISBN 9780471720348.
7. Jachnis A.: *Psychologia konsumenta. Psychologiczne i socjologiczne uwarunkowania zachowań konsumenckich*. Bydgoszcz- Warszawa: Oficyna Wydawnicza Branta, 2007. 208 p. ISBN 97-883-601-86-558.
8. Kempny D.: *Logistyczna obsługa klienta*. Warszawa: PWE, 2001. 15, 19-24 p. ISBN 83-208-1310-7.
9. Kramer J.: *Badanie rynkowe i marketingowe*. Warszawa: PWE, 1994. 266 p. ISBN 978-83-7338-804-8.
10. Lambert D. M., Stock J. R.: *Strategic Logistics Management*, Boston: Cram101 Incorporated, 2006. 113-116 p. ISBN 1428812806.
11. Lovelock Ch.: *Service Marketing*. London: Prentice Hall International, 2010. 30 p. ISBN 0136107214
12. Matwiejczuk R.: *Orientacja na klienta w logistyce a zmiany zarządzaniu przedsiębiorstwem*. „Logistyka” 1/2013. 21-22 p. ISSN 1231-5478.
13. Matwiejczuk R.: *Zarządzanie marketingowo – logistyczne. Wartość i efektywność*. Warszawa: C.H. Beck, 2006. 30 p. ISBN 83-7987-466-6.
14. Mazurek-Łopacińska K.: *Zachowanie nabywców i ich konsekwencje marketingowe*. Warszawa: PWE, 2003. 305 p. ISBN 83-208-1430-8.
15. Payne A.: *Marketing usług*. Warszawa: PWE, 1997. 210 p. ISBN 83-208-1050-7.
16. Rudawska E.: *Lojalność klientów*. Warszawa: PWE. 2005. 91 p. ISBN 83-208-1558-4.

Primary Paper Section: A

Secondary Paper Section: BC

ONE PLUS TWO? TEACHING FOREIGN LANGUAGES TO YOUNG CZECH CHILDREN

*SILKE GESTER

Tomas Bata University in Zlín, nám. TGM 5555, 760 01 Zlín,
Czech Republic
email: "gester@fhs.utb.cz"

Abstract: This article deals with some questions and issues related to early foreign language acquisition in the Czech Republic. The most important legislative documents for this area are introduced, on a national as well as European level. The second part of this article introduces research results obtained from 141 respondents – parents whose children attend kindergarten in the Zlín Region.

Keywords: teaching foreign languages to young children, education, language policy.

1 Introduction

The time between birth and the start of school is an important period not only for language development, but also, in connection with foreign language teaching, which is attracting more and more interest from the public and academia. Czechs have reached a consensus that knowledge of at least one foreign language is a necessity in a globalized world. Yet despite strong efforts by many participants, early language education remains somewhat unresolved. This article summarizes the results of public discussion on this topic as well as the results of research on the current status of foreign language teaching in kindergartens in the Zlín Region.

2 Legislative documents

A concise formula, "one plus two", characterizes the European Union language strategy. The requirement that every citizen of the European Union should manage two foreign languages in addition to the mother tongue stems from a "new framework for multilingualism" ratified in Brussels in 2005. In addition, the E.U. developed an action plan, "Support for language education and diversity" (2004 - 2006). Both documents suggest that "English as a second language is not sufficient." All E.U. member countries were instructed to create national plans. As a result, the Czech Republic in 2006 approved a national plan for the teaching of foreign languages, which clearly defined required foreign language competencies for all citizens. The national plan was supported by a demanding "action plan for teaching of foreign languages, 2005 – 2008", containing concrete activities for a foreign language education framework, with various regional priorities. The first chapter focused on pre-school education. The following are the demands from the action plan (2006, 5):

- 1.1 Increase awareness of teachers and parents about early language education and about the conditions for securing positive results.
- 1.2 Process methodological material for teaching English (resp. other foreign language) for pre-school children and offer it at no cost to interested kindergartens.
- 1.3 Include English into the teaching plan programs for kindergarten teachers in pedagogical schools and at pedagogical faculties.
- 1.4 Include academic courses (propedeutics) focused on teaching foreign languages into the framework for the pre-school educational program.
- 1.5 Include academic language courses (propedeutics for languages) in study programs for future kindergarten teachers.

When discussing European Union documents related to foreign language teaching in pre-school education, it is important to mention the Piccolingo campaign, which started on September 25, 2009 in Brussels. The objective of this campaign is to inform European parents about the advantages of teaching foreign languages at an early age and also to create functional networks for sharing positive experiences. The objective is two foreign

languages, which should be learned between the ages of two and six. Due to this requirement, the campaign however goes beyond the intended goals of the 2006 Czech action plan, which discusses comprehensive implementation of only one, optional language- English.

In relation to national legislation, it is important to mention the National Program for Education, the so-called "White Book", of 2004. That same year, a new educational law was also enacted. These documents are binding for all levels of education, with the exception of universities. Pre-school education is described as a legitimate part of the Czech educational framework. The framework educational program for pre-school education (RVP PV) from 2004 is a decisive element for work in kindergartens. The educational principles in this document are formulated as follows:

The concept of pre-school education is based on the same principles as other fields and levels of education and together follow common goals: it is focused on the child's acquisition of key competencies from an early age, so that the child can gain prerequisites for lifelong education, enabling an easier and more reliable application in a society of experience (RVP PV 2004: 5).

Key competencies acquired by a child before entering school are study competence, problem solving competence, communicative competence, social and people competence, action competence and civic competence. A description of communicative competence notes that a child "knows, that people communicate by other languages, which can be learned, and the child has elementary prerequisites for learning a foreign language" (RVP PV 2004, 11). Foreign languages therefore do not play a major role in this educational level; there is an absence of binding regulations. The decision whether and how foreign language education will be organized lies within the competence of each kindergarten.

3 Foreign languages in kindergartens – research in the Zlín Region

Considering the level of interest on the given topic on the part of European Union, Czech politicians as well as the public, it can be expected that a timeline of five to ten years will be enough to yield initial results, enabling an assessment of the undertaken measures and intentions. For this reason, in fall 2011 a research questionnaire was sent to parents of children attending a kindergarten in the Zlín Region.¹ Along with the questionnaire, the parents participated in a narrative interview, designed to provide further data on the issue. The participants in the research included not only parents and kindergarten staff, but also university teachers (study field: pre-school teaching) and lecturers who teach foreign languages in kindergartens. Though the number of respondents in the questionnaire research was 141 and cannot be therefore deemed representative, it does shed some light on the status quo as well as on the continuing questions. Available studies on the given issue have also been evaluated and summarized. Table 1 clearly shows the age of the respondents' children as well as how many children study each language.

	3 years	4 years	5 years	6 years
No foreign language	6	96	32	13
English	7	13	24	7
German	0	0	2	0
English and German	0	0	1	0

Tab. 1: Foreign languages studied by children

¹ For details, see Gester 2011, 31.

The table demonstrates that 87 children (61 percent) do not study any language. The majority of children that have already come into contact with a foreign language learn only one language, with the exception of 2 children studying English. Two children study German and one child studies English and German. Of interest is the group of three-year-olds: there are more children in this group who learn English than those who do not. With the six-year-olds, the ratio is reversed: out of 20 children, only 7 learn English and 13 do not learn any foreign language. The former intentions of the comprehensive implementation of the optional teaching of English to all kindergartens targeted mainly and specifically pre-schoolers. Though the numbers are not representative, it can be suggested that the intended comprehensive implementation has not yet occurred.

That said, some kindergartens in the Zlin Region do currently offer foreign language courses in a form of paid courses. Lessons are limited to a few teaching periods a week. The best description of the current situation can be found in a Czech Ministry of Education report entitled, "Foreign language teaching in schools in 2005-2008". Inspectors visited 635 kindergartens in order to find out if these offer foreign languages, how the curriculum is organized and if qualified teachers are available.²

Of the visited kindergartens, 47 percent offered foreign languages and 82 percent of those used voluntary courses. As for the ratio, English was clearly favored over German, which was offered in only 4 percent of the schools and only when a strong tradition was present. In only 3 kindergartens could children choose between English and German. No other languages were offered. On average, 25 percent of children participated in the courses and the attendance ranged widely from 10 to 100 percent. A Czech School Inspection report from 2010, which focused on foreign language courses in 115 kindergartens, stated that out of 6,629 children, 1,196 learned English and only 31 German. In the Zlin Region questionnaire, one-fourth of the parents also stated that their children participate in the kindergarten courses.

As not all kindergartens in the Zlin Region offer language courses, parents are forced to look elsewhere. Nearly every Czech town currently has private language schools, which specialize in children's courses, Helen Doron being one example. Of the respondents, 7 parents noted this alternative, and 12 children take private lessons. Particularly in larger cities, it is a problem for parents to choose the right course out of so many commercial offers. The course content often does not match school curricula. Further, it is important to note that the choice of a private language course in an individual or group form might create a considerable financial burden for the family budget. Knowing the advantages of early language teaching, many parents hesitate. The second alternative, usually more expensive but also more effective, is to enroll a child in a bilingual kindergarten.³

A frequently discussed topic tends to be the frequency of teaching. The 2010 Czech school inspection found out that only 8 percent of kindergartens teach English daily in short sequences, while two-thirds of the kindergartens only teach it once a week. According to the results of the Zlin Region questionnaire, 75 percent of the schools offer one lesson (usually 30-45 minutes) per week. Only 9 respondents indicated that their children have two, one-hour lessons per week, two children have occasional lessons and one child has a 30-minute lesson daily. This form of teaching, with such a low frequency (1-2 hours per week) has a very low effect. Parents are well aware of this fact, but they justify it by a lack of options and the high cost of the lessons.

² In the 2011/2012 school year, a total of 339,185 children attended one of 4,931 kindergartens in the Czech Republic, which is approx. 95 percent of all children. At the same time, 26,780 teachers and pedagogs were employed, which corresponds with 12.6 children to one teacher. (www.uiv.cz)

³ Full day attendance at an English kindergarten in Zlin costs 6,400 czk per month (www.venter.cz), in Brno 9,990 czk (www.kidsgarden.cz). Prices can also be higher. When enrolling in a German kindergarten in Prague for example, a one time fee of 16,000 czk is paid. Yearly tuition for all day attendance is around 150,000 czk (www.dsp-praha.org).

Some respondents noted that they are unable to measure their child's progress and therefore they chose an option, which in a certain way meets their lowest requirements. The absence of progress evaluation options is a criticism of the educational institutions, which either do not inform the parents at all on the progress of their children or do so in an insufficient way. Private language schools, on the other hand, generally consider parents their partners and guide them methodologically as well as didactically.

In order for a one-hour language course per week to be at all successful, parents must clearly be involved in the educational process. The Zlin Region parents were asked how they support their children's foreign language acquisition. The majority of them (33) play CDs or DVDs in the foreign language to their children. The questionnaire also identified a pervasive fear among parents that they do not know if they can speak with their children as non-native speakers, worried that they might do more harm than good. By using audio and/or visual media, they are avoiding this problem since the recordings are usually done by native speakers. Private schools often offer CDs or other materials to the parents, who either buy these materials or receive them as part of the course. The situation is more difficult for those who do not have this option. It is therefore not easy to navigate commercial offers, and there is also the financial aspect to consider.

Of the Zlin respondents, 33 confirmed that they speak with their children in a foreign language at home. Based on the evaluated data, it is evident that even parents that only have a minimal knowledge of foreign languages practice this activity with their children, which might be considered an extraordinary effort. Only a small percentage of parents read stories and fairytales to their children in English. However, the parents almost unanimously expressed a need for a greater variety of didactic supplies, such TV programs, affordable materials in bookstores or libraries or advice on teaching methods. This need is also noted in the White Book from 2001:

A two foreign language education at all school levels will be enabled so that every graduate of complete secondary school will be able to communicate at a certain level of fluency in two languages, one of them being English. It is necessary to search for various forms of media support in order to increase the foreign language literacy of children, youth and adults. (National Program of Educational Growth 2001, 83)

The question of effectiveness is closely tied with the qualifications of kindergarten teachers. The 2008 report of the Czech school inspection states that only 6 percent of teachers had specialized qualification for work with pre-school children as well as qualification for foreign language teaching, which teachers completed during life-long learning programs. More than half of foreign language teachers in kindergartens received special education for teaching in kindergarten, however were not sufficiently equipped in terms of language or were only graduates of the "maturita" exam in Russian, which is not at present a desired language. The education of external staff often did not fulfill special qualification requirements. Even more, only in 36 percent of kindergartens is the teaching of a foreign language documented and evaluated for quality.⁴

Concerning the advantages for children who learn a foreign language, most often English, at an early age, Petr Najvar (2008) did not find any connection between early foreign language education (English) and later success at school. In his empirical study, he compared the levels of English knowledge of 211 eighth-grade students from 7 schools and found out that children who attended foreign language courses prior to school did not do any better on exams than children who started to learn English at school. He then interviewed 16 children, who in a certain way deviated from the norm (achieved particularly positive or negative results, had an intensive early education or learned German as a first foreign language). These interviews enabled him to conclude that there was a considerable lack of quality in

⁴ For details, see Czech School Inspection 2008, 6.

the courses offered.⁵ As suggested by the Zlin case study, courses are often limited and concentrate on isolated vocabulary or very simple syntactical structures. The use of metalanguage or pronunciation by non-native speakers also belongs to this category. It seems necessary to follow the requirement from the Ministry action plan about including foreign language teaching into the curricula for kindergarten teachers, where future teachers should gain such knowledge applicable for everyday use. It is not a matter of creating special courses, but rather of including small foreign language sequences into kindergarten daily programs.

The Zlin respondents agreed that early foreign language education has many advantages: 129 answered favorably to a question about whether children learn foreign language easily; only 9 did not agree and 3 did not answer. These results are not surprising since the topic of language education is omnipresent in the Czech media and passes like a red thread through not only preschool but all levels of education.

Which foreign language should be taught first is also the subject of heated debates. It cannot be denied that in today's globalized world, English has become a respected universal communication tool (lingua franca). Further, English is a strongly preferred language in Czech educational politics. However, there is no valid reason why language education should be limited to one language only. In this context, note the 1980 "Homburg suggestions for common language diversification in Germany and Europe", where the authors encourage mediation of "language of meeting" and the language of neighbors in Europe, by which students would have the advantage of experiencing a second language in the form of various partnerships, exchanges, excursions, etc. Germany and Austria are two German-speaking neighboring countries with which the Czech Republic has countless historical, cultural and social contacts, creating a deep and intense interconnection. There would certainly be many opportunities for language exchange.⁶ Similarly, Polish or Slovak could also play an important role as neighbor languages.

Worth mention are also parental arguments in favor of early foreign language teaching. As part of the Zlin Region case study, four reasons were offered to the respondents, allowing them to pick several and also add their own reasons. There were no other reasons mentioned except for those already noted. The highest number of votes were allotted to, "my child will have better opportunities later in school" (24). At the same time, parents are often confronted with the problem that between the end of kindergarten and the beginning of regular foreign language education at an elementary school, there is often a two year gap, as not all elementary schools offer voluntary foreign language courses during the first and second grade. Parents either accept this delay, knowing that knowledge might be forgotten, or they continue with individual courses, which either way leads to heterogeneous classroom structures at the beginning of the third grade, when foreign language education officially begins. There is still a lack of continuity in moving from one educational level to the next. A good example is a project undertaken in the small Moravian village, Strani. The project was titled "Innovation and Expansion of English Language Education at the Elementary School in Strani" and started with the 2009/2010 school year. The Strani elementary school was the first in the Czech Republic where English language education in the first and second grades was financed by the European Union. After a successful first phase, this project should be extended in the future to the local kindergarten, assuring a smooth transition from one educational level to the next. Such well thought out projects guarantee the continuity of child education.

The second most common argument for early language education was a child's joy in learning a foreign language (20). This result demonstrates that parents realize the importance of the developmental years in the educational resume of each child, especially considering foreign languages. Children tend to learn

willingly, using all their senses and curiosity, without much effort or drills. Children at this age do not distinguish between social or historical contexts, the harmony or disharmony of a foreign language; they are generally free of all biases and learn in a playful way. Adults should take advantage of this natural instinct and encourage and lead the child. Of the respondents, 16 noted that they have friends or family abroad or that they vacation there often. The opportunity for live contact with a foreign language is often the strongest intrinsic motivation for mastering it.

The last question asked the parents if they wished for a wider selection in foreign language courses or for more information from the kindergarten. The most frequent answer was, "I want more information about how I can better study with my child" (35). This reflects the idea that parents generally do not feel they are sufficiently informed and didactically guided. Despite the fact that we live in a knowledge-oriented society, which holds education as its highest esteem, such a glaring and well-known deficit unfortunately continues to exist. Directly corresponding with the parents' desire for more information is also the answer, "I would like more materials to take home", noted 18 times. The shortage of affordable materials for the public clearly continues. Altogether 17 respondents would welcome more courses or better quality. Connected with the quality of courses is the quality of teachers, educational methods and materials, as well as parents' awareness of the course content and the progress of their children. Only one respondent in the Zlin Region voted for a different language than English, demanding German. Other languages, such as Spanish or Chinese, were not mentioned at all. Also prevalent among the respondents was the opinion that children should learn their mother tongue well prior to taking on another language.

4 Conclusion

The comprehensive implementation of voluntary foreign language teaching in all kindergartens in the Czech Republic has not yet taken place. Requirements from the 2006 action plan were implemented only partially. Parents still feel insufficiently informed in terms of the measurable progress of their children as well as educational methods and didactic materials. Such materials are still in great shortage. Deficiencies exist also in the qualifications of lecturers and kindergarten teachers. Mandatory lessons of English as part of study programs are insufficient. It is necessary to arrange such learning methods and language knowledge that are applicable in real life. Further, it is essential to solve issues with the transition from one educational level to the next and with the continuity of foreign language education. A good example is the project implemented in Strani. Overall, the goal of "one plus two" in the Czech Republic has not yet been reached.

Literature:

1. Gester, S.: *Quo vadis, DaF? Betrachtungen zu Deutsch als Fremdsprache in der Tschechischen Republik*. 1. vydání. Zlín: VeRBuM, 2011. 128 p. ISBN 978-80-87500-13-2.
2. Homburger Empfehlungen für eine sprachenteilige Gesellschaft in Deutschland und Europa, Januar 1980. In: *Neusprachliche Mitteilungen 33/80, 97-99*. Reprint in: Rudtke, D. (eds.): *Europäische Mehrsprachigkeit: Analysen - Konzepte - Dokumente*. Aachen: Shaker, 2002, 97-100. ISBN 978-3-8265-9716-9.
3. Ministerstvo školství, mládeže a tělovýchovy (eds.): *Národní program rozvoje vzdělávání v České republice: Bílá kniha*. Praha: Tauris, 2001. 90 p. ISBN 80-211-0372-8.
4. Najvar, P.: *Raná výuka cizích jazyků v České republice na přelomu 20. a 21. století*. Disertace. Brno: Masarykova univerzita, 2008. 201 p. ISSN: 1211-4669.
5. Výzkumný ústav pedagogický (eds.): *Rámcový vzdělávací program pro předškolní vzdělávání*. Praha: Výzkumný ústav pedagogický, 2006. 45 p. ISBN 80-87000-00-5.

⁵ For details, see Najvar 2008, 87.

⁶ Along the German-Czech and Austrian-Czech borders exist some bilingual kindergartens where mainly Czech children learn German, but also German children profit from intercultural education.

Internet sources:

1. Commission of the European Communities: *Promoting Language Learning and Linguistic Diversity: An Action Plan 2004 – 2006*. 24.07.2003. Brussels: COM(2003) 449 final. [online] http://eur-lex.europa.eu/LexUriServ/site/en/com/2003/com2003_0449en01.pdf [cit. 2012-11-05].
2. Česká školní inspekce: *Výuka cizích jazyků ve školách v letech 2005 – 2008*. 06.01.2009. [online] <http://www.csicr.cz/cz/85162-vyuka-cizich-jazyku-ve-skolach-v-letech-2005-2008> [cit. 2012-11-05].
3. Česká školní inspekce: *Podpora a rozvoj výuky cizích jazyků*. 06.04.2010. [online] <http://www.csicr.cz/cz/85027-podpora-a-rozvoj-vyuky-cizich-jazyku> [cit. 2012-11-05].
4. Davidová, Z.: *Inovace a rozšíření výuky anglického jazyka na ZŠ Strání*. [online] http://strani.cz/zpravodaj/html/03_2010/skola.html [cit. 2012-11-05].
5. Komise evropských společenství: *Nová rámcová strategie pro mnohojazyčnost*. 22.11.2005. Brusel: KOM(2005) 596. [online] <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2005:0596:FIN:cs:PDF> [cit. 2012-11-05].
6. Ministerstvo školství, mládeže a tělovýchovy (eds.): *Národní plán výuky cizích jazyků*. 18.01.2006. [online] <http://aplikace.msmt.cz/PDF/JT010NPvyukyCJnaNet.pdf> [cit. 2012-11-05].
7. Ministerstvo školství, mládeže a tělovýchovy (eds.): *Akční plán výuky cizích jazyků pro období 2005 – 2008*. 18.01.2006. [online] <http://aplikace.msmt.cz/PDF/JT010NPvyukyCJnaNet.pdf> [cit. 2012-11-05].

Primary section: A**Secondary section: AM**

SELECTED ELEMENTS OF THE INTERNATIONALIZATION OF SMALL AND MEDIUM-SIZED ENTERPRISES

³BEATA GLINKOWSKA

Department of Management, University of Lodz, Matejki 22/26 Street, Poland, 90-237 Lodz
e-mail: ^abettysue@uni.lodz.pl

Abstract: In this paper the author tried to analyze some aspects of the process of internationalization of small and medium-sized enterprises. It contains the essence and definitions related to the process of internationalization, the theoretical analysis of the skills and attributes necessary for the modern entrepreneur / manager, wishing to enter foreign markets. The author also concluded the analysis of theoretical and practical statistics compiled by the Polish Ministry of Finance on the process of internationalization of Polish enterprises.

Keywords: internationalization, multiculturalism, small and medium-sized enterprises, SME.

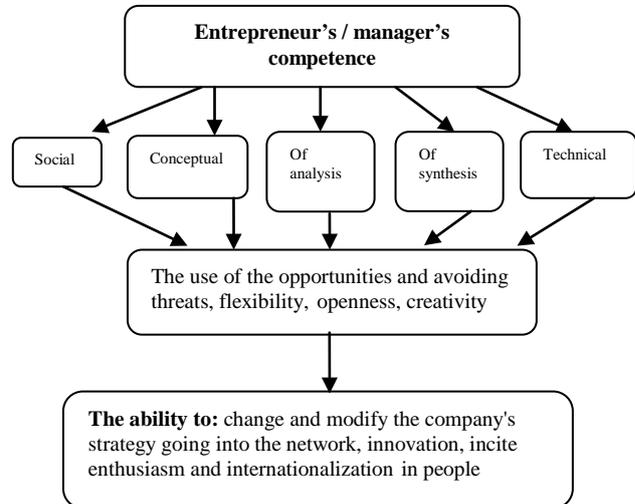
1 The process of internationalization- essence and definitions

Analyzing the literature in the topic of enterprises internationalization, differences in terminology are noticeable. According to Swedish researchers, J. Johanson and JR Vahlne internationalization process refers to any activity undertaken abroad by the organization. Globalization is seen as a higher stage of internationalization¹. This view is shared by Pole J. Rymarczyk, who deems that the essence of the process of internationalization is "any kind of business activity undertaken abroad by the company"². The internationalization in German literature, is seen not only as a process, but also as a way of acting and statistical phenomenon³. A. Minguzzi, R. Passaro (Italian literature) emphasize that having a conceptual and application knowledge is a key to gain a competitive advantage in the internationalization process⁴. This view is shared by J. Schumpeter, who says that internationalization is an innovation process⁵. Returning to the study of Polish researchers, the fastest internationalization can be observed in those organizations, which have advanced technologies (or use them B.G.), also those, owners (directors, managers B.G.) of which have the highest competence⁶. Learning and adapting to the culture of a country is a challenge for today's manager, regardless of whether it is business manager for-profit or non-profit organization. In the process of internationalization manager's social and conceptual competence are of greater importance than technical skills.

2 Challenges for contemporary "Internationalized" entrepreneurs/managers

The impact of the above competencies (social, conceptual, technical) to use the opportunities and avoid risks in the global environment is obvious, as it is the entrepreneur and manager are all advocates of change and initiated the formulation of a strategy for the company. The modern entrepreneur / manager operates in a global environment that is far from the stability characteristics. This forces the need to have and develop new

skills, which are highly related to the ability to enter new markets, and the management of multi-cultural organization. The connection between entrepreneur's and manager's competence with the ability to internationalize is shown in author's figure No 1.



Source: own work

In Figure 1 author firstly submits social skills closely related to cross-cultural management. Conceptual thinking and action are needed to perceive the organization as a whole. Technical skills in this particular case will be moved to the last place. This means that the importance moves to the perception of the organization as a whole in a global world. The importance of leading process rises. There is an important difference between being formal and formal head of the leader. The leader is a charismatic man, chosen and recognized by the group. In this situation, it is easier to develop a new organizational culture.

Key competence of entrepreneurs and managers translate into ability to make use of opportunities and avoid threats in the environment, they affect their flexibility, creativity, openness. This fact is important for the organization's ability to change and modify its strategy. It is not insignificant for the internationalization process to be able to incite enthusiasm in the people, to enter into a variety of relationships and interactions in a global environment. It certainly may accelerate the process of internationalization. Not every company is able to exist in a foreign market. This ability is closely related to owners' / managers' charisma, personality traits and skills. If these are timid people, afraid of challenges and risks, lacking vision and creativity, the chances to start international cooperation are slim, unless it is a coincidence, or a one-off transaction. Many modern scientists and researchers emphasize the role of management and entrepreneurship competence in creating the culture of an international organization. Expectations of participants in terms of their organization and functioning are also changing.

In the "new" conditions we need an entrepreneur / manager having authority, having "credit of trust" closely associated with the recognition, trust, objectivity, truthfulness, or rational and emotional intelligence. Among other qualities and skills characterized by the entrepreneur / manager who joins the internationalization process we can distinguish:

- having certain characteristics psychophysical
- having the ability to communicate,
- having the skills to trigger enthusiasm, stimulating creativity and initiatives
- having the skills to continuously respect standards and ethical behaviour.

¹ J. Johanson, J.E. Vahlne *The Internationalization Process of the firm- A Model of Knowledge Development and Increasing Commitments*, Journal of International Business Studies 8, 1977

² J. Rymarczyk, *Internacjonalizacja i globalizacja przedsiębiorstwa*, PWE S.A., Warszawa, 2004, p. 19

³ E.A. Dörnberg, *Die Internationalisierung mittelständischer Industrieunternehmen- Auswirkungen auf Organisationsstruktur und Führungsstil*, Göttingen, Vandenhoeck, Ruprecht, 1982, p. 93

⁴ A. Minguzzi, R. Passaro, *Entrepreneurship Behaviour and International Market Activi: Some Empirical Findings from a cross-Sector Analysis*, Research Institute on Service Activities, National Research Council, Naples, 1993

⁵ J. Schumpeter, *Teoria rozwoju gospodarczego*, PWN Warszawa, 1960

⁶ B. Nogalski, N. Daszkiewicz, *Internacjonalizacja polskich małych i średnich przedsiębiorstw- przymus czy swobodny wybór [w:] Strategie korporacji działających w skali ponadnarodowej*, Komitet Nauk Organizacji i Zarządzania PAN, Tychy 3-4 November, 2005

In large enterprises there must be a system of division of roles, directly resulting from the strength of the authority of the entrepreneur / manager. In such a situation, you can either talk about the authority granted by the organizational hierarchy⁷, or the one resulting from the reference power (admiration, appreciation for the knowledge, skills, values, etc.). Concentration on the problem and the ability to communicate with employees, who are participants in the organization, leading to learn from their knowledge and experience, seems to reinforce the authority of the head and leads to optimal organizational efficiency. According to P. Hersey K.H. Blanchard the choice of governance depends on the managers' personality and knowledge, personality and competence of their subordinates, as well as the situation in which the superior is⁸. This means that there is no one model management style good for each organization and each situation. The "new" style of management should include the ability to adjust the manager to diverse circumstances in which organizations are located.

3 The process of enterprise internationalization-theoretical basis

Checking the degree of internationalization of the company requires the use of certain indicators. These indicators inform about the independence of enterprise internationalization implementation of the strategy, or about the intensity of the process. Among the most important indicators applicable to conduct the study of the intensity of the process, according to J. Rymarczyk we can distinguish:

- The number of foreign markets served,
- The share of accounting value of assets abroad to company's assets total
- Share of profit coming from abroad to the total company's profit
- The scale of foreign direct investment,
- Participation in foreign markets,
- The share of workers employed abroad to total employment⁹.

The organization may internationalize alone, with others or by other organizations. The degree of independence in the process of internationalization of the company is shown in Table 1.

Tab. 1 The degree of enterprise's independence

Internationalization strategy alone	Internationalization strategy by other organizations	Internationalization strategy with others
Function transfer style	Market-partnership style	Participatory style
-market policy (supply / sell) - organization / administration - production / location - other functions	- export / import - license transfer - know-how transfer - franchising	- participation - takeover - merger - joint venture - consortium - cooperation

Source: based on J. Rymarczyk, *Internacjonalizacja i globalizacja przedsiębiorstwa, PWE, Warsaw 2004, p 29* [a:] WG Dittmar, C.W. Mezera, W. Hoyer, *Die Expansion international Planen und durchfuhren, moderne industries Verlag, Munich 1979, p 94*

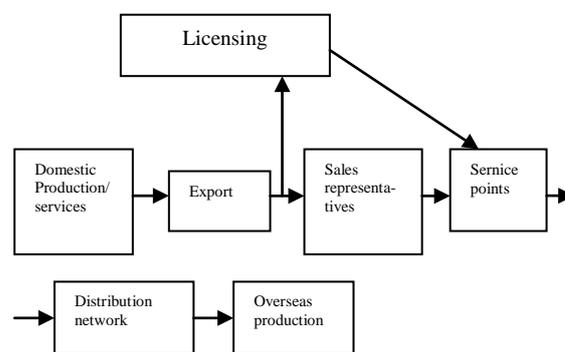
In the process of internationalization, micro and small businesses face many more obstacles than large enterprises¹⁰. The reason for this situation are mainly small companies' financial resources and lack of mobility. Such companies should

pursue internationalization strategies with others, or at least by other organizations. Themselves, they have little chance of rapid internationalization process, unless it is a coincidence. The process of internationalization may be carried out in different ways. Among the most popular routes we can distinguish:

- sequential model of internationalization,
- a holistic model of internationalization (Finnish),
- internationalization of Born Globals type,
- internationalization through networking.¹¹

The essence of the *sequential model* is a gradual, stepwise internationalization process, from exports, through creating its own retail chain, entering into contracts, to taking up production abroad¹². This way of "entering foreign markets" is relatively risky and usually characteristic of small entities. The beginning of the chain sequence, i.e. export is a process from which you can withdraw at any time a fairly quick way. Sequential model is shown in Figure 2.

Fig. 2 Sequential model of the enterprises' internationalization process



Source: A. Buckley, *Inwestycje zagraniczne. Składniki, wartości i ocena, PWN, Warszawa 2002, p. 97*

Sequential model shows how a national company, entering into foreign markets, usually begins with the first export organized occasionally, and then usually in a continuous manner. Then there is the need to create in the markets their dealerships for service. Mastering foreign distribution system is another step in the process of internationalization. Now, there is only one step to their own overseas production. Selling licenses to foreign companies is a step that can substitute the creation of dealerships. The above is a very simplified model. It is necessary to be aware of the cause-effect relationships between successive stages, as well as the existence of feedback.¹³

Holistic model of internationalization, so called. Finnish model, is based on the theory of growth of the company and its internationalization. The process of internationalization is here to make imported goods, resources, technology, resulting in domestic companies to learn and gather experience, which is very useful for making exports by these companies and the effect on foreign markets¹⁴. Thus, the holistic model preserves the principle of sequential development, however, companies can avoid some steps of sequential model¹⁵, or enter directly into strategic alliances, and various forms of cooperation.

The Born Globals internationalization is different from the sequential process. T.G. Madsen points out that sometimes newly created company immediately head to the international markets¹⁶. According to J. Kwiatkowska, Z. Wysokiński these

¹¹ J. Witkowska, Z. Wysokińska, *Umiędzynarodowienie... op. cit.*, p. 7- 16

¹² A. Buckley, *Inwestycje zagraniczne. Składniki, wartości i ocena*, Wyd. PWN, Warszawa 2002, p. 96-100

¹³ A. Buckley, *Inwestycje... op. cit.*, p. 98-99

¹⁴ J. Witkowska, Z. Wysokińska, *Umiędzynarodowienie... op. cit.*, p. 10

¹⁵ T. Vissak, *The Internationalization of Foreign-Owned Firms in Estonia: a Case Study* [w:] Proceedings of 7th Vaasa Conference on International Business, August 24-26 2003, University of Vaasa, Finland 2003 [w:] http://www.comparative.uni.lodz.pl/attachments/article/11/07_full.pdf [access: 15 XI 2012]

¹⁶ T.G. Madsen, P. Servais, *The Internationalization of Born Globals: an Evolutionary Process?*. "International Business Review", 1997, Vol. 6, p. 562

⁷ A.K. Koźmiński, W. Piotrowski, *Zarządzanie- teoria i praktyka*, PWN Warszawa 2010, p. 59

⁸ P. Hersey, K.H. Blanchard, *Management of Organizational Behavior*, Englewood Cliffs, ed. Brinig, 2002, p. 47

⁹ J. Rymarczyk, *Internacjonalizacja... op. cit.*, p. 24

¹⁰ J. Witkowska, Z. Wysokińska, *Umiędzynarodowienie małych i średnich przedsiębiorstw a procesy integracji europejskiej. Aspekty teoretyczne i empiryczne*, Ed. UŁ 2006, p. 7

are companies that "were created after 1976 and which have reached the 25% share of foreign sales in total sales and the export began in the three years since the founding of the company."¹⁷ The internationalization of Born Globals type runs without clichés, i.e. the companies instead of using a fairly typical cooperation with neighbouring countries, seek opportunities around the world, by using, for example, personal contacts, and market niches. These are usually young companies with small capital.

The internationalization of companies through networking (network approach) is a typical example of entering international markets through the use of existing and potential relationships abroad home country. The essence of this type of process is to use the multilateral relations of companies creating a network of different entities, with which they are related. It is a process characteristic of the corporation, where an important role is played by the parent company, as well as culture of the country where the subsidiary (branches) is located.

The fact which model a company chooses to exist in global markets depends on many factors. Among them crucial are: owner's and managers' entrepreneurship and charisma, financial and human resources, personal contacts and relationships (primarily with entities abroad), type of production or services, economic situation of the country, etc.

4 Statistics showing the condition of export/import of Polish and some European entrepreneurs

Polish Ministry of Economy published a report on the state of international activities of Polish enterprises and enterprises in selected European countries. These are estimates, but they give a fairly clear picture of reality associated with the process of internationalization (Table 2).

Tab. 2 Polish trade turnover by continents in the period January-December 2011 and the base 2010 (in millions of euros)

Country	2011		2010		Share in:	
	Export	Import	Export	Import	Export	Import
Poland	135754,4	150 456,3	120 373,1	134188,4	100,00	100,00
Europe	121 454,9	114 612,8	108 210,2	99 124,5	89,47	76,18
Asia	7 910,8	27 588,5	6 503,6	27 116,9	5,83	18,34
Africa	1 315,7	1 187,4	1 357,8	1 040,5	0,97	0,79
North America	3 251,0	3 652,8	2 892,0	3 800,6	2,39	2,43
South America	1 322,7	2 596,5	972,0	2 233,7	0,97	1,73
Australia and Oceania	419,9	356,4	369,0	369,6	0,31	0,24

Source: own studies based on data from the Ministry [w] http://www.mg.gov.pl/files/upload/8437/Syntetyczna_inf_rok_2011_wstepna_inf.pdf [access 15 XI 2012]

The analysis of the data in the table shows that both export and import in 2011 compared to 2010 showed volume growth. This could mean an increase in international activity of Polish entrepreneurs. Still, looking globally, we import more (150 456.3 million) than we export (135 754.4 million). A similar tendency was in 2010. The largest Polish international enterprises activity took place on the European continent. The analysis of the data on the percentage of Polish exports in Europe shows that it is 89, 47% compared to other continents, while the share of imports is 76, 18%. The smallest percentage of exports and imports was recorded in 2011 in Australia and Oceania (the same: 0.31% and 0.24%), but it is worth noting that in Africa, North America, Australia and Oceania trade in goods related to exports and imports is fairly compensated. The largest

disproportions can be observed in trade transactions carried out in Asia. The ratio of exports to imports was clear and was negative in 2011, minus (-) 19 677.7 million in favour of imports over exports. This could mean difficulty in finding markets for those products / services or a lack of domestic market niches, or appropriate links. This could also indicate the difficulties of legal regulations, and many other causes of an objective.

Interesting may seem the data concerning Polish trade in goods in 2011 and 2010 by product groups (Table 3).

Tab. 3 Polish trade turnover by product groups in 2011 and the base 2010 (in millions of euros)

Name of product group	2011		2010		Share in: (%)	
	Export	Import	Export	Import	Export	Import
Agri-food products	15 097,7	12 481,1	13 507,2	10 921,1	11,12	8,30
Mineral products	6 890,4	20 609,2	5 153,8	15 533,3	5,08	13,70
Chemical products	18 723,3	26 381,9	15 724,4	23 310,7	13,79	17,53
Leather	525,7	842,7	484,7	734,1	0,39	0,56
Other products of wood and paper	6 832,3	5 371,2	6 253,4	4 866,5	5,03	3,57
Products of light industry	4 881,2	7 433,3	4 438,1	6 830,4	3,60	4,94
Ceramic products	3 848,2	2 158,2	2 986,7	2 007,0	2,83	1,43
Metallurgical	16 031,6	16 280,7	13 491,9	13 936,6	11,81	10,82
Electrical industry products	55 223,8	52 544,5	51 513,6	50 855,8	40,68	34,92
Various	7 628,0	2 624,1	6 772,7	2 362,0	5,62	1,74
Total:	135 754	150456	120373	134188	100	100

Source: own studies based on data from the Ministry [w:] http://www.mg.gov.pl/files/upload/8437/Syntetyczna_inf_rok_2011_wstepna_inf.pdf [access 15 XI 2012]

The analysis of the data in Table 2 shows a positive percentage of exports of agree- food products over imports (11,2% export compared to 8.30% - imports). A similar trend occurs in groups of commodities such as industry products, wood and paper, ceramics and so called. miscellaneous items. The opposite applies to mineral products, industrial goods: chemical, leather and light industry products, where import dominates over export. Aligned situation can be observed in the group of metallurgical goods, where exports are aligned with imports. In comparison to 2010 the highest growth rate in favour of export can be characterized by a group of "ceramic". We most import and export electrical machinery (appropriately: 52 544.5 million to 55 223.8 million), and the minimum of leather products (842.7 million euros to 525.7 million euros).

However, the most important is the fact that the index of exports and imports in all product groups increased compared to 2010.

Conclusion

Summarizing the above consideration it should be emphasized that it is not possible to draw far-reaching conclusions from these examples and analysis made. The article is only an approximation of the problems associated with the processes discussed above. However, you can make a synthesis, namely the internationalization process in 2011, reflected by an increase in exports and imports compared to year 2010 was significantly intensified. The analysis of the data shows that in terms of exports there is much to be done in Asia. It is a relatively pristine area in relation to the scale of imports. The process of internationalization of Polish companies shows positive dynamics. The observations of economic practice shows that more and more small businesses internationalize _ using various links and personal contacts throughout the world. As for

¹⁷ J. Witkowska, Z. Wysockińska, *Umiejętności... op. cit.*, s. 11

management, we are moving from the "normal" management through: planning, organizing, motivating, deciding and organizing towards management defined as: leadership. This of course requires the formation of new entrepreneur's/ manager's attitudes and these attitudes continue to evolve.

Literature:

1. BUCKLEY A., *Inwestycje zagraniczne. Składniki, wartości i ocena*, Ed. PWN, Warszawa 2002
2. DÖRNBERG E.A., *Die Internationalisierung mittelständischer Industrieunternehmen- Auswirkungen auf Organisationsstruktur und Führungsstil*, Göttingen, Vandenhoeck, Ruprecht, 1982
3. HERSEY P., BLANCHARD K.H., *Management of Organizational Behavior*, Englewood Cliffs, wyd. Brinig, 2002 ISBN 0-13-551268-9
4. JOHANSON J., VAHLNE J.E., *The Internationalization Process of the firm- A Model of Knowledge Development and Increasing Commitments*, Journal of International Business Studies 8, 1977 (article)
5. KOŹMIŃSKI A.K., PIOTROWSKI W., *Zarządzanie- teoria i praktyka*, PWN Warszawa 2010, ISBN: 978-83-01-16441-6
6. MADSEN T.G., SERVAIS P., *The Internationalization of Born Globals: an Evolutionary Process?*. "International Business Review", 1997, Vol. 6
7. MINGUZZI A, PASSARO R., *Entrepreneurship Behaviour and International Market Activi: Some Empirical Findings from a cross-Sector Analysis*, Research Institute on Service Activities, National Research Council, Naples, 1993
8. NOGALSKI B., DASZKIEWICZ N., *Internacjonalizacja polskich małych i średnich przedsiębiorstw- przemysł czy swobodny wybór* [w:] Strategie korporacji działających w skali ponadnarodowej, Komitet Nauk Organizacji i Zarządzania PAN, Tychy 3-4 November, 2005, ISBN 83-88402-80-3
9. RYMARCZYK J., *Internacjonalizacja i globalizacja przedsiębiorstwa*, PWE S.A., Warszawa, 2004
10. SCHUMPETER J., *Teoria rozwoju gospodarczego*, PWN Warszawa 1960
11. WITKOWSKA J., WYSOKIŃSKA Z., *Umiejdzynarodowienie małych i średnich przedsiębiorstw a procesy integracji europejskiej. Aspekty teoretyczne i empiryczne*, Ed. UŁ 2006, ISBN 978-83-7171-941-8
12. VISSAK T., *The Internationalization of Foreign-Owned Firms in Estonia: a Case Study* [w:] Proceedings of 7th Vaasa Conference on International Business, August 24-26 2003, University of Vaasa, Finland 2003 [w:] http://www.comparative.uni.lodz.pl/attachments/article/11/07_full.pdf
13. http://www.mg.gov.pl/files/upload/8437/Syntetyczna_inf_rok_2011_wstepna_inf.pdf

Primary Paper Section: A

Secondary Paper Section: AH, BC

A NEW COMMUNICATION APPROACH FOR THE HOTEL INDUSTRY

*SANDRA HEIDEN

University of Latvia, Raiņa bulvāris 19, Rīga, Rīgas pilsēta, LV-1050, Latvia
e-mail: "sandra@heiden.name"

Abstract: Lifecycle concept is well known from performance in kind, but is also crucial for services and service marketing. The focus of this concept is the assumption, that every performance has a limited lifetime and the selling of this performance underlies a cyclic development over time (Wiesner and Sponholz, 2007, p. 27). The purpose of this paper is to gain insights about the changes in needs and expectations in terms of communication of hotel customers during relationship lifetime and the impact on communication and hence, also retention strategies. With the help of a questionnaire, hotel customers in different customer lifecycle phases are asked for their needs and interests concerning marketing communication. With these insights, the creation of a new dynamic communication approach for the hotel industry is possible.

Keywords: Hotel marketing, customer lifetime, dynamic communication approach.

1 Introduction

The purpose of this paper is to introduce a new model for marketing communications in the hospitality industry through a more efficient and effective marketing communication strategy, which takes the dynamics of the customer relationship lifecycle into consideration. For this reason, the customer communication lifecycle is introduced, to offer a more integrated and appropriate model for marketing communication in the hotel industry. The invention of this lifecycle takes the dynamics in communications in consideration, which are otherwise ignored by usual communication methods.

2 Theoretical Framework

The main goal of using the customer relationship lifecycle model for customer retention is the efficient realization of customer retention in different phases of the relationship of the customer with the firm. The phase of the relationship determines the measures, which should be used for successful retention. The rationale is that based on the phase of relationship, the most appropriate way for customer retention can be derived (Georgi, 2005, p. 237). Within the lifetime of the customer relationship, characteristic phases can be identified, which represent different states of the relationship from a customer's perspective. Due to the different phases, management tasks for customer retention differ (Stauss, 2011, p. 320). Furthermore, the aim is present customers certain buying opportunities not only in a way that satisfies their needs. Also to present and communicate purchase possibilities in an enjoyable way is a main task (Tsai, 2005). The lifecycle idea should be integrated in the strategic planning and implementation process of Integrated Marketing Communications (IMC). Especially in a competitive environment it is crucial that companies involve detailed information about their customers. Furthermore, modern integrated marketing requires the integration of customers needs, motivations, attitudes and actions. Additionally, the main purpose of modern marketing is not to persuade people, but to satisfy the customer, which is the essence of customer orientation (Mihart, 2012). Also due to the changed natures of marketing communications in the Internet era, new strategic and tactical perspectives are required (Ivanov, 2012). One main aspect of the analysis of communication characteristics is the special phase of the customer lifecycle in which a relationship is. The customer lifecycle shows the different stages of a customer relationship. To identify the stages, the development of the strength of relationship can be used, operationalized for instance by the customer turnover as well as the duration of relationship (Georgi, 2005, p. 231 f.). Thus, customer lifecycle of relationship can be regarded as an analogy to the product lifecycle model in terms of the customer-provider relationship. The customer lifecycle model was developed correspondently and was developed to show the ideal-typical temporal process of a customer relationship (Stauss 2000, p. 15, Stauss, 2011, p. 322, Bruhn, 2009, p. 59 ff.).

3 Research question, model description and hypotheses

The goal is to examine how the relationship lifecycle can be used to create a corresponding cycle for marketing communication purposes and how this customer communication lifecycle is able to make customer retention in the hospitality industry more successful and more efficient. The marketing communication sent out by the provider and received by the customer is able to fulfil different aims. In service marketing, three main aspects can be communicated with the help of marketing campaigns: Emotions, offers and information. First of all, communication has an informative character and is able to close information gaps. This may be the case for instance in terms of new offers or detailed information about facilities. Information is able to reduce uncertainty at the beginning of the customer provider relationship. Furthermore, information is not only necessary to reduce risks before the stay, but is as well important after the purchase decision to inform customer about hotel services in particular, sport facilities, restaurants and all other factors that increase the pleasure of the hotel stay. Furthermore, communication is able to transfer emotions, which are especially important, if the customer provider relationship is at the peak of the lifecycle curve. Hence, communication in this area seems to be less interesting. Emotion transfer should help to create and support loyalty and customer retention. Only if communication meets customer expectations, it will be able to push further purchase decisions. Offers include all special prices, packages or last minute deals for instance that are communicated to customers. Since the intensity of the relationship changes over time, also the need for these three different aspects is supposed to change. Hence, marketing should adapt communication based on the different needs in the different phases of the customer-service provider relationship. It is postulated that customers have a certain need for information to reduce perceived risks before their first stay. After their first stay, if they know the hotel experience for instance briefly but not in detail, a further need for information may arise. After many repeat stays, the need for further information is assumed to decrease, because no more risks are perceived and the product is well known. Concerning emotions, they are important to build up and to strengthen loyalty, so it is assumed that the need for emotions increases over time. When it comes to offers, it is likely that customized offers are required in every phase of the customer lifecycle, but the need will decrease if customers know the product very well and know special rates etc. very well. Furthermore, loyal guests are less price sensitive (Reichheld, 2001) and are less interested in lower rates than new guests.

Thus, the following main hypotheses can be postulated:

H1: Within customer lifecycle of a hotel guest, the interest and need for communication from the hotel changes.

Based on the customer lifecycle phase, the need for communication in terms of information (a), offers (b) or emotional content (c) is assumed to change accordingly. Thus, the following sub-hypotheses can be formulated, based on the operationalized indicators:

H2a: The longer the customer relationship, the lower is the need for information of customers about the service.

H2b: The longer the customer relationship, the lower is the need for cheap offers in communication.

H2c: The longer the customer relationship, the higher is the need for emotional content in communication.

3.1 Goal of the communication model

Based on the theoretical considerations, a new communication model is invented. The following assumptions regarding the new model are empirically examined in the next step. The relationship lifecycle model shows that relationships are dynamic and hence, also marketing measures must be dynamic to be efficient and successful. To achieve this, a dynamic model

for marketing communication is required. The goal is the creation of a more efficient model for marketing communication at the example of the hotel industry. Efficiency refers to an improvement in customer retention, which leads to increased customer turnovers and profits. The new model should offer a substitute or at least a supplement to usual segmentation methods, which are used to implement a more customized marketing communication strategy. Customers are segmented with the goal of offering a more individual and appropriate marketing communication strategy. The problem of classical segmentation methods is that they are often only past oriented or one-dimensional. Since the focus of nowadays marketing lies on the relationship between the customer and the provider, this relationship should also be the base for a new communication approach. Since this relationship is rather dynamic, the new communication model should take the same dynamics into consideration. The ideas, considerations and rationales of the customer relationship lifecycle model are used to create a corresponding model for communication: A customer communication lifecycle. From a customer's perspective, the communication offered should meet his expectations in a higher extent than before.

3.2 Model indicators

The relationship lifecycle model consists of various characteristics, which must be adapted to the requirements of the communication lifecycle model. The relationship lifecycle model is usually illustrated in a coordinate system to show the intensity of the relationship over the course of time. Regarding the customer communication lifecycle model, first of all, the indicator for the duration of the relationship must be adapted. This aspect is illustrated usually as length of relationship by the abscissa. Second, an indicator concerning the ordinate, called relationship intensity in the relationship lifecycle models, must be chosen. Within this new communication model, this indicator represents customers' intensity of expectations and interest for marketing communication during the relationship over the course of time. Third, an appropriate phase separation, based on the indicator, which determines customers' marketing communication expectations, must be accomplished. Then, based on the definition of the phases, the characteristics of each phase must be analysed. The following table shows a comparison between the usual indicators for the relationship lifecycle and the corresponding indicators of the new customer communication lifecycle.

Table 1: Comparison of indicators relationship lifecycle and customer communication lifecycle, Source: Own illustration

Characteristics	Relationship lifecycle	Customer communication lifecycle
Indicator for the abscissa	Duration of the relationship	Customer lifetime, measured in days from the first purchase until the last purchase, which occurred so far, to measure the length of the active customer-provider relationship
Indicator for the ordinate	Intensity of the relationship	C.A.L.I. the communicational adhesion lifetime index, which illustrates the changes in customers' expectations towards marketing communication and the changes in intensity within these expectations

Source: Own illustration

Based on the customer relationship lifecycle, the phases for the communication lifecycle are defined correspondingly. Based on the chosen indicators, the phase borders are modified due to the requirements of the communication lifecycle. The table below shows the four phases, phase names, indicator for phase separation, starting point for each phase and end of all phases.

Table 2: Customer communication lifecycle phase characteristics, Source: Own illustration

Phase	Phase name	Separation indicator	Starting point	End of the phase
1	Socialization phase	Only one purchase so far	First purchase	First repeat purchase
2	Growth phase	Active repeat customer	Second purchase within one year	Time frame between the first and last (until now) purchase less than one year
3	Maturity phase	Active, stable repeat customer	Repeat purchases within one and two years	Time frame between the first and last (until now) purchase within one and two years
4	Risk phase	Threatened repeat customer	Repeat purchases within more than two years	Time frame between the first and last (until now) purchase more than two years

Source: Own illustration

Based on the classical illustration (Bruhn 2001, Stauss 2000) of the customer relationship lifecycle, the illustration of the communication lifecycle is accomplished. The communication lifecycle is hence also separated into four phases, starting with the socialization phase at the beginning of the relationship. Then, the growth phase follows, where the relationship is increasing in terms of its intensity. With regards to the communication, the willingness of customers to receive communication, attention and interest is arising. Hence, the C.A.L.I. is increasing correspondingly to the intensity of the relationship. The third phase is the maturity phase, where the relationship intensity as well as the communication lifecycle is at its peak. The final phase, the risk phase, starts with a slow decrease in intensity of the relationship. Also the communicational adhesion lifetime index is assumed to decrease. With the help of communication, the decrease is supposed to slow down to delay a final defection of customers. The following empirical work is conducted to analyse the assumed dynamics in reality.

4 Research results and discussion

4.1 Data Source and Analysis Design – methodology

To analyse the dynamics in different phases of the customer communication lifecycle, a questionnaire was used. The questions concerning marketing were integrated in an existing guest questionnaire of a European hotel group with about 30 hotels. Most of the hotels are also located in Austria, followed by Italy, Croatia, Czech Republic, Serbia and Slovakia. The portfolio of hotels is separated into wellness hotels (14 hotels), a luxury premium collection (three hotels), family hotels (8 hotels) and city hotels. The main focus is on leisure guests, but especially in the city hotels (four hotels in sum), business travellers play an important role¹. All transactional information concerning the hotel stay is stored in a multi-property management system. If a guest makes a reservation, this information is stored in the system, including all available information concerning name, postal address, email address, arrival date, depart date, number of guests, room type etc. The information stored in the operative reservation system is transferred in an extra database for marketing purposes. Within the import process, data is cleaned and structured to be ready and appropriate for marketing communications. Two days after the departure, guests get a post-stay email. This email contains a "Thank you for your stay" message and the possibility to evaluate the hotel group and the previous hotel stay itself. If the hotel guests clicks on the link in the newsletter to open the questionnaire website, a personalized ID (alphanumeric) is transferred to link the questionnaire to the guest who fills it in. This enables a link between the questionnaire and the guest profile in the marketing database. After the guest has filled in the

¹ Falkensteiner.com, Date of insight: 28.10.2012

questionnaire and has clicked on “send”, the results are saved and written back into the database. Hence, the information about the guest’s evaluation of the stay and the hotel group can be linked to the guest’s profile with segmentation and transaction information. To answer the research questions and to examine the postulated hypotheses, questions regarding the interest for marketing communication, the perceived importance of marketing communication as well as the desired content of marketing communication, were added to the post-stay guest questionnaire of the hotel group. An own part in the questionnaire, labelled “Marketing” was created, were all questions concerning marketing communication are stored. The questionnaire version including the marketing communication questions was sent out at the beginning of July 2012 for the first time. To have a representative time frame with a sufficient amount of responses, questionnaire responses were used from July to the middle of October 2012. Overall, about 24,140 guests arrived in total during this time frame in all hotels of the hotel group and had a correct email address available, were the questionnaire could be sent. A total amount of 2,816 questionnaires were filled in. This represents a response rate of 11.7%, which represents a relatively high quota. Since the hotels are located in different European countries and customers are rather international, the questionnaire was sent out in different language versions. It was available in English, German, Italian and Croatian. Corresponding to the language, which was saved in the reservation system of the hotels, the guests received the questionnaire. This facilitates the process, because guests did not have to choose the right language before starting to fill in the questionnaire. Based on the customer lifetime value in days, the classification of the variable was accomplished in accordance to the phase boarder definition. Hence, all guests with only one stay so far and hence, no customer lifetime in days available, are in phase 1 for single stays. 1,644 respondents, what equals 59.1%, are in phase 1. The next phase, phase 2, was defined for all repeat guests with not more than one year between their first and last stay. 352 guests are in the growth phase, what equals 12.5% of all guests, who answered the questionnaire. Phase 3, maturity phase, refers to all guests with a customer lifetime of one until two years. 294 guests are in in the maturity phase, what equals 10.4% of all guests. Phase 4, the risk phase, contains all guests with more than two years of active relationship and 506 guests are located within this phase, what equals 18.0% of all guests. The distribution contains a minimum of approximately 300 answers per phase type. Hence, the answers per phase can be regarded as representative due to a sufficient number of answers per phase.

Table 3: Overview frequencies of customer lifetime in days, classified

	Frequency	Percent	Valid Percent	Cumulative Percent
Phase 1: Single stays	1,664	59.1	59.1	59.1
Phase 2: <1 year	352	12.5	12.5	71.6
Valid Phase 3: 1-2 years	294	10.4	10.4	82.0
Phase 4: >2years	506	18.0	18.0	100.0
Total	2,816	100.0	100.0	

Source: Own calculation based on questionnaire results

The question concerning the desired content of the next marketing campaign was especially important to evaluate the changes in expectations per phase. The respondents had to decide, which marketing campaign content is the most important for them, because they were only allowed to choose one content out of three possible choices (offers and packages, exclusive news representing the emotional content or relevant information). The next table shows the absolute and relative figures for the different contents per lifecycle phase in a contingency table.

Table 4: Content of marketing campaign and customer lifetime

	Customer lifetime value in days - classified	Total				
		Single Stays	<1 year	1-2 years	>2years	
No answer given	Count	231	45	24	50	350
	% within Customer lifetime	13.9%	12.8%	8.2%	9.9%	12.4%
Offers and Packages	Count	960	183	150	242	1535
	% within Customer lifetime	57.7%	52.0%	51.0%	47.8%	54.5%
Exclusive News	Count	269	82	97	178	626
	% within Customer lifetime	16.2%	23.3%	33.0%	35.2%	22.2%
Relevant Information	Count	204	42	23	36	305
	% within Customer lifetime	12.3%	11.9%	7.8%	7.1%	10.8%
Total	Count	1664	352	294	506	2816
	% within Customer lifetime	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Own calculation based on questionnaire results

The amount of respondents without an answer at all, decreases from 13.9% of guests in phase 1 (single stays) to 8.2% of guests in phase 3 and 9.9% of guests in phase four. The content “offers and packages” is constantly decreasing from phase 1 to phase 4. In phase 1, 57.7% of all respondents rate offers as the most important content. Contrariwise, only 47.8% of guests in phase 4 chose this type of content. Only 16.2% of all respondents in phase 1 chose “exclusive news”, but 35.2% of guests with a lifetime of more than two years rated this content as most desired. Relevant information has been chosen from all segments relatively seldom (10.8% on average). 12.3% of guests in phase 1 chose information, whereas only 7.1% of guests with the longest lifetime chose this content. Based on these results, a chi square test was accomplished. The results are highly significant with a p value < .0001.

Table 5: Chi Square test marketing campaign and customer lifetime

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	111,740 ^a	9	,000
Likelihood Ratio	108,709	9	,000
N of Valid Cases	2816		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 31,84.

Source: Own calculation based on questionnaire results

Due to the nominal scale of the desired content, a Cramer’s V was conducted to analyse the strength of association. With a also very high significance (p<.0001), Cramer’s V shows an existing, but weak correlation (.115).

Table 6: Cramer’s V marketing campaign and customer lifetime

	Value	Approx. Sig.
Nominal by Nominal	Phi	,199
	Cramer's V	,115
N of Valid Cases	2816	

- Not assuming the null hypothesis.
- Using the asymptotic standard error assuming the null hypothesis.

Source: Own calculation based on questionnaire results

Guests’ need for communication in terms of information, offers and emotional content changes. Since the need for information of customers about the service decreases during customer lifetime, H2a is supported. Also H2b is supported, because the illustration shows the fact that the need for cheap offers in communication decreases from phase to phase. Finally, H2c is supported, since the expectations towards exclusiveness and emotional content increases from 16.2% in the first phase until 35.2% in the final phase. “Offers and Packages” is decreasing from phase to phase as well as “Relevant Information”, whereas “Exclusive” news is increasing in a high extent from phase to

phase. Several questions regarding the importance of marketing communication were integrated into the questionnaire. The importance of information, exclusiveness and offers were asked separately. To show the overall importance and to examine the C.A.L.I. per phase, the sum of the three values for each importance was calculated. Then, in the next step, the mean for each phase was determined. The next table shows the results. The highest mean has group 3 (1-2 years), where the peak of the intensity of the relationship as well as the expectations towards communication was assumed. Furthermore, single stay guests in phase 1 have the lowest mean. This supports H1, because the expectations, needs and interests of a hotel customer in terms of marketing communication change during customer lifetime.

Table 7: Mean of overall marketing importance per lifecycle phase

Customer lifetime - classified	Mean	N	Std. Deviation
Single Stays	11,9050	1663	4,78698
<1 year	12,6648	352	4,75749
1-2 years	13,1939	294	4,08859
>2years	12,9980	506	4,48650
Total	12,3311	2815	4,68926

Source: Own calculation based on questionnaire results

The Chi square test, comparing the overall perceived marketing importance, consisting of emotions, information and offers, is significant with a significance level of 5% (p value is .027).

Table 8: Chi square test importance of marketing communication and lifecycle phases

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	75,740a	54	,027
Likelihood Ratio	78,671	54	,016
Linear-by-Linear Association	30,972	1	,000
N of Valid Cases	2815		

a. 10 cells (13,2%) have expected count less than 5. The minimum expected count is ,73.

Source: Own calculation based on questionnaire results

Since both variables are ordinal, the gamma value could be calculated. The value shows a weak association (.127) with a high significance ($p < .0001$).

Table 9: Gamma value marketing communication and lifecycle phases

	Value	Asymp. Std. Error	Approx. Tb	Approx. Sig.
Ordinal by Ordinal Gamma	,127	,020	6,321	,000
N of Valid Cases	2815			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Source: Own calculation based on questionnaire results

Conclusion

The findings presented in this paper are only an extract from the comprehensive results of the empirical work. Within customer communication lifecycle of a hotel guest, the interest, needs and expectations concerning information, offers and emotions change. Hotel marketers should take these changes into consideration in the future. During the relationship, the need for information of customers about the service becomes less important. Contrariwise, the question concerning the desired content of marketing campaigns was able to show that the importance of emotional content and the desire for exclusiveness increases. Especially very valuable guests with a high customer lifetime expect emotional messages to feel important and pampered. Another interesting finding is the fact that the importance of offers decreases during the relationship as assumed, but the overall importance is still very high. This means that all guest segments expect a certain extent of

appropriate and customized offers within their received marketing communication. This will be a prerequisite for successful customer retention in the hotel industry in the future. Furthermore, the new model offers insights regarding an integrated marketing communication concept in the hotel industry. Integrated communication is commonly considered as management process, but also requires the underlying integrated mechanics to operate effectively (Smith, 2012). The customer communication lifecycle can be considered as one mechanic towards communication integration. The conducted questionnaire was able to show that customers' expectations towards marketing communication change during the relationship. Furthermore, the intensity and interest changes accordingly to the intensity of the relationship. It is a main goal for service marketers, to design new strategies for marketing communication, which take these dynamics into consideration. Additionally, due to a better understanding of customers' wishes, an increase in efficiency and output of marketing communication campaigns is likely. The next step within this research project is an operationalization of the different strategies per phase. Furthermore, it would be interesting to accomplish a similar research product in a different service industry to compare the results. Another important fact would be the integration of the lifecycle in the whole integrated marketing communication strategy of a hotel company. Since interaction between the instruments of the communications mix, which target at the same market segments are able to create synergy, a further increase in marketing effectiveness may be possible (Prasad and Sethi, 2009).

Literature:

1. Bruhn, Manfred. Relationship Marketing. Das Management Von Kundenbeziehungen. 1st edition. München, 2001.
2. Bruhn, Manfred. Relationship Marketing. Das Management Von Kundenbeziehungen. 2nd edition. München, 2009.
3. Falkensteiner Hotels & Residences, <http://www.Falkensteiner.com>, Date of insight: 28.10.2012
4. Georgi, Dominik. "Kundenbeziehungsmanagement Im Kundenbeziehungslebenszyklus." In Handbuch Kundenbindungsmanagement, edited by Manfred Bruhn and Christian Homburg, 229–250. 5th ed. Wiesbaden: Gabler Verlag / GWV Fachverlage, Wiesbaden, 2005.
5. Ivanov, Adelina Eugenia. „The internet's impact on integrated marketing communication“ *Procedia Economics and Finance* Nr. 3 (2012): 536-542
6. Mihart, Camelia. „Modelling the influence of integrated marketing communication on consumer behaviour: an approach based hierarchy of effects concept“ *Procedia Social and Behavioral Sciences* Nr. 62 (2012): 975-980
7. Reichheld, Frederick F., and Thomas Teal. "The Loyalty Effect." Harvard Business School Press, 2001.
8. Prasad Ashutosh, Sethi Suresh P. "Integrated marketing communications in markets with uncertainty and competition" *Automatica* Nr. 45 (2009): 601-610
9. Smith, Brian G. "Communication integration: An analysis of context and conditions" *Public Relations Review* Nr. 38 (2012): 600-608
10. Stauss, Bernd. "Perspektivenwandel: Vom Produkt-Lebenszyklus Zum Kundenbeziehungs-Lebenszyklus." *Thesis* 17. Jahrgang, no. Nr. 2 (2000): 15–18.
11. Stauss, Bernd. "Der Kundenbeziehungslebenszyklus." In *Grundlagen Des CRM: Strategie, Geschäftsprozesse Und IT-Unterstützung*, edited by Hippner Hajo, Klaus D. Wilde, and Beate Hubrich. 3rd ed. Wiesbaden: Gabler, 2011.
12. Tsai, Shu-peí. "Integrated marketing as management of holistic consumer experience" *Business Horizons* (2005) Nr. 48: 431-441
13. Wiesner, Knut A., and Uwe Sponholz. *Dienstleistungsmarketing*. München u.a: Oldenbourg, 2007.

Primary Paper Section: A

Secondary Paper Section: AE

CYBER BULLYING – INAPPROPRIATE ADOLESCENT BEHAVIOUR IN THE 21ST CENTURY

*KATARÍNA HOLLÁ

Faculty of Education, Constantine the Philosopher University,
Drážovská 4, Nitra, Slovak Republic
email: "kholla@ukf.sk"

Abstract: Cyber bullying is intentional and repeated causing damage via electronic technologies. In relation to the scientific and technological development, cyber bullying could be identified as the inappropriate behaviour of mainly teenagers and adolescents in the 21st century and as the socio-pathological phenomenon, as well. The paper draws the attention to the definition of cyber bullying from the point of view of the erudite professionals concerned with the respective issue. It clarifies the forms and types of cyber bullying. Cyber bullying as the inappropriate behaviour of the adolescents is characteristic for the American continent, indicating the cases of the suicides of young people. The particular focus is held on the overview of the researches concerned with the cyber bullying in the selected European countries such as Germany, Spain, Ireland, United Kingdom and Slovak Republic.

Keywords: cyber bullying, definition of cyber bullying, cyber bullying typology, overview of cyber bullying, researches upon cyber bullying.

Introduction

Today's generation of young people and adolescents grows in the fast changing social, economical, technical and educational environment. At the beginning of the 21st century, the great gap is forming between knowledge and skills earned at the school and the problems, the youth are daily confronted with and do not know how to tackle them.

Obviously, bullying in its traditional form is not the phenomenon of this century. Bullying has been the problem for pedagogues and parents for particularly long time. At the beginning of the 21st century, the considerable number of teenagers and adolescents were affected by the new form of bullying – cyber bullying. Cyber bullying represents more harmful form of bullying due to the fast technological development. It illustrates such type of the inappropriate behaviour that suppresses the human dignity. Cyber bullying affects negatively the individual much more than the traditional bullying because it represents the behaviour supporting the atmosphere of fear and contempt. It can seriously harm the physical and psychological health of the teenager and/or adolescent and create the conditions affecting negatively the studying and thus decreasing the ability to fully develop their potential. The aim of the paper is to point out the occurrence of cyber bullying as the inappropriate behaviour of the teenagers and adolescents in the 21st century in the selected European countries.

1 Cyber bullying – definition and typology

Together with the fast technological development the new socio-pathological phenomenon – cyber bullying is growing. In the next chapter we will clarify the character of the cyber bullying and identify the potential characteristics of this behaviour.

According to B. Belsey (2004, p. 3), „cyber bullying involves the use of information and communication technologies to support deliberate, repeated, and hostile behaviour by an individual or group, that is intended to harm others“.

Also P. Smith (2006, In Ortega Ruiz, R. et al., 2007) states that electronic bullying is the intentional aggressive behaviour frequently repeated by the group or the individual against the victims that cannot defend, all done via new electronic media.

G. R. Stutzky (2006) from Michigan State University defines cyber bullying as “the use of modern communication technologies to embarrass, humiliate, threaten, or intimidate an individual in the attempt to gain power and control over them”.

P. W. Agatson, R. Kowalski and S. Limber (2007, p. 60) define cyber bullying as “using the Internet or other digital

technologies such as cellular phones and personal digital assistants to be intentionally mean or to harass others.”

Another definition is entered by S. Hinduja and J. W. Patchin (2009): “Cyber bullying is wilful and repeated harm inflicted through the use of computers, cell phones, and other electronic devices”.

The National Crime Prevention Council (2010) defines the issue as follows: “Online bullying, called Cyber bullying, happens when teens use the Internet, cell phones, or other devices to send or post text or images intended to hurt or embarrass another person”.

As it is evident from the definitions, cyber bullying is apparently the use of ICT, mobile phones and internet in particular, for causing harm to another person intentionally. It could refer to causing suffer, threatening, persecution, humiliation or other negative behaviour of the individual or the group through internet, interactive and digital technologies or mobile phones. The authors of the above mentioned premises are the professionals coming from the American continent. Despite this fact, in the European dimension cyber bullying represents serious socio-pathological phenomenon that still attracts the attention of various specialists more and more frequently. With the increasing occurrence of cyber bullying not only in non-European but also in European areas, this phenomenon could be understood as the use of electronic means to harm the other person. Cyber bullying is the serious form of emotional attack (so-called relational aggression) that causes the feelings of fear, isolation and humiliation of the victims.

Despite the progress in defining cyber bullying, there are considerable ambiguities in relation to the identification of cyber bullying. Clarifying the forms of cyber bullying can help to its identification. The typology of the forms of cyber bullying is very wide. N. Willard contributed to develop the cyber bullying typology among the first, classifying it as harassment, flaming, denigration, impersonation, trickery, outing, exclusion exposure and cyber stalking. The chart below introduces the names of particular types of cyber bullying with the definition made by N. Willard (2009) and explanation by the authors B. C. Trolley and C. Hanel (2010).

Chart 1 Cyber bullying typology (Trolley, B. C., Hanel, C., 2010)

Name of Avenue (Willard, N., 2006)	Definition of Type (Willard, N., 2009)	Explanation of Type (Trolley, B. C., Hanel, C., 2010)
Flaming	Online “fights” using electronic messages with angry and vulgar language. Generally involves equivalent strength aggressors.	Language that moves dialogue to a new level.
Harassment	Repeatedly sending offensive and insulting messages. The online equivalent of direct bullying.	This is consistent messaging and repeating the action.
Cyber stalking	Engaging in online activities that make a person afraid for his or her safety. Using technology for control in an abusive dating relationship. Includes many of	This is harassment that is more serious in nature. The key is some serious in nature. The key is some type of threat of impending harm.

	the other forms of aggression. In generally in the context of a personal relationship. Generates fear.	
<i>Denigration</i>	Sending or posting cruel gossip or rumours about a person to damage his or her reputation of friendships. The online equivalent to indirect bullying with wider dissemination.	This is the art of putting someone down.
<i>Impersonating</i>	Impersonating someone to make the person look bad, get into trouble or danger, or damage that person's reputation or friendships. A new form of aggression made possible by the ability to create a fake profile.	This is a person who poses as someone else to retrieve sensitive or private information.
<i>Outing</i>	Sharing someone's secrets or embarrassing information or images online. A new form of aggression made possible because targets put damaging material in an electronic form that others can use against them.	This is trying to disclose someone else's information.
<i>Trickery</i>	Tricking someone into revealing secrets or embarrassing information which is shared. Deceiving someone online to humiliate or cause harm. A new form of aggression made possible because it is easier to deceive someone online and obtain damaging information that can be shared.	This is pretending to be a friend. It includes collecting private information and then sharing it, and mocking the individual.
<i>Exclusion</i>	Intentionally excluding someone from an online group, like a "buddy list". The online equivalent of relational aggression: "You are not my friend."	Not allowing someone to be part of a group. Intentionally leaving them out and not allowing them to participate in electronic communication.

Cyber bullying does not need to have the strict form of messages or emails containing insults, threats, mockery, sexual allusions or vulgar expressions. It involves also using names, personal data and photographs on the internet aiming for person's humiliation, mockery or injury. Simultaneously, it can be represented by spreading false information and encouraging others to the negative behaviour and opinions on the bullied

person. The special case of cyber bullying is cyber stalking or cyber-persecution. Cyber bullying occurs particularly among the children, teenagers and adolescents. "Cyber stalking" or harassment is the characteristic behaviour among the adults. The difference between cyber stalking and cyber-persecution is in the number of contacts between the bullied person and the bullying person. While in case of cyber stalking it is one incident, if we want to speak about cyber-persecution, the number of the incidents has to be higher. The behaviour could be considered harassment when it is repeated and insulting. And naturally, to be regarded as the form of cyber bullying, the action should be performed in the on-line environment.

2 The overview of cyber bullying

Cyber bullying is the phenomenon of the 21st century. Recently, the epidemical increase of this socio-pathological issue can be registered. It is not the phenomenon concerning the American continent; unfortunately it penetrates to all the continents including the European. In relation to the researches and the real situations accompanying cyber bullying on the American continent (online attacks terminated by suicide on R. P. Halligan from Vermont, 2003; M. Meier from Missouri, 2006; T. Clementi from New Brunswick, 2010; P. Prince from Massachusetts, 2010 etc.), the team of investigators started to work on the project called The CyberTraining – Taking action against Cyber bullying (2008-2010). The partial reports released in 2009 presented the overview of the situation in the particular countries focused on country's description, socio-demographic aspects, use of ICT, system of education of particular country, prevalence and measures of bullying, studies and researches on cyber bullying and its prevention. Due to the limited extent of the paper, we present the overview of cyber bullying from the selected European countries – Germany, Spain, Ireland, and United Kingdom. The mentioned project was focused also on the following countries: Switzerland, Bulgaria, Greece, France, Scandinavian countries, Balkan countries and BENELUX. Despite the fact that the project was not applied in Slovak Republic, in the last subchapter we introduce the partial research investigation made in Slovakia.

2.1 Cyber bullying in Germany

Germany is the federal republic consisting of 16 federal states ("Bundesländer"). With a population of approximately 82 million people, Germany has the largest population among the member states of the European Union.

Due to the extent we do not specify socio-demographic conditions of the country, use of ICT, system of education of the particular country and cyber bullying prevalence, however, we present the overview of the several researches made in Germany with the focus on cyber bullying and the individual aspects. In 2007, R. S. Jäger, U. Fischer & J. Riebel (2007) made the research with the participation of 1,997 students. Almost 20% of the respondents confirmed to be the victim of cyber bullying; from the total sample, 4% were bullied via technological means. Similar replicated research was made by R. S. Jäger, U. Fischer & J. Riebel in 2009 on the same-size sample. The research repeatedly confirmed the same results.

The studies made by C. Katzer (2007) and C. Katzer and D. Ferchenhauer (2007) pointed out the risk factors concerning cyber bullying. One of the risk factors of cyber bullying is gender. Proceeding from the above mentioned information, cyber bullying is more frequently committed by boys, particularly those with self-awareness, negative emotional relationship with their parents and show educational problems or problems with their behaviour. The mentioned authors investigated the forms of cyber bullying resulting in the following (according to the study): insults and gossiping (34%), social manipulation (28%), threats and extortion (15%). Cyber victims expressed the following emotional states as the reactions to cyber bullying: anger (41%), unpleasant feelings

(approximately one third), frustration (20%), depression (15%) and fear (8%) (cf. Katzer, C., Ferchenhauer, D., 2007).

The next research was organized by F. Staud-Müller, T. Bliesener and N. Nowak in 2009 on the sample of 1.227 children and teenagers in the age from 8 to 22. From the aspect of frequency of the particular types, amongst the forms of cyber bullying the most frequent were: sexual harassment (22%), spreading of lies (21%), insulting (18%) and threatening (16%) messages. The prevalence of all other forms was lower than 10% (stolen identity, disclosure of secrets on the internet, publishing of compromising photographs, extortion) (Staud-Müller, F., Bliesener, T. Nowak, N., 2009).

Electronic communication allows spreading harmful material in far wider extent, therefore cyber bullying can cause serious emotional trauma. The psychological discomfort can also have equally serious, however, not so visible influence on individual's health.

2.2 Cyber bullying in Spain

Spain is located in the Iberian Peninsula in Southern Europe. It is bordered by Portugal on the west, by Africa on the south and by France on the north-east. As parliamentary democracy, it has been a member of the European Union since 1986.

In Spain, the Ombudsman investigated the sample of 3,000 students in the age of 12 – 16 within UNICEF (in 2006). The subject of the research was cyber bullying and traditional form of bullying. The results present 5.5% of cyber bullying victims. In the same year, C. Orte (2006) performed the empirical investigation and found out that 20% of the total number of 770 students in the age of 11 – 19 became the victims of the new technologies. In 2008 in Andalusia, the team headed by prof. R. Ortega gathered the data through the sample of 1,661 respondents (the age of 12 – 13, 14 – 15 and 16 – 17).

The research brought the following results:

- 4.2% of the respondents became the victims of cyber bullying via mobile phone (3.7% occasionally and 0.5% seriously);
- 7.5% of the respondents became the victims of cyber bullying via internet (6.2% occasionally and 1.3% seriously);
- 5.1% of the respondents considered themselves cyber aggressors;
- Cyber bullying was made via Instant Messenger in 46.62% of the cases;
- In almost 20% of the cases, cyber bullying was performed in chat rooms;
- In 12% of the cases, the cyber bullying was performed through indecent text messages via mobile phone;
- In 10.53% of the cases, the respondents confessed to the cyber bullying through threatening, unpleasant or hurting emails (Ortega, R. et al., 2008);

Proceeding from the research, R. Ortega (2008) established the thesis based on the fact that the emotional influence of the cyber bullying is very similar to the indirect bullying in its traditional form. The further studies pointed out the impact of cyber bullying on the gender. According to the individual findings, it was clarified that the girls are affected by this issue the most in comparison to the boys who are more frequently the cyber aggressors. The emotional influence of cyber bullying investigated in the individual researches among the Spanish and the above mentioned German respondents was identical. The respondents showed the identical negative emotional states. The emotional aspect of cyber bullying differs with every person; however, it has destructive impact on the child's personality.

2.3 Cyber bullying in Ireland

In Ireland, L. Corcoran, J. Connolly and M. O'Moore (2008) studied the occurrence and impact of cyber bullying on the

sample of 946 students (the age of 12 – 16; boys = 62%, n = 587, girls = 38%, n = 359). The revised version of Cyber bullying Questionnaire by the authors P. Smith, et al. (2006) was selected as the investigation measurement tool. From the total number of respondents, 6.5% of the pupils confessed to be cyber victims in the stated period of time. As far as personality characteristic is concerned (according to Junior Eysenck Personality Questionnaire: Eysenck & Eysenck, 1975), cyber victims and "traditional" victims showed considerably higher neuroticism.

The research made by Microsoft in Ireland in 2009 pointed out that 22% of the respondents suffered online bullying, 40% of which in a frequent range. Up to 52% of the respondents reported the internet assists bullying. On the basis of their findings, bullying via Instant messaging is classified as one of the most frequent forms of cyber bullying in Ireland.

2.4 Cyber bullying in the UK

The UK consists of four countries: England, Wales, Scotland and Northern Ireland. England has the largest population, with a total of 51,092,000 people, of whom 9,655,800 are under the age of 16 and 9,644,500 are above working age (currently 60 for women and 65 for men).

In the UK, the children's charity Action for Children (formerly the National Children's Home) carried out a survey of the phenomenon (NCH, 2005) by asking 770 young people about their experiences of cyber bullying. They found that 20% reported experiencing some form of cyber bullying through text messaging (14%), Internet chat rooms (5%) and e-mail (4%).

Research by Microsoft Service Network (MSN, 2006) found that 11% of children in their survey reported being the victims of some form of cyber bullying and that girls (14%) thought that cyber bullying was worse than face-to-face bullying. 22% of this sample of young people reported that the worst aspect of cyber bullying, in comparison with face-to-face bullying, was that more people would know about it.

I. Rivers and N. Noret (2009) included the analysis of longitudinal data in their 5-year study of a cohort of around 2,500 pupils in 13 UK schools. The study charted reports of nasty and threatening text and e-mail messages received by students in years 7 and 8 (11 – 13 years of age). Results indicated that the number of students receiving one or more per term offensive messages increased significantly, especially amongst girls, from 13% in 2002 to 15.5% in 2006. Across all years, girls were significantly more likely to receive nasty or threatening messages at least once a term than boys ($p = 0.05$) with rates for girls increasing from 18.8% to 20.8% while rates for boys decreased from 13.8% to 10.3% over the five-year period. However, reports of *frequent* (once a week or more) receipt of such messages remained stable over the same time period at 1.00% – 1.08% with no significant differences between boys and girls. Girls were twice as likely as boys to be cyberbullied (20.8% as opposed to 10.3%) once a term. But there were no gender differences for *frequent* cyber bullying and very little change across time. In this study, the researchers found that boys who were being bullied offline were more likely to report being cyberbullied.

2.5 Cyber bullying in Slovak Republic

There is an absence of relevant cyber bullying researches in Slovakia. Particularly, the foreign research investigations are those that inform about the dangers of this socio-pathological phenomenon. In Slovakia, there is an evidence of partial investigation tasks aiming at mapping cyber bullying at the beginning of 21st century. During the academic term 2008/2009 we made the research focused on the occurrence of the aggressive behaviour among the children and their attitude to the cyber bullying. The research was made on the sample of (n) 446 pupils (8th and 9th grade). The investigation measurement tools were Aggression Questionnaire by the authors A. H. Buss a M.

Perry (1992) and Tolerance of cyber bullying Questionnaire. The aim of the research was to discover whether there is a statistical relation between the total score of aggression and the range of cyber bullying, and if so, to determine its level. The gathered data were applied in the formula:

$$R = 1 - \frac{6 \sum_{i=1}^n d_i^2}{n(n^2 - 1)}$$

We obtained the value of rank correlation coefficient $R \hat{=} 0.6255$. Based on the coefficient interpretation, the measured value $0.5 \leq |0.6255| < 0.7$ indicates there is a considerable level

of relation between the variables (aggressive behaviour and tolerance of cyber bullying). The correlation between the monitored signs is statistically important. The mentioned coefficient value indicates that increasing the aggression values, determines also the increase of the cyber bullying values.

Within the various forms of electronic bullying, in this group of respondents the following items occurred: threatening via telephone calls (10.8%), threatening emails and text messages (30.2%), pictures humiliating and insulting friends (67.6%), photographs humiliating respondent's personality (17.3%), videos capturing the friends in the incriminated situations (23%).

Other research investigations were made by D. Čechová and E. Hlistová (2009) in 2009 reporting the cyber bullying victim experience among the pupils of 9th grade in 12.8%. The research of A. Kováčová (2012) pointed out the increase of cyber bullying victims (38.7%) as well as the aggressors of this type of bullying (23.84%, students of secondary professional schools – 63.64%, students of grammar schools – 36.36%).

Conclusion

The cause of cyber bullying amongst the adolescents is the inappropriate reaction to the aggressive, provocative attack during which they are not aware of the consequences of their activity. They are not aware of the seriousness of their behaviour; they experiment and do the individual actions for fun without considering any possible consequences.

Apart from the mentioned aspects, the cause of the aggression and violence of the adolescents could also lay in the factors of genetic a physiologic nature. The adolescents could lack the sense of life, as well. The specific cause of cyber bullying can be toxic disinhibition representing more aggressive, combative, mocking behaviour against the other people in virtual environment in comparison with the real life. Both the aggressor's and the cyber bullying victims' personalities belong to the aspects stirring up bullying. In both cases it is the personal immaturity. It is moral, emotional and social immaturity on the part of aggressor. The victims show the immaturity in social terms, they are not able to defy the negative behaviour; they are anxious and not able to create functioning relationships. As far as personality conditions are concerned, the factors of cyber bullying represent physical and psychical changes of the individual during pubescence. The transformation of somatic region can produce shyness, diffidence, rejecting of communication and also failing to handle emotions in adolescents themselves. Failing to deal with the mood swing, adolescents, in consequence, often resort to aggressive reactions and provocation. It could be temporary symptoms related to the period of adolescence. Despite this fact, it is necessary to pay close attention to detection and prevention of cyber bullying not only in Slovak Republic but also in the whole European area.

Literature:

1. Agatston, P. et al.: *Students' perspectives on Cyber Bullying*. Journal of Adolescent Health 41 (2007) s.59–s.60.
2. Belsey, B.: *Cyber bullying: An Emerging Threat to the "Always On" Generation*

[on line] 2004 [cit. 2013-02-21]. <http://www.cyberbullying.ca/pdf/Cyber_bullying_Article_by_Bill_Belsey.pdf>.

3. Buss, A. H., Perry, M.: *The Aggression Questionnaire*. Journal of Personality and Social Psychology 63, 1992, s. 452 – 459
4. Corcoran, L., et al.: *Cyber bullying: a new dimension to an old problem*. Paper presented at the Psychological Society of Ireland Annual Conference, The Mount Wolseley Hotel, Tullow, County Carlow, Ireland, 20th-23rd November 2008.
5. Čechová, D., Hlistová, E.: *Šikanovanie cez internet*. Prevencia, roč. 58, č. 10, s. 18, 2009, ISSN 1336-3689.
6. Defensor del Pueblo – UNICEF: *Violencia escolar: el maltrato entre iguales en la educación secundaria obligatoria. 1999-2006*. Madrid: Publicaciones de la Oficina del Defensor del Pueblo, 2006.
7. Hinduja, S., Patchin, W. J.: *Bullying beyond the schoolyard: Preventing and responding to cyber bullying*. Thousand Oaks, CA: Corwin, 2009.
8. Hollá, K.: *Rodinné prostredie ako determinant agresívneho správania a jeho nových foriem u detí*. Nitra : PF UKF, 2009. Dizertačná práca.
9. Hollá, K.: *Vybrané aspekty elektronického šikanovania v edukačnom prostredí*. In. Kapitoly zo súčasnej edukácie. - Nitra : Iris, 2011. - ISBN 978-80-89256-62-4, S. 119-132.
10. Jäger, R. S., Fischer, U. et al.: *Mobbing bei Schülerinnen und Schülern in der Bundesrepublik Deutschland. Eine empirische Untersuchung auf der Grundlage einer Online-Befragung*. 2007. Landau: Zentrum für empirische Pädagogische Forschung.
11. Jäger, R. S., Riebel, J.: *Mobbing bei Schülerinnen und Schülern in der Bundesrepublik Deutschland. Eine empirische Untersuchung auf der Grundlage einer Online-Befragung* 2009. Landau: Zentrum für empirische Pädagogische Forschung.
12. Katzer, C.: *Gefahr aus dem Netz. Der Internet-Chatroom als neuer Tatort für Bullying und sexuelle Viktimisierung von Kindern und Jugendlichen*. Unveröff. Dissertation, Wirtschafts - und Sozialwissenschaftliche Fakultät, Universität Köln, 2007.
13. Katzer, C., Fetchenhauer, D.: *Cyber bullying: Aggression und sexuelle Viktimisierung in Chatrooms*. In M. Gollwitzer, J. Pfetsch, V. Schneider, A. Schulz, T. Steffke & C. Ulrich (Hg.), *Gewaltprävention bei Kindern und Jugendlichen*. Band I: Grundlagen zu Aggression und Gewalt in Kindheit und Jugend (S. 123-138). 2007, Göttingen: Hogrefe.
14. Kováčová, A.: *Kyberšikanovanie jako novodobý fenomén u žiakov stredných škôl – jeho výskyt a prevencia*. Banská Bystrica : PDF UMB, 2012, 92 s. Rigorózná práca.
15. Microsoft Service Network (MSN) *MSN cyber bullying report: Blogging, instant messaging, and email bullying amongst today's teens*. 2006. (Retrieved July 20, 2009, from: www.msn.co.uk/cyber_bullying).
16. National Children's Home: *NCH 2002 Survey*. (Retrieved July 20, 2009, from: <http://www.nch.org.uk/itok/showquestion.asp?faq=9&fldAuto=145>)
17. National Crime Prevention Council newsroom: *Cyber bullying*. Para. 2. 2010, from www.ncpc.org/newsroom/cyber-campaigns/cyber_bullying.
18. Orte, C.: *Nuevas perspectivas sobre la violencia y el bullying escolar. Infancia y juventud: nuevas condiciones, nuevas oportunidades*, 3, 27-41. (2006).
19. Ortega, R., et al.: *Cyber bullying*. *International Journal of Psychology and Psychological Therapy*, 8(2), 183-192, 2008.
20. Rivers, I., Noret, N.: *"Ihdu": Findings from a five-year study of text and e-mail bullying*. 2009, *British Educational Research*
21. Smith, P. K., et al.: *An investigation into cyber bullying, its forms, awareness and impact, and the relationship between age and gender in cyber bullying*. Research Brief No. RBX03-06. London: Department for Education and Science, 2006 (DfES).
22. Staudé-Muller, F., Bliesener, T., Nowak, N.: *Cyber bullying und Opfererfahrungen von Kindern und Jugendlichen im Web 2.0*. *Kinder- und Jugendschutz in Wissenschaft und Praxis*, 54, 42-47, 2009.

23. Stutzky, G. R.: *Cyber Bullying Information*. 2006. Retrieved from: http://www.ippsr.msu.edu/Documents/Forums/2006_Mar_CYBER_BULLYING_INFORMATION_2006%20--%20Provided%20by%20Mr.%20Glenn%20Stutzky.pdf.
24. Trolley, B. C., Hanel, C.: *Cyber Kids, Cyber Bullying, Cyber Balance*. Ca: Corwin, 2010, ISBN 978-1-4129-7292-5.
25. Willard, N.: *Cyber bullying and cyberthreats: Responding to the challenge of online social cruelty, threats and distress*. Eugene, OR: Center for Safe and Responsible Internet Use. Retrieved May 1, 2006, from: <http://www.cyberbully.org/cbbook.html>.
26. WILLARD, N.: *We hate Ashley: Counteracting cyber bullying inside-and outside-school grounds*. District Administration. 2009, from: <http://www.districtadministration.com/viewarticle.aspx?articleid=1675>.

Primary Paper Section: A

Secondary Paper Section: AM, AN, AO

PERSONALITY TRAITS OF ENGLISH TEACHERS

^aLENKA HRUŠKOVÁ

*Institute of Technology and Business in České Budějovice,
Okružní 10, 37001 České Budějovice, Czech Republic
email: "hruskova@mail.vstecb.cz"*

Abstract: The influence of a teacher cannot be replaced by textbooks, through moralizing or by a set of punishments and encouragements. The example set by a teacher and the influence of their personality are irreplaceable. A teacher's work often has a far reaching, long term and suggestive impact on the development of a pupil's personality, their behaviour and feelings. In our paper we try to describe some of the personality traits of English teachers in primary education in selected schools in the Czech Republic with the use of standardized psychological tests (quantitative method) and personal interview (qualitative method).

Keywords: personality traits, neuroticism, extraversion, openness to experience, agreeableness, conscientiousness, NEO personality inventory

1 Factors influencing the teaching process

The relationship between pupils and teachers is to some extent "symbiotic" (Kohoutek 2004). A teacher at primary, as well as secondary and tertiary educational levels is perceived as an intermediary of new knowledge as well as serving as an example because their own behaviour can greatly influence that of their pupils too. One of the basic factors which influences the success (or lack of success) of the teaching process is the interaction between the teacher and the pupil (pupils). Pupils perceive the teacher's personality through the way he act and behave whilst managing the teaching process. The teaching strategies of every teacher are closely related to the teaching and educational strategies of every school as well as to the individual teaching style of every teacher, as mentioned above. The frequency with which different strategies are utilised reflect the teacher's personality. Different authors have given a lot of attention to teachers, the personality of a teacher, their strategies, methods, and tactics (e.g. Průcha 2000, 2002; Spousta 1995; Blížkovský 2000; Kurelová 1998; Pelikán 1995, 2008; Gavora 2005; Petty 2004; Vašutová 2001, 2004 aj.). It can even be said that a teacher is one of the most frequented topics in pedagogical research. However, if reaching the aims, competencies and outcomes of the Framework of Educational Programme currently requires a change in the paradigm of the pupil in the educational and teaching process, then it is necessary – in parallel with this new attitude to the pupil - to also reassess the requirements for changing the paradigm of the teacher (comp. Kratochvílová, Horká, Janík and Filová 2011). At present, changes to the concept of the teaching profession are focussed on its professionalization, a shift towards a model of wider professionalism which requires a change in teachers' roles. What are the personality traits of a teacher at a primary school? Are they different from those of a teacher at secondary level? Does a language teacher have different personality traits than those for mathematics or science?

1.1 Personality traits of a teacher

Traditionally, professional competencies are divided into personal, subject and pedagogical and psychological competencies. The pedagogical dictionary defines a teacher's competencies (Pedagogický slovník, 2003, p. 103) as: "A set of professional skills and dispositions, which a teacher should possess in order to be able to effectively carry out their profession. Usually, personal and professional competencies are stated. Personal competencies include responsibility, creativity, ability to solve problems, to work in a team, to be socially perceptive and reflective.

Our work and research is based on data which we obtained from psychological research in which we worked primarily with personal characteristics and the psychological definition of personality i.e. "its feelings and behaviour, conscious and subconscious aspects in activities, in interactions with the environment" (Čáp and Mareš 2007, p. 26). "Behaviour and

feelings are always a manifestation of a personality of an individual person with generally human and individual characteristics, aims, joys and problems" (ibid, p. 24). A teacher as an individual personality must have general abilities (including above average intelligence) and special abilities which are crucial for the teaching profession. They include "didactic abilities which are related to the use of relevant teaching methods, interesting presentation of the subject matter, developing creativity and volitional characteristics of pupils. The basis of constructive abilities is the formulation of teaching and educational processes; perceptive abilities are related to perception of the children in the classroom and perception of the pupils' needs. Expressive abilities demonstrate themselves by understandable verbal and non-verbal expression; important communication abilities influence the interaction between a teacher and pupils. Organizational abilities prove the teacher's ability to manage their pedagogical work and the pupils' activities. A teacher should also have the ability for self-reflection which comes from feedback from themselves and/or from pupils. Pedagogical tact which demonstrates itself through empathy, quick decision making, sense for fairness, objective attitude and interest in pupils and their problems is an integral and important part of a teacher's personality (Pruner 2003, p.109-110). Professor Kohoutek adds that teachers who have mental health issues may cause anomalies in the development of their pupils' personalities; these anomalies are often accompanied by stress. On the basis of his research (2008) he expressed his opinion that due to the extraordinary demands of the teaching profession on mental health there is a need to consider health and mental issues when selecting teachers. Pedology (discipline of teacher personality) has advanced considerably in recent years. Two approaches to the study of teacher's personality are used: normative and analytical.

1.2 Typology of teacher personality

"Type means a group of people with certain common mental characteristics in which they differ from other groups or types." (Čáp and Mareš 2007, p. 175). In ancient Greek the term *typos* meant picture, feature, appearance, shape which a hard thing imprints, punches or hammers into malleable material. Within the framework of personality typology individuals with common traits are ranked into given types with the same characteristics. "An ideal type is an individual who has only these characteristics. In practice there are no ideal types and we talk about so called real types" (Nakonečný 1997, p. 352). Our typology of pedagogues is based on the assertion of Čáp and Mareš (2007, p. 352) who add that the expression "type" is also used to describe an individual who is a characteristic, "typical" representative of such a group". Our typology of pedagogues bears in mind representatives of a certain kind, a collection of certain characteristics which are typical for several pedagogical personalities. Typology is a sort of mirror for teachers. It is important for self-knowledge from which comes self-evaluation and self-education.

W. O. Döring (in Chlup – Kopecký et al. 1967, p. 327 - 329) described six basic types of teacher personality which he based on the personality typology of the German psychologist Eduard Spranger:

- Religious type - reliable in character, serious, withdrawn, without a sense of humour. Due to the fact that they do not have a lot of sense for child's play, they are not able to approach pupils; they are meticulous and pedantic. Mentally this type is split into two sub-types: a more emotional one (pious) and a more intellectual one (orthodox).
- Aesthetic type - primarily characterized by intuition, fantasy and the heart of a pedagogue. Due to the predominance of an irrational element, this type has the ability to put themselves into the pupil's personality and form it. This type finds the highest value in beauty, harmony, shape,

grace, symmetry, style; they have a tendency towards individualism and independence. This type has two variants: actively creative (original) and passively receptive.

- Actively creative type - form pupils' personality according to themselves with a complete disregard for the individuality of each individual.
- Passively receptive type - popular with pupils thanks to their ability to put themselves in any personality and develop it even if the pupil's personality is different from their own.
- Social type - characterized by their love of people, altruism and philanthropy. The basis of this type is very close to the religious type. Their aim is to educate citizens beneficial to society which is why they patiently devote time to all the pupils in the class regardless of their knowledge and skills. Teachers of this type are popular with pupils.
- Theoretical type - more interested in the subject matter than in the pupil. Usually they do not even aim to get to know the personality of a pupil and understand them in detail.
- Economical type - characterized by striving to achieve maximum results with pupils using the minimum of energy, strength and effort. They often use individualized teaching strategies in the teaching process because they tend to be very successful methodologists. They often underestimate or do not fully appreciate creativity, fantasy and originality in their pupils.
- Power type - have a tendency to always push through their own personality, they are very demanding and even unreasonably so, critical too; they always want to gain ground at all costs.

According to Döring's typology, and Döring himself, the most suitable type for the teaching profession is the social type. The aesthetic and the religious type are also suitable despite their type shortcomings.

E. Luka bases his typology of pedagogues on two criteria:

1. the way the pedagogue reacts to stimuli,
2. the way they mentally process external stimuli, in their psyche:
 - reflective, adaptive type: reflect on external stimuli and on their reactions to them
 - naive type: natural, spontaneous and expressive and typically react to stimuli without thinking, often impulsively.

With regards to the personality of teachers Luka divides them into four types:

- Naively reproductive type - those who simply mediate knowledge to pupils and only demand memorized knowledge. They do not often encourage pupils to initiate independent creative work, to form their own opinions, attitudes, etc.
- Naturally productive type - typically self-assured in decision-making and alert in the education process. They achieve excellent results because their teaching is based on their own opinions and attitudes and they pass on this knowledge to the pupils in a very original manner. They encourage pupils to be creative and active.
- Reflectively reproductive type - finds it difficult to approach their pupils, they think at length and in a complicated way about everything and cannot creatively enrich nor express their knowledge. New unexpected situations prove difficult for them and they often resolve them unsuccessfully.

- Reflectively productive type - processes external stimuli with consideration, they often reshape them and creatively think them through. If they are outstandingly intelligent and creative, their pedagogical measures are adequate. On the contrary, if they are less intellectual and creative, their pedagogical measures and solutions for pedagogical situations are not of good quality (comp. E. Vorwickel, Caselmann in Kohoutek, 1996).

1.3 Personal traits

It is clear from the above just how important it is to create an adequate profile of a teacher in primary education, a profile which must include required personality traits. The traits of a teacher's personality are given by the type of teacher (see typology of a teacher's personality) and concrete personality manifestations and traits:

- creativity – ability to find something new, new methods, techniques, tactics, strategies
- principled moral attitude – based on humanism, sense for democracy, attitude to work, discipline, strong will
- pedagogical optimism – a belief in the effectiveness of pedagogical work, in the pupil's strengths and their positive characteristics
- pedagogical tact – respecting the pupil as a unique individual who has the right to be treated correctly, respect and approval, ability for self control, the skill to say unpleasant things in a relevant non-destructive manner
- pedagogical composure – patience, unhurriedness, calmness, not easily unnerved, react adequately without emotion
- pedagogical passion – enjoys their work, has a tendency to influence other people, has a desire to educate and teach, regard their work as being important
- be strictly fair – do not show favouritism, resist subjective psychological effects

A different view of teacher's traits is based on the division of characteristics into:

- primary (with innate basis or adopted in early childhood), e. g. dominance, sociability, adequate frustration tolerance, self control, self assurance and a sense for a bearable level of risk, emotional stability
- secondary (obtained through upbringing and education), e.g. ability to manage the activity of a group, to learn about others, social responsibility, professional competence, sense of fair play, ability to admit their own mistake, pedagogical skills, pedagogical expressiveness, ability to teach others and influence them by education, formal speech, adequate vocabulary, clear pronunciation, clarity, emotionality of speech and its dynamics
- tertiary (super structural, resulting from the specific role of a teacher as a representative of educational aims of the society). This characteristic includes a system of interiorized values and attitudes with regard to contents – especially motivation and commitment.

The success of any teacher's teaching also depends on external factors such as the level of psychosocial climate. According to Prunner (2003, p. 122 - 123) "a teacher's personality greatly influences the climate in the classroom. According to research, certain characteristics of a teacher such as warmth, emotional stability, self confidence, rational approach, dynamics of a personality which enables the teacher to flexibly react to changes, and dominance contribute to a conflict free environment and to the positive development of pupils".

2 Materials and methods

In our research, we focused on the personality traits of teachers of English. In personality psychology cognitive styles, goals, interests, motives, needs, personal projects, values are examined. Some psychologists believe that all these elements are contained in the features, which are the core of every person. They then manifest as ways of thinking, feelings and actions by which people differ from each other.

With the help of discussions and a standardized NEO five-factor inventory we attempted to find personal differences in the personalities of teachers of a foreign language (English).

2.1 Psychological measurement of foreign language teachers

In order to specify the general information about the personality of foreign language teachers, NEO personality inventory psychological measurement was carried out (NEO-FFI compiled by Paul Costa and Robert McCrae). It is a method created to measure five general dimensions of personality - Neuroticism, Extraversion, Openness to experience, Agreeableness and Conscientiousness (the so-called Big Five). The short version of inventory includes a total of 60 items (12 items per domain).

The Revised NEO Personality Inventory, or NEO PI-R, is a 240-item measure of the Big Five personality traits (Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience). Additionally, the test measures six subordinate dimensions (known as facets) of each of the 'FFM' personality factors. The test was developed by Paul T. Costa, Jr. and Robert R. McCrae for use with adult (17+) men and women without overt psychopathology.

The NEO PI-R and NEO-FFI were updated in 2010 in a manual called the NEO Inventories for the NEO Personality Inventory-3, NEO Five-Factor Model 3, and NEO Personality Inventory-Revised. While the NEO PI-R is still being published, the NEO-PI-3 and NEO-FFI-3 feature updated normative data and new forms.

A list of the personality dimensions measured by the NEO PI-R, including facets, is as follows:

1. Neuroticism (Anxiety, Hostility, Depression, Self-Consciousness, Impulsiveness, Vulnerability to Stress)
2. Extraversion (Warmth, Gregariousness, Assertiveness, Activity, Excitement Seeking, Positive Emotion)
3. Openness to experience (Fantasy, Aesthetics, Feelings, Actions, Ideas, Values)
4. Agreeableness (Trust, Straightforwardness, Altruism, Compliance, Modesty, Tendermindedness)
5. Conscientiousness (Competence, Order, Dutifulness, Achievement Striving, Self-Discipline, Deliberation)

The standardized inventory used for all teachers of foreign languages in primary educational sector can be used in projects aimed at ascertaining the degree of individual differences. The method is time-consuming and provides information about the five levels of general dimensions of personality.

The 'Big Five'

Individual differences cannot be reduced to five dimensions only, but we can say that the five dimensions relatively well capture the overall structure of personality. Five-dimensional description of the personality structure derived from a lexical study in Czech language (Hřebíčková 1997) works with the following factors:

- Extraversion - Vivacity are represented by synonyms expression chattiness; on the other hand introversion is significantly characterized by reclusiveness and introversion (sociable - retiring; talkative - taciturn, aggressive - unassertive).

- Agreeableness and its positive pole is represented by adjectives like hearted, tolerant, friendly; including adjectives that affect the morality: honest, ethical, upright (good-natured - insensitive; kind - unkind; tolerant - intolerant).
- Attitude to work and a sense of duty or, on the other hand, rejection and inconsistency is expressed by the Conscientiousness factor. These features are represented by words like diligent, hardworking, effortful, (consistent - inconsistent; careful - careless; responsible - irresponsible)
- Emotional stability is characterized by two sub-dimensions: emotional stability expressed by adjectives like calm, serene, confident and emotional lability expressed by words like nervous, restless, labile (calm - restless; relaxed - tense, emotionally balanced - emotionally unbalanced).
- Intellect's positive pole is expressed by words like natural intelligence, knowledge and talent Its negative pole is characterized by words like narrow-mindedness, ignorance, talentlessness (reflective - unreflective; intelligent - unintelligent; educated - uneducated).

2.2 Discussions with teachers of foreign languages

At the end of the measurement, i.e. during the autumn of 2011, discussions (discussion was used as an extensive qualitative research method) were conducted with teachers of English. Beseda as a variant of the interview was to our advantage that we get more opinions and views. The directors of individual schools were interviewed. The interviews were semi-structured; the author of the questions has prepared the questions partially in advance and partially he asked according to the responses given to him grabbing the possibility to get more information about the school as a whole and thus emphasize the use of teaching strategies, methods and techniques by individual teachers.

Naturally, it included a direct interpersonal contact with all the teachers who participated in the testing of students in English classes of the fourth and fifth grades. During discussions at individual schools, open and semi-open questions were given priority. Utterances of teachers were recorded and processed qualitatively as a description which should illustrate the data obtained from standardized psychological investigation.

2.3 Data Processing

A. The NEO Personality Inventory was filled out by the teachers individually according to precise instructions. The inventory contained 60 items which the teachers answered on a five point scale:

- 0 (strongly disagree)
- 1 (disagree)
- 2 (neutral)
- 3 (agree)
- 4 (strongly agree)

Time needed to complete the inventory was approximately 10-15 minutes.

B. Individual responses from the discussions and was recorded and processed as qualitatively transcript free answers with minimal correction.

3 Results – Interpretation

3.1 The NEO Personality Inventory Assessments

With compliance to the scheme, it was necessary to calculate individual teachers' ratings for all items. Assignment of numbers to the so-called rings corresponded to the dimension pole related items. Identified scores of scales were compared with standardized norms, as there exist differences between men and

women of all ages. Standards were created in the form of percentiles.

Tab. 1: Facts comparison

PRIMARY SCHOOL	F/M	AGE	POINTS					PERCENTILES				
			N	E	O	P	S	N	E	O	P	S
MALONTY	F	41	16	27	36	42	39	29	31	44	0	88
STRAKONICE	F	58	15	28	19	39	33	26	35	6	90	45
	F	58	12	27	24	18	22	12	31	28	1	5
RUDOLFOV	F	52	23	34	27	33	41	67	60	52	43	94
	F	34	23	34	18	31	34	67	60	4	26	54
	M	37	20	30	21	35	31	63	46	7	75	53
VYŠŠÍ BROD	F	50	9	31	25	34	32	3	49	33	51	39
TÁBOR	F	31	31	30	37	34	29	92	43	95	51	26

Source: author

Table 2: Frequency according to gender

	Frequency	Relative frequency in percent
Women	9	90 %
Men	1	10 %
Total	10	100 %

Source: author

The ratio of men and women in the teaching profession (teachers of English language) fairly accurately reflects the feminization of this profession and coincides with the data published by the Institute for Information on Education for the year 2010/2011 when the majority of the primary school teachers were female (26,354 of a total of 27,796; source: <http://www.uzis.cz/link/ustav-pro-informace-vzdelavani>).

Table 3: Frequency according to age

Age	Frequency	Relative frequency in percent
20-30	0	0 %
31-40	4	40 %
41-50	2	20 %
51-60	4	40 %

Source: author

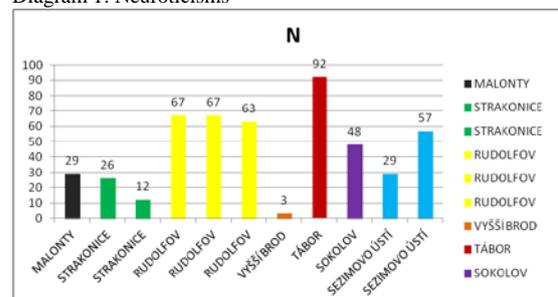
Extraversion and Agreeableness factors were especially important for us because they are indicators of interpersonal behavior. Extraversion factor determines the quantity and quality of interpersonal interactions, activation level, need for stimulation. Agreeableness factor determines the quality of interpersonal orientation on a continuum from compassion to hostility in thoughts, feelings and actions. From the score, we could easily note vast differences in individual teachers, which are reflected in their interaction styles and teaching strategies. The data showed personality differences in the approach to cooperation (high scores in extraversion) and competition; e.g. a teacher from the primary school in Sokolov has reached a very high percentile in Extraversion factor – she has been described as an active woman who easily builds interpersonal contacts favoring cooperation; at the same time, according to the Agreeableness factor she reached percentile 1 which identified her as a selfish, self-centered person. Extreme values of Agreeableness factor were reached by two more teachers: a 41-year-old teacher from Malonty (0) and a 58-year-old teacher at the primary school in Strakonice. It was interesting that both teachers reached the same percentile in the Extraversion factor (31), a confirmation of their modesty, independence and perhaps even autonomy and propensity to teach according to competitive strategies in group teaching, but also according to individualized instructional forms. The second female teacher from Strakonice (90) and a male teacher from the primary school Rudofov (75) were placed high on the scale of Agreeableness which could theoretically be a good prerequisite for the two to employ cooperative strategies in the classroom. However, not one of them was a forged 'extravert' (in Extraversion factor they

did not reach the 50 percentile), although they predominantly tended to cooperation, they exclusively employed teaching competitive strategies in their foreign language lessons. The opposite was characterized by female teachers from Rudofov and Sezimovo Ústí who reached a high percentile in Extraversion factor. The female teachers prefer a common purpose to their own purposes (tend to group teaching) but their score on the scale of the Agreeableness factor shows us that one teacher from Rudofov (43) and one of Sezimovo Ústí (31) were relatively skilled to teach using competition and elements of cooperation just according to the situation in the class. The other two female teachers tend primarily to competition.

The results in the area of Neuroticism yielded interesting findings - all women teachers were placed on a scale that determines how negative emotions are experienced (in a wide range between 3-92 percentiles). The female teachers from primary schools in Brod (3) Malonty (29), young female teachers from Sezimovo Ústí II (29) and Strakonice (26, 12) reached lower neuroticism score - they are calm, balanced and emotionally stabler than their colleagues from Tábor (92) and the primary school in Rudofov (67, 67) that are mentally unstable, and their psychological balance may be easily disturbed. Unlike emotionally stable colleagues, they reported more negative experiences and difficulties in overcoming them. They may be more easily embarrassed, feel abased, insecure, they are often nervous, anxious, experiencing intensely fear, worries and sadness. The teacher from Tábor (92) showed increasing failure to cope with stressful situations combined with anxiety and sometimes even with mental exhaustion. The female teacher from Sokolov (48) and the senior teacher from Sezimovo Ústí II (57) scored around the mean value.

The male teacher from the Rudofov scored 63 on the percentile which means a value a little lower than the average. He is a little better mentally balanced than his two female colleagues from his school and the teacher from Tábor but, on the other hand, in comparison with the other teachers from elementary schools, he is mentally unstable, finds difficulties to handle stressful situations in the class; sometimes he experience feelings of guilt, fear and sadness.

Diagram 1: Neuroticisms



Source: author

Finally, it is necessary to objectively evaluate the data obtained from the standardized psychological questionnaire which helped us uncover some of the identity features of English teachers who play an important role in our research. According to the research, it is clear that the special traits of the teachers' personality and character does not have to have a direct impact on the efficiency and effectiveness of foreign language teaching, and that the teacher's characteristics has not a direct impact on the benefit of students (a choleric may be a relatively good teacher), and that it does not matter so much what qualities a teacher has, but rather what the teacher does and how he does it. As there is no universal definition of a good or effective teacher, there is no correlation between the teacher's personality and teaching effectiveness, perhaps due to a fact that the educational results are not decided by a teacher but by many other variables. The data obtained by us reflect mostly the pedagogical competencies (ability to control, teach, etc.) that are the target categories of the teaching profession in a changing school; thus they are capable

of development, variable and flexible and less dependent on the personality of the teacher.

4 Conclusion

NEO inventory does not detect intelligence or ability of teachers is not intended to detect mental disorders. In our case, it has been used as important information about various personality types of teachers of foreign languages and as a default information leading to their teaching styles, teaching strategies, methods and techniques. While examining the relationship between instructional strategies of teachers and pupils is very difficult (since the learning outcomes can also be influenced by factors other than the teaching strategies and interaction styles of the teacher), nevertheless, some relationships may be considered very probable. With the increasing demands on the teacher (both on physical endurance, health and mental toughness), as well as increasing requirements for the educational, psychological education which includes moral and environmental education and special training requirements.

Literature:

1. Blížkovský, B.: Aktuálnost Masarykovy snahy o demokratickou unii střední Evropy. In *Bilance a výhledy středu Evropy na prahu 21. století. Úvahy, svědectví a fakta k 10. výročí československého listopadu, 1989-1999 a k 150. výročí narození T. G. Masaryka, 1850-2000*. Brno: Konvoj, 2000. p. 109-118. ISBN 8073020009.
2. Čáp, J.; MAREŠ, J.: *Psychologie pro učitele*. Praha: Portál, 2007. 655 p. ISBN 978-80-7367-273-7.
3. Horká, H.; Filová, H.; Janík, T.; Kratochvílová, J.: *Studie ze školní pedagogiky*. Brno: Masarykova univerzita Pedagogická fakulta, 2011. 180 p. ISBN 978-80-210-4859-1.
4. Hřebíčková, M.; Urbánek, T.: *NEO pětifaktorový osobnostní inventář*. Praha: Testcentrum, 2001. p. 52. ISBN 80-86471-06-3.
5. Chlup, O.; Kopecký, J., et al.: *Pedagogika*. Praha: Státní pedagogické nakladatelství, 1967. 360 p.
6. Kohoutek, R., et al.: *Základy pedagogické psychologie*. Brno: Akademické nakl. CERM, 1996. 182 p. ISBN 80-85867-94-X.
7. Kohoutek, R.: Psychological Counseling at Universities and the relating Questions of Health. In Řehulka, E.: *Teachers and Health 6*. Brno: Masarykova univerzita, 2004. p. 369-384. ISBN 978-80-7315-093-8.
8. Kurelová, M.: Analýza profesionalizačních činností učitelů. In *Výchova a vzdělávání v českých zemích na prahu 3. tisíciletí*. Plzeň, 1997. ISBN 80-7178-965-8.
9. Gavora, P.: *Učitel a žák v komunikaci*. Brno: Paido, 2005. 165 p. ISBN 80-7315-104-9. vydání
10. Nakonečný, M.: *Encyklopedie obecné psychologie*. Praha: Academia, 1997. 437 p. ISBN 80-200-0625-7.
11. Pelikán, J.: *Výchova jako teoretický problém*. Ostrava: Amosium servis, 1995. 234 p. ISBN 80-85498-27-8.
12. Pelikán, J.: *Hledání těžiště výchovy*. Praha: Karolinum, 2008. 175 p. ISBN 9788024612652.
13. Petty, G.: *Moderní vyučování*. Praha: Portál, 1996. 380 p. ISBN 80-7178-070-7.
14. Průcha, J.: *Přehled pedagogiky: úvod do studia oboru*. Praha: Portál, 2000. 269 p. ISBN 80-7178-399-4.
15. Průcha, J.: *Moderní pedagogika*. Praha: Portál, 2002. 481 p. ISBN 8071786314.
16. Prunner, P. Les salariés tchéques sont-ils préparés à l'entrée dans l'Union européenne? Dialogues Européens, Université de la Sorbone, Nouvelle Paris, 2003. p. 127-131.
17. Spousta, V.: *Speciálně pedagogická diagnostika etopedická*. Brno: Masarykova univerzita, Pedagogická fakulta, 1995. p. 105. ISBN 80-210-1261-7.
18. Vašutová, J.: Kvalifikační předpoklady pro nové role učitelů. In Walterová, E. (ed.): *Učitelé jako profesní skupina, jejich vzdělávání a podpůrný systém*. 1. vol. Praha: UK PedF, 2001. p. 19-46.
19. Vašutová, J.: *Profese učitele v českém vzdělávacím kontextu*. Brno: Paido, 2004. 190 p. ISBN 80-7315-082-4.

Primary Paper Section: A

Secondary Paper Section: AH, AI

THE ROLE OF DOUBLE TAX CONVENTIONS IN INTERNATIONAL TAX LAW

³PETER HUBA

*Pavol Jozef Šafárik University in Košice, Faculty of Law,
Department of Financial Law and Tax Law, Kováčska 26, 040
75 Košice, Slovak Republic
email: ⁴peter.huba@yahoo.com*

Abstract: This article deals with position of double tax conventions on income and capital in international tax law based on two issues. Firstly, what is the purpose of these tax treaties¹ nowadays? Is it only an avoidance of international juridical double taxation or tax treaties also stimulate foreign direct investments and international trade? Secondly, what is the future of double tax conventions? In order to answer above mentioned questions the author will briefly look at the past and present of double tax conventions. The answers will provide not only a description and analysis but also an evaluation. Taking into account available limited length for this paper, it is not possible to discuss the position of double tax conventions in the international tax law in more detail. The author can only introduce a number of highlights.

Keywords: double tax conventions, international tax law.

INTRODUCTION

At the present time, which is characterized by ongoing global financial crisis and problems with the amount of public debt in the states of the Eurozone, it is significant, that economic activities of individuals and legal entities are increasingly global. Importance of foreign taxpayers has increased with a development of international trade and investment and also with increasing labour mobility. These are the individuals who make business or work in another country than in their tax residence. On the other hand, the power to impose and collect taxes remains a matter of national sovereignty of the states.² They use it and try to tax economic activity carried out within their territory, regardless of the tax jurisdiction of individuals or legal entities. As a result of the fact that each country applies in its territory full power of taxation in the field of direct taxation existence of international double taxation occurs.

In international tax relations the problem occurs, if under national legislation, there is an overlap of right to tax an income in a state of taxpayer's residence (state of tax residence) and a state of a taxpayer's income country of origin (state of source of the income). If this happens in practice and both countries use its full powers of taxation, the income will be taxed in both countries, i.e. in a state of tax residence of a taxpayer and state of source of the income.

International double taxation causes in a global scale disruption of economic relations and creates barriers for development of international trade and investment. Double tax conventions serve as a tool for connecting the economies of the contracting states and play an important role in supporting economic growth of these countries. According to the author, one of the main reasons of conclusion of tax treaties is an attempt to avoid international double taxation which is caused by a fact that each state applies full power of taxation in the field of direct taxation within its territory. At the same time these treaties perform other tasks that are discussed in this article, having a significant impact on the development of economic relations between the states.

1 PAST AND PRESENT OF DOUBLE TAX COVENTIONS

The first tax conventions that were intended to prevent double taxation of income were concluded between the European states in the early 20th century. After the First World War, there was a boom in their conclusion, which was associated with the

development of international trade and activities of the League of Nations in this area. At the expert level, more attention had been paid to the issue since 1920, when the Fiscal Committee of the League of Nations invited leading economists to solve a problem of double taxation. In the following years several conferences were convened with an aim to develop a multilateral treaty. However, the States rejected a possibility of a single multilateral treaty and supported creation of legally not binding convention which could be a model for bilateral tax treaties. Work of special commission of the League of Nations resulted in series of model conventions published in the years 1928, 1935, 1943 and 1946.³ It can be observed that although international taxation has become more intricate and tax legislation in this area more complex, current model treaties and double tax conventions are based on the above mentioned conventions.

In 1961 the Organisation for Economic Co-operation and Development was established and published its first Model Tax Convention on Income and on Capital⁴ ("OECD Model Convention") and the Commentaries thereto in 1963. Since then the OECD Model Convention had been continually updated, the first revision was made in 1977 and the last in 2010. After the changes in global economic environment in the 90's of the last century, mainly due to the liberalization of trade and services, number of tax treaties grew quickly. Although the states are not obliged to use the OECD Model Convention in their bilateral negotiations, more than 3,000 tax treaties are currently in force, inspired by the provisions of the OECD Model Convention.⁵ This high number is caused by a fact that developed countries enter into tax treaties only on the basis of the OECD Model Convention but also by a fact that less developed countries use them in their mutual bilateral relations as well.

Historical development of creating international tax rules on avoidance of double taxation was not without conflict. The most important issue related to a problem which principle should be used for income taxation. Is it preferable to tax under a principle of tax residence or under a principle applicable within a state of source of income? Generally it was and still is true that developed countries are in favour of the principle of tax residence due to the fact that they belong to the exporters of capital and investment funds. Less developed or developing countries prefer the principle of taxation by state of source of income. The existence of two different model conventions is nowadays an evidence of the conflict.

From the current OECD Model Convention, as well as its predecessors, it results that taxation under the tax residence of a taxpayer is being favoured. In respect of the foregoing it is not a surprising finding. Organisation for Economic Co-operation and Development consists of the most advanced countries in the world that have similar political and economic interests whose expression is also a very close international tax policy. According to the author, the OECD Model Convention is based on a fact that it is trying to prevent or at least mitigate double taxation in the state of tax residence by applying the methods for elimination of double taxation. It also simultaneously limits power of a source state as it excludes right of a state to tax a certain income or determine lower tax rates than usual in a state of source of the income. The United Nations, which involves representatives of all countries of the world, created a competitive model, i.e. Model Double Taxation Convention between Developed and Developing Countries ("UN Model Convention") which incline to the taxation by state of source.⁶

¹ In the article term tax treaties is used as a synonym for double tax conventions on income and capital.

² This statement is not absolute, since states that are members of international political-economic integration structures such as the European Union, had to give up a part of their tax sovereignty prior to commencement of membership in these structures. For Member States of the European Union it mainly meant subordination of common rules in the field of indirect taxation.

³ See more: RIXEN, T. – ROHLFING, I. *The Institutional Choice of Bilateralism and Multilateralism in International Trade and Taxation*. In: *International Negotiation*, Vol. 12, No. 3, 2007, pp. 394-395.

⁴ OECD Model Tax Convention on Income and on Capital [online]. [cit. 2012-12-28]. Available at: [<http://www.oecd.org/tax/taxtreaties/47213736.pdf>].

⁵ More in: <http://www.oecd.org/about/history/>

⁶ UN Model Double Taxation Convention between Developed and Developing Countries [online]. [cit. 2012-12-29]. Available at: [<http://unpan1.un.org/intradoc/groups/public/documents/un/unpan002084.pdf>].

2 PURPOSE OF DOUBLE TAX CONVENTIONS

It can be declared that model conventions serve as a basis for bilateral negotiations and modify the standards for solving international tax issues including elimination of double taxation but they do not predetermine specific content of tax treaty. It depends on an outcome of the negotiations and, except for avoidance of double taxation of income; it typically includes other issues which will be analysed below.

2.1 Tax treaties and avoiding of double taxation of income

International double taxation occurs for several reasons. The most common case is when incomes of an individual or legal entity are taxed in a state in which persons are deemed to be tax resident and at the same time in a state which is source of these incomes. As a result, tax burden of the taxpayers is disproportionately high and it reduces profits and competitiveness of the persons. It can be said that this happens due to diverse legislation in different countries (different determination of tax institutes, types of income, fiscal obligations, etc.). It results from the application of tax sovereignty of the states while making tax legislation. From these reasons the main argument for contracting double tax conventions is an effort to resolve potential conflict between the states in the application of their tax claims.

As indicated above, each state, as an independent entity, unlimitedly sets conditions for collecting taxes from taxpayers within its territory. However, globalization of world economy and impact of the institutes of international tax law is forcing the lawmakers to take into account international trends in creation of tax legislation. It is impossible to omit presence of European tax law and case law of the Court of Justice of the European Union on tax legislation of the Member States. We can not ignore the fact that increasing mobility of the persons and capital, together with often complex and opaque tax laws are liable to create newer procedures by which taxpayers tend to minimize their tax liability.

At this point it is important to mention that the states adopt national legislative measures to avoid international double taxation. Currently, the most common means are special provisions of tax laws governing the methods which avoid taxation of the same income in two states. It is an exemption method and there is full exemption and exemption with progression, and tax credit method with two possibilities, i.e. full credit and ordinary credit.⁷ On basis thereon the state of taxpayer's residence gives up its entitlement to a tax if specified conditions are met. The author believes that internal measures of the states can not effectively and comprehensively resolve the issue of international taxation of incomes. They do not protect tax residents against high taxes in other states and do not affect equitable distribution of tax revenues between the state of tax residence and the state of source of income. They also do not prevent a person to be considered as tax resident in two countries and thus to be taxed in two states. This is mainly due to limited scope of national tax laws but also due to inability to affect the potential adversarial legislation in another state.

It should be noted that in professional circles there has never been consensus on the best and most efficient mean that would avoid international double taxation. Due to complexity of this issue it is not surprising. Since the end of the 19th century the states had made effort to intensify economic relations through tax treaties. During the 20th century they were looking for ways to avoid international double taxation on bilateral and multilateral level. Therefore at present, bilateral conventions between states for the avoidance of double taxation and prevention of fiscal evasion with respect to taxes on income and

capital (i.e. double tax conventions) are considered to be the most effective tools.

Proposed solutions are now included in the above-mentioned model conventions and that is typical for international taxation and, particularly, for double taxation. They are based on principles that have been adopted in the conventions of the League of Nations and in the first tax treaties concluded between the states, mainly after the First World War. The principles are currently codified in relevant articles of the OECD Model Convention and UN Model Convention. The right to tax different types of income is allowed to either state of source of income or state of tax residence. Based on this, there is a general rule that the state of tax residence must provide relief from taxation in a case of full or limited taxation in the state of source. This can be done, if a tax paid in a state of source is credited against a tax due in home country or by exemption of income taxed in a state of source from the calculated tax in a state where person is resident for tax purposes. It should be emphasized that bilateral tax treaties do not contain complex rules for taxation but basically determine which state has the right to tax a particular income. If tax authority is identified under the tax treaty, a state applies national tax and legal regulation on relevant incomes which are determined in tax treaty. It can be said that double tax conventions enable coordination of application of different national tax laws which regulate sovereign tax systems of the states. International tax law, with tax treaties as its basis, thus gain importance and is gradually being set apart as a separate branch of law.

2.2 Other objectives of double taxation conventions

In addition to avoidance of international double taxation, the states in tax treaties also try to solve other issues related to the regulation of international legal tax relations. The author believes that one of the goals of tax treaties is to stimulate and facilitate international business and to intensify cross-border movement of the persons, goods, services, and capital by avoiding international double taxation. For this purpose it is necessary to work constantly to improve contractual provisions and regulations.

In recent years, in international tax relations, apart from the fight against double taxation, there has been an effort to eliminate cases of double non-taxation. Such situations happen due to the opportunities given by inconsistent national tax laws and tax treaties. The issue of preventing tax evasion, especially during current economic crisis, gains a new dimension, and it is very difficult to distinguish between legal and illegal form of reducing tax liability. If contracting states applied different rates of income tax, provisions of the treaties could be used for tax planning that would result into legal reduction of tax base of the taxpayer's worldwide income to the lowest possible level. Intensive cooperation of the states, based on the mentioned conventions, can reduce success of the taxpayers to evade tax obligations and increase revenues for state budgets.

The reason for concluding tax treaties is also the fact that they provide additional comparative advantages. They reduce administrative costs of taxation, e.g. through an exchange of information between competent national authorities. Provisions of tax treaties relating to definitions, rules of taxation, and methods for elimination of double taxation contribute to legal security of foreign taxpayers and reduce the cost of tax and legal services.

Double tax conventions concluded between the states also contain provisions designed to ensure equal treatment of foreign taxpayers as domestic individuals and legal entities, regardless of their tax jurisdiction.

During negotiating developed countries apply their stronger political and economic status which enables them to benefit at the expense of the other contractual party. The state of tax residence tends to limit the state of source and its right to tax income coming from that state. The motive for this action is the

⁷ See more: BABČÁK, V. *Slovenské daňové právo*. Bratislava : EPOS, 2012. pp. 98-100.

fact that the restriction of taxation of incomes in the state of source reduces the tax burden on persons with tax residence in another state. The state of tax residence gains a larger share of tax revenues and its investors face better tax conditions in another state. Obvious disadvantage of tax treaties for less developed countries is potential loss of tax revenues, if principle of taxation by the state of tax residence of the taxpayer is preferred in tax treaties. For these states, in bilateral negotiations, it is difficult to impose equal taxation under the principle of source of income which would fairly split tax revenues and reflect true economic reality. Tax powers of the states should be divided in the tax treaties equally and their performance should not lead to discrimination against taxpayers or other restrictions.

Double tax conventions also have impact on a flow of foreign direct investment among the parties to the convention. Several studies have considered them to be an effective mean of promoting foreign direct investment ("FDI") because they lead to a growth of FDI.⁸ In some cases it has negative aspect. Due to reciprocity of FDI flows the benefits offered by domestic taxpayers in another country should be compensated by the same advantages for foreign taxpayers in this country because both contracting states act towards the taxpayers as the state of tax residence as well as the state of source of income. FDI flows between developed and developing countries are asymmetric whereas developed countries are capital exporters in economic terms. If developing countries are parties to bilateral tax treaties based on the principle of taxation by the state of tax residence, it causes a loss of tax revenues for these states. It is clear that double tax conventions based on the OECD Model Convention are only suitable for regulation of relations between those states where capital flows are about the same. Despite or perhaps because of that, the most of double tax conventions are concluded on the basis of the OECD Model Convention.⁹

A significant lack of tax treaties is also fact that, during their implementation, limitations occur mainly due to differing interpretations of the provisions and inconsistent legal coverage of new cases which circumvent the purpose of the treaties. Administrative costs of negotiation and ratification of the treaties are obvious disadvantages of double tax conventions. The states have to synchronize the provisions of national tax laws, as well as other legislation, with the content of tax treaties.

Based on the above mentioned facts the objectives of the double tax conventions are to:

- avoid situations with international double taxation of income,
- establish cooperation of financial authorities of the contracting states in order to prevent international tax evasion. In this respect conventions contain provisions on mutual cooperation of the states, in particular on exchange of information,
- ensure fair distribution of tax revenues between contractual states,
- ensure legal security which is necessary to attract foreign investment,
- eliminate discrimination of foreign entities,
- facilitate the development of international trade relations and cross-border economic activities.

3. FUTURE OF DOUBLE TAX CONVENTIONS

The states conclude bilateral double tax conventions but also actively participate in multilateral cooperation at the Organization for Economic Co-operation and Development and the United Nations while drafting the provisions of the OECD Model Convention or the UN Model Convention. They are not legally binding and therefore it is a crucial reason why states can reach agreement on its content. Considering that the states are

free to deviate from the provisions of model conventions in their bilateral negotiations. They are more willing to agree with wording of a model on international forums, even though it may not fully reflect their preferences and interests. Genuine flexibility of model conventions, as soft law institute, is one of the main reasons why states are inclined to such modifications. It can be said that the states negotiate general version of model conventions on multilateral level but they are not legally bound to follow them during negotiations with other states. The states negotiate specific provisions of double tax conventions at bilateral level.

According to some European experts on tax law, during a negotiation about tax treaties, member states of the European Union should follow the EU Model Tax Convention which they suggest.¹⁰ It should be adopted by the Commission and it should have a similar structure to the OECD Model Convention with dominant principle of taxation by a state of tax residence but it should contain specific provisions reflecting special relationship in the European Union. The author does not see point of this model because all Member States of the European Union are members of the Organisation for Economic Co-operation and Development so they have sufficient influence on its provisions. According to a proposal the EU Model Tax Convention should be only recommendatory like the OECD Model Convention and that would not prevent to negotiate arbitrary treaties. Proposed changes in the provisions also would not solve the problems associated with current tax treaties between member states.

It can be stated that the system of double tax conventions which works at present between the countries has significantly contributed to solving the issue of international double taxation but fully elimination of this phenomenon has not occurred. There are still conflicting issues related to the application of contractual clauses, types of income or classification of economic entities, etc. The author believes that substantial limit of currently concluded tax treaties is their bilateral character. Because of the bilateral nature they can not effectively address the problem of double non-taxation arising out of tax competition of the states or triangular cases. The solution is seen in the adoption of multilateral conventions between the states which should, in current critical times, be willing to collaborate and to focus just on coordinated solutions. The states protect their tax revenues, eliminate tax discrimination, and resolve problems of double taxation or non-taxation only by adopting comprehensive conventions. According to the author, for full and effective achievement of the objectives, which the states face and which arise out of international legal tax relations, it is needed to adopt multilateral conventions. He further agrees that the states that are now part of the global economic market would be ideal for multilateral treaties dealing with whole complex tax issues and trade relations.¹¹ In this respect, the author realizes that even if the benefit of such conventions for further development of global trade and economic is undoubted, the implementation of such ideas is considered nowadays impossible.

The author deems that it is easier to accomplish creation of a multilateral double tax convention within the political-economic structures such as the European Union.¹² The Union is a tight integration group, consisting of the states with similar tax systems and the same objectives in taxation. Bilateral arrangements of tax relations between the Member States rather create distortions in internal market because tax treaties do not have identical content and do not provide the same tax rules for

⁸ See more: BARTHEL, F. – BUSSE, M. – NEUMAYER, E. *The Impact of Double Taxation Treaties on Foreign Direct Investment: Evidence from Large Dyadic Panel Data*. In: *Contemporary Economic Policy*, Vol. 28, No. 3, 2010, pp. 368-375.

⁹ See: <http://www.oecd.org/about/history/>

¹⁰ See: LANG, M./SCHUCH, J./URTZ, CH./ZUGER, M. *Draft for a Multilateral Tax Treaty*. In: LANG, M., LOUKOTA, H., RADLER, A., SCHUCH, J., TOIFL, G., URTZ, CH., WASSERMEYER, F., ZUGER, M. (eds.) *Multilateral Tax Treaties. New Developments in International Tax Law*. London: Kluwer Law International, 1998. pp. 197-245.

¹¹ See e.g. AVI-YONAH, R. – SLEMRUD, J. *(How) Should Trade Agreements Deal with Income Tax Issues?* In: *Tax Law Review*, Vol. 55, No. 4, 2002, pp. 533-554.

¹² There is already an example of the multilateral treaty in the area of tax law: Convention on Mutual Administrative Assistance in Tax Matters drawn up within the framework of the Council of Europe and the OECD, which was signed at Strasbourg on 25 January 1988 and entered into force on 1 April 1995. Protocol amending the Convention on Mutual Administrative Assistance in Tax Matters entered into force on 1 June 2011.

all taxpayers. A multilateral tax treaty would make it possible to address the problems that are insoluble under the system of bilateral treaties and it would introduce greater legal security. An example would be the Nordic Tax Treaty which replaced previous bilateral treaties between the five countries.¹³

Despite these shortcomings it should be noted that double tax conventions are currently the most important and most effective ways to combat double taxation and tax evasion in international tax relations. Their importance is highlighted by other issues which govern the relations between the states, i.e. effort for fair distribution of tax revenues, creation of stable legal environment or prevention of discrimination of foreign persons. Solving these issues on a contract basis, contributes not only to the development of international trade relations between the states, but also to the expansion of international business opportunities and jobs.

It is difficult to predict future development of double tax conventions but the author does not expect any dramatic changes in the system of these tax treaties in close future. Activity of the OECD Committee on Fiscal Affairs and the UN Group of Experts continue permanently, while trying to modernize present model conventions and adjust them to current trends in international tax relations. Technical innovations resulting from bilateral tax treaties, as well as other innovations that are being developed in the framework of the activities of these committees are being implemented there. According to the author, it is likely that, within different integration structures, proposals for harmonization and unification of bilateral tax treaties between the Member States will be elaborated. That will lead to adoption of multilateral tax treaties. In addition to the European Union there are proposals for a multilateral tax treaty also within the Association of South East Asian Nations.¹⁴

CONCLUSION

At present, double tax conventions are inseparable part of international legal tax relations and the most important source of international tax law. Tax treaties complement tax systems of the states by laying down the methods for elimination of double taxation, the rules for taxation of certain incomes and exchange of information between competent authorities in the fight against tax evasion. Simultaneously, they also contain provisions to ensure legal security and non-discrimination of the persons which are essential for attracting foreign investment. This helps both to avoid international double taxation and prevent tax evasion, and also supports international trade between states and flow of foreign investment. In this respect, in the opinion of the author, double tax conventions concluded between the states on the basis of model conventions are regarded as a tool for harmonization of international tax relations.

The states conclude bilateral double tax conventions in order to maintain a space for promoting their economic interests which would not be sufficient in negotiations with several countries on multilateral tax treaties. For achievement of desired goal, i.e. prevention of loss of revenue from income tax because of double non-taxation, but also solution of other issues that stand before the states in international legal tax relations, greater co-operation in future will be needed. Double tax conventions will have to be subject to revision and will be replaced by another solution in political-economic structures such as the European Union or the Association of South East Asian Nations. Multilateral tax treaty will enable the states to achieve desired objectives associated with the development of a single market and support of economic growth.

Literature:

1. AVI-YONAH, R. – SLEMROD, J. (*How*) *Should Trade Agreements Deal with Income Tax Issues?* In: *Tax Law Review*, Vol. 55, No. 4, 2002, pp. 533-554. ISSN 0040-0041.
2. BABČÁK, V. *Slovenské daňové právo*. Bratislava : EPOS, 2012. 670 p. ISBN 978-80-8057-971-5.
3. BARTHEL, F. – BUSSE, M. – NEUMAYER, E. *The Impact of Double Taxation Treaties on Foreign Direct Investment: Evidence from Large Dyadic Panel Data*. In: *Contemporary Economic Policy*, Vol. 28, No. 3, 2010, pp. 366-377. ISSN 1465-7287.
4. JOGARAJAN, S. *A Multilateral Tax Treaty for ASEAN – Lessons from the Andean, Caribbean, Nordic and South Asian Nations*. In: *Asian Journal of Comparative Law*, Vol. 6, Iss. 1, 2011, pp. 145-166. ISSN 1932-0205.
5. LANG, M., LOUKOTA, H., RADLER, A., SCHUCH, J., TOIFL, G., URTZ, CH., WASSERMEYER, F., ZUGER, M. (eds.) *Multilateral Tax Treaties. New Developments in International Tax Law*. London : Kluwer Law International, 1998. 250 p. ISBN 90-411-0704-5.
6. RIXEN, T. – ROHLFING, I. *The Institutional Choice of Bilateralism and Multilateralism in International Trade and Taxation*. In: *International Negotiation*, Vol. 12, No. 3, 2007, pp. 389-414. ISSN 1382-340X.
7. OECD Model Tax Convention on Income and on Capital [online]. [cit. 2012-12-28]. Available at: [http://www.oecd.org/tax/taxtreaties/47213736.pdf].
8. UN Model Double Taxation Convention between Developed and Developing Countries [online]. [cit. 2012-12-29]. Available at: [http://unpan1.un.org/intradoc/groups/public/documents/un/unpan002084.pdf].

Primary Paper Section: A

Secondary Paper Section: AG

¹³ Multilateral Tax Agreement between Denmark, Finland, Iceland, Norway and Sweden, signed in Helsinki on 22 March 1983.

¹⁴ See more: JOGARAJAN, S. *A Multilateral Tax Treaty for ASEAN – Lessons from the Andean, Caribbean, Nordic and South Asian Nations*. In: *Asian Journal of Comparative Law*, Vol. 6, Iss. 1, 2011, pp. 145-166.

LEGAL ACTS CHANGEOVERS AS THE REALIZATION OF SUSTAINABLE DEVELOPMENT CONCEPTION. THE CASUAL ANALYSIS

^aANNA JASIŃSKA-BILICZAK

The Opole University of Technology, Faculty of Economics and Management, Poland

email: a.jasinska-biliczak@po.opole.pl

Abstract: Subject of the article is showing the problem of legal changeovers connected to the necessity of implementation Community legal acts into national legal systems of member states from one side and its connection to development policy an development concepts from other side. Analysis of the case was undertaken at the base of Polish act from 1st July 2011 about changing the act about maintenance of clearness and order in commune and changing some other legal acts as well as at the base of sustainable development conception.

Present article is the casual analysis and can be the contribution to further discussions and research at legal changeovers and their influence at development of enterprises as well as at local and/or regional development.

Keywords: commune, commune's own tasks, maintenance of clearness and order, sustainable development

1. Introduction

The duty to care of environment and ecological safety has got its legal and social dimension. Subjects of public authorities and citizens are obligated to taking up the actions having on their aim environmental protection. Efficiency of this protection depends on implementation of following conditions – firstly the position and range of competence of public authorities responsible for environment condition must be adequate to the real or potential ecological threats, secondly - effect of undertaken protective operations should be the amount of coordinated action in this domain on all levels of responsibility, with particular taking into consideration the local level at which organs of local self-governments perform the public authority¹.

Commune is the basic unit of local government² and the self-governed community being the basic unit of territorial dividing of the state³. Satisfying of collective community's requirements belongs to its own tasks. Especially those tasks include cases of spatial order, estate economy, environmental protection as well as nature and water economy. Also belong to them cases from the range of commune roads, provision to water and sewerage, deletion and clean-up of municipal effluents, maintenance of clearness, order and sanitary fix-ups, litters dumping grounds and neutralizing of municipal wastes or cases related with public health. Among commune's own tasks are also matters concerning order public and citizens' safety and supporting and spreading of self-governed ideas as well as cooperation with local, regional and state communities from other states⁴.

Commune management is a continuous process of order creation in unit of territorial dividing at the range of norms, plans, instruction and other documents. From its definition these should be the coordination instruments in reaching and functioning of objective and personal components of commune's activities. It is also possible to treat commune management as the factor stimulating process of economic growth.⁵

2. Sustainable development

Among concepts of development at particular note deserves the sustainable development conception. The main aims and conditions of the sustainable development were considered: rejection of poverty, change of consumption and production

patterns and the protection and management of natural resources in the socioeconomic development processes⁶. Should be pointed that sustainable development is the process having on its aim alleviating of development aspirations of present generation on purpose which could manner realization of the same aspirations to next generations⁷. So understood aim has to be achieved by integration in three main domains:

- economic growth and even distribution of benefits,
- natural goods and environment protection,
- social development.

In literature overview „sustainable development” is understood as a philosophy of socio-economic development harmonized with respecting the nature. It is a philosophy as a common meaning of the word, not as a specific philosophical system⁸. It is also such way of economic activity leading, forming and using of environment potential and such an organization of social life which can provide: dynamic development of qualitatively new productive process, systems of managements, constancy of use of natural goods, powers, values and natural processes as well as correction and, further, behavior of high quality of life of people – persons, families and societies⁹. Sustainable development is a contested concept, with theories shaped by people's and organizations' different worldviews, which in turn influence how issues are formulated and actions proposed. It is usually presented as the intersection between environment, society and economy, which are conceived of as separate although connected entities¹⁰.

Sustainable development defines the process of change of conditions of dynamic balance between regional economic, social and ecologically-spatial development. Final aim of this process is correction - with taking into consideration the respect of natural goods - widely understood quality of life¹¹.

It is possible to notice the correspondence of so defined and understood sustainable development with the purpose of regional policy of European Union which is stimulation and achievement of economic and social cohesion in regions. It is considered that inherent element of accustoming of sustainable development is the ability of evaluating if development at different spatial and decision-making levels is characterized with the feature of constancy or not¹².

Therefore person as a being is based on constancy as a unit: social group, nation and whole mankind. Providing so called continuity requires the evolution of economic and social sphere and maintenance of behavioral bases of human being, possibly most approximated to those which have been formed in process of evolution. Human being is the element of ecosystem so one of the condition of its development is the presence of other parts of nature – animate and inanimate¹³.

Still changing conditions of enterprises' and local self-government units' functioning, particularly communes, causes that more important becomes one of sustainable development's rules – the rule of prevention. In accordance to the rule it belongs

⁶ Johannesburg Declaration of 4 September 2002.

⁷ Raport Światowej Komisji ds. Środowiska i Rozwoju ONZ *Nasza wspólna przyszłość*, PWE, Warszawa 1991.

⁸ A. Papuziński, *Filozoficzne aspekty zrównoważonego rozwoju - wprowadzenie*, „Problemy Ekorozwoju”, 2006, vol. 1 No 2, p. 26.

⁹ B. Poskrobko, T. Poskrobko, *Zarządzanie środowiskiem w Polsce*, PWE, Warszawa 2012, p. 17.

¹⁰ B. Giddings, B. Hopwood, G. O'Brien, *Environment, economy and society: fitting them together into sustainable development*, „Sustainable Development”, 2002, Volume 10, Issue 4, pp. 187-196.

¹¹ K. Malik, *Rozwój zrównoważony i trwały jako koncepcja foresightu regionalnego*, [w:] Województwo opolskie regionem zrównoważonego rozwoju – foresight regionalny do roku 2020. Metody badawcze i najlepsze praktyki, Wydawnictwo Instytut Śląski Sp. z o.o., Opole 2008, p. 49.

¹² C. George, *Testing for sustainable development though environmental assessment*, „Environmental Impact Assessment Review” 1999, No 19, pp. 175-200.

¹³ B. Poskrobko, T. Poskrobko, *op. cit.*, p. 18 and next.

¹ L. Gardjan-Kawa, *Administrowanie zasobami środowiska po reformie ustrojowej*, Wydawnictwa Prawnicze, Warszawa 2000, s. 64.

² Art. 164 ust. 1 Konstytucji Rzeczypospolitej Polskiej, Dz. U. z 1997r., Nr 78, poz. 483.

³ Art. 1 i 2 act from 8th March 1990 y. about commune self-government, Dz. U. z 2001 r., Nr 142, poz. 1591 with later changes.

⁴ Art. 7 pkt 1 act from 8th March 1990 r. . . .

⁵ H. Sasinowski, *Zarządzanie regionalne jako czynnik aktywizacji obszarów*, Zeszyty Naukowe Politechniki Białostockiej, *Ekonomia i Zarządzanie – Zeszyt nr 3/1998*, s. 53.

to tend to prevent of ecological damage instead of liquidating their results¹⁴.

The act from 1st July 2011 about changing the act about maintenance of clearness and order in commune and changing some other legal acts¹⁵ imposes duties not only at basic unit of regional self-government which is the commune. In accordance to sustainable development conception also real estate owners, so physical persons, being also commune inhabitants and entrepreneurs leading their economic activity the territory of commune are obligated to definite actions and behaviors.

3. Communes tasks at the field of wastes management

In accordance to regulations of analyzed act being the consequence of implementation European Union law into Polish national legal order¹⁶, there were introduced changes in so far obligatory legal act in range of commune tasks and tasks for owners of real estates placed at the commune's territory concerning clearness and order maintenance¹⁷. At this legal base commune self-governments have been obligated for organization of receipt of municipal wastes from owners of estate placed at the commune's territory in which their owners live. Commune's council can also decide about getting back municipal wastes from owners of estate from the commune area in which their owners do not live but in which municipal wastes emerge¹⁸ – estate assigned to leading economic activity.

For particular communes' tasks in range of maintenance of clearness and order at their area belong:

- creation of conditions for practice the works related with maintenance of clearness and order at the commune's area or providing of execution of these works by creation of proper organizational units,
- providing of structure, maintenance and exploitation of own or common with other communes:
 - regional installation for processing of municipal wastes,
 - drainage area stations, in case when connection of all estate to sewerage network is impossible or it causes excessive costs,
 - installation and fix-ups for collection, transport and neutralizing of animal bodies or their parts,
 - public toilets,
- accession of all owners of estate in the commune's area to system of municipal wastes farming,
- - leading oversight of farming municipal wastes, including realization of tasks entrusted to subjects collecting wastes from estate owners,
- accustoming of selective collection of municipal wastes including minimum following fractions of wastes: paper, metal, artificial materials, glass and multimaterial wraps and municipal wastes undergoing biodegradation - including packages wastes (especially packages wastes undergoing biodegradation),
- creation of points of selective collection of municipal wastes in a way assuring easy access to these points to all commune's inhabitants, especially by pointing places in which wasted electric and electronic equipment from households can be collected,

- providing achievement of proper levels of recycling, preparation for underutilizing and recycling with using other methods and limitations of masses of municipal wastes undergoing biodegradation which are transferred to storage,
- prevention of pollution of roads, squares and opened areas, particularly by collection and disposing slush, snow, ice and other wastes from footpaths by owners of estate as well as wastes stored in assigned to this containers placed at the pavements,
- maintenance of clearness and order on communication stays being the commune estate of being under commune's management placed at the commune area at public roads without meaning of these roads category¹⁹.

Tasks entrusted to commune can be also made by intercommunal associations, for example in the case of voting local legal acts proper will be organs of this association. Control at observance and using in practise the act regulating commune's own tasks is exercised by commune administrator, mayor or president of city by using proper detailed regulations²⁰.

Mentioned control body is also obligated for composing an annual report from realization of the tasks from range of municipal wastes management.

In case of regulations apply regarding procedure with municipal wastes in unsettled range in discussed act could be taken into consideration regulations concerning wastes²¹.

By the reason of tasks put before commune self-government this self-government has been obligated to preparing annual analysis of the condition of municipal wastes economy for verification of technical and organizational capabilities of commune in range of municipal wastes management.

Particularly the subject of analysis should be:

- capabilities of processing of assorted municipal wastes, green wastes and residues from classification of municipal wastes assigned for storage,
- investment requirements related with municipal wastes management,
- costs incurred by reason of getting back, recycling and neutralizing of municipal wastes,
- number of commune's inhabitants,
- number of estate owners, who did not assigned the agreement at getting back their wastes and commune should come into effect who names to get back their wastes,
- amounts of municipal wastes made at the commune area,
- amounts of assorted municipal wastes, green wastes and residues from classification of municipal wastes intended for storage gotten back from commune's area²².

For control of discharging of owners of estate and entrepreneurs' their legally binding duties commune self-governments are obligated to monitoring and keeping records of outflow-less containers²³, home sewage treatment plants²⁴ and of agreements entered into for getting back the municipal wastes from estate owners.

Along with the amendment of the discussed act commune self-governments were also obligated for conducting information and educational actions in the correct management of municipal wastes, in particular in selective collecting the municipal wastes as well as opening the commune office on the website to

¹⁴ R. Miłaszewski (red.), *Nowoczesne metody i techniki zarządzania trwałym i zrównoważonym rozwojem gminy*, Wydawnictwo Politechniki Białostockiej, Białystok 2001, s. 8.

¹⁵ Dz. U. z dnia 25 lipca 2011 r., Nr 152, poz. 897.

¹⁶ Dyrektywy 91/271/EWG z dnia 21 maja 1991 r. dotyczącej oczyszczania ścieków komunalnych, Dz. Urz. WE L 135 z 30.05.1991, str. 40, z późn. zm., Dz. Urz. UE Polskie wydanie specjalne, rozdz. 15, t. 2, str. 26; Dyrektywy Rady 1999/31/WE z dnia 26 kwietnia 1999 r. w sprawie składowania odpadów, Dz. Urz. WE L 182 z 16.07.1999, str. 1, z późn. zm., Dz. Urz. UE Polskie wydanie specjalne, rozdz. 15, t. 4, str. 228; Dyrektywy 2008/98/WE z dnia 19 listopada 2008 r. w sprawie odpadów oraz uchylająca niektóre dyrektywy, Dz. Urz. L 312 z 22.11.2008, str. 3–30.

¹⁷ Ustawa z dnia 13 września 1996 r. o utrzymaniu czystości i porządku w gminach, Dz. U. z 2005 r. Nr 236, poz. 2008, z późn. zm.

¹⁸ Art. 6c ust 2. ustawy z dnia 1 lipca 2011 r. o zmianie...

¹⁹ Art. 3 ust 2 ustawy z dnia 1 lipca 2011 r. o zmianie...

²⁰ art. 379 i art. 380 ustawy z dnia 27 kwietnia 2001 r. - *Prawo ochrony środowiska*, Dz. U. z 2008 r. Nr 25, poz. 150, z późn. zm.

²¹ Ustawa z dnia 27 kwietnia 2001 r. o odpadach, Dz. U. z 2010 r. Nr 185, poz. 1243 z późn. zm.

²² Art. 3 ust. 2, pkt 10 act from 1th July 2011 y. about the change...

²³ in the audit purpose of the frequency of emptying and in order to update the development plan of a sewer system.

²⁴ in the audit purpose of the frequency and the way of getting rid of municipal sewage deposits and in order to update the development plan of a sewer system.

information - especially the commune has a duty of passing to public information concerning:

- data of entities getting back the municipal wastes from estate owners at the area of commune containing the name, marking the registered office and the address or name, surname and address of the entity getting the municipal wastes back from estate owners,
- places of developing by entities getting the municipal wastes back from estate owners from the commune area, the mixt municipal wastes, green wastes and remains from the sorting of the municipal wastes intended to store,
- required levels reached by the commune and entities getting the municipal wastes back from estate owners in the given calendar year of the recycling, the preparation for the reuse and the recycling with other methods and of limiting mass of the biodegradable municipal wastes sent to the storage,
- points of selective collecting the municipal waste,
- entities collecting the consumed brown goods (electric and electronic equipment) coming from households^{25,26}.

Apart from tasks and the manner of their realization and the manner of their monitoring the legislator also put on communes levels of the recycling²⁷ which their are obligated to reach till 31st December 2020 year:

- level of the recycling and preparing for the reuse the following factions of the municipal waste: paper, metals, plastics and glass in the height at least 50% in terms of weight,
- level of the recycling, the preparation for the reuse and the recycling with other methods other than dangerous of building and demolition wastes in the height at least 70% in terms of weight.
- Moreover the act is imposing an obligation to limit the biodegradable municipal wastes intended to the storage on communes²⁸:
- to 16th July 2013 - up to no more than a 50% in terms of weight of total mass of the biodegradable municipal waste intended to the storage,
- to 16th July 2020 - up to no more than a 35% in terms of weight of total mass of the biodegradable municipal waste intended to the storage,
- towards mass of this wastes produced in year 1995.

4. Duties of property owners in assuring of the cleanness and order

The act is imposing an obligation to ensure the cleanness and order on estate owners through:

- equipping the real estate with containers being used to collect the municipal wastes and holding these devices in the right sanitary, ordinal and technical state,
- connecting the real estate to existing sewer network or, in the event that the structure of a sewer system is technically or economically unjustified, equipping the real estate into outflow-less container of liquid impurities or into the home sewage treatment plant welfare, fulfilling requirements determined in distinct regulations²⁹,
- collecting incurred on the area of the real estate municipal wastes in accordance with the requirements determined in regulations,
- accumulation of liquid impurities in outflow-less containers,

- getting rid of collected on the area of estate municipal wastes and liquid impurities into the way in accordance with provisions of the act and distinct regulations,
- removing mud, snow, ice and other pollutants from pavements laid along the estates³⁰,
- completion of other duties determined in regulations of the maintenance of the order and the cleanness in the commune.

Property owners are obligated to incur for the commune, on the area which their estates are located, for payment for the management of the municipal wastes. The commune council determines minimum rates of the payment³¹ for the management of the municipal wastes if the municipal wastes are collected and picked up in the selective way.

In case that the commune isn't fulfilling the legal binding duty of getting back the municipal wastes from property owners, the property owner is obliged for handing the municipal wastes, at the commune's expense, to the entity getting waste back form estates owners which is registered in the register of governed activity.

Not-complementing by the property owner the duty in selective collecting the municipal wastes the entity getting the municipal wastes back is accepting them as the mixt municipal wastes and is notifying the commune of it.

For estate owners not-ensuing from their duties in the maintenance of the order and the cleanness or fulfilling this obligations in the wrong way, criminal sanctions are determined by the act.

5. Summary

Implementing the new system will allow for making accurate measurements of quantities of wastes made by property owners - talk through residential, of multi-occupied buildings or objects belonging to entrepreneurs and the cost control of their transport, recycling or storage.

The commune as the owner of wastes will be indicating places of neutralizing and storage the wastes what should influence for ceasing applying practices of taking wastes away into places different from municipal stockpiles.

However it shold be noticed that the way of implementation of the municipal waste management will be a new system undertaking for many Polish communes - to a considerable degree unknown and unpredictable. Amongst unquestionable benefits of implementing the new system can also appear threats to his practical realization. There are necessary economic and organizational and, perhaps, social decisions associated with not-fulfilling duties imposed by the act on them by the part of property owners - whether these are through not entering into agreements or through the non-payment payments arising from acts of the local law. Danger of giving a lift to wastes to the area of other, neighbouring communes by residents of adjacent communes should be taken into consideration too. A risk appears from making a note of the increased quantity of wastes in the first year of functioning of the system - the part of residents of communes can get rid in frames of the new system and limits it being entitled in of wastes collected for many years in basements, cells or garages.

For the part of Polish communes a lack is a problem own, apart from the stockpile, of installation for rendering waste harmless. Such a state causes, that these communes have a limited impact at present for the forming of costs of the wastes treatment.

Choice of transit companies through the commune by tender can also raise doubts of property owners – they can sense that they

²⁵ At the base of the Act from 29th July 2005 y. about used electric and electronic equipment, Dz. U. Nr 180, poz. 1495, z późn. zm.

²⁶ Art. 3 ust. 2 pkt 8 i 9 act from 1th July 2011 y. about the change...

²⁷ Regulation of the Environment Minister from 29th May 2012 on levels of the recycling, the preparation for the reuse and the recycling with other methods of some factions of the municipal wastes, Dz. U. z 2012r., poz. 645.

²⁸ Regulation of the Environment Minister from 25th May 2012 on biodegradable levels of limiting mass of the municipal waste handed over to the storage and the way of calculating the level of limiting mass of this wastes, Dz. U. z 2012r., poz. 676.

²⁹ Connecting the real estate to a sewer system isn't compulsory if the real estate is equipped with the home sewage treatment plant meeting requirements determined in separate regulations.

³⁰ an allocation of the public road serving for the pedestrian traffic is being regarded as the pavement put directly close to the border real estates; the property owner isn't obliged for tidying up the pavement, on which he is passed the paid stop or parking motor vehicles.

³¹ Detailed aspects of setting payments are being regulated in art. 6 act from 1th July 2011y. about the change ...

were deprived of the right for independent, competitive appointing companies serving them.

Undoubtedly leading and supporting the system requires the entitlement based on the change and will require information and educational action as well as financial under the angle of both the functionality and constant improving the system.

Literature:

1. Gardjan-Kawa L., *Administrowanie zasobami środowiska po reformie ustrojowej*, Wydawnictwa Prawnicze, Warszawa 2000,
2. George C., *Testing for sustainable development through environmental assessment*, „Environmental Impact Assessment Review” 1999, No 19,
3. Giddings B., Hopwood B, O'Brien G., *Environment, economy and society: fitting them together into sustainable development*, „Sustainable Development”, 2002, Volume 10, Issue 4,
4. Malik K., *Rozwój zrównoważony i trwały jako koncepcja foresightu regionalnego*, [w:] Województwo opolskie regionem zrównoważonego rozwoju – foresight regionalny do roku 2020. Metody badawcze i najlepsze praktyki, Malik K. (red.), Wydawnictwo Instytut Śląski Sp. z o.o., Opole 2008,
5. Miłaszewski R., *Nowoczesne metody i techniki zarządzania trwałym i zrównoważonym rozwojem gminy*, Wydawnictwo Politechniki Białostockiej, Białystok 2001,
6. Papuziński A., *Filozoficzne aspekty zrównoważonego rozwoju - wprowadzenie*, „Problemy Ekorozwoju”, 2006, vol. 1 No 2,
7. Sasinowski H., *Zarządzanie regionalne jako czynnik aktywizacji obszarów*, Zeszyty Naukowe Politechniki Białostockiej, Ekonomia i Zarządzanie – Zeszyt nr 3/1998,
8. Raport Światowej Komisji ds. Środowiska i Rozwoju ONZ *Nasza wspólna przyszłość*, PWE, Warszawa 1991,
9. Johannesburg Declaration of 4 September 2002,
10. Dyrektywa 91/271/EWG z dnia 21 maja 1991 r. dotyczącej oczyszczania ścieków komunalnych, Dz. Urz. WE L 135 z 30.05.1991, str. 40, z późn. zm., Dz. Urz. UE Polskie wydanie specjalne, rozdz. 15, t. 2,
11. Dyrektywa Rady 1999/31/WE z dnia 26 kwietnia 1999 r. w sprawie składowania odpadów, Dz. Urz. WE L 182 z 16.07.1999, str. 1, z późn. zm., Dz. Urz. UE Polskie wydanie specjalne, rozdz. 15, t. 4,
12. Dyrektywa 2008/98/WE z dnia 19 listopada 2008 r. w sprawie odpadów oraz uchylająca niektóre dyrektywy, Dz. Urz. L 312 z 22.11.2008,
13. Konstytucja Rzeczypospolitej Polskiej, Dz. U. z 1997r., Nr 78, poz. 483,
14. Ustawa z dnia 1 lipca 2011 r. o zmianie ustawy o utrzymaniu czystości i porządku w gminach oraz niektórych innych ustaw Dz. U. z dnia 25 lipca 2011 r., Nr 152, poz. 897,
15. Ustawa z dnia 29 lipca 2005 r. o zużytym sprzęcie elektrycznym i elektronicznym, Dz. U. Nr 180, poz. 1495, z późn. zm.,
16. Ustawa z dnia 27 kwietnia 2001 r. - *Prawo ochrony środowiska*, Dz. U. z 2008 r. Nr 25, poz. 150, z późn. zm.,
17. Ustawa z dnia 27 kwietnia 2001 r. o odpadach, Dz. U. z 2010 r. Nr 185, poz. 1243 z późn. zm.,
18. Ustawa z dnia 13 września 1996 r. o utrzymaniu czystości i porządku w gminach, Dz. U. z 2005 r. Nr 236, poz. 2008, z późn. zm.,
19. Rozporządzenie Ministra Środowiska z dnia 29 maja 2012 r. w sprawie poziomów recyklingu, przygotowania do ponownego użycia i odzysku innymi metodami niektórych frakcji odpadów komunalnych, Dz. U. z 2012r., poz. 645,
20. Rozporządzenie Ministra Środowiska z dnia 25 maja 2012 r. w sprawie poziomów ograniczenia masy odpadów komunalnych ulegających biodegradacji przekazywanych do składowania oraz sposobu obliczania poziomu ograniczania masy tych odpadów, Dz. U. z 2012r., poz. 676.

Primary Paper Section: A

Secondary Paper Section: AG, AH

IS IT NECESSARY TO REGULATE FINANCIAL REPORTING OF SMALL AND MEDIUM-SIZED ENTITIES?

^aMICHAL JEŠŠ, ^bMATEJ LEPIEŠ, ^cDAŠA MOKOŠOVÁ

Department of Accounting and Auditing, Faculty of Economic Informatics, University of Economics in Bratislava, Dolnozemská cesta 1/B, 852 35 Bratislava, Slovakia
 email: ^amichal.jess@mail.euba.sk, ^bmatejlepies@gmail.com, ^cdasa.mokosova@euba.sk

Abstract: This paper deals with the analysis of the position of small and medium-sized entities in the Slovak Republic and with the international regulation of small and medium-sized entities' financial reporting. It provides the business demography of economic subjects by size class category by number of employees and follows by an average number of employed persons by size classes of enterprises in persons. Due to the fact that the number of these entities represents a significant role, the regulation of their financial reporting becomes a material fact. The International Accounting Standards Board issued the International Financial Reporting Standard for Small and Medium-sized Entities (IFRS[®] for SMEs) to achieve the international comparability of accounting and reporting information. The paper covers as well as the perspectives of the IFRS[®] for SMEs implementation within the European Union.

Keywords: small and medium-sized entities, International Financial Reporting Standards, International Financial Reporting Standard for Small and Medium-sized entities, comprehensive review, Accounting Directive

1 Introduction

Small and medium-sized entities are not only an inseparable part of the European economy, but they also represent a tool to maintain the competitiveness in the market mechanism. Small and medium-sized entrepreneurship provide an opportunity for self-realization and represents large and differentiated source of job opportunities. Small and medium-sized entities are the dominant form of business organizations in Europe. Because they are not equally represented in various sectors of the economy, we can find them in areas where they can use their competitive advantages.

2 Analysis of the position of small and medium-sized entities

In the European Union non-financial business economy exists more than 27 million enterprises employing a workforce of more than 133 million people. The vast majority (over 91 %) are micro enterprises employing less than ten people. Around 30 % of the European workforce in private business is employed by micro enterprises. The second largest small and medium-sized entities group (around 7 %) is made up of small enterprises, defined as employing 10 – 49 people, employing one fifth of the total workforce. Only 1 % of enterprises in the non-financial business economy belonged to the medium-sized enterprises defined as employing 50 – 249 people. With a workforce of about 22 million people, medium-sized entities are the smallest of the four enterprise groups. In spite of very small share (0.2 %) of the overall number of enterprises, large companies (defined as employing 250 or more people) employed about one third of the workforce.¹

According to the statistics of *Economic subjects by institutional sectors ESA 95 and size class category by number of employees* produced by Statistical Office of the Slovak Republic, at the end of the 2012 were 610,381 economic subjects in the Slovak Republic.

Based on the statistical surveys of Statistical Office of the Slovak Republic, at 31.12.2012 the sector of small and medium-sized entities consists of 99.82 % of the overall number of enterprises and provides job opportunities to 70.44 % of the overall number of employees in the economy. To improve the

development of small and medium-sized entities is necessary to evaluate the current situation and monitor the development. The analysis of the situation helps to identify current trends and predict the future development.

Table 1 Business demography of economic subjects in the Slovak Republic by size class category by number of employees

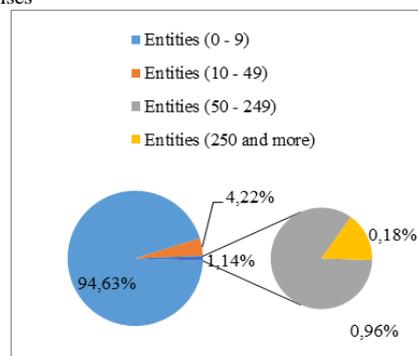
Entities by size class category by number of employees	31.12. 2009	31.12. 2010	31.12. 2011	31.12. 2012
Entities (0 – 9)	287,448	315,475	307,084	401,221
Entities (10 – 49)	33,741	16,262	22,702	17,912
Entities (50 – 249)	4,403	4,204	4,295	4,082
<i>Small and medium-sized entities</i>	<i>325,592</i>	<i>335,941</i>	<i>334,081</i>	<i>423,215</i>
<i>The percentage of small and medium-sized entities on the overall number of entities with known number of employees</i>	<i>99.75%</i>	<i>99.78%</i>	<i>99.77%</i>	<i>99.82%</i>
Entities (250 and more)	829	746	756	761
Number of entities with unknown number of employees	266,798	270,710	277,575	186,405
Total number of entities with known number of employees	326,421	336,687	334,837	423,976
Total	593,219	607,397	612,412	610,381

Source: SLOVSTAT, Statistical Office of the Slovak Republic, own processing

At the end of the 2012, were 610,381 economic subjects in the Slovak economy. Only 423,976 economic subjects reported the number of employees in statistical surveys carried out by Statistical Office of the Slovak Republic (Table 1). The total number of economic subjects in 2012 compared to 2011 increased about 26.62 %, which represent creation of 89,139 new economic subjects. The largest share in the growth of economic subjects belongs to micro entities, where the number of economic subjects was increased about 94,137 new economic subjects over the comparable period in the previous year.

Since the beginning of 2010, we can observe in the Slovak economy the positive development of economic entities with known number of employees. It means, that since 2010 was created 97,555 new economic subjects with identified number of employees.

Chart 1 Structure of economic subjects by size classes of enterprises



Source: SLOVSTAT, Statistical Office of the Slovak Republic, own processing

¹ EUROPEAN COMMISSION. 2011. *Final Report „Future Skills Needs in Micro and Craft(-type) Enterprises up to 2020“*. [online]. Cologne, Hamburg, Vienna : Publications Office, 2011. p. 40. Available at internet: <http://ec.europa.eu/enterprise/policies/sme/promoting-entrepreneurship/files/skillsneeds_final_report_final_180211_en.pdf>, Accessed at 20.4.2013

At the end of 2012, the group of small and medium-sized entities represented 99.82 % of the overall number of economic subjects with known number of employees (Chart. 1). The largest share of small and medium-sized entities belongs to micro entities employing less than ten people with a 94.63 % representation in this group (401,221 micro entities).

Since 2009, the average number of representation of small and medium-sized entities with known number of employees oscillate around 99.78 %. This number indicate that this group have a dominant position in the Slovak economy.

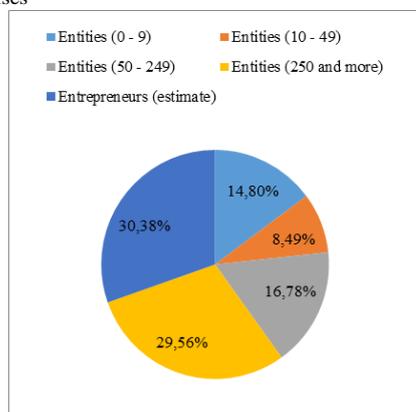
At the end of 2012, the number of small and medium-sized entities slightly increased about 26.68 % (89,134 new economic subjects) in comparison with the number of small and medium-sized entities at the end of 2011. Within the quarterly statistical reporting was observed minor decrease of small and medium-sized entities which could be converted into micro entities as a result of amendments to law or another factors that affect small and medium-sized business.

Table 2 Average number of employed persons by size classes of enterprises in persons

Entities by size class category by number of employees	31.12. 2009	31.12. 2010	31.12. 2011	31.12. 2012
Entrepreneurs (estimate)	665,000	660,000	660,000	661,000
Entities (0 – 9)	104,588	186,117	159,892	321,950 ²
Entities (10 – 49)	370,908	300,814	344,438	184,702 ³
Entities (50 – 249)	376,396	389,063	388,073	365,101
<i>Small and medium-sized entities</i>	<i>1,516,892</i>	<i>1,535,994</i>	<i>1,552,403</i>	<i>1,532,753</i>
<i>The percentage of small and medium-sized entities on the overall number of employees</i>	<i>70.18%</i>	<i>70.62%</i>	<i>70.76%</i>	<i>70.44%</i>
Entities (250 and more)	644,417	639,031	641,581	643,093
Total	2,161,309	2,175,025	2,193,984	2,175,846

Source: SLOVSTAT, Statistical Office of the Slovak Republic, own processing

Chart 2 Structure of employed persons by size classes of enterprises



Source: SLOVSTAT, Statistical Office of the Slovak Republic, own processing

According to the statistics of *Average number of employed persons by size classes of enterprises in persons* produced by Statistical Office of the Slovak Republic, at the end of the 2012 were 2,175,846 people employed in the Slovak Republic (Table 2). Small and medium-sized entities, including entrepreneurs, employed 1,532,753 persons which represent 70.44 % of the overall number of employed persons in the Slovak economy (Chart 2). The total number of employed persons in 2012 compared to 2011 decreased about 0.27 %, which represent termination of 19,650 job positions. Since 2009, the average number of employed persons oscillate around 70.50 %. This number also indicate that the small and medium-sized entities provide job opportunities to nearly three quarters of all employed persons in the Slovak economy.

Entrepreneurs provide employment to 30.38 % of the employed population (661,000 employees), medium-sized entities provide employment to 16.78 % of the employed population (365,101 employees), micro entities to 14.80 % of the employed population (321,950 employees) and small entities to 8.49 % of the employed population (184,702 employees).

3 Assessment of comprehensive review of the IFRS[®] for SMEs

Due to the fact that the number and proportion of small and medium-sized entities represent a significant part of the economy of each countries around the world, the regulation of their financial reporting becomes a material fact. To achieve this purpose small and medium-sized entities need a uniformed set of standards, which will be tailored to the needs of small and medium-sized entities. This set of standards have to permit clear and accurate expression of their current transactions, events and facts. Advanced and emerging economies needed to use a precise, joint and simple system of accounting standards for small and medium-sized entities. The International Financial Reporting Standard for Small and Medium-sized Entities (IFRS[®] for SMEs) achieves this purpose. The Standard provides better comparability and increases the overall confidence in the financial reporting of small and medium-sized entities.

The first release of the proposal for a simpler set of financial reporting standards (IFRS[®] for SMEs) was issued in 2007. Subsequently, in July 2009 was published the final version of this Standard. The IFRS[®] for SMEs allows individual countries to decide, which economic subjects may, respectively are required to apply this Standard.

Compared with the full International Financial Reporting Standards (IFRS[®]), the IFRS[®] for SMEs contains about 230 pages and is less complex in a number of ways. The Standards does not include topics which are not relevant for small and medium-sized entities such as operating segment reporting, interim financial reporting, insurance contracts or non-current assets held for sale and discontinued operations.

The IFRS[®] for SMEs is issued by the International Accounting Standard Board (IASB). Because this Standard was published in 2009, with its application in practice occurs various ideas and insights to the situations, which are not covered or not specified how it should be applied by the Standard in these cases. Therefore, in order to assess individuals ideas and insights, the IASB established a Small and Medium-sized Entities Implementation Group (SMEIG), which deals with the suggestions. After its careful consideration, the SMEIG issues more detailed implementation guidance for problematical areas and topics. Up to now, the SMEIG issued eight final implementation guides governing specific problems with the application of the IFRS[®] for SMEs and three papers in the form of questions and answers in which has expired the opportunity to comment them.⁴

² Due to changes in the methodology of Statistical Office of the Slovak Republic, data includes entities employed 0 – 19 persons

³ Due to changes in the methodology of Statistical Office of the Slovak Republic, data includes entities employed 20 – 49 persons

⁴ IFRS FOUNDATION. 2012. *IFRS for SMEs – Draft Q&As*. [online]. Available at internet: <<http://www.ifrs.org/IFRS-for-SMEs/Pages/Draft.aspx>>. Accessed at 20.04.2013

The IASB examines the experience of small and medium-sized entities in countries, where the IFRS[®] for SMEs is used, on basis of already prepared financial statements in accordance with this Standard. The result of the survey, by which the IASB seeks to obtain relevant information about problems with application of the IFRS[®] for SMEs, should be a proposal of amendments to issues related to its implementation and application, including new and amended IFRSs[®]. The process of a comprehensive review of the IFRS[®] for SMEs is planned about once in every three years. The Standard has not yet been revised or amended.

In 2012, the IASB issued publication *Request for Information – Comprehensive Review of IFRS[®] for SMEs*, which arise from the IASB timing plan of comprehensive review process. For the past four years since the IFRS[®] for SMEs was released, it was adopted in more than 80 countries over the world. On this basis we expect the amendment of the IFRS[®] for SMEs in next two years. Subsequent comprehensive reviews according to the Standard are scheduled again once in every three years.

During the revision of the IFRS[®] for SMEs, the SMEIG provides recommendations to the IASB, which may include any proposals for changes in the Standard. At the same time, the SMEIG and the IASB plans to amendments of the IFRS[®] for SMEs implement problems that have been published by questions and answers form. As well as they plan to implement new and amended IFRSs[®], which have been published since the first publication of the IFRS[®] for SMEs.

The aim of the IASB and SMEIG is to obtain information not only about opinions of the users of financial statements prepared in accordance with the IFRS[®] for SMEs, but as well as the opinions of professional organizations, regulatory authorities of individual countries and all other interested parties. The objective of a comprehensive review is to determinate whether the IFRS[®] for SMEs needs to be amended and, if so, what amendments should be made.

Request for Information – Comprehensive Review of the IFRS[®] for SMEs is divided into two parts. The first part covers specific information in selected sections of the IFRS[®] for SMEs and contains twenty questions to which the respondents could express their opinions and includes following thematic areas:⁵

- use by publicly traded entities;
- use by financial institutions;
- clarification of use by not-for-profit entities;
- consideration of recent changes to the consolidation guidance in full IFRSs[®];
- use of recognition and measurement provisions in full IFRSs[®];
- guidance on fair value measurement for financial and non-financial items;
- positioning of fair value guidance in the IFRSs[®] for SMEs;
- consideration of recent changes to accounting for joint ventures in full IFRSs[®];
- revaluation of property, plant and equipment;
- capitalization of development costs;
- amortization period for goodwill and other intangible assets;
- consideration of changes to accounting for business combinations in full IFRSs[®];
- presentation of share subscriptions receivable;
- capitalization of borrowing costs on qualifying assets;
- presentation of actuarial gains or losses;
- approach for accounting for deferred income tax;
- consideration of *IAS 12 Income Taxes* exemptions from recognizing deferred taxes and other differences under *IAS 12 Income Taxes*;
- rebuttable presumption that investment property at fair value is recovered through sale;
- inclusion of additional topic in the IFRSs[®] for SMEs; and
- opportunity to add own specific issues.

⁵ IFRS FOUNDATION. 2012. *Comprehensive Review of the IFRS for SMEs*. [online]. Available at internet: <http://www.ifrs.org/IFRS-for-SMEs/Documents/RequestforInformation_IFRSforSMEs_WEBSITE.pdf>, p. 12 – 32, Accessed at 20.4.2013

The second part of the *Request for Information – Comprehensive Review of the IFRS[®] for SMEs* includes six general questions relating to the IFRS[®] for SMEs and are relevant to consideration of minor improvements to full IFRS[®], to further need for “questions and answers” and treatment of existing questions and answers, to continue providing the self-study educational materials or to the possibility of adding another general questions.

After completion of this phase of comprehensive review will be followed by a further revision dealing with new and amended IFRSs[®]. Whereas the *Request for Information – Comprehensive Review of the IFRS[®] for SMEs* could be commented until 30 November 2012 we actually expect an assessment of the results and their publications. On this basis it should be created a proposal to amend the IFRS[®] for SMEs. After the careful consideration of this proposal is scheduled to publish the final amendments of which effectiveness may take effect from 1.1.2015.

Up to now, the IASB received 87 comment letters as a response to Request for Information – Comprehensive Review of the IFRS[®] for SMEs.⁶ Only 70 respondents sent to the IASB completely filled out the questionnaire which was a part of a comprehensive review. Remaining 17 respondents gave only general opinion to the comprehensive review.

Our analysis of the responses to the questions of the first part of the *Request for Information – Comprehensive Review of the IFRS[®] for SMEs* indicate that respondents:

- do not require to change the current requirements of the IFRS[®] for SMEs for:
 - publicly traded entities and financial institutions and they agree to continue to prohibit an entity whose debt or equity instruments trade in a public market and all financial institutions and other entities that hold assets for a broad group of outsiders as one of their primary business from using the IFRS[®] for SMEs;
 - capitalization of development costs and they agree to continue to charge all development costs to expense;
 - capitalization of borrowing costs on qualifying assets and they agree to continue to require all borrowing costs to be recognized as an expense when incurred;
- need to revise the IFRS[®] for SMEs:
 - to clarify that soliciting and accepting contributions does not automatically make a not-for-profit entity publicly accountable and a not-for-profit entity can use the IFRS[®] for SMEs if it otherwise qualifies under the *Section 1 Small and Medium-sized Entities*;
 - to reflect the main changes from *IFRS 10 Consolidated Financial Statements*, modified as appropriate for small and medium-sized entities;
 - so that arrangements are classified as joint ventures or joint operations on the basis of the parties rights and obligations under the arrangement (terminology and classification based on *IFRS 11 Joint Arrangements*, modified as appropriate for small and medium-sized entities);
 - to incorporate the main changes introduced by *IFRS 3 Business Combinations (2008)*, modified as appropriate for small and medium-sized entities;
 - to incorporate those aspects of the fair value guidance in *IFRS 13 Fair Value Measurement* that are important for small and medium-sized entities, modified as appropriate for SMEs including the appropriate disclosures and move the fair value guidance from *Section 11 Basic Financial Instruments* into a separate section on fair value measurement;
 - to permit an entity to choose, for each major class of property, plant and equipment, whether to apply the cost-depreciation-impairment model or the revaluation

⁶ IFRS FOUNDATION. 2012. *IFRS for SMEs – Comment Letters*. [online]. Available at internet: <http://www.ifrs.org/IFRS-for-SMEs/comment-letter/Pages/Home.aspx>, Accessed at 20.4.2013

model (the approach in *IAS 16 Property, Plant and Equipment*);

- to revise *Section 29 Income Tax* to conform it to the current *IAS 12 Income Taxes*, modified as appropriate for small and medium-sized entities and to incorporate the exemption for investment property at fair value; and
- so that an entity is required to recognize all actuarial gains and losses in other comprehensive income (i.e. removal of profit or loss option in paragraph 28.24);
- agree to allow entities the option of following the recognition and measurement provisions of *IFRS 9 Financial Instruments* with the disclosure requirement of *Section 11 Basic Financial Instruments* and *Section 12 Other Financial Instruments Issues*;
- agree that small and medium-sized entities should recognize deferred income tax using the temporary difference method (the approach currently used in both the IFRS[®] for SMEs and full IFRSs[®]); and
- need to modify paragraph 18.20, which states “If an entity is unable to make a reliable estimate of the useful life of an intangible asset, the life shall be presumed to be ten years.” to establish a presumption of ten years that can be overridden if a shorter period can be justified.

Actually, the IASB began on Tuesday 23 April 2013 its public meetings, which will conclude on Friday 26 April 2013. During these meetings is planned a discussion about the issues in the IASB’s 2012 *Request for Information – Comprehensive Review of the IFRS[®] for SMEs*.

4 Perspective of the implementation of the IFRS[®] for SMEs within the European Union

In November 2009, the European Commission asked European Financial Reporting Advisory Group (EFRAG) to provide it with advice detailing on exactly which points the IFRS[®] for SMEs are incompatible with the European Union Accounting Directives (*Fourth Council Directive 78/660/EEC of 25 July 1978 based on Article 54(3)(g) of the Treaty on the annual accounts of certain types of companies and Seventh Council Directive 83/349/EEC of 13 June 1983 based on Article 54(3)(g) of the Treaty on consolidated accounts*).

In May 2010, the EFRAG issued its advice to the European Commission and considered following incompatibility with the European Union Accounting Directives:⁷

- the prohibition to present or describe any items of income and expense as extraordinary items in the statement of comprehensive income (or in the income statement, if presented);
- the requirement to measure financial instruments within the scope of *Section 12 Other Financial Instruments Issues* of the IFRS[®] for SMEs (non-basic financial instruments) at fair value;
- the requirement to presume the useful life of goodwill to be ten years if an entity is unable to make a reliable estimate of the useful life;
- the requirement to recognize immediately in profit or loss any negative goodwill;
- the requirement to present the amount receivable from equity instruments, issued before the entity receives the cash or other resources, as an offset to equity and not as an asset; and
- the prohibition to reverse an impairment loss recognized for goodwill.

⁷ European Financial Reporting Advisory Group. 2010. *EFRAG’s consultation on Compatibility Analysis: IFRS for SMEs and the EU Accounting Directives*. [online]. p. 1. Available at internet: <<http://www.efrag.org/files/EFRAG%20public%20letters/IFRS%20for%20SMEs%20compatibility%20analysis/The%20Feedback%20Statement.pdf>>, Accessed at 20.4.2013

For these reasons the IFRS[®] for SMEs cannot be used within the European Union, although the majority of member states believe that the European Commission nevertheless prohibit individual countries to adopt this Standard.

In order to further simplify the requirements for small and medium-sized entities, the European Commission started a review process of the Accounting Directives with the “think small first” as the guiding principle. European Commission proposes a new *Directive of the European parliament and of the Council on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings* repealing and replacing the Fourth Council Directive 78/660/EEC and Seventh Council Directive 83/349/EEC. The proposal simplifies the accounting requirements for small companies and improves the clarity and comparability of companies’ financial statements within the European Union.⁸

New Directive is not only designed to unite the Fourth Council Directive 78/660/EEC and Seventh Council Directive 83/349/EEC, but also certain accounting policies and principles, such as the principle of substance over the form and materiality, will become mandatory so as to increase the clarity of financial statements.

Within the European Union should new Accounting Directive totally exempt small companies from audit requirement and do not allow member states to make a choice. All public interest entities shall be subject to a statutory audit, regardless of their size.⁹

The proposal introduces a specific regime for small companies that will considerably reduce the administrative burden currently borne by small companies when they prepare their financial statements. It will limit disclosures by way of notes to the accounts to:¹⁰

- i. accounting policies;
- ii. guarantees, commitments, contingencies and arrangements that are not recognized in the balance sheet;
- iii. post-balance sheet events not recognized in the balance sheet;
- iv. long-term and secured debts; and
- v. related party transactions.

The proposal of new Accounting Directive plans to increase criteria for division the economic subjects into micro, small, medium-sized and large companies, which would theoretically allow the extension of the subjects that could prepare abridged financial statements. It is up to the decision of a member state whether this exemption allow or not.

The proposal of new Accounting Directive also mentions about possible mandatory implementation of the IFRS[®] for SMEs within the European Union. It was concluded that implementation of this Standard would not serve the objectives of simplification and reduction of administrative burden, because experiences with its implementation and application worldwide

⁸ EUROPEAN COMMISSION. 2011. *The EU Single Market – Review of the Accounting Directives*. [online]. Available at internet: <http://ec.europa.eu/internal_market/accounting/sme_accounting/review_directives/index_en.htm>, Accessed at 20.4.2013

⁹ EUROPEAN COMMISSION. 2011. *Directive of the European parliament and of the Council on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings*. [online]. p. 12. Available at internet: <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0684:FIN:EN:PDF>>, Accessed at 20.4.2013

¹⁰ EUROPEAN COMMISSION. 2011. *Directive of the European parliament and of the Council on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings*. [online]. p. 6. Available at internet: <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0684:FIN:EN:PDF>>, Accessed at 20.4.2013

are still lacking. Mandatory adoption of the IFRS® for SMEs is not being pursued within the new Accounting Directive, because the differences between this proposed Accounting Directive and IFRS® for SMEs are still remaining.

Currently, the European Council, Parliament and Commission agreed on the finalization of the new Accounting Directive. The full text of the final compromise on the Accounting Directive¹¹ doesn't mention about possible implementation of the IFRS® for SMEs within the European Union, but refers to the international accounting standards adopted in accordance with *Regulation (EC) No 1606/2002 of the European Parliament and of the Council of 19 July 2002 on the application of international accounting standard*. This reference should allow member states of the European Union to provide financial statements in accordance with the IFRS® for SMEs as soon as the differences between the Accounting Directive and the IFRS® for SMEs will be eliminated and the Standard will be accepted within the European Union legislation.

5 Conclusion

In recognition of the fact that the importance of small and medium-sized enterprises worldwide is increasing, there is the question whether it is necessary to implement an international regulation of their financial reporting. The IASB considers opinions of the users of financial statements prepared in accordance with the IFRS® for SMEs, professional organizations, regulatory authorities of individual countries and all other interested parties by revision of this Standard.

Responses to the *Request for Information – Comprehensive Review of the IFRS® for SMEs* indicate that the need to revise the IFRS® for SMEs exists, i.e. in the area of soliciting and accepting contributions, which do not automatically make an not-for-profit entity publicly accountable and an not-for-profit entity can use the IFRS® for SMEs if it otherwise qualifies under the *Section 1 Small and Medium-sized Entities*; the main changes from *IFRS 10 Consolidated Financial Statements* and *IFRS 3 Business Combinations (2008)* should be modified as appropriate for small and medium-sized entities; incorporation of those aspects of the fair value guidance in *IFRS 13 Fair Value Measurement* that are important for small and medium-sized entities, modified as appropriate for small and medium-sized entities including the appropriate disclosures and move the fair value guidance from *Section 11 Basic Financial Instruments* into a separate section on fair value measurement.

The issues mentioned above signal that the IFRS® for SMEs needs to be amended in the short period of time. The European Union is considering the IFRS® for SMEs that is why the European Commission asked the EFRAG to provide a comparison of the IFRS® for SMEs with the European Union Accounting Directives. The EFRAG issued its advice to the European Commission and considered six incomparable features with the European Union Accounting Directives. For these six reasons the IFRS® for SMEs cannot be used within the European Union, although the majority of member states believe that the European Commission nevertheless prohibit individual countries to adopt this Standard.

Currently, the European Council, Parliament and Commission agreed on the finalization of the new Accounting Directive that should simplify the accounting requirements for small companies and improve the clarity and comparability of companies' financial statements within the European Union.

Literature:

1. EUROPEAN COMMISSION. 2011. *Directive of the European parliament and of the Council on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings*. [online]. 87 p. Available at internet: <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0684:FIN:EN:PDF>>, Accessed at 20.4.2013
2. EUROPEAN COMMISSION. 2011. *Final Report „Future Skills Needs in Micro and Craft(-type) Enterprises up to 2020“*. [online]. Cologne, Hamburg, Vienna : Publications Office, 2011. 133 p. Available at internet: <http://ec.europa.eu/enterprise/policies/sme/promoting-entrepreneurship/files/skillsneeds_final_report_final_180211_en.pdf>, Accessed at 20.04.2013
3. EUROPEAN COMMISSION. 2011. *The EU Single Market – Review of the Accounting Directives*. [online]. Available at internet:<http://ec.europa.eu/internal_market/accounting/sme_accounting/review_directives/index_en.htm>, Accessed at 20.4.2013
4. EUROPEAN FINANCIAL REPORTING ADVISORY GROUP. 2010. *EFRAG's consultation on Compatibility Analysis: IFRS for SMEs and the EU Accounting Directives*. [online]. p. 15. Available at internet: <<http://www.efrag.org/files/EFRAG%20public%20letters/IFRS%20for%20SMEs%20compatibility%20analysis/The%20Feedback%20Statement.pdf>>, Accessed at 20.4.2013
5. IFRS FOUNDATION. 2012. *Comprehensive Review of the IFRS for SMEs*. [online]. 46 p. Available at internet: <http://www.ifrs.org/IFRS-for-SMEs/Documents/RequestforInformation_IFRSforSMEs_WEBSITE.pdf>, Accessed at 20.4.2013
6. IFRS FOUNDATION. 2012. *IFRS for SMEs – Comment Letters*. [online]. Available at internet: <http://www.ifrs.org/IFRS-for-SMEs/comment-letter/Pages/Home.aspx>, Accessed at 20.4.2013
7. IFRS FOUNDATION. 2012. *IFRS for SMEs – Draft Q&As*. [online]. Available at internet: <<http://www.ifrs.org/IFRS-for-SMEs/Pages/Draft.aspx>>, Accessed at 20.04.2013
8. THE COUNCIL OF THE EUROPEAN UNION. 2013. *Proposal for a Directive of the European Parliament and of the Council on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings (Accounting Directive) (First reading) – Approval of the final compromise text*. [online]. 215 p. Available at internet: <<http://register.consilium.europa.eu/pdf/en/13/st08/st08328.en13.pdf>>, Accessed at 20.4.2013

Primary Paper Section: A

Secondary Paper Section: AH

¹¹ THE COUNCIL OF THE EUROPEAN UNION. 2013. *Proposal for a Directive of the European Parliament and of the Council on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings (Accounting Directive) (First reading) – Approval of the final compromise text*. [online]. Available at internet: <<http://register.consilium.europa.eu/pdf/en/13/st08/st08328.en13.pdf>>, Accessed at 20.4.2013

ELEMENTS OF SOCIOLOGY OF MUSIC IN TODAY'S HISTORICAL MUSICOLOGY AND MUSIC ANALYSIS

*KAROLINA KIZIŃSKA

Adam Mickiewicz University, ul. Szamarzewskiego 89A Poznań,
Poland
e-mail: ^akarolinn@amu.edu.pl

Abstract: In this article I try to show the incorporation of the elements of sociology of music by such disciplines as historical musicology and music analysis. For that explain how sociology of music is understood, and how it is connected to critical theory, criticism or aesthetic autonomy. I cite some of the musicologists that wrote about doing analysis in context and broadening the research of musicology (e.g. Jim Samson, Joseph Kerman). I also present examples of the inclusion of sociology of music into historical musicology and music analysis – the approach of Richard Taruskin in and Suzanne Cusick. The aim was to clarify some of the recent changes in writing about music, that seem to be closer today to cultural studies than classical musicology.

Key words: sociology of music, sociomusicology, historical musicology, critical theory, Theodor Adorno, Richard Taruskin, Suzanne Cusick

1 Sociomusicology

Historical musicology and music analysis recently became open to incorporating elements of sociology of music. Understanding of the importance of analyzing music in context was not unfamiliar to musicology in general – the obvious example is ethnomusicology, which focuses on music culture(s) and which asks about the relationship between the society and the music it produces. So called “new musicology” aimed at broadening the frames of classical musicology, was the next step. It’s approach to music was cultural, analytical and critical. From it such subdisciplines as feminist musicology and sociology of music emerged. But historical musicology and analysis only lately became ready to include elements of sociology of music (as well as of feminist musicology) into its narratives. It is especially visible in the new version of general music history by Richard Taruskin¹ or Suzanne Cusick’s book on Francesca Caccini.² In this article I would like to summarize the discussion about analyzing music in context and critical analysis, and shortly show that many aspects of sociology of music are present in recent works musicologists (Richard Taruskin’s and Suzanne Cusick’s books will serve as examples).

Sociology of music is also called sociomusicology. As Charles Keil put it, sociomusicology is a „paleologism [...] for wording how musicking, socializing, and a certain kind of utopian aspiring or imagining all fit together. The most basic sociomusicological idea is that interacting sound constitute the abstraction ‘music’ in the same way that interacting people constitute the abstraction ‘society’; we can learn a lot by the close comparison [...] of interacting sounds and interacting people in specific times, places and contexts that we can’t learn by transcribing music, transcribing interviews, and interpreting these texts in terms of each other”.³ Norman Stanfield’s writes shortly about the history of sociomusicology, and how we can trace some of its characteristics back to Max Weber. In his *The Rational and Social Foundation of Music* that „linked the Western exploration of harmony with the European development of rationalisation, Weber theorized that it was the invention of Western notation, and not music per se, that set Europe on its singular path. This line of thought was pursued by the Canadians Harold Innis and his successor, Marshall McLuhan”.⁴

More recent definition describes sociomusicology as the work of scholars that is often „similar to ethnomusicology in terms of its exploration of the sociocultural context of music”.⁵ However „sociomusicology maintains less of an emphasis on ethnic and

national identity, and is not limited to ethnographic methods. Rather, sociomusicologists use a wide range of research methods and take a strong interest in observable behavior and musical interactions within the constraints of social structure. Sociomusicologists are more likely than ethnomusicologists to make use of surveys and economic data, for example, and tend to focus on musical practices in contemporary industrialized societies”.⁶ Classical musicology, and it’s way of emphasizing historiographic and analytical rather than sociological approaches to research, is the reason why sociomusicology was regarded as a small subdiscipline for a long time. But the increasing popularity of ethnomusicology and new musicology (as well as the emergence of interdisciplinary field of cultural studies), created a situation in which sociomusicology is not only a fully established field itself, but is also widely used by other subdisciplines, such as historical musicology or music analysis.⁷

To sum up, by definition, sociomusicology refers to “both an academic subfield of sociology that is concerned with music, as well as a subfield of musicology that focuses on social aspects of musical behavior and the role of music in society. It is the study of music as a social phenomenon or the study of the social aspects of music”.⁸ In Ivo Supićić’s opinion, „the social functions of music evolve, diversify, and are transformed, reflecting different aspects according to the global societies from which they emerge. The social functions and references of music derive from its social conditionings allowing music to act as an important factor that contributes towards cultural change. Music influences and reflects many parts of society such as politics, religion, current events, and popular culture”.⁹ So sociology of music (sociomusicology) is a discipline that focuses on the relations between music and people who create, perform and „use” it.¹⁰ It lays between sociology and musicology, and the aspects it deals with are (after Theodor Adorno): musical institutions, musical jobs and their role in the society, the way music functions in the society, social functions of music, changes of the musical preferences.¹¹

1.1 Critical theory, analysis in context

Adorno, sociologist and musician, believed that “critical theory” (that he was one of the founders of), a subdiscipline of sociology that was created in the 1930s, could also be applied to music.¹² Nicholas Cook reminds us, that the purpose of critical theory is “to expose the workings of ideology in everyday life, revealing ‘uncritically’ accepted beliefs and so returning to individuals the power to decide for themselves what they will believe”.¹³ Origins of critical theory lay in Marxism, but it became a culture critique that effected also musicology.¹⁴ Adorno’s work contributed to the emergence of the “critical” viewpoint (that Joseph Kerman calls for, as I explain further in this article).¹⁵ Critical theory is, as Cook puts it, “in essence of the theory of power, and it sees power largely in terms of the institutions through which it is channeled”.¹⁶ That’s why institutions are crucial in “naturalizing power structures”, so that we think that unequal distribution of power across the world is natural.¹⁷ The discussion in musicology about canon formation is connected with that process of naturalization. The new question was asked: what is “the role of musical institutions in

⁶ Ibidem.

⁷ Ibidem.

⁸ <http://societyandmusic.wordpress.com/2012/02/18/what-is-sociomusicology/>.

⁹ Ibidem.

¹⁰ *An Introduction To Music Studies*, ed. J.P.E. Harper-Scott, J. Samson, Cambridge 2009, p. 43.

¹¹ T. Adorno, *O fetyszyzmie w muzyce i o regresji słuchania*, [in:] T. Adorno, *Sztuka i sztuki*, Warszawa 1990, p. 100-130.

¹² N. Cook, *Music. A Very Short Introduction*, New York 2000, p. 102.

¹³ Ibidem.

¹⁴ Ibidem.

¹⁵ Ibidem, p. 103.

¹⁶ Ibidem.

¹⁷ Ibidem.

¹ R. Taruskin, *Oxford History Of Western Music*, 5 volumes, New York 2010.

² S. Cusick, *Francesca Caccini at the Medici Court. Music and the Circulation of Power*, Chicago 2009.

³ Ch. Keil, *Call and Response, Applied Sociomusicology and Performative Studies*, „Ethnomusicology”, vol. 42 no. 2, Spring/Summer 1998.

⁴ N. Stanfield, *Sociomusicology*, <http://blogs.ubc.ca/normanstanfield/music-matters/>.

⁵ <http://dictionary.sensagent.com/sociomusicology/en-en/>.

constructing, maintaining and naturalizing this canon?"¹⁸ Also the 'critical' orientation became an important aspect of gender studies (so at the same time of feminist/gender musicology) as well as historical musicology and music analysis. Jim Samson talks about critical theory in terms of explaining the 'project' of aesthetic autonomy. As he explains in his article *Analysis in Context*, in the book *Rethinking Music*¹⁹, "the more art disengaged itself from the social world (and thus gained – as Adorno saw it – critical acumen), the more easily it could be manipulated by that world, and the less effectively it could adopt a disinterested critical stance".²⁰ And that, he says after Peter Bürger, marked a failure of aesthetic autonomy. And he also calls for including social aspects into the music analysis, seeing it as the alternative available for analysts today: "a redefinition of the province of music theory will be a prerequisite for any further advance in the professional discipline of analysis. Such a redefinition would step beyond the identification of musical materials, confronting the social nature of those materials and exploring the mechanisms involved in their realization and perception".²¹ So formal analysis that does not go beyond the material itself is no longer enough. The context for the score is needed as much as it is for its creator.

Now let's explain what Joseph Kerman means when he calls for criticism in musicology. As he writes in his famous *Contemplating Music. Challenges to Musicology*²², criticism is "the study of the meaning and value of art works".²³ In Kerman's opinion, it is history, and not music theory or ethnomusicology, that is the most solid basis for criticism.²⁴ His conception of history is also more comprehensive than that of some conventional musicologists.²⁵ And that brings it closer to the kind of history (historical musicology) I am talking about in this article – the one that also includes elements of the sociology of music. Obviously the meaning and value of art works that Kerman writes about, can only be such to people. So analyzing the social aspects is crucial in following the 'critical' approach. As Derek Scott points out, social factors affect our response to music.²⁶ And that in a variety of ways. For example changing social factors can "affect our response to works which may have previously provoked quite different reactions: *Così fan tutte* is not the same after the cultural impact of modern feminism, and *Peter Grimes* has become problematic due to present concern about child abuse; we are no longer ready to accept Grimes as a tortured idealist".²⁷

Jim Samson talks not only about aesthetic autonomy in the abovementioned article, but also, as its title suggests, about analysis in context. In his opinion, music is so specific, and "its meaning so embedded in its essence" that researchers are forced "to borrow from other systems of thought in order to attempt any kind of description at all".²⁸ Only examining music in context allows to reach deeper into its meaning, and using other disciplines' terminology or theories allows to talk and write about music, as well as understand it. This is why using some of the sociology approaches to music serves as a way of understanding how music functions in society and culture. Samson even proves his point by talking about the history of this phenomena (of the fact that musicology needs other disciplines to capture music). He reminds us about ancient times and Greeks, who used mathematics to describe music.²⁹ Then about Renaissance-Baroque period, when two different categorization of music were favoured – one linking music to verbal language, and one linking it to *ars oratoria* (in the eighteenth century).³⁰ Also visual and spatial arts were used as models for analyzing

music (e.g. in the late nineteenth and early twentieth centuries).³¹ And let's not forget about biographical, social, and literary tropes that, we might say, dominated nineteenth-century criticism.³² The attempts to 'ground' music³³ embraces social cause, but also, as Samson emphasizes, they extend to so called 'social trace' ("the imprint of the social world on the musical materials themselves"³⁴), and to the social production of meanings ("the subject-matter of a reception history"³⁵). As Samson further explains, analysis engaged by this larger enterprise usually addresses the second of these levels (social trace), but it may do so by using several strategies:³⁶

- By making a notion of a 'double-root' for the musical work (social and stylistic),³⁷ usually "through homologies of compositional and contextual constructions" – the essence of sociological poetics
- By forming one or several strands of a "'thick' web of metaphors, metonyms or allegories"³⁸ (the work becomes encircled by layers of possible meaning)
- By making (through semiotic theory) possible "series of stepping-stones linking 'neutral' musical materials to formal, generic and narrative codes, and ultimately - by way of these codes – to the world beyond music"

To sum up, Samson says that analysis may confront, be absorbed by, or absorb context. "The emphasis lies rather on inclusion, the 'bringing together' of disparate perspectives and separated categories [...]".³⁹ And that is what Richard Taruskin and Suzanne Cusick do. They include elements of sociology of music into both their historical and analytical parts of research, but for the need of this article I will briefly focus on Taruskin's historical part, and Cusick's analytical part.

1.2 Examples

Richard Taruskin, in his *Oxford History of Western Music* focuses not on events in the history of music, but on people that caused those events. That means that he rejects the common way of writing about music history (we might call it a "classical" way), that does not take into account agents standing behind the historical facts. In his opinion statements and actions should always be included, because these are "the essential facts of human history".⁴⁰ Taruskin's emphasis on the "human aspect" in his narratives, as I had the chance to explain more broadly in one of my articles is backed by nothing else but his interest in sociology.⁴¹ Particularly, in Howard Becker's book "Art Worlds" on sociology of art. This clearly shows where are the origins of the existence of sociology of music in his histories. And he remains true to talking about the history of music in a broad context of societies and cultures throughout all of the five volumes of his book.

Prin Cusick devoted her book to the life and works of a seventeenth-century Italian composer, Francesca Caccini. Cusick decided to analyze Francesca's music from the feminist perspective, so she looked for gender aspects in Caccini's works (let these fragments be the example: when she writes about Francesca's collection *Il Primo Libro*, she defines it as a "course of study that winks simultaneously at problems of vocality and

¹⁸ Ibidem.

¹⁹ J. Samson, *Analysis in Context*, [in:] *Rethinking Music*, ed. N. Cook, M. Everist, New York 2001, pp. 35-54.

²⁰ Ibidem, p. 51.

²¹ Ibidem, p. 53.

²² J. Kerman, *Contemplating Music. Challenges to Musicology*, Harvard 1985.

²³ Ibidem, p. 16.

²⁴ Ibidem, p. 19.

²⁵ Ibidem.

²⁶ *Music, Culture and Society. A Reader*, ed. D. B. Scott, New York 2002, p. 13.

²⁷ Ibidem.

²⁸ J. Samson, op. cit., p. 47.

²⁹ Ibidem.

³⁰ Ibidem, p. 48.

³¹ Ibidem, p. 49.

³² Ibidem, p. 50.

³³ See e.g. Richard Leppert and Susan McClary, *Music and Society: The Politics of Composition, Performance and Reception*, Cambridge 1987". After: Ibidem.

³⁴ Ibidem, p. 50.

³⁵ Ibidem.

³⁶ Ibidem.

³⁷ "The notion of a 'double root', social and stylistic, was developed for art history especially by Heinrich Wölfflin; see his *Principles of Art History*, New York 1950". After: Ibidem.

³⁸ "See in particular Gary Tomlinson, *The Web of Culture: A Context for Musicology*, „19th-Century Music", 7 (1984), pp. 350-62. Also Clifford Geertz, *Thick Description: Toward an Interpretive Theory of Culture* [in:] *The Interpretation of Cultures: Selected Essays*, New York 1973, pp. 3-30". After: Ibidem.

³⁹ Ibidem, p. 51.

⁴⁰ Taruskin, op. cit.,

⁴¹ K. Kizińska, *Richard Taruskin's Historical/New musicology and the Topic of 'Women in Music'*, *International Handbook of Academic Research and Teaching. Proceedings of Intellectbase International Consortium*, Volume 25, Winter 2012 – Las Vegas, NV, USA.

problems of womanhood”,⁴² in which the composer shows “paradoxes of gender and problems of musical technique as interrelated dilemmas to be simultaneously resolved”⁴³ Such an approach, characteristic for feminist musicology, is also connected with the aims of the sociology of music. There is an inclusion of social aspects (such as the experience of the artists as a member of the specific society) into the analysis of music (see again Jim Samson’s explanation of this process above). Of course the most important fact for Cusick, is that Caccini was a woman in a particular musical culture of the Medici Court in Florence. From explaining in details Francesca’s struggles and success in this social environment, she goes to analyzing her music. And the music is seen as something mirroring the biography.

These short examples were to end the article of a more theoretical character. I tried to show the incorporation of the elements of sociology of music by such disciplines as historical musicology and music analysis. For that I first explained in detail how sociology of music (or sociomusicology) is understood, and how it is connected to critical theory, criticism or aesthetic autonomy. I also cited some of the musicologists that wrote about doing analysis in context and broadening the research of musicology. The aim was to clarify some of the recent changes in writing about music, that seem to be closer today to cultural studies than classical musicology.

Literature:

1. Adorno, T.: *O fetyszymie w muzyce i o regresji sluchania*, [in:] Adorno T.: *Sztuka i sztuki*, Warszawa: Państwowy Instytut Wydawniczy, 1990. pp. 100-130. ISBN 83-06019-08-3.
2. Cook, N.: *Music. A Very Short Introduction*, Oxford: Oxford University Press, 2000. 145 p. ISBN 01-92853-82-1.
3. Cusick, S.: *Francesca Caccini at the Medici Court. Music and the Circulation of Power*, Chicago and London: The University of Chicago Press, 2009. 445 p. ISBN 02-26132-12-9.
4. Harper-Scott, J.P.E., Samson, J. (ed.): *An Introduction To Music Studies*, Cambridge: Cambridge University Press, 2009. 296 p. ISBN 05-21603-80-3.
5. Keil, Ch.: *Call and Response, Applied Sociomusicology and Performative Studies*, „Ethnomusicology”, vol. 42 no. 2, Spring/Summer 1998.
6. Kerman, J., *Contemplating Music. Challenges to Musicology*, Cambridge: Harvard University Press, 1985. 255 p. ISBN 06-74166-78-7.
7. Samson, J.: *Analysis in Context*, [in:] Cook N., Everist M.: *Rethinking Music*, Oxford: Oxford University Press, 2001. 574 p. ISBN 01-98790-04-X.
8. Scott, D. B. (ed.): *Music, Culture and Society. A Reader*, Oxford: Oxford University Press, 2002. 238 p. ISBN 01-98790-12-0.
9. Taruskin, R.: *Oxford History Of Western Music*, 5 volumes, Oxford: Oxford University Press, 2010.

Primary Paper Section: A

Secondary Paper Section: B, L, O

⁴² S. Cusick, op. cit., p. 114.

⁴³ Ibidem.

ANALYSIS OF INTERGENERATIONAL POLICY MODELS

³ANDRZEJ KLIMCZUK

*Collegium of Socio-Economic Policy, Warsaw School of Economics, al. Niepodległości 162, 02-554 Warszawa, Poland
email: "aklimczuk@gazeta.pl"*

Abstract: Contemporary demographic processes forcing increasing attention to the problems of relationships and dependencies between the different age groups. The ageing of the population in each society leads to changes in the contacts between young people, adults and the elderly. It is reasonable to undertake research on the concept of "solidarity of generations". Maintaining relationships without generational conflict requires actions in the field of social policy known as intergenerational policy. Aim of this article is to present some of its models, which allow not only to analyze the changes in the various communities, but also to create recommendations for public intervention. Description will include activities at the international, national, regional and local levels.

Keywords: intergenerational policy; policy analysis; social policy towards old age and older people; society for all ages; strategic management.

1 Introduction

One of the key challenges for the European Union at the beginning of the 21st century is the rapid ageing its population. This process leads to long-term changes in the intergenerational relationships. The growing number of older people can be considered either as a threat or as an opportunity to improve the quality of life. On the one hand, it is noted that it leads to negative losses in the labor market, problems with maintaining health systems and pensions. On the other demographic change forces the investment in architecture free from functional barriers, lifelong learning, adapting products and services to meet the needs of the elderly. Particularly important is topic of changes in the relationship between young people, adults and elderly. To avoid the risk of intergenerational conflict and reduce the scale of age discrimination is necessary to manage relationships between the generations through the interventions of this social issues by public, private and non-governmental entities. Coordination of goals and objectives can be regulated by models of intergenerational policy. Aim of the article is to present some models that can be used both for research activities in each country at different levels of the social structure, as well as to create specific recommendations and action plans.

2 Intergenerational policy models

Under the concept of generation can be interpreted most generally community of "individuals belonging to the age group of people born at about the same time"¹, or otherwise: "people born in the same period (usually within one year), which social and/or demographic characteristics are considered analytically in time"².

Pros P. Szukalski can be identified types of relations between generations³. These are intergenerational: relationship, bond, solidarity and contract (table 1). While relationships and contract are terms value-free, while bond and solidarity are positive characterized. Researcher also points to derivatives concepts, which have positive connotations (integration) and negative (war, conflict, disintegration)⁴. It should be noted that the presence of contradictions existing between them leads to concept of "intergenerational ambivalence" – coexistence of the different attitudes and ways of thinking about relationships between both micro (individual families) and macro (entire societies) levels.

Table 1. Types of intergenerational relationships and their scope

Concept	Key features	Range of obligations
Inter-generational relationship	generally relationship between individuals or groups from different generations interactions, opinions, attitudes, stereotypes	lack of obligations
Inter-generational bond	sense of biological, cultural, economic communication with other generations, positive attitudes towards individuals of other generations	"we should do something" attitude
Inter-generational solidarity	mutual responsibility towards other generations, considering their activities, interest, needs and opinions by other generation	"we must do something" attitude
Inter-generational contract/agreement	written or not rules of redistribution of social status (wealth, power, prestige) between the generations	"let's do this and this" attitude

Source: based on P. Szukalski, *Czym jest solidarność międzypokoleniowa?*, [in:] D. Kałuża, P. Szukalski (eds.), *Jakość życia seniorów w XXI wieku z perspektywy polityki społecznej*, Wyd. Biblioteka, Łódź 2010, p. 87-88; P. Szukalski, *Solidarność pokoleń. Dylematy relacji międzypokoleniowych*, Wyd. Uniwersytetu Łódzkiego, Łódź 2012, p. 47-49.

Through the intergenerational policy could be understood collections of activities focused on the development and implementation of a specific contract between the generations. This policy applies to establishing and maintaining "regime" – rules defining the shape of relationships between generations, written or not, the principles present in law, religion, ethics and customs⁵. This policy includes conducting the discourse, negotiating use of ethical and ideological arguments on the scales, orientations and traces of resources redistribution between generations. This policy may be forced upon by force or through symbolic violence by one generation to others, as well as co-created through dialogue.

Literature review enables indicating at least five models of intergenerational policy. The first three of them allow primarily work on theoretical and research work on actions in this area (intergenerational social integration; linking strategies of social policy towards old age and elderly people; intergenerational policy dimensions). While the next two refer to interventions promoted and supervised by international organizations (United Nations; European Union).

2.1 Intergenerational social integration

Intergenerational social integration are activities aimed at the consolidation, merger individuals and groups representing different generations, and thus increase relationships strength and solidarity of generations⁶. These actions relate to raising awareness of generations interdependence and take into account the effects of choices and actions of individuals and groups from one generation to another. Integration indirectly affects the intergenerational contract rules.

To the analysis of integration can be used concept of C. Offe, which points to its cultural, economic and political forms and manifestations on the macro-, meso- and micro-structural levels of society (table 2)⁷. This approach allows drawing attention to generational differences such as division of labor, as recognized means of conflict resolution, governance institutions, rule of law,

¹ K. Olechnicki, P. Załęcki, *Słownik socjologiczny*, Graffiti BC, Toruń 2002, p. 29.

² A. A. Zych, *Leksykon gerontologii*, Impuls, Kraków 2007, p. 61.

³ P. Szukalski, *Czym jest solidarność międzypokoleniowa?*, [in:] D. Kałuża, P. Szukalski (eds.), *Jakość życia seniorów w XXI wieku z perspektywy polityki społecznej*, Wyd. Biblioteka, Łódź 2010, p. 74-91; P. Szukalski, *Solidarność pokoleń. Dylematy relacji międzypokoleniowych*, Wyd. Uniwersytetu Łódzkiego, Łódź 2012, p. 47-80.

⁴ P. Szukalski, *Solidarność pokoleń...*, op. cit., p. 49-50.

⁵ Compare: P. Szukalski, *Solidarność pokoleń...*, op. cit., p. 48.

⁶ Compare: P. Szukalski, *Czym jest solidarność międzypokoleniowa?*, op. cit., p. 87; P. Szukalski, *Solidarność pokoleń...*, op. cit., p. 49.

⁷ C. Offe, *Drogi transformacji*, PWN, Kraków 1999, p. 183-184.

access to voting rights, activities of work and leisure time, in the use of media technology and accumulation of cultural heritage⁸. C. Offe concept underscores also meso-structural level - between the state and family, and by this generation analysis and integration activities in local communities, political parties, non-governmental organizations and professional corporations.

Table 2. Forms and levels of social integration

Forms of integration	Symptoms of integration at different levels of society		
	Macro	Meso	Micro
Cultural	unity consciousness which is reflected in the history, language, tradition, religion	existence of ideology and parties which in its actions and programs are guided by cultural values	anthropological basis for social action, the cultural tradition of shaping the identity of individuals
Economic	production capacities to meet the needs of material and social security	presence of the parties and organizations which recognize their identity and program in economic terms	reasonably carried interests and needs of clients of the welfare state
Political	universality of institutions capable of damping, adjustment and centralization of political conflict on the basis of constitutional regulations	parties and organizations concentration on certain principles and the institutions of law and constitutional order	ability of citizens to ensure the protection of their rights in action and wise regulation by institutions

Source: C. Offe, *Drogi transformacji*, PWN, Kraków 1999, p. 184.

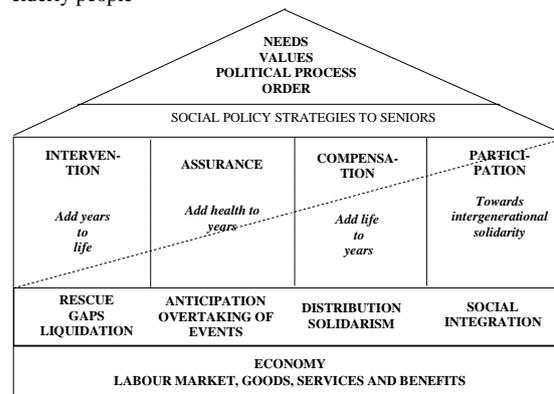
2.2 Linking strategies of social policy towards old age and elderly people

Model proposed by Z. Woźniak can be considered as a broader concept that allows to design and analysis of intergenerational policies. It concerns social policy towards old age and elderly people understood as “a set of goals, strategies and actions of systemic and legislative action, both at the national, regional and local levels in order to maintain and/or improving the social status and living conditions of the elderly, to increase their ability to lead an active and independent life”⁹.

This model assumes a combination of four strategies that should include general and specific tasks (drawing 1). These are: (1) “add years to life” – short-term, intervention-insurance, oriented to dealing with shortages, replenishment of social deficits and rescue; (2) “add health to years” – mid-term (5-10 years), insurance-compensation, including preventive and promotional programs for anticipate negative phenomena, events and processes, mainly relating to health; (3) “add life to years” – perennial compensating-participatory strategy, including prevention programs on preparing for old age, ability for self-care, improving quality of life, addressed to oldest of seniors groups; (4) “towards intergenerational solidarity” – long-term, participatory-integration, dominant strategy in the future using “Society For All Ages” concept – adaptation to the needs,

abilities and skills of all citizens, and activating as well as using the potential of the various generations.

Drawing 1. Strategies of social policy considering old age and elderly people



Source: Z. Woźniak, *Priorytety w programach gerontologicznych organizacji międzynarodowych i struktur europejskich jako przesłanka budowy polityki społecznej wobec starości i osób starszych*, [in:] M. Szlązak (ed.), *Starzenie się populacji wyzwaniem dla polityki społecznej. Materiały konferencyjne*, ROPS, Kraków 2003, p. 28.

Intergenerational policy can therefore be considered as a combination of several approaches and direction of change in the design of specific programs and strategies.

2.3 Intergenerational policy dimensions

A different approach propose J. Sáez, S. Pinazo and M. Sánchez by indicating the intergenerational policy dimensions¹⁰. According to the researchers this concept emerges through the implementation of development projects, generations cooperation as well as work of research entities and institutions in carrying out intergenerational projects under certain conditions. Interdependence among generations refers to the integration of the three dimensions: place of life, life cycle and life project (drawing 2). Those dimensions correspond to: environments which facilitate the intergenerational relations, interpretations and stereotypes about stages of life as well as visions of the future showing individuals their rights and opportunities in the case of losing different types of resources. Intergenerational policy should include joined together strategies and programs for: in the first dimension, environmental and architectural policies, in a second (inter)cultural and educational policies as well as in the third economics, labour and healthcare policies. It should also take into account the decisions agreed upon by many stakeholders, ethical explanation of the meaning of actions and practical possibilities of their implementation¹¹.

Discussed concept can be used for policy analysis at central, regional and local. Indirectly, also points to building solidarity of generations by adjusting to people of all ages, not only the life of individual families, but also public spaces significant for local communities (municipalities, districts). It is possible to create (or convert existing) facilities and institutions as “intergenerational shared sites”, as a those which meet at the same time the needs of children, youth and seniors, as well as serve to shape their relationship¹². This includes a joint running nursing homes and kindergartens, senior clubs and schools, homes for the elderly and homeless mothers, day care for seniors and child development centers, retirement and academic communities. Programs of this kind will help to stimulate the exchange between the generations and create a number of benefits to the participants and their environment (table 3).

⁸ Compare: A. Klimczuk, *Bariery i perspektywy integracji międzypokoleniowej we współczesnej Polsce*, [in:] D. Kaluza, P. Szukalski (eds.), *Jakość życia seniorów w XXI wieku z perspektywy polityki społecznej*, Wyd. Biblioteka, Łódź 2010, p. 94-95, 103.

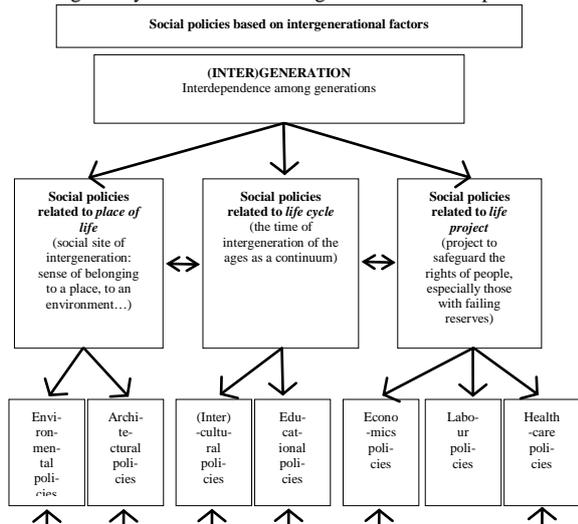
⁹ Z. Woźniak, *Priorytety w programach gerontologicznych organizacji międzynarodowych i struktur europejskich jako przesłanka budowy polityki społecznej wobec starości i osób starszych*, [in:] M. Szlązak (ed.), *Starzenie się populacji wyzwaniem dla polityki społecznej. Materiały konferencyjne*, ROPS, Kraków 2003, p. 28.

¹⁰ J. Sáez, S. Pinazo, M. Sánchez, *Fostering intergenerational policies*, [in:] M. Sánchez (eds.), *Intergenerational programmes. Towards a society for all ages*, “la Caixa” Foundation, Barcelona 2007, p. 186-191.

¹¹ *Ibidem*, p. 200.

¹² S.E. Jarrott, A.P.C. Weintraub, *Intergenerational shared sites: A practical model*, [in:] M. Sánchez (eds.), *Intergenerational programmes...*, op. cit., p. 139.

Drawing 2. Key dimensions of intergenerational social policies



Source: J. Sáez, S. Pinazo, M. Sánchez, *Fostering intergenerational policies*, [in:] M. Sánchez (eds.), *Intergenerational programmes. Towards a society for all ages*, “la Caixa” Foundation, Barcelona 2007, p. 202.

Table 3. Benefits of intergenerational exchange

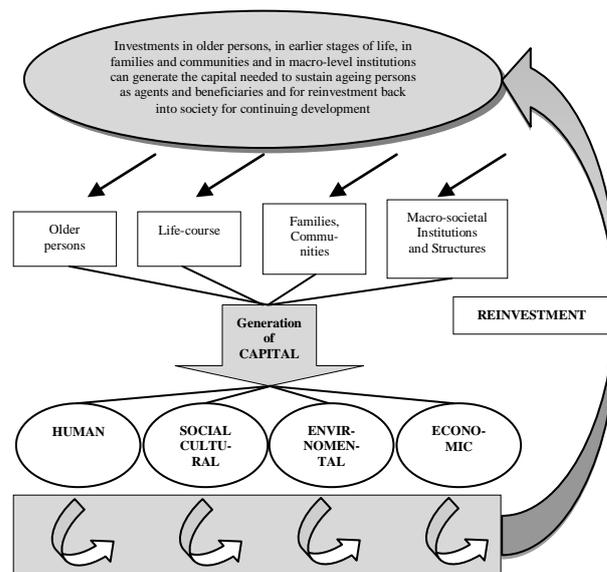
For older persons	For children and young people	For the community
<ul style="list-style-type: none"> Better mood, more vitality Increased ability to cope with physical and mental illness Increased perception of self-worth Opportunities to learn Escape from isolation Renewed appreciation for their past experiences Reintegration in the family and community life Friendships with younger people Receipt of practical help, such as for shopping or transport Spending time with young people combats feelings of isolation Increased self-esteem and motivation Sharing experiences with an audience which appreciates their achievements Respect, honour and recognition of their contribution to the community Learning about young people Development of skills, especially social skills and the use of new technologies Transmitting traditions, culture and language Enjoy themselves in physical activities Exposure to diversity Increased strength to cope with adversity 	<ul style="list-style-type: none"> Increased sense of worth, self-esteem and self-confidence Less loneliness and isolation Access to adult support at difficult times Enhanced sense of social responsibility More positive perception of older persons Greater awareness of the heterogeneity of older persons More practical skills Better school results Better reading habits Less involvement in violence and drug use Better health More optimism Strength in times of adversity Increased sense of civic and community responsibility Learning about one's history and origins and the history of others Building one's own life history Enjoyment and fun Gain respect for the achievements of adults Receive support for one's own professional career Alternative leisure activities to cope with problems, particularly drugs, violence and antisocial conduct 	<ul style="list-style-type: none"> Reconstruction of social works Development of sense of community Construction of a more inclusive society Breaking down barriers and stereotypes Enhanced social cohesion Construct and strengthen culture Relieve parental pressure Build social networks and develop bridges in the community Change stereotypes Provide civic behaviour models Build, maintain and revitalise community opportunities and public infrastructures Produce public art Develop volunteer work Provide volunteers for community services and encourage people to work with others in community groups Create stories in common Care for the environment

Source: based on J. MacCallum (et al), *Community building through intergenerational exchange programs*, NYARS, Canberra 2006; cited by: S. Pinazo, M. Kaplan, *The benefits of intergenerational programmes*, [in:] M. Sánchez (eds.), *Intergenerational programmes. Towards a society for all ages*, “la Caixa” Foundation, Barcelona 2007, p. 72, 75, 84.

2.4 United Nations “Society For All Ages“ concept

Proposed actions for solidarity of generations are also created by international organizations. At this point, attention should paid only to the most important ones. First of all, intergenerational policies are accompanied by promoting active ageing policy – concept disseminated since the 90s mainly due to the World Health Organization, which combines the desire to maintain the productivity of older people with their quality of life as well as mental and physical well-being. This policy stresses the need to reduce age discrimination, multidimensional education and citizen participation in protecting the economic, political and social rights of elderly which is conducive to improve health and address actions to family and local communities¹³.

Drawing 3. Flow between elements and capitals in framework for a “Society For All Ages“



Source: *Highlights of an expert consultation on developing a policy framework for a society for all ages - From the Annex of A54/268 - Report of the Secretary General International Year of Older Persons 1999: activities and legacies*, United Nations, www.un.org/esa/socdev/ageing/policyframework.html [04.01.2011].

At the global level both of these policies are part of “Madrid International Plan of Action on Ageing“ which is coordinated since 2002 by the United Nations and which contains recommendations for national governments¹⁴. The core of this approach is the created by UN concept in 90s “Society For All Ages” (drawing 3)¹⁵. Generally, it assumes: (1) use and reinvestment in the life cycle a human, socio-cultural, economic and environmental capitals; (2) adaptation of families, communities and countries infrastructure into of the demographic structure; as well as (3) carrying out activities on behalf of: active ageing, lifelong learning, promote healthy lifestyles, intergenerational relations integration, flexibility of labor markets, the development of age-friendly environments, civil society development, sustainable social policies to prevent poverty and exclusion the elderly.

2.5 European Union concept of “Silver economy”

In the European Union debate on active ageing was spurred in 1999 in Communication “Towards a Europe for All Ages -

¹³ *Active Ageing. A Policy Framework*, WHO, Geneva 2002.
¹⁴ *Report of the Second World Assembly on Ageing Madrid. Madrid International Plan of Action on Ageing*, United Nations, New York 2002.
¹⁵ *Highlights of an expert consultation on developing a policy framework for a society for all ages - From the Annex of A54/268 - Report of the Secretary General International Year of Older Persons 1999: activities and legacies*, United Nations, www.un.org/esa/socdev/ageing/policyframework.html [04.01.2011].

Promoting Prosperity and Intergenerational Solidarity”¹⁶ issued on the occasion of the celebration of the UN International Year of seniors as well as in 2012 by the organization European Year for Active Ageing and Solidarity between Generations. Intergenerational policies and active ageing are disseminated for a number spheres of socio-economic life¹⁷. Noteworthy in relation to the labor market are age management programs in organizations as part of a broader strategy for diversity managing¹⁸. The essence of the the proposed changes is taking into account differences in age of employees in the processes: recruitment, training, development and promotion; flexible forms of employment and ergonomic design of work stations, as well as change in attitudes towards older workers.

Another, more complex, recommended by the European Commission approach is to build a “silver economy”¹⁹. Wherein as the researchers of this phenomenon note is not only the market of goods and services for the wealthy elderly, but also special arrangements for trade between economic operators to allow adaptation to the ageing workforce; as well as ideas of “universal design” and “intergenerational relations” aimed at adaptation of goods and services to people of all ages, physical and cognitive capabilities, which can lead to improve social social integration²⁰.

3 Conclusions

The purpose of the article was to present selected models of intergenerational policy. It is a concept of social policy related to the ageing of the population, which specifically refers to the maintenance of good relations between the generations of young people, adults and elderly. Intergenerational policy allows to take action at different levels of society aimed at preventing and mitigating the effects of generational conflict as well as age discrimination. Discusses five models - three for the research and construction recommendations, as well as two models promoted and controlled by international organizations.

It is reasonable to identify a number of practical recommendations for action arising from the review. Given the increase of multigenerationality it is reasonable to continue to support activities intergenerational integration and policy. This approach should be taken into account in the specific policies (including population, family, education, migration). It is important to make efforts for the development of the national silver economy models, taking into account more activities in line with the policy of innovation. Intergenerational policies should aim to increase the benefits of cooperation by elderly (grandparents) and young (grandchildren) and their social environment. It is appropriate to take into account in the proposed actions solutions for eliminating overlapping generations divisions on territorial dimension and with situation on the labor market.

The following directions for further research on solidarity of generations may be proposed. Reasonable are studies on scale and signs of disintegration in intergenerational relations in particular of social, cultural, economic and political spheres. Presented models allows construction of discourse analysis on intergenerational policies and contracts as well as changes in the life cycle. Analyze of

compatibility of national strategy papers on solidarity of generations with recommendations of international organizations are needed. Research is also needed on the possible development of a common intergenerational relations spaces in local communities.

Literature:

1. *Active Ageing. A Policy Framework*. Geneva: WHO, 2002. 60p.
2. *Communication from the Commission. Towards a Europe for All Ages - Promoting Prosperity and Intergenerational Solidarity*. COM(1999) 221. Brussels: 21.05.1999. 26p.
3. *Europe's demographic future. Facts and figures on challenges and opportunities*. Luxembourg: European Commission 2007. 184 p. ISBN 978-92-79-07043-3.
4. *Highlights of an expert consultation on developing a policy framework for a society for all ages - From the Annex of A54/268 - Report of the Secretary General International Year of Older Persons 1999: activities and legacies*. United Nations, www.un.org/esa/socdev/ageing/policyframework.htm 1 [04.01.2011].
5. Jarrott, S.E., Weintraub, A.P.C. *Intergenerational shared sites: A practical model*, [in:] M. Sánchez (eds.), *Intergenerational programmes. Towards a society for all ages*. Barcelona: „la Caixa” Foundation, 2007. 125-147p.
6. Klimczuk, A. *Bariery i perspektywy integracji międzypokoleniowej we współczesnej Polsce*, [in:] D. Kałuża, P. Szukalski (eds.), *Jakość życia seniorów w XXI wieku z perspektywy polityki społecznej*. Łódź: Wyd. Biblioteka, 2010. 92-107 p. ISBN 978-83-62378-08-1.
7. Olechnicki, K., Załęcki, P. *Słownik socjologiczny*. Toruń: Graffiti BC, 2002. 262p. ISBN 83-900784-1-4.
8. Offe, C. *Drogi transformacji*. Kraków: PWN, 1999. 290p. ISBN 83-01-12900-X.
9. Pinazo, S., Kaplan, M. *The benefits of intergenerational programmes*, [in:] M. Sánchez (eds.), *Intergenerational programmes. Towards a society for all ages*. Barcelona: „la Caixa” Foundation, 2007. 64-91p.
10. *Report of the Second World Assembly on Ageing Madrid. Madrid International Plan of Action on Ageing*. New York: United Nations, 2002. 73p. ISBN 92-1-130221-8.
11. Sáez, J., Pinazo, S., Sánchez, M. *Fostering intergenerational policies*, [in:] M. Sánchez (eds.), *Intergenerational programmes. Towards a society for all ages*. Barcelona: „la Caixa” Foundation, 2007. 184-203p.
12. Szukalski, P. *Czym jest solidarność międzypokoleniowa?*, [in:] D. Kałuża, P. Szukalski (eds.), *Jakość życia seniorów w XXI wieku z perspektywy polityki społecznej*. Łódź: Wyd. Biblioteka, 2010. 74-91p. ISBN 978-83-62378-08-1.
13. Szukalski, P. *Solidarność pokoleń. Dylematy relacji międzypokoleniowych*. Łódź: Wyd. Uniwersytetu Łódzkiego, 2012. 206p. ISBN 978-83-7525-694-9.
14. *The EU contribution to active ageing and solidarity between generations*. Luxembourg: European Commission 2012. 24p. ISBN 978-92-79-25123-8.
15. Walker, A. *Active ageing in employment. Its meaning and potential*. „Asia-Pacific Review”, Vol. 13, No. 1, 2006. 78-93p.
16. Woźniak, Z. *Priorytety w programach gerontologicznych organizacji międzynarodowych i struktur europejskich jako przesłanka budowy polityki społecznej wobec starości i osób starszych*, [in:] M. Szlązak (ed.), *Starzenie się populacji wyzwaniem dla polityki społecznej. Materiały konferencyjne*. Kraków, ROPS: 2003. 14-33p. ISBN 83-918380-1-3.
17. Zych, A.A. *Leksykon gerontologii*. Kraków: Impuls 2007. 276p. ISBN 978-83-7308-708-8.

Primary Paper Section: A

Secondary Paper Section: AD, AE, AO

¹⁶ *Communication from the Commission. Towards a Europe for All Ages - Promoting Prosperity and Intergenerational Solidarity*, COM(1999) 221, Brussels, 21.05.1999.

¹⁷ Dimensions of intergenerational policies and active ageing in the EU include: European Employment Strategy, Open Method of Coordination on social protection and social inclusion, fight against age discrimination, policy of equal opportunities for people with disabilities and gender equality, promotion of social innovation, public health and physical activity, accessibility and mobility, ICT for the elderly, lifelong learning. See: *The EU contribution to active ageing and solidarity between generations*, European Commission, Luxembourg 2012.

¹⁸ A. Walker, *Active ageing in employment. Its meaning and potential*, „Asia-Pacific Review”, Vol. 13, No. 1, 2006, p. 89.

¹⁹ According to the European Commission's silver economy is a concept that refers to “a combination of good delivery conditions (high levels of education, research and development, sensitive and flexible markets) with the increasing purchasing power of older consumers, which offers great opportunities for new economic growth”. See: *Europe's demographic future. Facts and figures on challenges and opportunities*, European Commission, Luxembourg 2007, p. 96.

²⁰ See: A. Klimczuk, *Supporting the Development of Gerontechnology as Part of Silver Economy Building*, „Ad Alta: Journal of Interdisciplinary Research”, Vol. 2. Iss. 2. 2012, p. 52-56.

THE ROLE OF ICT SECTOR IN CREATIVE INDUSTRY IN ŽILINA REGION

^aTATIANA ČOREJOVÁ, ^bEMÍLIA MADUDOVÁ, ANGELA PODPEROVÁ

University of Žilina, Univerzitná 8215/1, 010 26 Žilina, Slovak Republic.

email:^aTatiana.Corejova@fpedas.uniza.sk,

^bEmilia.Madudova@fpedas.uniza.sk

This paper was supported by the Slovak Research and Development Agency under the contract No. APVV-0101-10 and Institutional research 6/KS/2013.

Abstract: Creativity is typically thought of in the singular – as an attribute. This paper looks at the way creativity itself is being transformed in ICT sector. To be effective in innovation efforts, ICT sector has to take into account the nature of the strategy and organizational processes of innovation as a mixture of creativity, irrationality and feasibility. ICT sector is a rapidly changing sector. This paper also answers questions on the subject of enhancing the creativity in ICT sector, environment supporting creativity in ICT sector, relation of creativity to knowledge and expertise in ICT sector, the role of ICT sector in creative industry in Žilina region.

Keywords: Creative economy, Creativity, ICT sector, Žilina Region.

1 Introduction

Over the last decades Information and communication technologies have enabled changes in people's lives. ICT has been taken up in public services such as government, the health sector and educational and training (Osimo, 2008; Ala-Mutka, 2008; Punie, 2008; Redecker, 2008).

To be effective in innovation efforts, companies have to take into account the nature of the strategy and organizational processes of innovation. Innovation activities are a mixture of *creativity, irrationality and feasibility*. (Huizenga, 2007). Creativity is an integral part of innovation. This is the main reason, why the creativity in ICT sector is look over.

Mayer's (1999) review of seven definitions given by authors contributing to the 1999 'Handbook of Creativity' (Sternberg, 1999), provided the following definition of creativity: "[...]creation of new and useful products including ideas as well as concrete objects." A more recent, albeit unsystematic, review has confirmed the importance of this definition (Andreasen, 2005). Thus, in Zeng et al. (2011) "creativity is broadly defined as the goal-oriented individual/team cognitive process that results in a product (idea, solution, service, etc.) that, being judged as novel and appropriate, evokes people's intention to purchase, adopt, use, and appreciate it."

Authors trace the role of ICT sector in creative industry in Žilina region, as well as relationship between creativity, knowledge and innovations in this article. A number of studies have investigated creativity in many industries, but the sector of ICT is different and special for its rapidly changing development. In the sector of ICT, in comparison with other industries, it is much more important and even natural to be creative. In this article, authors analyze the place of ICT in creative industries. For the purpose of this survey, there has to be the interconnection between ICT sector and creative industry defined. Section 2 provides a methodological definition of the ICT sector in the Slovak Republic. Authors has described the data, researched questions in Section 4 and also has reported the principal results in Section 5. Discussion and conclusion follow.

1.1 The interconnection between ICT sector and creative industry

The creative industries have all the characteristics of high-tech industries. They demand a diverse mix of skills and are likely to gravitate towards urban areas that either have or are acquiring the institutions and other attributes to meet the labor requirements of the creative sector. They require a well developed ICT infrastructure to serve their clientele, and

interaction with and IT manufacturing base to create and target their products. (Yusuf, Nabeshima, 2005)

The ICT sector is a heterogeneous collection of industry and service activities, Internet service providers (ISPs), libraries, commercial information providers, network-based information services and other specialized services (Mansell, Wehn, 1998).

Creative subsectors, such as electronic games, depend upon local and international networking in order to develop commercially successful products and to enhance their market prospects. The forward linkage is assessed to be significant if the source industry accounts for at least double the economy average – 0,7 percent of the purchasing industry's total goods and services inputs. The linkage is considered strong, if this dependence is at least 3 percent. (Yusuf, Nabeshima, 2005)

As can be seen in Table 1, in score of Global Creativity Index (GCI) for 2011, Slovakia placed the 41st place. The best score in this indicator has got Sweden. Finland is the best in Talent and Technology. Finns worsened indicator Tolerance towards ethnic and racial minorities and against homosexual people. The most tolerant nation in this study is Canada.

Table 1 The Global Creativity Index

Total rank	Country	Technology	Talent	Tolerance
1.	Sweden	5	2	7
2.	United States	3	8	8
3.	Finland	1	1	19
21.	Austria	13	30	35
26.	Hungary	33	25	34
29.	Czech Republic	25	31	49
41.	Slovak Republic	36	33	55
41.	Poland	37	29	58
49.	Ukraine	34	27	77

Source: R.FLORIDA – CH.MELLANDER – K.STOLARIEK: Creativity and Prosperity: The Global Creativity Index, Martin Prosperity Institute, September 2011. [online]. [cit.2012-01-20]. Available online: /http://martinprosperity.org/media/GCI-Report-reduced-Oct%202011.pdf

Quah (2002), emphasizing demand over supply, argues that the Information and Communication Technology (ICT) revolution is fostering improvement in labor skills, consumer sophistication, and an increased level of broad-based education. This encourages the improved use of technology and raises labor productivity and as a result, "drives economic growth, one way or another" (Quah, 2002, p. 22). Levine (1997) argues that relaxing barriers to information access that **ICT is believed to be an important driver**, promotes faster growth by encouraging increased investment. The link between investment in information technology and growth has been investigated by a wealth of studies. (Kuong, 2011).

Slovak Republic (Slovakia) is one of the moderate innovators with a below average performance. Relative strengths are in Human resources and Economic effects. Relative weaknesses are in Open, excellent and attractive research systems, Finance and support, Firm investments, Linkages & entrepreneurship, Intellectual assets and innovators. High growth is observed for New doctorate graduates and Community trademarks. A strong decline is observed for Non-R&D innovation expenditure and License and patent revenues from abroad. Growth performance in Human resources, Open, excellent and attractive research systems and intellectual assets is well above average. (European union, 2012)

2 Methodological definition of the ICT sector in the Slovak republic

In order to consider the role and signification of Information and communication sector (farther ICT sector) we have to go out from the available methodic that defines this sector, used for the demands of economical statistic. Unitary Eurostat NACE rev 1.1 methodology was replaced by NACE methodical rev. 2 in year 2008. There had been used OKEČ methodology, which met classifications NACE rev. 1.1. (in modified version accommodated to domestic conditions) till 2007 in Slovakia. While the IT services were acknowledge as a part of services sector (category K, real estates, rent and trade services) by OKEČ methodic, methodic NACE rev. 2 acknowledge IT as an independent sector. This significant methodic change presents major problem by comparing of former economic development sector. (See Figure 1)

The only exception is presented by divison of telecommunications, which occurs in both methodics in a separate form.

<p>The ICT Sector Statistical Office of the Slovak Republic SK NACE rev. 2</p>	<ul style="list-style-type: none"> • Publishing activities, • Film, video, TV production, • Broadcasting, • Telecommunications, • Computer programming, • Information services
<p>Primary ICT Sector Statistical Office of the Slovak Republic Slovak IT Asociacion</p>	<ul style="list-style-type: none"> • Telecommunications, • Computer programming, • Information services.
<p>Creative ICT Sector</p>	<ul style="list-style-type: none"> • Computer programming

Figure 1 Methodological Definition of ICT Sector, Source: Author

Both forms were used by statistic agency to check infomations only in the year 2008 due needs of short term predictions. National invoice, a savoir GDP or brutto added value, that are key factors to determine single sectors of economy, are still allocated in OKEČ methodic. This fact does evocate problem by a accurate quantification of ICT sector in a way defined by NACE rev.2. (Slovak IT Association, 2011)

Statistic definition of ICT sector through NACE and OKEČ includes merely companies, which allocate activities related to ICT as a main activity. Statistical reporting is made according to companies location, in separate regions, what makes the situation in some cases significant misleading. Several big companies are located in Žilina region, but many of them are not statistical reported, due a fact of their headquarter location in other cities.

These days ICT specialists works in every kind of enterprise unit, presenting a group of very creative employees creating SW solutions for specific situation. The sector of ICT is a common platform for all sectors (education, medicine, public administration etc.)

2.1 ICT sector in Žilina Region

Žilina's self governing region has a surface area of 6788km² with population of 693499 inhabitants. The region shares 9 borderline checkpoints with Czech Republic and Poland.

The Žilina region can be considered as industrial and with a high potential for development, primarily because of two facts: its location near the industrial areas of the neighbouring Czech Republic and Poland and its lack of fertile soil. Industry represents 72% of the region's annual turnover. This includes all the sectors and is equally distributed.

The development of the ICT sector in Žilina Region occurred mainly after 1990, when computer performance was already at a higher level. Czechoslovakia was connected to the global internet network in 1992. Especially because of internet, but also thanks to the rapid development of hardware and software, this year could be identified as a milestone in the development of new companies. From the primary ICT sector there are most active players operating in the field of computer programming, which is the sole regarded as a creative one. (See Figure 2)

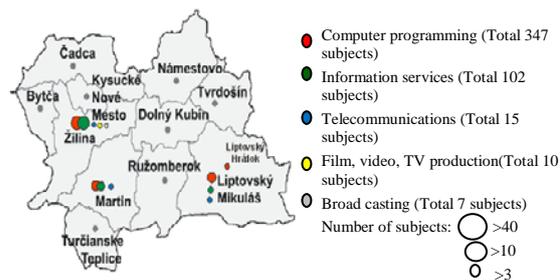


Figure 2 ICT Subjects operating in Žilina self-governing region, Source: Author

3 Materials and methods

Whereas primary research was set to be interview, twenty leading companies of the ICT sector in Žilina Region were asked to participate. With a starting point of elaborating partially standardized questionnaire, there were suitable respondents selected.

Respondents were employees of selected companies operating in ICT sector, division 62 – Computer Programming according to the SK NACE rev. 2 classification. (See figure 1) This division is considered to belong to creative sector. The questionnaire consisted of 30 questions and the survey focused on three main areas: Innovation, Finance, Creativity and Impact of external environment. Seeing that respondents disapproved to be named and asked for anonymity of their company's name, answers are evaluated as anonymous. Since it is impossible to cite all respondents with their answers, all responses were processed and there was a summary of all answers created.

Primary research was conducted from September 2011 to April 2012 with the main aim to answer research questions. The formulation of research questions followed on secondary research – the study of literature and analysis of the current status of ICT sector in Žilina Region.

4 Research and research questions

The research questions are follows:

RQ1: *Who is the creator of creative ideas?*

RQ2: *How can the environment be designed to support creativity in ICT sector?*

RQ4: *What is the relation of creativity to knowledge and expertise in ICT sector?*

For the reason contribution is limited by the number of pages, presents just the brief evaluation of the questions of the questionnaire.

71 % of respondents pointed that companies they work for do not have a separate creative department, so 29 % of respondents work for a company which built a separate creative department. The level of innovation activities and creativity in companies

depends on customer requirements. Customer is the main impulse for making decision to create innovative products and services. In second place it is a competition, rapid development of new technologies in ICT sector and up-to-date trends in this branch, but also new functionality of applications and impulse coming from the company's management. Employees are seen as innovators with creative ideas. They acquire new ideas for creative solutions through participating in workshops, monitoring trends in the ICT sector, monitoring their competitors, market situation and running projects. In general companies in the ICT sector of Žilina Region does not cooperate within the implementation of new products or services.

Regarding factors affecting the region's ICT industry, respondents suppose that this industry is mostly influenced by dynamics of technology development and progress of IT technologies and applications. Another factor of the sector's development is the trend of overall economic development of the country but also competition, demand or new trends in marketing.

According to customers the government of Slovakia does not support ICT sector sufficiently. Some respondents think that the government is more focused on other sectors, mainly on automotive industry.

In respect of negative factors affecting employees while developing creative ideas, the main factor was found to be stressful working environment. Other negative factors affecting the employees in creating ideas include:

- Too rigid environment (stark working environment),
- Deadlines,
- Constant supervision by management and managers,
- Pressure from the side of the employer,
- Rush at workplace,
- Bad relationships with other employees,
- Unkind working atmosphere,
- Negative thinking,
- Misunderstanding and criticism from management,
- Creative ideas generate only in a home company, while there are employees in a Slovak affiliated branch only working with them and do not even have to think creative.

Strengths	Weaknesses
<ul style="list-style-type: none"> ▪ Plenty of university graduates and experienced IT professionals in the region who are lower remunerated than graduates and experts abroad, ▪ Existence of innovativeness in the industry and talents in companies, ▪ Constant development of the industry and new technologies, ▪ Information literacy of users, ▪ Good availability of internet in the region. 	<ul style="list-style-type: none"> ▪ People have low awareness of ICT products and their use, ▪ Strong competitors on the industry, ▪ Weak competitiveness in developing new technologies.
Opportunities	Threats
<ul style="list-style-type: none"> ▪ Possibilities of education in 'perspective' fields (Java, C++, MS Visual Studio), ▪ Development of unknown technologies, ▪ Increasing awareness of people about the field of ICT, ▪ Employing of young people who can bring new ideas, ▪ Investments, ▪ New trends in ICT 	<ul style="list-style-type: none"> ▪ People are too dependent on technologies that reduces their ability to solve problems independently, ▪ Entry of new competitors into the industry, ▪ Threat of losing know-how and competitive advantage.

Figure 3 SWOT analysis of ICT sector in Žilina Region, Source: Author

Regarding question about education, all respondents answered equally, and that all employees should be educated in the field of company's business activities. When introducing new products/services it is not necessary to neither carry out special training nor hire new experts because all employees involved in new innovative solutions are experts in their field. On the other hand, we can state that these employees continually have to learn new things. All companies that participated in the survey have close relations and cooperate with the University of Žilina.

Respondents were asked to identify strengths/weaknesses and opportunities/threats of the ICT sector. These can be seen in figure 3.

5 Results

From the basic analyses and research regarding information-communication technologies in Žilina region following can be stated: although this branch doesn't belong among the regional dominancy, it still cannot be considered gutless. In term of human resources, this sector offers lavish sources of experienced experts, skilled in technical and technological procedures. These experts must face to various demands from customers and company management. Seeing a fact, that creativity is hardly to measure, we can only guess the level of creativity in companies placed in Žilina region. The Majority of companies are running in a non innovative and non creative mode, but they are still classified as "creative companies".

Likewise, statistics and branch classifications include employees of above mentioned companies performing without any sense for creativity. Employees such gate keepers, cleaners, clerks etc., are employed in a creative company and are included into employee figures but these do not perform this kind of creative work. Due this fact it is complicated to state the correct figure of employees involved. A recent survey exposed following conclusions related to survey questions.

RQ1: Who is the creator of creative ideas ?

The main motion regarding decision by innovation of products and services – to be creative comes from the side of customers - demand. The Second source of the main motion are competition and effort to be competitive, sustain tempo in steadily changing conditions, followed by employees and last but not least the management of the firm.

RQ2: How can the environment be designed to support creativity in ICT sector ?

The major factor influencing IKT sector is a rapid development of technologies and applications, not less important factor of macro environment is an economic process. In term of macro-environment it is also a rapid changing competition, demand and market inquiry. Unthinkable part of IKT sector support should be guaranteed by the state. The most significant factors influencing working conditions are stress, misunderstanding and critique from the side of company management.

RQ4: What is the relation of creativity to knowledge and expertise in ICT sector ?

Education as well as high level of knowledge present an unthinkable part of every employee operating in IKT sector, whose the main role is to think creative and create a creative product. It is possible to get a creative idea without knowledge, however the knowledge is important for the realization of the creative idea. The very process of realization presents the major task of employees operating in sphere considered be creative within the frame of IKT sector (See Figure 9)

Žilina is a large city, which offers a wide scale of self realization opportunities. Moreover, Žilina can be considered "wealthy city" concerning human resources, whereas University of Žilina becomes the major source producing alumni in a field of technique and technology.

Figure 4 compares definitions of creativity (Mayer's 1999, Sternberg, 1999, Andreasen, 2009, Piffer 2011) with attributes of creative product in sector of ICT. If the creative product will

meet all attributes within the range of creativity and attributes, determined from the results of research, this product can be defined as a creative product.

Attributes of Creativity (Mayer's 1999, Sternberg, 1999, Andreasen, 2009, Piffer 2011)	Attributes of Creative Product in ICT Sector
Novelty,	Novelty,
Imagination,	Appropriateness/Usefulness,
Appropriateness/Usefulness	Effectiveness/Functionality,
Differentiation from standard,	Economic Efficiency,
Applied into practice	Intellectual property.
Economic Efficiency	High level of knowledge,
Intellectual property	Value added

Figure 4 Attributes of creativity vs. Attribute of Creative product in ICT Sector, Source: Author

6 Discussion

Creativity is in a peak season. This term in nowadays used to define internally diverse group of economically active people engaged in inventiveness and new ideas. Core parts of creative industry are architecture, design, film, media, software, fashion design, music and art. For creative industry there is a group of enterprising people essential; these people primarily use creative ideas, talent and new ideas at their work.

According to The Economist Intelligence Unit study (eTrend, 2012) Slovak local firms are not an important source of product innovations, while they do not possess necessary structure, processes and global thinking as well. This tends to be the biggest source of possible reserves of restructuring of the Slovak economy. Education, governmental support of infrastructure development and labour market policy are linked to the support of innovative companies.

Actual mapping of creativity in ICT sector distorts disunited definition of the sector which is a starting point for making statistics. This inconsistency in the definition of ICT sector significantly distorts in the positive or negative way realized secondary research.

The initiative to creative activities has to originate from creative people, but also should be supported by the government. The role of government and regional institutions is to create appropriate conditions that would lead to creation and development of creative ideas. It is necessary to ensure that the education system encourages young people to develop their creative skills and talent. It is also necessary to ensure that creative start-ups have access to financing for their investments. We cannot forget about the sensitive area of intellectual values which creative sector generates.

As the primary research was not conducted in all companies in the Žilina Region, but only on a selected sample, results of the research may be considered as a screening analysis of the current status of the ICT sector in the field of computer programming. The realized research was the first of the planned surveys. Authors plan to carry out the survey on a wider sample of respondents in the future, not only in the Žilina Region but in the whole Slovakia because of making comparison of nationwide state of ICT sector especially in the field of computer programming which is considered to be creative.

7 Conclusion

Day by day, information and communication technologies have become an inevitable part of modern life. Advanced programs and applications promise promptitude, novelty and docility. Technical advance aims forward with a sky-high velocity and employees that produce programs and applications don't keep up emit new ideas and creative solutions.

This article exposes issue of creativity in information and communication technologies. In a pure theoretical way article specifies attributes of creative product in IKT sector.

Occasionally terms creativity and innovation are falsely commuted, but in fact these terms cannot be considered not even as synonym due their different meaning. To be creative means own an idea that is original, new, forming and creating something. In a field of innovation we call entitle such idea as invention. True meaning of invention can be characterized by spending money to achieve generation of ideas. Innovation is a process, by which money are generated from the very ideas. Thomas Edison was an innovator, earned a huge profit from his ideas. On the other hand Nikola Tesla was a contriver, he used all his money and minds to achieve inventions, but he never gained financial profit. Contriver creates creative ideas. Innovator make this ideas applicable. (Improvements, 2010)

Both, contriver and innovator are needed to be under one roof to achieve highly qualitative products considering inquiry with 100% level of knowledge, acquirement, benefit and added value. The new symbiotic and integral (holistic) approach assumes that without an appropriate use of ICT for development funds will not be used efficiently and vital sectors such as an education and health will not be able to adequately provide their benefits. A fundamental shift is required in a view of the marginalized regions, countries and population groups in terms of global economy.

Literature:

1. *A study on creativity index*. Home Affairs Bureau, The Hong Kong special administrative region government, 2005.
2. BANKS, A., LOVATT, J., CONNOR, C.: *Risk and trust in the cultural industries*. Geoforum, 31 (2000), pp. 453–464.
3. CAO, CH. *The analysis of Guangxi's cultural and creative industries development*. In Industrial Engineering and Engineering Management (IE&EM), 2011 IEEE 18Th International Conference on. 2011, Volume: Part 3, pages 2110-2113. ISBN 978-1-61284-446-6.
4. CHANG, W.S., 2011, CHANG, W.S.: *The process of value generation in cultural creative industries*. In 2011 Eighth International Conference on Fuzzy Systems and Knowledge Discovery, pages 1495-1499. Available at <<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6019828>>
5. ČOREJOVÁ T. A KOL. : *Znalostná infraštruktúra a trajektórie znalostí v regionálnom kontexte / Knowledge Infrastructure and Knowledge Trajectory in a Regional Context / electronic source – (in Slovak)*, vedecký redaktor: Dušan Kevický. - 1. vyd. - Žilina : Žilinská univerzita, 2011. - 1 elektronický optický disk (CD-ROM), 438 s., [AH 26,29; VH 27,03]. - ISBN 978-80-554-0411-0.
6. *Creativity in the Natural State: Growing Arkansas' Creative Economy*, Vol. 1, 2007, Regional Technologies Strategies, Inc., Carboro, NC, ISBN 1-931613-03-L. Available at <http://rtsinc.org/publications/pdf/Arkansas_final.pdf>.
7. PIFFER, D. *Can creativity be measured? An attempt to clarify the notion of creativity and general directions for future research*, Thinking Skills and Creativity, Available online 4 May 2012, ISSN 1871-1871, 10.1016/j.tsc.2012.04.009. Available from: <http://www.sciencedirect.com/science/article/pii/S1871187112000326>>
8. DCMS. *Creative Industries Mapping Document*, Department for Culture, Media and Sport, London (1998).
9. HEARN G, ROODHOUSE S, BLAKEY J. *From value chain to value creating ecology*. International Journal of Cultural Policy [serial on the Internet]. (2007, Nov), [cited January 12, 2012]; 13(4): 419-436. Available from: Academic Search Complete.
10. HELLER K. *Scientific ability and creativity*. High Ability Studies [serial on the Internet]. (2007, Dec), [cited January 12, 2012]; 18(2): 209-234. Available from: Academic Search Complete.
11. HSU M, HSUEH-LIANG F. *Organizational Innovation Climate and Creative Outcomes: Exploring the Moderating*

- Effect of Time Pressure. *Creativity Research Journal* [serial online]. October 2010;22(4):378-386. Available from: Academic Search Complete, Ipswich, MA. Accessed January 12, 2012.
12. http://thrivingtoo.typepad.com/thriving_too/2009/02/what-does-creativity-mean.html
 13. <http://www.thinkingmanagers.com/management/technical-creativity.php>
 14. Improvements: *Innovation vs. Inventiveness*, Available from: <<http://www.improvements.sk/sk/inovacie>>
 15. IT ASOCIÁCIA SLOVENSKA: *Význam Sektoru IKT pre Slovensko / The role of ICT sector in Slovak Republic*, electronic source – (in Slovak) , február 2011. Available from: <itas.sk/category/1-itas?download=435>
 16. KARAKOVÁ, M.: *Creativity in sector of information and communication technology in the Žilina region*, In: Diploma Thesis, Tutor: MADUDOVÁ Emília, Žilina: FPEDAS, ŽU, 2012
 17. KERN, P., RUNGE, J.: *KEA briefing: towards a European creativity index*. KEA European affairs, 2009. Available at: <<http://ec.europa.eu/education/lifelong-learning-policy/doc/creativity/report/kea.pdf>>
 18. KERN, P.: *Towards a creativity index*. Paper from the Conference Can creativity be measured? 2009. Available at: <<http://ec.europa.eu/education/lifelong-learning-policy/doc/creativity/kern.pdf>>
 19. KHUONG M. VU: *ICT as a source of economic growth in the information age: Empirical evidence from the 1996–2005 period*, *Telecommunications Policy*, Volume 35, Issue 4, May 2011, Pages 357-372, ISSN 0308-5961, 10.1016/j.telpol.2011.02.008. Available from: <<http://www.sciencedirect.com/science/article/pii/S0308596111100022X>>
 20. LUBART T. *Creativity and cross-cultural variation*. *International Journal Of Psychology* [serial online]. February 1990;25(1):39. Available from: Business Source Premier, Ipswich, MA. Accessed January 12, 2012.
 21. MANSELL, R.; WEHN, U. *Knowledge societies: information technology for sustainable development*. 1988 United Nations Commission on Science and Technology for Development; Oxford University Press, New York, NY, USA.
 22. OKRUHLICA, F.: *Kam bez podpory talentov / Where to go without talents*, electronic source – (in Slovak) In: *eTrend*, 2011. [online]. [cit. 2012-17-06]. Available from: <http://ekonomika.etrend.sk/ekonomika-slovensko/kam-bez-podpory-talentov-2.html>
 23. PRINCE, R.: *Fleshing out expertise: The making of creative industries experts in the United Kingdom*. In *Geoforum*. 2010, Volume 41, Issue 6. Available from: <www.sciencedirect.com>.
 24. SCOTT, A. *The cultural economy: geography and the creative field*. *Media, Culture and Society*, 21 (1999), pp. 807–817.
 25. SCOTT, A. *The Cultural Economy of Cities*. Sage, London (2000).

Primary Paper Section: A

Secondary Paper Section: AH

SOME CONSIDERATIONS ON THE INSTITUTION OF A DISPOSAL OF AN EMPTIED MORTGAGE PLACE

^aANETA MAKOWIEC

Jagiellonian University, Gołębia 24 St., Cracow, Poland
email: ^aaneta.makowiec@uj.edu.pl

Abstract: After 18 months of *vacatio legis*, the act on land and permanent mortgage entries and also on other regulations¹ from 26th June 2009, came into force. This change resulted in introducing new regulations which considerably changed the previous model of mortgage succession. The answer to the demands reported by the representatives of the doctrine and the constant changes within the current market economy was the introduction of the permanent mortgage entries to the Polish legal system. The attempt to investigate the normative regulation as well as institutions responsible for restricting the advancement of the mortgage in other legal systems, was reflected in considerations presented in the hereby article. Moreover, the normative qualification of the disposal of an emptied mortgage place raises numerous questions. What therefore needs to be considered is the question whether the possibility of a disposal should be understood as a separate substantive right or rather as an entitlement being the element of ownership.

Keywords: mortgage, advancement, amendments, disposal of an emptied mortgage place, the advancement of the mortgage

1. Introduction

On 20th February 2011, after 18 months of *vacatio legis*, the act on land and permanent mortgage entries and also on other regulations² from 26th June 2009, came into force. This change resulted in introducing new regulations which considerably changed the previous model of mortgage succession.

The answer to the demands reported by the representatives of the doctrine and the constant changes within the current market economy was the introduction of the permanent mortgage entries to the Polish legal system. Disposing of the emptied mortgage entry is a completely new solution in Polish law. It came into force on 20th February 2011. As a justification of the project we are given the following statement: “ The institution which is being created refers to the solution that can be found in other legal systems. In particular it concerns the Swiss system of permanent mortgage entries and the Austrian law of disposing of the mortgage. It is an original approach to this issue, which does not come down to any mentioned solutions. It simply unites the advantages of both solutions”³.

The fact that the institution of disposing of the emptied mortgage entry is completely new and that it has never been used practically in Polish law, affected the necessity to research, as well as to refer to Polish and foreign materials.

The attempt to investigate the normative regulation as well as institutions responsible for restricting the advancement of the mortgage in other legal systems, was reflected in considerations presented in the hereby article.

The normative qualification of the disposal of an emptied mortgage place raises numerous questions. One could distinguish two variants of interpretation in this regard. What therefore needs to be considered is the question whether the possibility of a disposal should be understood as a separate substantive right or rather as an entitlement being the element of ownership. The settlement of this issue is of great importance not only from a theoretical point of view but also from a practical one and, therefore, requires a more thorough analysis.

It should be noted that the newly adopted legal solution is largely modelled on a similar concept provided for in the draft

property law of 1937 and 1939 and in the draft amendments to the Land and Mortgage Registers and Mortgage Act of 2000.

2. Limitation of the advancement of the mortgage in Polish and foreign legal systems

Up to 20th February 2011 there was a general rule on the advancement of the mortgage (*ius successionis*) in the Polish legal system. According to this rule, in case of charging the mortgage with more than one property and subsequently expiring the mortgage, which does not have the lowest priority, the mortgage and other laws encumbering the property move one level up in the hierarchy⁴.

For instance, in case of expiration of the mortgage located within the first place, this place is taken by the mortgage which previously had been found within the second place (and was written down in the land and mortgage register on the basis of a filed application) and when it expires, the place is taken by the property located within the third place⁵. To sum up, in case of expiration of the mortgage, the mortgages which follow it, gets a higher priority⁶. It should be stressed, that the reason of the expiration of the mortgage does not matter. As a result, the position of creditors, whose mortgages had lower priority in relation to the expired mortgage is improved. (it should be noted that the owner of the property does not have a right to establish a new mortgage in the place of the expired one)⁷. Therefore, he can establish a new mortgage only within the last place⁸. Yet, the expiration of mortgage has no influence on the laws with higher priorities. It should be noted that this described advancement does not take place if there are laws which are of equal priority with the expired mortgage, simply because they take the place of the expired mortgage. The rule of advancing mortgage was not expressed *expressis verbis* in the land and mortgage register, but it results from the regulations which normalize the priority of a limited property right⁹. J. Pisuliński writes that the ‘advancement of mortgage’ is a result of rule, which says that the law, written in the land and mortgage register on the basis of an application filed beforehand, has priority over the law written on the basis of application filed afterwards¹⁰.

The justification of the existing rule could be found in the legal system, namely in socialism. It seems that nowadays, at the time of market economy and economic relations departing from the rule of disposing of the emptied mortgage entry is a desirable step towards updating Polish law of land register¹¹.

Legal systems, in which you can find the priority rule of laws written in order of either filed applications or entries made in the land and mortgage register, accept solutions, which aim at preventing the advancement of mortgage or other mortgage laws. A special attention should be given to the following solutions:

- a) The owner’s mortgage (German system),
- b) Permanent mortgage entry system (Swiss system),

⁴ See T. Czech, *Wykonywanie uprawnień do rozporządzania opróżnionym miejscem hipotecznym*, MoP 2010, no. 20, p. 1103, B. Swaczyna, *Rozporządzenie opróżnionym miejscem hipotecznym i hipoteka właściciela (uwagi na tle projektu Komisji Kodyfikacyjnej Prawa Cywilnego)*, KPP 2003, no. 1, p. 212, S. Rudnicki, *Ustawa o księgach wieczystych i hipotece. Przepisy o postępowaniu w sprawach wieczystoksięgowych. Komentarz*, Warszawa 2010, p. 31.

⁵ See S. Gołąb, *Rozporządzenie hipoteką przez właściciela*, p. 5-6.

⁶ J. Pisuliński [in:] *System Prawa Prywatnego. v. 4. Prawo rzeczowe*, (ed.) E. Gniewek, Warszawa 2005, p. 656.

⁷ *Ibidem*, p. 656.

⁸ See J. Ignatowicz [in:] *Prawo rzeczowe*, J. Ignatowicz, K. Stefaniuk, Warszawa 2009, p. 290.

⁹ See article 249 in the Civil Code and art. 12 in The Land and Mortgage Registers and Mortgage Act.

¹⁰ See J. Pisuliński, *Verfügung über frei gewordene Hypothekenstellen* [in:] *Ius est ars boni et aequi. Festschrift für Stanislaw Kalus*, (ed.) M. Habdas, A. Wudarski, Frankfurt am Main 2010, p. 409.

¹¹ See B. Swaczyna, *Hipoteka umowna*, Warszawa 2007, p. 433.

¹ Act on the amendment of the act on land and mortgage register and other acts from 26th June 2009 (Journal of Laws of the Republic of Poland, nr 131, entry nr 1075).

² Act on the amendment of the act on land and mortgage register and other acts from 26th June 2009 (Journal of Laws of the Republic of Poland, nr 131, entry nr 1075).

³ The justification of the project of the act concerning changing The Act on Land and Mortgage Registers and Mortgage, Sejm papers nr 1562 from 29.12.2009., p.1, available on www.sejm.gov.pl., p. 12.

c) Mixed system (Austrian system)¹².

In the Polish legal system we find that the expiration of limited property law which is applied when the law along with the freehold charged with the limited property law, are put together¹³. However, in the German legal system we can find the institution of the owner's mortgage instead (§ 1163, section 2 of German Civil Code from 1896). This regulation says that obtaining the charged mortgage and the claim secured by the mortgage does not result in the expiration of the mortgage (§ 1143, section 1 and § 1177, section 2 of German Civil Code from 1896). The owner of the charged mortgage can transfer the claim along with the mortgage to another person. But when the secured claim expires, the owner is by right (§ 1163, section 1, sentence 2 of German Civil Code from 1896) provided with the mortgage which is changed into the owner's land debt (§ 1177 of German Civil Code from 1896)¹⁴. The owner of the estate can also secure another claim by using this mortgage¹⁵. But this is not the only case when the mortgage is changed into the owner's land debt. In case of abandoning the right to the mortgage by the creditor, the mortgage does not expire but it is transferred to the owner who can use it for securing another mortgage (§ 1168 of German Civil Code from 1896). Abandoning of the right to the mortgage results in the complete expiration of the property law by virtue of paragraph 871, sentence 1. By virtue of paragraph 1183, section 1, it requires the consent of the owner.

As J. Pisuliński writes, the regulation concerning the owner's mortgage has already lost its significance¹⁶. Its reasons can be found in the claim to mortgage removal (§ 1179a, 1179b of German Civil Code from 1896). According to Przyborowski, it is quite a common practice when the owner of the mortgage is obliged to perform the mortgage removal by people entitled on the grounds of the lower priority pledge laws¹⁷. There are two subjects entitled to the legal claim - the mortgage creditor and the subjects entitled on the ground of a land debt (to be specific - persons entitled on the ground of mortgage with equal or higher priority). Every owner, to whom the mortgage was transferred (even if at the moment of satisfying the claim he already was not the owner) has the right to the claim. The result of this claim is found in a brief entry made in the land and mortgage register. The executing of the claim results in cancelling such law and advancing other pledge laws. However, when the mortgage is transferred to the owner whose creditor is unknown, the proper proceeding are then undertaken (§ 1170 of German Civil Code from 1896).

One of the characteristic features of the Swiss system is the permanent mortgage entry rule (Prinzip der festen Pfandstelle)¹⁸. This issue was regulated in the article 813-815 in the Swiss Civil Code¹⁹. The pledge laws can come into existence by virtue of an act or a legal act, which represent the owner's will²⁰. In case of statutory pledge laws, an act determines their priority and influences on the way they come into existence. Relations between laws created by way of legal transactions (in the context of priority of the pledge laws competing on the mortgage) come under particular rules resulting from the regulation mentioned

above. In case of expiration of the pledge laws, laws with lower priority do not advance and a new place is created. It should be noted that the pledge law, even at the moment of coming into existence, can be given priority over one which results from the *prior tempore potior iure* rule.

In the Swiss legal system there is a possibility of creating a mortgage only to a specified part of the mortgage. The mortgage is created by the owner through a record written down in the land and mortgage register, which means that it can be immediately created within the second or a further place. The only condition is that the sum falling on the future pledge laws of a higher priority must be stated at the point of making an entry in the land and mortgage register. Such mortgage is given a certain priority, which is a deviation from the rule concerning property law. (the rule saying that priority of the limited property law is determined by the data written in the land and mortgage register. It is admissible to establish mortgage law on the empty mortgage entry with a higher priority. As a result of the expiration of mortgage, a new entry/place is created (so called 'offene Stelle'), which can be disposed of by the owner of the mortgage²¹. The owner of the mortgage can also reserve the right to the empty mortgage place for a determined amount of money while establishing the mortgage within the further place.

It should be noted that the permanent mortgage entry system does not have an absolute character²². However, an exception can be found in the article 815 of Swiss Civil Code. During pursuing the enforcement of the claim, the amount of money is divided in such a way as if there is no empty place. So we do not take into account the empty mortgage entries. Another example can result from the agreement between the owner and a person, who is entitled to the mortgage law of a lower priority which charges a given mortgage, rather than another law of such kind. Parties can state that in case the law of higher priority expires, a new empty entry will not be created, and a law of a lower priority will take its place. According to the regulation found in the article 814, paragraph 3, in Swiss Civil Code, such agreement can be effective towards the successive owners only when it's stated in the land and mortgage register²³. B. Swaczyna writes that in practice such agreements are rarely found, which means that permanent mortgage entries are a rarity²⁴.

Solutions accepted in Austrian law can be described as mixed system²⁵. This statement requires a brief explanation. In the mortgage expires, the Austrian law gives exception to the rule of advancing mortgages. This enables the owner of the mortgage to dispose of free entry. There are also situations, in which the owner's mortgage is established.

When the secured claim is passed along with mortgage to the owner and the debtor of the claim secured by a mortgage is a third party, then the owner's mortgage is created. (It is so called *Eigentümerhypothek*)²⁶. The owner of the estate who is at the same time a mortgage creditor can dispose the claim along with mortgage to the property of another person. However, according to act 2, paragraph 470, the mortgage on property is important for the owner because in case of pursuing the enforcement of claims from a property charged with this mortgage he

¹² See: J. Pisuliński, *Verfügung...*, s. 412 – 415, B. Swaczyna, *Rozporządzenie...*, p.214 – 215, J. Ignatowicz, J. Wasilkowski [in] *System prawa cywilnego, vol. II, Prawo własności i inne prawa rzeczowe, Warszawa 1977*, p. 799 i 800

¹³ See: art. 247 in the civil Code and S. Rudnicki, *Komentarz do kodeksu cywilnego. Księga Druga. Własność i inne prawa rzeczowe, Warszawa 2006*, p. 435 – 438.

¹⁴ The importance of the owner's land debt for limiting the regulation on advancing mortgages is the same as for the owner's mortgage. See in comments included in footnotes by B.Swaczyna, *Rozporządzenie...*, p. 214.

¹⁵ See: J. Pisuliński, *Verfügung...*, p.412.

¹⁶ *Ibidem*.

¹⁷ See: L. Przyborowski, *Ograniczone prawa rzeczowe w prawie niemieckim*, Studia Prawa Prywatnego 2008, nr 4, p. 56.

¹⁸ See: B. Swaczyna, *Ograniczone prawa rzeczowe w prawie szwajcarskim*, Studia Prawa Prywatnego 2008, nr 4, . 80 and 81, J. Pisuliński, *Verfügung...*, p. 413.

¹⁹ See: reflections on the sense of this regulation in: P. Simonius, T. Sutter, *Schweizerisches Immobiliarsachenrecht, Bd II. Die Beschränkten dinglichen Rechte*, Basel und Frankfurt am Main 1990, p. 176-177.

²⁰ See: interesting comments on this aspect: P. Tuor, B. Schnyder, J. Schmidt, *Das Schweizerische Zivilgesetzbuch*, Zürich 1995, p. 993-994. The commentators write: „Beim gesetzlichen Grundpfandrecht bestimmt das Gesetz, den Rang, und zwar in anderer Weise beim mittelbaren als beim unmittelbaren gesetzlichen Pfandrecht. Beim vertraglichen Grundpfandrecht entscheidet der Wille der Beteiligten“ and E. Weber, *Das system der festen Pfandstelle*, Bern 1929, p. 9-15

²¹ See: P. Tuor, B. Schnyder, J. Schmidt, *op.cit.*, p. 996

²² See: B. Swaczyna, *Ograniczone...*, p. 81, see also: P. Tuor, B. Schnyder, J. Schmidt, *op.cit.*, p. 996-998, the authors write: „Die Parteien können durch Vereinbarung festsetzen, dass bei Erledigung einer Pfandstelle ein *Nachrücken* erfolgt. Ein solcher Vertrag bedarf der öffentlichen Beurkundung (71¹ GBV) und begründet zunächst einmal ein obligatorisches *Nachrückungsrecht*“ and „Die zweite Ausnahme gilt für die *Pfandvenwertung*. (...) Die leere Stelle wird bei der Verwertung einfach ausser Acht gelassen“, interesting remarks: B. Trauffer, in: H. Honsell, N.P. Vogt, T. Geiser, *Basler Kommentar. Zivilgesetzbuch II*, Basel 2007, p. 1639-1642.

²³ See: P. Simonius, T. Sutter, *op.cit.*, p. 177-178, this problem is also discussed by R. Pfäffli [in:] *Theorie und Praxis zum Grundpfandrecht*, recht 1994, Heft 6, p. 271-272.

²⁴ See: B. Swaczyna, *Ograniczone...*, p. 81.

²⁵ See: J. Pisuliński, *Verfügung...*, p. 414.

²⁶ See: J. Pisuliński, *Verfügung...*, p.414, K. Hofmann, in: P. Rummel, *Kommentar zum Allgemeinen bürgerlichen Gesetzbuch*, Wien 2000, Bd. 1, p. 732, the author writes: „Echte Eigentümerhypothek, auch „forderungsbeleidet“ genannt, entsteht bei der Vereinigung von Eigentum (Pfandschuld) u Hypothek (Forderung), zB durch Zession der Forderung oder Erbgang sowie Zahlung durch den Pfandschuldner (1358) unter der Voraussetzung, dass weiterhin ein Dritter persönl schuldet. In diesem Fällen hat der Eigentümer ausnahmsweise die Stellung eines Hypothekargläubigers“.

participates in the division of the amount of money gained from the enforcement of claims.

In Austrian system, apart from the owner's mortgage, there is also an institution responsible for disposing of the emptied. According to Cierpiał the aim of accepted regulation is only owner's business interest. In her opinion, with which we should agree, is that mortgages which were established within further entries and which secure lending rates mentioned above, should not be unconditionally transferred to better positions which aim at securing cheaper loans²⁷.

In Austrian law, the mortgage may exist formally up to the moment of its removal from the land and mortgage register. When the secured claim expires it is obtained by the owner of the real estate and when its secured claim expires (in a situation when the owner of the mortgage was at the same time a personal debtor) or when the creditor abandons his right to the mortgage, the owner of the real estate is given the law of establishing a new mortgage within the free position, to the value of the mortgage and with the priority of mortgage. Then, so called *die Verfügungsrecht über einen Pfandrand* which is a possibility to dispose of mortgage entry comes into being to the benefit of the owner. We have this possibility up to the moment of removing the expired mortgage from the register²⁸. It should be noted that keeping unremoved mortgage in register may result in creating the danger of purchasing a satisfied claim in good faith by a third party²⁹. In such situation, according to the principle of public credibility of land and mortgage register, unremoved mortgage is revived, also in case when the claim secured by mortgage expires. Article 469 says that if a property is charged with other limited property right which have a priority lower than the mortgage, then the owner of the real estate can dispose of the mortgage only when such right was reserved in the agreement along with persons entitled on the ground of these rights and then registered in the land and mortgage register (*Rangvorbehalt*)³⁰. In case of dismissing the estate, the right to dispose is given to the purchaser. However, when the declaration of insolvency of the owner is issued, the right is given to the bankruptcy trustee. In reference to the blanket mortgage the right to dispose have all owners of the estate charged with the mortgage³¹. The owner of the mortgage can secure with the mortgage a new claim, which value cannot be higher than the value of the expired claim. Paragraph 479, section 1 says that *das forderungsbekleidete Eigentümerhypothek* is not taken into account during dividing the sum of money gained from pursuing the enforcement of claims. Paragraph 58, section 1 says that during the removal of mortgage from the land and mortgage register the owner reserves for himself the possibility to establish a new mortgage up to the value and with a priority of removed mortgage. He gets the right to dispose within 3 years since the moment of removing the mortgage³². The owner of the mortgage can also apply for a conditional entry of the new mortgage, only if the existing mortgage will be removed from the land and mortgage register within the next 12 months (§ 59)³³.

3. The right to dispose of the emptied mortgage entry within the Polish legal system

According to article 101 of the Act on Land and Mortgage Registers and on Mortgage, when the mortgage expires, the owner has, within the expired mortgage, the right to dispose of the emptied mortgage entry. In contrast to previously regulations, according to which the expiration of a mortgage with a higher priority resulted in the automatic movement forward of mortgages with a lower priority, new regulations create the possibility of inhibiting this process. A similar aim was given to the creation of the owner's mortgage, which was

included in the government's plan. However, during the parliamentary session, the regulations concerning the owner's mortgage were rejected.

Limiting the rule of advancing mortgages through disposing of an emptied mortgage entry may occur in a situation where after the mortgage expires, the owner either can establish a new mortgage within this place or transfer another one. He may also retain the right to such acts by registering them in the land and mortgage register. The term 'mortgage entry' means a position in order of the priority of established regulations. Grzechnik compares disposing of the mortgage entry to a free place in a garage³⁴. Another car (or a vehicle of its size) can park in this free place (assuming it fits). However, to overspill the parking place is forbidden as it would damage other cars situated nearby.

The owner can also establish a new mortgage or transfer an existing one, but they must add that the only condition is not to exceed the sum of expired mortgage. It should be stressed that both mortgages will have the same priority. As we can see, we have got here an exception to the found in the article 12, section 1 of the Land and Mortgage Registers and Mortgage Act, which says that the priority of laws established in the land and mortgage register is determined by the moment at which the consequences of the entry start to be taken into account.

According to the article 101, section 2 of the Land and Mortgage Registers and Mortgage Act, if a mortgage expires only partially, then the owner can dispose of the emptied mortgage entry in this part.

However, it should be stressed that in a situation when the owner does not perform the acts mentioned above along with removing the expired mortgage, all remaining ones will move one level up according to the previous rule. Here we can notice that for instance, in the Swiss law (in which we find the 'absolute' permanent mortgage entries system), removing a mortgage results in creating a free mortgage entry which can be used later. So the positions of remaining mortgages do not change by right.

The right to dispose of the emptied mortgage entry, which was registered in the land and mortgage entry at the same time as the expired mortgage was removed, is not time-limited, but it expires in case of selling the estate during the process of pursuing the enforcement of claims or during insolvency proceedings. We can find a similar situation in Swiss law. Here, in case of removing the mortgage, the owner can establish a mortgage within the emptied place only within 3 years starting from the moment of removing the mortgage.

What is really significant from the mortgage owner's point of view is article 101 of the Land and Mortgage Registers and Mortgage Act which aims at preventing exclusion of the right to dispose of the emptied mortgage entry. The owner of the estate cannot commit themselves to not disposing of the emptied mortgage entry, unlike in Swiss law, where such obligation is admissible. Also the regulation included in the project of the property law from 1939 allowed the existence of an obligation not to dispose of the emptied mortgage entry, which in practice could make this right illusory. In this context we should pay special attention to the regulation included in the article 101 of the Land and Mortgage Registers and Mortgage Act. This regulation permits the claim to transfer the mortgage to the emptied entry disclosed in the land and mortgage register. As a result, the owner can be obliged to transfer a given mortgage to the specified mortgage entry many times after it's already emptied. In such a situation the owner's prerogative becomes limited as he can no longer willingly dispose of such entry. Moreover, in order to fulfil the previous obligation, he must transfer a mortgage to this entry.

In contrast to the Swiss system of permanent mortgage entries, if an estate was not previously charged with a mortgage, then the immediate establishing of mortgage within the further place is

²⁷ See: R. Cierpiał, *Ograniczone prawa rzeczowe w prawie austriackim*, Studia prawa prywatnego 2008, nr 4, p. 12.

²⁸ See: K. Hofmann, in: P. Rummel, *op.cit.*, p. 726-727.

²⁹ See: R. Cierpiał, *Ograniczone...*, p. 12.

³⁰ See: J. Pisuliński, *Verfügung...*, p. 414.

³¹ *Ibidem*.

³² See: K. Hofmann, in: P. Rummel, *op.cit.*, 730-731.

³³ *Ibidem*, p. 731-732.

³⁴ See: L. Grzechnik, *Hipoteka w obrocie gospodarczym. Komentarz do nowelizacji ustawy o księgach wieczystych i hipotece*, Warszawa 2011, p. 29.

not admissible. Moreover, in contrast to the Swiss law, removing the expired mortgage without a simultaneous registration of the right to dispose of the emptied mortgage entry results in the advancement of a mortgage with lower priority. Similarity can be noticed in the fact that in both legal systems, the owner establishes a new mortgage within the place of an expired one, but he does not dispose of the mortgage³⁵.

It should be noted that in Austrian law, even if the secured claim expires, the mortgage starts to formally exist when it is removed from the land and mortgage register. Therefore the owner can transfer it to another person in order to secure the new claim. In Polish law, however, within the place of the expired mortgage, the owner establishes a new mortgage or transfer a new one to this place.

It's also worth mentioning that in Austrian law the owner of the estate cannot dispose of the mortgage or transfer it in order to secure another claim if the estate is charged with a law of lower priority, which came into being by right. However, it does not constitute an obstacle in disposing of the emptied mortgage entry in accordance with the Polish regulations by the owner.

We can notice not only differences but also similarities between both, Polish and Austrian legal systems. The similarity can be seen in a situation when the mortgage expires and the right of the owner to dispose of the emptied mortgage was registered in the land and mortgage register. Then, the owner can establish a new mortgage within the place of the expired one, but in Austrian law the owner can do it only within 3 years since the moment of removing the previous mortgage.

4. The disposal of an emptied mortgage place as an entitlement

A differentiation between a substantive right and an entitlement does not pose an easy task. The doctrine presents different positions, and what for some constitutes a substantive right is viewed by other representatives as a mere entitlement or a type of entitlement.

Undoubtedly, a substantive right is perceived as a central category which constitutes the basis of individual civil institutions³⁶, hence the doctrine has long been involved in defining the nature of this category. There have been many theories aiming to explain the essence of a substantive right³⁷, starting from those which proclaim that a substantive right is something inherent to a man, something that combines the elements of will and interest, or something that derives from a right in the objective sense and ending with the theories denying the existence of substantive rights³⁸. Natural law ideologies recognize the priority of substantive rights over the written laws, in turn, the positivist mainstream assumes that the substantive right is derived from the system of norms enacted by the competent authorities.

By making some generalisations it can be stated that a substantive right is treated as a bundle of rights³⁹. Entitlements are perceived as a peculiar material for the legislator to create substantive rights. Yet, there arise certain differences. Z. Radwański, in contrast to A. Wolter, does not refer the classification of substantive rights to entitlements. S. Grzybowski, in turn, believed that the content of the legal relationship consists of entitlements and obligations, while Z. Radwański views the elements of a civil law relation as a substantive right and a duty.

For the purpose of the subject at issue it seems reasonable to narrow the study to the right of ownership as being the broadest and the most basic substantive property right. The ownership right is defined in the article 140 of the Civil Code. When analysing the cited definition, we can distinguish a positive and a negative side of ownership. The positive side will consist of a triad of the owner's entitlements - *ius possidendi*, *ius utendi et fruendi*, *ius abutendi*. In turn, the negative side will entail the duty of other entities involving non-interference in the sphere of the owner's rights (*non facere*). The core of the ownership right consists of the entitlement to use the thing and the entitlement to dispose of the thing⁴⁰. The entitlement to use the thing includes the entitlement to possess the thing (*ius possidendi*), to use it (*ius utendi*), to derive benefits and other profits from the thing (*ius fruendi*) as well as to have the thing at one's actual disposal (*ius abutendi*)⁴¹. The entitlement to dispose of the thing entails, in turn, the power to divest oneself of the ownership of the thing and the right to encumber the thing. The power to encumber the thing in the strict sense stands only for the entitlement to charge the thing, while in the broad sense, it also involves the power to take the activities resulting in incurring obligations, such as rental or lease⁴².

In the context of the abovementioned views we need to make an attempt to answer the question whether the disposal of an emptied mortgage place is a substantive right or an entitlement.

The provisions of the statute do not resolve the above issue directly. The title of the subsection 5 of the Act includes the term '*the disposal of an emptied mortgage place*'. A similar terminology can be found in the draft law of 1939, which constituted the model for the existing legislation. In turn, section VII of the draft law of 1937 as well as the subsection 5 of the draft act of 2000 is entitled '*The power to dispose of an emptied mortgage place and the owner's mortgage*'. The provisions of the draft law of 1939 replaced the term '*the power to dispose of an emptied mortgage place*' by the description of the competence or the determination⁴³ of '*the entitlement*'⁴⁴. This issue is similarly settled in the current text of the Act⁴⁵. It must be therefore concluded that the literal wording of the relevant sections and their terminology weighs in favour of adopting the second perspective⁴⁶.

In this context, the disposal of an emptied mortgage place should be regarded as an entitlement which, together with other powers, constitutes the ownership right. At the same time, it must be assumed that it forms a part of more widely understood powers of the owner to dispose of the property, which is the core of the ownership right (*ius disponendi*)⁴⁷.

Confining our considerations merely to the analysis with the use of a linguistic interpretation seems to be insufficient. It is therefore reasonable to investigate the consequences of adopting one of the two possible positions.

What needs to be analysed firstly is the situation where the owner is vested with the substantive right to dispose of an emptied mortgage place. The consequence of such an assumption is the fact that this place can be foreclosed under the security of monetary claims that the creditor has against the property owner under article 747 paragraph 1 of the Polish Civil Procedure Code. In turn, the combination of this type of security with encumbering the debtor's property with a compulsory mortgage, in accordance with article 747 paragraph 1 of the

³⁵ Unlike in Austrian law, where the owner administers the owner's mortgage by transferring it to the creditor.

³⁶ See: A. Wolter, J. Ignatowicz, K. Stefaniuk, *Prawo cywilne. Zarys części ogólnej*, Warszawa 2001, p. 125.

³⁷ More M. Pyziak – Szafnicka [in:] *System Prawa Prywatnego. Prawo cywilne – część ogólna*, v. 1, (ed.) M. Safjan, Warszawa 2007, p. 704, Z. Radwański, *Prawo cywilne – część ogólna*, Warszawa 2009, p. 675 – 687.

³⁸ See K. Opalek, *Prawo podmiotowe*, Warszawa 1957, p. 414.

³⁹ See M. Pyziak – Szafnicka, *op.cit.*, s. 704, Z. Radwański, *Prawo cywilne...op.cit.*, p. 85.

⁴⁰ See J. Ignatowicz [in:] J. Ignatowicz, K. Stefaniuk, *Prawo rzeczowe*, Warszawa 2006, p. 66.

⁴¹ *Ibidem*.

⁴² *Ibidem*, p. 67.

⁴³ See articles: 225, 226, 234 of the draft property law of 1939.

⁴⁴ See articles: 228, 230, 231, 232, 236, 241 of the draft property law of 1939.

⁴⁵ See articles: 101¹, 101⁴, 101⁵, 101⁶ of the Land and Mortgage Registers and Mortgage Act.

⁴⁶ Compare B. Swaczyna, *Hipoteka po nowelizacji* (ed.) J. Pisuliński, Warszawa 2011, p. 445, B. Swaczyna, *Rozporządzanie...*, p. 217-219, T. Czech, *Wykonywanie...*, *op.cit.*, p. 1104.

⁴⁷ T. Czech, *Wykonywanie...*, *op.cit.*, p. 1104.

Polish Civil Procedure Code, would allow for entering a compulsory mortgage.

Conversely, if one assumes that the disposal of an emptied mortgage place is an entitlement included in the ownership right vested with the owner, the security of a pecuniary claim becomes inadmissible. What weighs in favour of this concept is the regulation included in article 101⁶ of the Land and Mortgage Registers and Mortgage Act, which provides that “The right to dispose of an emptied mortgage place is not subject to a foreclosure. Establishing a compulsory mortgage on an emptied mortgage place is inadmissible”. The cited article 101⁶ of the Land and Mortgage Registers and Mortgage Act is a consequence of treating the disposal of an emptied mortgage place as non self-contained substantive right. It therefore confirms that the disposal of an emptied mortgage place is an entitlement being the component of the ownership right.

This approach has been also manifested in the wording of the regulation contained in article 101⁵ of the Land and Mortgage Registers and Mortgage Act. In addition to an easily discernible term ‘entitlement’, used in the text, it also merits noting the meaning of this regulation in the context of the adopted standpoint. Undeniably the very entitlement itself, as a part of a substantive right, cannot be traded independently of the right itself.

The abovementioned provision states that the entitlement to dispose of an emptied mortgage place is vested with each and every property owner. It should be therefore concluded that since the disposition of eligible mortgage place is vested with each and every property owner, it cannot be traded regardless of property right. This, in turn, is supported by the fact that it is an entitlement rather than a subjective right.

In the context of the relevant problems, one cannot leave aside the importance of a functional interpretation. The rules of the said interpretation prefer such an understanding of the phrases contained in the regulations which allows achieving the goals that underlie the rationale for the implementation of a relevant institution to the legal system⁴⁸. The purpose of implementing the institution of the disposal of an emptied mortgage place into the legal system is to protect the legitimate interests of the property owner with a simultaneous respect for the rights of the persons vested with the rights of a lower priority. The establishment of a compulsory mortgage on an emptied mortgage place is undoubtedly in contradiction with such a goal.

According to K. Zaradkiewicz, “This entitlement is not an inherent property right (i.e. the right to one’s own thing), or an obligation, providing only – based on the draft law substantiation – to some extent ‘independent’ element of the ownership right, excluded from the frames of the broadest property rights (as indicated in the justification, it is a *manifestation of the flexibility of ownership right*)”⁴⁹.

We should also mention the position presented by S. Gołąb in the context of the draft property act of 1937. The author does not agree with the term ‘the right to dispose of an emptied mortgage place’, used in the draft law. He clearly states that “there was no separate substantive right, there was no practical need to construct such a right. One of the links in the chain should not be called a chain, but only a part of it”⁵⁰. This position interacts with the so-called Occam’s razor, namely the principle of an economy of thought, assuming the desire for simplicity in explaining phenomena⁵¹. Assuming the standpoint that the disposal of an emptied mortgage place constitutes a substantive right would result in creating more beings than required (*Non*

sunt multiplicanda entia sine necessitate)⁵². It is beyond doubt right to claim that the reason for the disposal of an emptied mortgage place is based on the ownership right. If the owner can establish a mortgage, he can also transfer a new mortgage or previously established mortgage to the emptied mortgage place on his property.

The reasons of the draft law include the statement that “the entitlement to dispose of an emptied mortgage place should be seen as a manifestation of the flexibility of ownership rights. Since the existing encumbrance expired, the property owner should be able to dispose of his property right, for example by establishing a new mortgage in the place of an expired one”⁵³.

It should be therefore concluded that the power to dispose of an emptied mortgage place results from ownership right (140 of the Civil Code). The power to use the thing, to collect the proceeds and other benefits, and to dispose of the thing is included in the ownership rights, called direct entitlement or authority⁵⁴. A. Wolter claims that their essence is the ability to use the specific thing or to take other actions concerning the latter. The entitlement to dispose of an emptied mortgage place can be viewed as a form of disposing of a thing by its owner (*ius disponendi*) and it relates to the owner’s entitlement to encumber the real property with the mortgage⁵⁵.

5. Conclusion

The analysis of regulations concerning disposal of emptied mortgage entries which was described in this article, show that it’s a highly original institution that cannot be amounted to any presented constructions, which can be found in foreign legal systems.

It can be noted that a Polish legislator strives for showcasing benefits and eliminating shortcomings in foreign legal systems. However, the main aim of introducing the institution is to secure the owner’s legitimate interest and to respect entitlements of other people, who have rights of lower priority, and this can be done only through inhibiting the automatic advancement of mortgages with a lower priority.

The analysis of normative regulations in other legal systems as well as economic relations in Poland leads to a conclusion that in the era of market economy, the departure from the rule of advancing mortgages is a significant step towards updating Polish mortgage law. The regulation of the institution is considered to be consistent and clear but on the other hand, it’s not difficult to see that on the basis of the amended acts there are still plenty of doubts, which will certainly be resolved by the doctrine and jurisdiction.

The analysis of the provisions on the disposal of an emptied mortgage place and the comparison of the nature of the right and the entitlement clearly indicate that the disposal of an emptied mortgage place constitutes an entitlement, a variation of disposing the thing by its owner and it relates to the owner’s entitlement to encumber the real property with a mortgage. What can be also observed is the desire of the Polish legislator to expose the advantages and to eliminate the disadvantages perceived not only in foreign legal systems, but also in draft laws of 1937, 1939 and 2000, which is reflected in the implementation of the analysed institution into the Polish legal system. The introduced solutions derive mainly from the solutions adopted in the draft property law of 1939, what needs to be positively assessed. The cited draft law included some amendments in relation to the draft law of 1937, both in editorial as well as substantive terms. What was taken into account were

⁴⁸ More Z. Radwański, M. Zieliński [in:] *System...*, p. 465 – 457.

⁴⁹ See K. Zaradkiewicz, *Nowa regulacja prawa hipotecznego*, PPH 2011, no. 1, p. 29 and 30.

⁵⁰ Compare S. Gołąb, *Opróżnione miejsce...*, KPP 1938, no. 1, p. 52 – 53, M. Lisiewski, *Hipoteka...*, p. 36, B. Swaczyna, *Rozporządzenie...*, p. 217 i 218.

⁵¹ See J. Żeliński, *Ekonomia myślenia – bryzwa Ockhama*, <http://it-consulting.pl/autoinstalator/wordpress/index.php/2011/04/23/ekonomia-myslenia-brzywa-ockhama>, [access: 26.04.2013].

⁵² T. Czech, *Wykonywanie...*, p. 1104.

⁵³ Uzasadnienie projektu ustawy o zmianie ustawy o księgach wieczystych i hipotece (The reasons of the draft law), druk sejmowy nr 1562 z 29.12.2009 r., p. 1, www.sejm.gov.pl, p. 11.

⁵⁴ M. Pyziak – Szafnicka [in:] *System Prawa Prywatnego...*, p. 704, Z. Radwański, *Prawo...*, p. 76.

⁵⁵ M. Deneka, *Księgi wieczyste. Zasady materialnoprawne*, Warszawa 2010, p. 259.

significant achievements being the result of a number of ongoing controversy presented in legal journals.

It can be stated that the update of the Act on Land and Mortgage Register and on Mortgage which was suggested by a legislator definitely deserves acclaim. After many years the act was finally legislated. It has significantly changed Polish law of land register. Moreover, it's an organized regulation and is beneficial for both parties. According to the legislators, the new solution is 'a sensible compromise between the interests of the owner of the charged mortgage and the need of creating a flexible and easily established security'. It should be stressed that in most cases these changes are necessary and moreover, they have been postulated for a very long time. The Regulations from the Act on Land and Mortgage Register which were previously in force, did not provide sufficient security for the claim. The main reason for this situation was the lack of adaptation to the current system, free market and to the economic circulation. The motives for drafting the act show that the amendments do not eliminate the possibility of further modification to the mortgage law. To sum up, the amendments to the mortgage law from 2009 constitute an important step towards making mortgage a flexible and effective instrument of securing claims.

Literature:

1. Act on the amendment of the act on land and mortgage register and other acts from 26th June 2009 (Journal of Laws of the Republic of Poland, nr 131, entry nr 1075).
2. Cierpiał R., Ograniczone prawa rzeczowe w prawie austriackim, *Studia prawa prywatnego* 2008, no. 4.
3. Czech T., Wykonywanie uprawnienia do rozporządzania opróżnionym miejscem hipotecznym, *MoP* 2010, no. 20.
4. Deneka M., *Księgi wieczyste. Zasady materialnoprawne*, Warszawa 2010.
5. Gołąb S., *Rozporządzanie hipoteką przez właściciela*.
6. Grzechnik Ł., *Hipoteka w obrocie gospodarczym. Komentarz do nowelizacji ustawy o księgach wieczystych i hipotece*, Warszawa 2011.
7. Honsell H., Vogt N.P., Geiser T., *Basler Kommentar. Zivilgesetzbuch II*, Basel 2007.
8. Ignatowicz J. [in:] J. Ignatowicz, K. Stefaniuk, *Prawo rzeczowe*, Warszawa 2006.
9. Ignatowicz J. [in:] *Prawo rzeczowe*, J. Ignatowicz, K. Stefaniuk, Warszawa 2009.
10. Ignatowicz J., Wasilkowski J. [in] *System prawa cywilnego, vol. II, Prawo własności i inne prawa rzeczowe*, Warszawa 1977.
11. Opalek K., *Prawo podmiotowe*, Warszawa 1957.
12. Pfäffli R. [in:] *Theorie und Praxis zum Grundpfandrecht, recht* 1994, Heft 6.
13. Pisuliński J. [in:] *System Prawa Prywatnego. v. 4. Prawo rzeczowe*, (ed.) E. Gniewek, Warszawa 2005.
14. Pisuliński J., *Verfügung über frei gewordene Hypothekenstellen* [in:] *Ius est ars boni et aequi. Festschrift für Stanisława Kalus*, (ed.) M. Habdas, A. Wudarski, Frankfurt am Main 2010.
15. Przyborowski Ł., Ograniczone prawa rzeczowe w prawie niemieckim, *Studia Prawa Prywatnego* 2008, no. 4.
16. Pyziak – Szafnicka M. [in:] *System Prawa Prywatnego, Prawo cywilne – część ogólna, v. 1*, (ed.) M. Safjan, Warszawa 2007.
17. Radwański Z., *Prawo cywilne – część ogólna*, Warszawa 2009.
18. Rudnicki S., *Komentarz do kodeksu cywilnego. Księga Druga. Własność i inne prawa rzeczowe*, Warszawa 2006.
19. Rudnicki S., *Ustawa o księgach wieczystych i hipotece. Przepisy o postępowaniu w sprawach wieczystoksięgowych. Komentarz*, Warszawa 2010.
20. Simonius P., Sutter T., *Schweizerisches Immobiliarsachenrecht, Bd II. Die Beschränkten dinglichen Rechte*, Basel und Frankfurt am Main 1990.
21. Swaczyna B., *Hipoteka po nowelizacji* (ed.) J. Pisuliński, Warszawa 2011.
22. Swaczyna B., *Hipoteka umowna*, Warszawa 2007.
23. Swaczyna B., Ograniczone prawa rzeczowe w prawie szwajcarskim, *Studia Prawa Prywatnego* 2008, no. 4.
24. Swaczyna B., *Rozporządzanie opróżnionym miejscem hipotecznym i hipoteka właściciela (uwagi na tle projektu Komisji Kodyfikacyjnej Prawa Cywilnego)*, KPP 2003, no. 1.
25. The justification of the project of the act concerning changing The Act on Land and Mortgage Registers and Mortgage, *Sejm papers nr 1562 from 29.12.2009.*, p.1, available on www.sejm.gov.pl, p. 12.
26. Tuor P., Schnyder B., Schmidt J., *Das Schweizerische Zivilgesetzbuch*, Zürich 1995.
27. Weber E., *Das system der festen Pfandstelle*, Bern 1929.
28. Wolter A., Ignatowicz J., Stefaniuk K., *Prawo cywilne. Zarys części ogólnej*, Warszawa 2001.
29. Zaradkiewicz K., *Nowa regulacja prawa hipotecznego*, PPH 2011, no. 1.
30. Żeliński J., *Ekonomia myślenia – brzytwa Ockhama*, <http://it-consulting.pl/autoinstalator/wordpress/index.php/2011/04/23/ekonomia-myslenia-brzytwa-ockhama>.

Primary Paper Section: A

Secondary Paper Section: G

SELECTED PERSONALITY TRAITS OF YOUNG PEOPLE RELATED TO QUALITY OF EXPERIENCING THEIR RELATIONSHIPS AND LIFE

^aMIČKOVÁ ZUZANA

Univerzita sv. Cyrila a Metoda v Trnave, Ulica J. Herdu 2, Trnava, Slovakia
 email: "mickoval@gmail.com"

Abstract: This paper focuses on psychological and social aspects of quality of life and perceived emotional closeness in context of personality factors. The target group of the study are employed participants in young adulthood. To determine the level of psychological and social quality of life aspects questionnaire WHOQL - BREF/1996 was used, to detect perceived emotional closeness Social support questionnaire MOS was used, personality traits were assessed by Miglierini personality questionnaire. Interesting findings on personality traits relate to differences between participants due to the existence of partnership. There is also found a link between personality traits of participants and social aspects of quality of life, and there is not a relation between personality traits and mental aspects of quality of life.

Keywords: quality of life, emotional closeness, personality traits

1. Introduction

Quality of life can be defined as a normative category, which is an expression of desirable optimal level or degree of expectations of needs of an individuals or groups. Another definition is to indicate specific characteristics, qualities and attributes which the object differs from other objects without emphasizing the degree of satisfaction of certain needs (Tokárová, 2002). Quality of life is determined markedly by an optimal level of social contacts, especially emotional relationships. The intensity and level of these relationships is mainly reflected in the psychological and social aspects of quality of life. The specific needs satisfaction of the personality can be characterized by degree of comfort that significantly affects all categories of an individual's life. As Gurková (2011) states, we have in mind an individual life in examining the quality of life, which includes events and activities characterizing a living organism.

The quality of life can be seen in two lines, as objective and subjective quality (Cummins, 2003, Hnilicová, 2005, Veenhoven, 2000). Džuka (2004) states that the objective quality can be good living conditions, for example food sufficiency, housing options, quality of health care. If the quality of life is not good enough in perspective of an individual, it can be considered as subjective quality. Švehlíková and Heretik (2008) state that we consider about differences respectively character traits when considering the quality of being or individual manifestations of living beings.

Living out of personal relationships is a matter of subjective quality as well as specific area of person's individuality. Personality and the personality traits play an important role in anchoring the partnership as well as emotional experience and need to develop social relationships. The ability to create meaningful relationships and experience them in terms of psychological well-being can be called a quality of being. The quality of being is shown in the overall quality of life. Ferransová (1992) identified five categories based on the meanings defined as the ability to lead a normal life, happiness and satisfaction, achieving personal goals, ability to lead an active social life, the level of physical and mental activity potential. Ferransová (1992) states as well ambiguity in the definition of quality of life may cause the development of research and subsequent applications in clinical practice. Other approaches to the quality of life of individual states Hnilicová (2005), these approaches are psychological, sociological and medical (health). Psychological aspect of quality of health includes mental and social well-being, and social relationships, environment, physical health, which is connected with the well-being.

Not only physical health but also mental and social well-being are important for the quality of life, they are manifested in relationship to us and to other people as well. The quality of life can be partially observed in the lifestyle, emotional and social relationships. The level of quality of life is based on subjective criteria - for each of us is the term of quality of life an individual concept, objective criteria can be health status or age. Certainly, it may be to emphasize the importance of personal harmony - the inner serenity.

Health is one of the most important values and is priceless in virtually all periods and cultures of human existence. A healthy individual can resist stress and problems of everyday life and is able to mobilize their internal resources in crisis situations and differs in by the presence of risk factors that can lead to disease. Health criteria may be due to the age and personality of the individual different. According to Ferrell (1992) quality of life is most often divided into 4 to 5 domains. It is the physical well-being, mental well-being, and social relationships, somatic aspects associated with disease and treatment, spirituality.

Research organized by the University of Cambridge Clinical School describes results concerning the health criteria. M. Blaxter (1990, in Vašina, 1994) identified in the analysis of health data eight criteria, which are based primarily on participant's evaluation of their health. The first criterion indicates the absence of disease. This concept is seen as "passive health" compared to the concept of fitness. Another criterion is the feeling of health. It is not easy to distinguish experiencing symptoms of disease of an individual and objectively determined symptom. The third criterion is the capacity of health. This concept can be seen as a strength and ability to cope with illness or disposition not to get ill, respectively individual has such a capacity of health that despite the unhealthy lifestyle, he cannot get ill. In this context, health is seen as something innate. A combination of resistance and feelings of energy and vitality is a criterion of health - energy and vitality. Physical energy has a clear meaning, but the term vitality is a psychosocial term, it is not significantly dependent on the physical energy. Another criterion of health is social ties and relationships. Next criterion is the function of health respectively an ability to cope with life's challenges and an ability to keep work performance. It shall be a significant factor here, and that is mental state. Psychological well-being is associated with energy as well as with social ties (Vašina, 1999). The health criterion - psychosocial relationships come to the fore during adulthood. As reported by Blaxter (in Vašina, 1999), adult people attach great importance to social ties and mental well-being. The value of positive social ties and mental well-being is given by developmental aspects of this period. According to Vagnerová (2000) is adulthood a period of creating an emotional relationships and partnerships as well creating social ties. The period of young adulthood is a period of establishing own family. On the other hand economic situation as well as the current lifestyle of young people and many other factors are in relationship to the fact that young people are significantly delaying starting a family to later. The need to have a loved one is a dominant need and therefore we believe that this aspect of the psychosocial aspects of emotional saturation remains preserved in early adulthood and is reflected as a positive factor in the quality of life. Emotional and social relations are associated with feelings of joy, happiness, and emotional and personal fulfilment. Quality emotional and social relationships have a positive effect on the development of the personality and an individuality of personality leads to the development of emotional and social relationships. Zelina (1994) states the result of developmental processes of maturation, learning, and action of genetic and environmental factors are the personality traits that make up an individual's individuality. Harmony and thus the quality of life in mental and social level is determined by the personality respectively personality characteristics of an individual. We know that some personality traits help in coping with stressful situations (Mill, Blatný,

Kohoutek, 2008) as well as to solve problems, some features of the individual can be a disadvantage in the psychosocial world. We can therefore conclude that the harmonization of the relationship with yourself, with your loved ones as well as the work environment significantly improves life in psychosocial aspects of quality of life.

Adulthood is a period in which there are already established personality traits, together with lifestyle and quality of life shape the individual being of an individual. Positive personality traits and the quality of life shape positive health of an individual. From a psychological point of view, each individual is a personality even though we differ in personality characteristics, mental processes and behaviour (Rican, 2010). Personality features are reflected in relationships and attitudes to the outside world especially to the social world and in relationship with ourselves. The individual features are typical for the individual character and affect his behaviour (Zelina, 1994). An adult's personality traits are more or less constant, but can be influenced by various effects to some extent change, personality traits are influenced genetically and socially. Properties affected by genetic change only partially, are significantly influenced by temperament. Personal experience has share in shaping personality. Qualities such as self-image, the rate of behaviour self-regulation, sense of responsibility, emotional stability, etc are important for social and psychological aspects of health. These are primarily those features that contribute to good personal and social adaptation of individuals. One of the most sensitive and dynamic feature of the personality is self-image. The self-assessment is affected by social status, successes or failures at work, in the erotic and sexual life. An important role is played by the level of family life as well as life satisfaction and achievement of goals. An individual with a healthy and stable self-esteem is better adapted, has a greater sense of fairness, of honour and personal responsibility, compared to subjects with lower self-esteem – more labile I. Self-esteem is associated with a tendency to lead others or submissive tendency and level of social engagement. Personality factors and personality traits associated with manifesting approach to life as the overall relationship to the work level of interest, method of implementation in work (as diligence or superficiality) have importance in social and psychological aspects of quality of life. Healthy personality is understood as a personality, with is socialized, integrated, differentiated, and capable of self-regulation and optimal identification. Integration of personality is determined by world view, perspectives, and personal hierarchy of values. The complex character of mental health affects the optimal level of experience pleasure and enjoyment in life, complex character of social aspects of health of an individual affects maintaining adequate personal interaction and an individual has created adequate social ties and social relations. The complex of these features creates a quality psychosocial aspect of life. Other positive personal characteristics in relation to observed aspects of quality of life are the balance of giving and receiving, positive relationship with people, patience, tact, courtesy, ability to help, ability to accept failure, the ability to self-realization (Křivohlavý, 2001). Mental aspects of health relates to intellectual, emotional and social maturity. The social aspect of health is essentially functioning and a level of interactive relationships. Social environment and social group to which an individual belongs to significantly influences the quality of life and lifestyle and contributes to the formation of personality (Hewstone, Stroebe, 2006). The social environment differs in cognitive and emotional challenges what is important with the development of personality. Zelina (1994) states the key to understand personality is the knowledge of the factors that accompany individual life since birth. Determinants help create and shape particular lifestyle, which becomes an individual's personality through survival and routing (Brotherhood, 2001). Relation between an individual and other people captures the dominant subjective inclinations as sociability or reclusiveness, rate tolerance or conflict in a group, selfishness or altruism. In today's complex world of values is the subjective satisfaction of human feeling, that its existence has meaning, importance, and also value. Specificity of determinants is manifested in variability of personality traits. Their combination sets

uniqueness of each of us. Comparison of people determines that different characteristic is a relatively stable feature of an individual. Attribute can be understood as a permanent way of behaviour, as a specific response, as a consistent aspect of personality – therefore a personality attribute can be inferred from behaviour. The concept of personality structure is therefore expressed as a certain combination of mental attributes. The quality of an individual's life reflects to the psychic structure of personality, whereas the action of stimuli leads to psychological response and behaviour. Mental structure does not create merely passive conditions that affect the personality, but also spontaneous activities of individuals with regard to the outside real life situations that significantly interfere with the formation of personality. Personality traits are formed by own activity, active attitude to life, as well as an effort to improve the quality of our live. We consider important to form such personality traits that promote the joy of life, inner satisfaction with oneself. Inner peace as well as overall satisfaction is strongly influenced by the interests of providing meaningful space for self-expression. Active interests contribute to the fulfilment of the meaning of life. Interests usually arise from the needs and are related to cultural values. Joy, happiness, enthusiasm is greatly reflected in the activities carried out by an individual with interest. Interests are driving because they are creating emotionally differentiated approach to certain activities for which the individual has talents and abilities. Different people have different interests, values and their hierarchy is determined by their way of life and lifestyle. An individual recognizes and guides its values on the basis of their individual development. Faults in the personal hierarchy of values and ideals can lead to changes in the structure of personality but also in severe cases to mental illness. Loss of priority values such as work, relationship, can affect the loss of interest that may cause the loss of meaning in life in extreme cases. In the social sphere, this can lead to loss of interest in establishing social relationships, which may cause as the closeness that can give rise to feelings of loneliness (Křivohlavý, 2001).

1.1 Characteristic of research problem

Personality integrity is related to many factors, among which we can highlight the positive personality traits and the quality of social relationships. Harmony of personality is reflected in the mental health aspect, specifically in relation to oneself and meaningful life. Social relationships particularly close emotional relationships share a part in the overall mental and social well-being. Mental health status is a condition in which mental processes occur in an optimal way a person is able to perceive reality, to respond promptly and appropriately to stimuli, and in meeting the challenges and have mostly a feeling of satisfaction and pleasure activities. One of the most important mental health factors is social maturity. Significant factors are social relationships which changes from family, to school and later on to work group (Langmeier, Krejcirova, 2006). A priority for young adults is considered partnership and satisfaction in social relationships. A quieter period of adolescence comes after tumultuous adolescence, when there is inter alia to create partnerships. Vágnerová (2000) states in adulthood is at the forefront of social relations within the partnership receives. Psychological and social aspects of health is reflected in our daily lives in the ability to cope with environmental problems, the ability to resolve conflicts as well as an ability to live own live in harmony with himself and with others. The structure of personality traits, such as self-esteem, or responsibility significantly affects the ability to develop mental and social health. In this context, we refer to Jung (in Grün, 2011), by which one can develop their elemental Me without considering the relationship to people and the world (Grün, 2011). Successful life can be measured by the love we give and receive (Gilbert, 2012). Love helps us develop relationships at all levels and also forms the personality. Everything we do with our love enriches and develops. Grunt (2011) adds that the proximity of others sustains us. A relationship must be balanced between closeness and distance that we maintain our personal integrity. Personal integrity defines our uniqueness and individuality in the functioning of social relationships. Personal integrity contributes

to our specific interests, and so developing our mental health aspect.

An actual crisis in the relationships is giving us a number of questions related to own personality with a sense of life. Some personality traits are necessary to maintain psychological and social quality of life, foster harmony with oneself and the environment, or conversely they have negative effect, thus the quality of life in various aspects is being reduced. Each of us is a unique combination of personality traits and we carry unique memories in us. As reported by Kofman (2006), based on individual history, we build our own understanding of the present and thus affects our future. Our experience determines our mental and social aspects of health. According to Krivohlavý (2002) is a personality defined as a person's unique pattern of traits and personality comprises the structure and dynamics of an individual as a unique unrepeatable individual. Important attributes of personality for mental aspect of health are adequate self-esteem, self-control, balance, responsibility, the ability to build lasting relationships, a good level of job performance. An individual with such personality traits is able to positively affect the social environment and build the satisfactory functioning social relations. Such harmony of intellectual and social aspects determines subjective satisfaction what has a preventing effect on somatic and psychiatric disorders (Krivohlavý, 2002). Mental health benefits from rich, deep and active feelings and interests, which are focused on a worthwhile goal. Young people often carry out activities together, which makes them satisfied and fulfils their sense of happiness. This is due to the fact that the value of family, love and children is getting more important, which provides partners with mutual happiness and mutual enrichment. A social and psychological aspect of health in young adulthood is related to the need for an emotional anchor of a loved one. We can therefore assume that the anchoring of the partnership enhances the quality of life in mental and social aspect. At the same time it can be assumed that for focusing the partner (emotional) relationship differs significantly in the presence of personality traits compared with individuals who do not work in a partnership relationship. In our study, we seek to determine whether the stated aspects of quality of life meets individual criteria in differences existing connected to partner relationship and personality characteristics. We are dedicated to personal characteristics and determine their share in shaping the psychological and social aspects of quality of life. We review the major attributes in conjunction with emotional closeness in young adulthood.

2. Method

For our purpose, a questionnaire method was used. Selected demographic data was important to include participants in your research: age-specific characteristics of young adulthood, only employed participants were included in our research. The research group consists of 98 young adults ($M=23,97$ years; 22 – 26 years). To detect perceived emotional closeness Social support questionnaire MOS was used, which is an indicator of degree of social functioning. Standardization on Slovak republic was done by J. Kožený and L. Tišanská (2002). The questionnaire consists of 18 questions in 3 dimensions. Our main focus is on emotional closeness dimension. To determine the level of psychological and social quality of life aspects questionnaire WHOQL - BREF/1996 was used. The questionnaire has a standard form from World Health Organization (1996) measuring 5 fields of quality of life. Multifactor personality questionnaire Miglierini is used to assess personality traits in our research. The questionnaire comprehends the personality profile as an open system and personality factors are created for in period of adolescence. Proximity linking adolescence to young adulthood, as well as exploring personality factors of this close developmental periods are the reason of choosing this multifactor personality questionnaire.

3. Results

Results were processed using statistical software SPSS, using inference statistics (Spearman correlation coefficient and Mann Whitney U test).

Tab.1 Observed relations between social quality of life and personality traits

1	2	3	4	5	6	7
-.267**	-.206*	-.224*	-.200*	-.261**	-.205*	-.204*
.008	.043	.027	.050	.010	.044	.045

Legend: Social quality of life

Correlation Coefficient
Sig. (2-tailed)

1. Secure – Insecure
2. Balanced - Unbalanced
3. Sober - Daydreaming
4. Mental and physical enthusiasm – Neurotic symptoms
5. Emotional volitional stability
6. Positive – Negative emotional relationships in family
7. Relationships in family

An interesting result between quality of life and personality traits occurs, because there is no relation between psychical quality of life and personality as expected. But on the other hand there is a link between social quality of life and personality (as you can see in tab.1). This relationship is due to factor C – Emotional volitional stability ($r = -, 261$; $p = , 010$), which occurs as most important for social quality of life. Emotional volitional stability is contained by security, balance, and sobriety, mental and physical enthusiasm of participants. Participant who are secure and easy-going, emotionally balanced, cheerful, sober, realistic, optimistic and feel mentally and physically enthusiastic evaluate their social quality of life higher. Social quality of life is connected as well to positive relationships in families.

Tab. 2 Observed relations between perceived emotional closeness and personality traits Perceived emotional closeness

	Mental and physical enthusiasm – Neurotic symptoms
Correlation Coefficient	-.256*
Sig. (2-tailed)	.011

Interesting result showed up as well in connection between perceived emotional closeness and a factor from emotional volitional stability, specifically mental and physical enthusiasms (tab.2.). The less neurotic symptoms participants perceive the more they feel emotionally close to others.

Tab. 3 Observed personality differences between participants with and without relationship

	Relationship	N	Mean Rank	Sum of Ranks	Mann – Whitney U	Sig.
1	1,00	55	44,65	2456,00	916,000	,052
	2,00	43	55,70	2395,00		
2	1,00	55	54,76	3012,00	893,000	,036
	2,00	43	42,77	1839,00		
3	1,00	55	54,87	3018,00	887,000	,033
	2,00	43	42,63	1833,00		

Legend

1. Secure – Insecure
2. Mental and physical well-being
3. Relationship to the people (Trustful – Untrustful)

Significant personality differences between single ($N1 = 43$) and non single ($N2 = 55$) participants are found. As we can see in tab. 3, participants in relationship feel more physically and mentally healthy and more secure but on the other hand they

evaluate themselves as more untruthful and more critical to others.

4. Discussion

Interesting findings on personality traits relate to differences between participants due to the existence of partnership. There is also found a link between personality traits of participants and social aspects of quality of life, and there is not a relation between personality traits and mental aspects of quality of life. The findings suggest that personality replicates social world of people, which is reflected in the ability to generate high-quality intimate and personal relationships. A mental aspect of quality of life is demonstrated as important for emotional closeness, indicating a strong human need to be loved, someone who can be lived for.

The social aspect of health represents functioning and level of interactive relationships. Social environment and social group to which an individual belongs significantly influences the quality of life and lifestyle and contributes to the formation of personality. Social area of quality of life has proved to be most associated with participant's personality traits, and psychological quality of life is not reflected in the personality. As it seems, this finding supports the well-known fact that for positive personality functioning is important emotional saturation, which resources are emotionally close people. The mere proximity of humans is a priority in young adulthood. As reported by several authors Vágnerová (2000), Langmeier, Krejčířová (2006) an individual matures in developmental and personality way, what has an result in a specific range of values which an individual attaches importance. Partnership and love are the most important to him. The finding that the social aspect of quality of life relates to personality traits more than psychological may result in support the idea, which corresponds to the priority to young adulthood, which is partnership and satisfaction in the social relationships. After overcoming puberty a period of adolescence and young adulthood comes, when there is inter alia to create partnerships. Vágnerová (2000) claims at the forefront of social relations is partnership in adulthood, as well as differences between the participants based on the existence of a relationship are proving essential in this period, which supports this conclusion.

The research results indicate that the existence of partnership and the perceived degree of emotional closeness creates some degree of mental and physical well-being in humans, respectively small degree of neurotic symptoms prevent the development of close emotional relationships while creating a sense of social quality of life.

Literature:

- Bratská, M.: *Zisky a straty v záťažových situáciách alebo príprava na život*. 1. Edition. Bratislava: Práca, 2001. 103p. ISBN 80-7094-292-4.
- Džuka, J.: *Kvalita života a subjektívna pohoda - teória a modely, podobnosť a rozdiely*. In *Psychologické dimenzie kvality života*. Prešov: Prešovská univerzita, Filozofická fakulta, 2004. ISBN 80-8068-282-8.
- Ferransová, C.E.: *Psychometric assesment of the Duality of life*. Research in Nursing and Health, 1992. 29-38 p. ISSN 1098-240X.
- Gilbert, G.: *Ať se Ti život povede*. Praha: Portál, 2012. 88p. ISBN 978-80-262-0157-1.
- Gurková, E.: *Hodnocení kvality života*. Praha: Grada, 2011. 221p. ISBN 978- 80-247-3625-9.
- Grún, A.: *Co živi lásku*. Praha: Portál,2011. 134p. ISBN 978-80- 262- 0015-4.
- Hewstone, M., Stroebe, W.: *Sociální psychologie*. Praha: Portál,2006. ISBN 807-36-709-2-5.
- Hnilicová, H.: *Kvalita života a její význam pro medicínu a zdravotnictví*. In Payne, J. et al. *Kvalita života a zdraví*. Praha: Triton,2005. ISBN 978-80-725-4657-2.
- Kofman, F.: *Vědomý business*. Praha: Portál, 2006. 343p. ISBN 978 80- 7367-747-3.
- Křivohlavý, J.: *Konflikty mezi lidmi*. Praha: Portál, 2002. 187p. ISBN 80-7178-642-X.
- Křivohlavý, J.: *Psychologie zdraví*. Praha: Portál,2001. 279 p. ISBN 80-7178-774-4.
- Kováč, D.: *WHOQOL-BREF*. Bratislava: WHO – ÚEPs SAV, 1996.
- Kováč, D.: *Kvalita života - naliehavá výzva pre vedu nového storočia*. In: *Československá psychologie*. Vol.45, No.1,2001. 33-34p.
- Kožený, J., Tišanská, L.: *Dotazník sociální opory – MOS. Vnitřní struktura nástroje*. In *Československá psychologie*, 2003. Vol. XLVII, No.2, 135-143p.
- Langmeier, J., Křejiřová, D.: *Vývojová psychologie*. Praha: Grada, 368p. 2006. ISBN 80-247-1284-9.
- Miglierini, B.: *OSOBNOSTNÝ DOTAZNÍK*. Psychodiagnostické a didaktické testy Bratislava.
- RÍČAN, P.: *Psychologie osobnosti*. Praha: Grada, 2010. 195p. ISBN 978-80-247-3133-9.
- Švehlířková, L., Heretik, A.: *Kvalita života*. Psychiatria – Psychoterapia – Psychosomatika. 2008. Vol. 15, No. 3, 194-198p. ISSN 1338-7030.
- Tokárová, A.: *K metodologickým otázkam výskumu a hodnotenia kvality života*. In *Kvalita života v kontextoch globalizácie výkonovém spoločnosti*. Prešovská univerzita: Filozofická fakulta, 2002, 11-30p. ISBN 80-8068- 087-6.
- Vašina, L.: *Psychologie zdraví*. Ostrava: Ostravská univerzita, Filozofická fakulta, 1999. 84p. ISBN 80-7042-546-6.
- Vágnerová, M.: *Vývojová psychológia*. Praha: Portál, 2000. 522p. ISBN 80- 7178-308-0.
- Zelina, M.: *Stratégie a metódy rozvoja osobnosti dieťaťa*. Bratislava: IRIS, 1994. 228p. ISBN 80-967013-4-7-26.
- Veenhoven, R.: *The four qualities of life. Ordering concepts and measures of the good life*. Journal of Happiness Journal Studies,2000. Vol.1, No1, 1-39p. ISBN 92-908-1130-4.
- Millová, K., Blatný, M., Kohoutek, T. (2008). *Osobnostné aspekty zvládania záťaže*. E-psychologie [online], WWW: <<http://e-psycholog.eu/pdf/millova-et-al.pdf>>.

Primary Paper Section: A

Secondary Paper Section: ED

LEGAL FOUNDATIONS OF METROPOLISES AND METROPOLITAN AREAS IN POLAND

^aSYLWIA ŁĘKAWSKA, ^bANETA PAWŁOWSKA

Jagiellonian University, Gronostajowa 7, Cracow, Poland
Email: ^asylwia.lebek@uj.edu.pl, ^baneta.pawlowska@interia.pl

Abstract: The issues of metropolises and metropolitan areas remain one of the major Polish challenges in long-term national development policy. Ten metropolitan centers were identified based on the metropolitan functions in the national settlement system: Warsaw, Silesia conurbation, Cracow, Łódź, Tri-city, Poznań, Wrocław, Bydgoszcz-Toruń duopolis, Szczecin and Lublin. In 2012, Ministry of Administration and Digitization of Poland released information about public consultations concerning metropolitan areas. The main goal of this article is to review Polish legislative acts concerning metropolises, metropolitan areas and their delineation along with contemporary legal and administrative solutions.

Keywords: metropolis, metropolitan area, legislation, public administration.

1 Introduction

As an offshoot of urbanization, metropolization is believed to be among the most characteristic spatial processes of 20th and 21st centuries. B. Domański (2008) considers metropolitan areas as main drivers of economic development in Poland after 1991. These areas are most privileged as compared to other regions on account of their ability to develop innovations and support their spread. Besides, numerous institutions crucial for economic development such as firms, banks and scientific bodies are also clustered in metropolitan areas. Above all, these institutions include high-tech companies and business-related services all making the knowledge-based economy thrive.

The issues of metropolitan areas have aroused considerable interest and provoked debates among both scientists and policy-makers during recent years. This interest has been invigorated since the introduction of works on legal act concerning the role of municipal governments located in close proximity to the Polish major cities. Unfortunately, the number, physical range, demarcation criteria and management of metropolitan areas have all aroused controversy and most of these issues still remain a bone of contention. Accordingly, although every large city wishes to be included to the elite circle of metropolises, not all desires can be fully justified. Depending on the concept, the recommended number of metropolises ranges from one (Warsaw) to seven-eight, and sixteen at the very most. Although the appropriate legislation has not been enacted, the decisions to reinstate legislative works are still being discussed by the politicians.

The main goal of this article is to review Polish legislative acts concerning metropolises, metropolitan areas and their delineation along with contemporary legal and administrative solutions. Numerous typologies of metropolises and metropolitan areas made by the socio-economic geographers and sociologists are quoted in order to compare scientific and political standpoints.

2 Major definitions of metropolis and metropolitan area

Late 19th and early 20th century can be perceived as a period of thriving large urban centers. As a result of industrial and infrastructural development cities experienced a great population influx giving a rise to first big-city landscapes in a form of urbanized area called urban agglomeration (from Latin *agglomerare* - to mass together). This term was first used in 1856 in France (Gontarski 1980) while in Poland the notion of urban agglomeration appeared in 1960s defined as an area where population cluster in space (Dziewoński and Kosiński 1964; cited by Czyż 2009). Accordingly, the agglomeration consists of inner city along with adjoining, strongly urbanized area of total population reaching over 100,000 of which most live off non-agricultural activities (Parysek 2003). E. Iwanicka - Lyra (1969) defines agglomeration as *densely built-up area comprising urban core, housing estates and surrounding administrative units all characterized by higher than average values of*

indicators accepted as urbanization measures; the more advanced urbanization processes the stronger linkages between city core and surrounding areas.

Structural changes within agglomeration emerged in consequence of suburbanization and counter urbanization processes both responsible for strengthening its internal integration and increase of spatial range (Czyż 2009). Settlement systems became more functionally complex thus agglomeration was identified with metropolitan area, and its center with metropolis (Parysek 2003). More recently, Markowski and Marszał (2006) defined agglomeration as densely built-up area of mutually related settlement units developed by concentration processes. In unison, these authors do not advice to identify agglomeration with metropolitan areas. Agglomerations can become metropolitan areas by quantitative transformations such as advanced urbanization and processes of functional and spatial integration (Markowski and Marszał 2006). Contrary to metropolises and metropolitan areas, the term agglomeration takes account of morphological aspect and refers to advanced stage of settlement system (Czyż 2009).

2.1 Metropolises

The term metropolis is derived from Greek (*metrópolis*) and denotes mother city or capital city (Pirveli 2003). Although metropolis has multiple meanings, only a few are actually utilized in geographical sciences. One of them refers to city-states of ancient Greece which performed political and economic functions in a relation to superiority to the Greek colony. In Polish language the term metropolis means relatively large city dominating at least one domain on an international scale (Zborowski 2005). Only in the late 1980s did this term emerge in relation to urban development in a way replacing the term urban agglomeration.

According to Zborowski (2005) contemporary metropolis embraces large city of 1) concentrated political and cultural power as well as 2) control and decision-making functions in global economy. Besides that, each metropolis must develop strong and mutual bonds with other large urban centers. Parysek (2003) defines metropolis as a city with political, administrative, social, economic and cultural institutions of superior role over the whole nation and apparent significance on an international scale. Nowak (2010) identifies metropolis with final stage of urban development (development of urban agglomeration) and dubs it "mother city" i.e. local center of sub-regional, regional and country-wide significance with clear-cut range of influence.

In order to distinguish metropolises a criterion of total population is most utilized. Following this train of thought, the total population of a city must be equal to at least 1,000,000 (Jałowicki 1999), and at least 500,000 in case of regional center (Jałowicki 2005, Zborowski 2005). Presently however, the sole demographic criterion is far insufficient. Instead, a complexity of functions and their role as nodes in global socio-economic network come to the fore (Maik 2003; Zborowski 2005; Markowski and Marszał 2006). Alongside the above principles, metropolises should be distinguished by morphological criterion i.e. including three complementary areas within urbanized area: city core, city outskirts and suburban area ranging up to twenty kilometers (Smętkowski et. al. 2008).

Metropolitan city must be also recognized by the excellence of services, institutions and infrastructure; it ought to hold potential to expand innovative capability in technical, economic, social, political and cultural terms (Bassand 1997; cited by: Jałowicki 2005). The urban brand is equally important as the image serves city promotion (Markowski and Marszał 2006). According to Korcelli (1998) metropolises are these cities which meet demographic criterion and possess modern services of at least regional significance. Meetings, congresses, exhibitions, festivals as well as sport and art events are all organized in

metropolises. Therefore, metropolitan center must provide excellent links with other large cities by road, railroad and air transportation all operating regionally and internationally. The presence of international media headquarters (radio, TV and press offices) also attest to metropolitan character of a city (Lendzion 2004).

P. Soldatos (cited by: B. Jałowicki 1999) distinguishes as many as 10 hallmarks of a full-fledged metropolis of global significance (P. Soldatos, cited by Jałowicki 2000). Such a metropolis:

- absorbs foreign factors of production, investments, workforce, services and supplies,
- hosts foreign firms, seats and branches of international companies, banks, NGOs, institutions of science and education (schools), universities with a considerable proportion of foreign students, diplomatic outposts,
- exports factors of production, companies, banks and other socio-economic, cultural and scientific institutions,
- is directly connected with foreign countries by transportation links owing that to well-developed freeway system, rapid railroad and international air transportation,
- has well-developed "info structure" evidenced by communication with foreign countries by mail and telecommunication services; generates and absorbs sizeable touristic traffic,
- possesses developed service sector focused on foreign customers, congress and exhibition centers, luxury hotels, international schools, high-quality office space, international law offices and scientific institutions,
- hosts mass media institutions of international range (newspapers, magazines, radio, television),
- regularly organizes various international meetings: congresses, exhibitions, festivals, sport and art events visited by foreign drama groups,
- has internationally-recognized institutions operating on a national and regional level and dealing with foreign affairs e.g. associations, sport teams etc.,
- conducts para-diplomatic activities in foreign cities by means of own representatives (urban or private public institutions); this activity is manifested by the participation in international organizations such as twin cities, sister cities etc.)

Stronger cooperation with other metropolises than with municipalities located in the suburban area is a key characteristic of a metropolis (Jałowicki 1999, Jałowicki 2005, Markowski and Marszał 2006). Total population, human services and spatial range of influence are among the criteria for a city to be recognized as a metropolis (Zborowski 2005). This city must also possess sizeable economic and innovative potential (evidenced by the presence of scientific and research institutions) and strong development of human services of at least national range.

Metropolises should play a vital role in the transportation network, develop contacts between organizations, facilitate information flows and stimulate network model of development in the field of urban economy and management. Moreover, the aforementioned criteria include the existence of extensive and highly-urbanized suburban zone and specificity or uniqueness of local history and culture as well as certain lifestyle patterns (Markowski and Marszał 2006). Markowski and Marszał (2006) classify metropolises by metropolitan functions and spatial range of influence to: global, international (continental) and national (regional).

In turn, Parysek (2003) using slightly different approach classifies cities into four types by the development of their functions:

1. world cities (global cities),
2. continental cities (world cities),
3. sub-continental cities (international cities),
4. national cities.

In addition, there is also a view that metropolises are only these cities which perform significant functions on an international scale and, simultaneously, they have well-developed functions on a national scale (Jałowicki 1999, Korcelli-Olejniczak 2004).

2.2 Metropolitan area

The notion of metropolitan area was first used in the United States in 1910. At the time, this term denoted an urban center of total population no fewer than 50,000 along with adjoining suburban areas and smaller settlement units (Szymańska 2009) and was used only for statistical purposes in relation to administrative division. Markowski and Marszał (2006) define metropolitan area as large urban mono- or polycentric settlement system embracing a zone of considerable and direct daily influence, which consist of multiple settlement units and urbanized area.

Czyż (2009) identifies metropolitan area with territorial arrangement of settlement that demonstrates clear-cut system characteristics. These characteristics include:

- socio-economic relationships within internal system of metropolitan area,
- full-fledged sub-system of daily links between residential areas and work etc.,
- limited range of exogenous bonds within the urban network system,
- development of external connections (Czyż 2009).

Metropolitan area comprises central city (metropolitan center) and metropolis along with functionally and spatially integrated settlement units. Dissemination of social and economic phenomena takes place within the entire metropolitan area (Czyż 2009). According to ESPON publications metropolitan area consists of its center - urban agglomeration - and surroundings from which urban residents commute to the city center (Lendzion 2004). Thereupon, transportation network within metropolitan area should be very well-developed (Markowski and Marszał 2006).

Contrary to the terms: agglomeration, urban complex and urbanized area, metropolitan area is perceived qualitatively. It is a functional unit formed by large, compound and functionally coherent urban complex characterized by metropolitan functions and a number of functional links (Markowski and Marszał 2006). Therefore, demarcation measures do not draw from physical characteristics, but they are based upon social and economic indicators (Marszał 2005).

Zborowski (2005) points out to the separate term of metropolitan region often erroneously identified with metropolitan area. The former denotes the space metropolitan area exerts impact upon. This space often encompasses sizeable parts of the country and sometimes exceeds national borders. The latter, though, can be compared with functional urban region as delineated by daily travels to work in the city center (Lendzion 2004).

The topic of metropolitan areas is always associated with an issue of their demarcation. Similarly to the classification criteria applied to metropolises, there are also numerous criteria utilized to delineate boundaries of metropolitan areas. Markowski and Marszał (2006) contend that functional criteria are paramount in any demarcation attempts. In addition, they suggest using demographic, economic, technical, social criteria as well as these connected with management, spatial coherence along with these utilized in demarcation of so-called daily urban system.

2.3 Metropolization

Metropolises are being formed during metropolization - one of the most prominent processes of 19th and 20th centuries. This process transforms urban space inducing changes in the relation between central city and its outskirts by *abating or breaking economic relations and simultaneously replacing them by relations with other metropolises on a continental or global*

scale (Jałowiecki 1999). According to Markowski and Marszał (2006) metropolization of urban space is a process connected with formation of new spatial structure, which helps large cities become the centers of economic development and acquire advantage over other areas.

Large cities concentrate world economic, financial and scientific potential. Apart from that, they take over superior functions in international economy management and dominate in terms innovativeness and quality of services. Lenzion (2004) describes metropolization as a process based upon accelerated development of cities and subsequent formation of more or less complex urban system around them. Metropolization is characterized by transition from quantitative to qualitative indicators of urbanization. This is, among other things, connected with the development of knowledge-based economy. Jałowiecki (1999) views metropolization as a process of taking over managerial and executive functions by large cities within economic and political international environment. This process is accompanied by far-reaching transformations of social, spatial and functional urban structure (Parysek 2003, Jałowiecki 2000).

Presently, multifunctional city centers are turning into uniform office space, business districts are being located in the peripheries, usually in the vicinity of airports, and shopping centers are being found further from the city core and closer to the main arteries. The profile of shopping centers is also under considerable changes - aside from shopping, they offer a range of "mass culture" services such as cinemas, bowling alleys, restaurants etc.

As a result of rising sense of danger, "gated communities" equipped with video surveillance are being erected in the peripheral parts of many cities. Furthermore, a strong demand on ludic spaces is observable in the society, which is evidenced by burgeoning buildings of mass culture and entertainment like cinemas, theaters, restaurants etc. (Smętkowski et al. 2008).

The process of metropolization entails numerous positive and negative consequences. One adverse effect include spatial polarization as the role of central city increases at the expense of its outskirts (Smętkowski i in. 2008). For this reason, large cities somehow detach from the rest of the country and develop faster than non-metropolitan areas. Consequently, a continuous growth of socio-economic inequalities causes marginalization of more distant regional hinterlands (Lenzion 2004; Jałowiecki 2005).

Smaller cities and towns find it very hard to compete with large metropolises. As large cities cooperate with one another more closely and more effectively, their relations with own hinterlands turns into decline (Marszał 2005). Hence, a role of social and economic "neighbor" is taken by other, more distant metropolis instead of surrounding area - this leads to "spacial discontinuity" (Jałowiecki 1999).

As a result, territorial differences in most countries continue to spread since metropolises concentrate sectors of rapid economic growth and develop faster than peripheral areas. These areas start to resemble a reservoir of poorly-qualified workforce or a place of residence and entertainment for affluent urban dwellers (Smętkowski et al. 2008).

Another issue concerns polarization within metropolitan center, where job market changes radically in effect of metropolization. Local job market is under intense segmentation as highly-qualified, high-earner workforce of young professionals, managers and culture- and media makers form so-called "metropolitan class" (Jałowiecki 2005) alongside a number of the unemployed living in the same area.

Metropolises are not inhabited by poor citizens, however in comparison to rich "metropolitan class" there is a colossal gap between "affluent" and "very affluent" frictions of population (Smętkowski et al. 2008).

2.4. Metropolitan functions

Metropolitan functions can be defined as exogenous functions of at least interregional importance and range (Markowski and Marszał 2006). The formation and development of metropolitan functions occurs along with acquiring by a city "critical mass" in demographic, economic, political, administrative and cultural domains (Maik 2003; Zborowski 2005). In consequence of some threshold level of socio-economic development numerous urban functions start to accumulate and interact with one another which results in formation of human services - metropolitan functions. Markowski and Marszał (2006) include the following highest-rank human services to metropolitan functions: political, religious, administrative, cultural, scientific, educational, touristic, economic, financial, communication and information. Spatial range and scope of these functions remain off the essence as the main role play these functions of decision-making character on an international scale. Czyż (2009) defines metropolitan functions as socio-economic functions of the entire metropolitan area (not only central city) exerting influence internationally, nationally and regionally. Metropolitan (big-city) functions determine the specificity and uniqueness of a city as compared to the whole settlement system (Szkurlat 2003).

Maik (2003) distinguishes three aspects of metropolitan functions. First include prevailing functions formed thanks to the absence of rival city in the vicinity and, inter alia, rapid economic development. Second aspect refers to control functions in economic, political, social, cultural and technical domains. Third encompasses functions that form international character of interrelations between cities. According to Parysek (2003) metropolitan functions are generated by clustering in a metropolitan center managerial and executive head offices of international economic corporations as well as financial (banks, stock exchanges), scientific (universities, scientific institutes), technological (technological parks) and cultural (museums, operas, theatres) institutions. Furthermore, metropolitan functions are shaped by introductions of fast and frequent transportation links (railroad and air transportation) with major economic centers in a continent or in the world. Nowak (2010) in his publication entitled *Polityka przestrzenna w polskich obszarach metropolitalnych (Spatial policy in the Polish metropolitan areas)* distinguishes five the most important metropolitan functions. Within Polish metropolitan areas these functions include: economic, transportation, touristic, cultural and scientific.

3 Metropolises and metropolitan areas in the world

World-first research on metropolises and metropolitan areas was conducted in the United States in the mid-20th century. Presently, three major metropolitan administrative units operate in this country: Metropolitan Statistical Area (MSA - federally designated geographical unit consisting of an urbanized area with a central city of at least 50,000 residents and a regional population of 100,000), Consolidated Metropolitan Statistical Area (CMSA - a central city of at least 50,000 residents along with surrounding counties of substantial commuting interchange), and Primary Metropolitan Statistical Area (PMSA that consists of one or more counties that have substantial commuting interchange).

In Canada, a separate governmental unit of Montreal Metropolitan Community deals with spatial planning, economic development and public transportation in most of the Greater Montreal area. Equivalent body operates in Stuttgart, Germany - Verband Region Stuttgart, which governs waste management system and touristic development. Present in the city since 1990 - Great London Authority - manages, among other things, transportation, spatial planning, public security, culture and health (Nowak 2010). Apart from aforementioned examples, a selection of rankings and classification of metropolises and metropolitan areas exists in the literature.

After reviewing the literature Inicki (2003) reports that the authors distinguish as many as 80 world cities. The most

frequently-cited include London, Paris, Tokyo, New York, Los Angeles, Chicago, Hong Kong, Sydney and Amsterdam. London, Tokyo and New York can be found in almost all classifications, thus these are accepted as global cities (Sassen 1991; cited by Parysek 2003).

The research carried out by Beaverstock et.al. in 1999 identifies metropolises by four types of activities: accounting firms, advertising agencies, financial and banking institutions and legal offices (Beaverstock et.al. 1999; cited by Ilnicki 2003). Using the above criteria as many as 55 cities are referred as world cities. Ten of them are identified as alpha (London, Paris, New York, Tokyo, Chicago, Frankfurt, Hong Kong, Los Angeles, Milan, Singapore), another ten beta (San Francisco, Sydney, Toronto, Zurich, Brussels, Madrid, Mexico City, Sao Paulo, Moscow, Seoul) and 35 gamma with Warsaw included in the last group.

According to the ranking published in 1999, the following European metropolises: London, Paris, Frankfurt and Milan are placed at the top and classified as alpha. Beta metropolises include Zurich, Brussels, Madrid and Moscow, and gamma metropolises embrace Warsaw after such metropolises as Amsterdam, Düsseldorf, Geneva, Prague, Rome and Stockholm. The Polish capital is classified higher than Barcelona, Berlin, Budapest, Copenhagen, Hamburg and Munich (J.V Beaverstock et. al 1999; cited by: Smętkowski et. al. 2008).

4 Metropolises and metropolitan areas in Poland – legal foundations

First delimitation of metropolitan areas and metropolises in Poland dates back to 1968 Central Statistical Office (GUS) identification of 17 cities-metropolises (Ilnicki 2003). In the publication entitled *Miasta polskie jako potencjalne metropolie o znaczeniu kontynentalnym (Polish cities as potential metropolises of continental significance, 2003)* Ilnicki distinguished Warsaw as world metropolis and Poznań, Wrocław, Gdańsk and Cracow as potential metropolises of continental significance. Markowski and Marszał (2006) identified a few groups of metropolises in Poland by the development of metropolitan functions criterion. Warsaw took top position in this ranking placed in A group as the only city of best-developed metropolitan functions. Cracow and Tri-city (Gdańsk, Gdynia, Sopot) were included into B, and Wrocław along with Poznań to C group. Group D consisted of Łódź and group E of Silesia conurbation. Szczecin and Lublin (F group) along with Białystok, Rzeszów, Toruń and Bydgoszcz (G group) were all classified as potential metropolises.

In 2008, Smętkowski et al. attempted to identify Polish metropolises based on demographic criterion and metropolitan characteristics describing control and managerial functions, academic and cultural potential, external market attractiveness, and transportation accessibility. As a result of this analysis, Warsaw, Silesian conurbation, Cracow, Poznań, Tri-city, Wrocław and Łódź were classified as metropolises. The remaining large cities were divided into regional (type A and B), sub-regional and supra-local centers.

Currently, the notions of agglomeration, metropolis and metropolitan area are not present in the Polish legal system. However, there is an option to legally appoint municipal associations. This obligation is entrusted to municipal council which can enact cooperation resolution on a local level and allocate appropriate financial resources to achieve this goal (*An Act of March 8, 1990 on municipal government; Dz.U.2001.142.1591; article 18, paragraph 2, subparagraph 12*). In order to perform public obligations, municipalities can found associations (*article 64 paragraph 1*) and covenants between one another (*chapter 7*). Importantly, the main benefits of municipal associations include: joint fundraising and mutual aid in performing public obligations (transportation, communication, waste management etc.).

In 1990 the Polish Metropolises Union was founded, which consists of 12 member cities presently (Białystok, Bydgoszcz, Gdańsk, Katowice, Cracow, Lublin, Łódź, Poznań, Rzeszów, Szczecin, Wrocław and Warsaw). Naturally, the sole participation in this union does not settle the matter of metropolitan character of a city.

In the Act of 23 March 2003 on spatial planning and development (*Ustawa z 23 marca 2003 r. o planowaniu i zagospodarowaniu przestrzennym*) metropolitan area is defined as an area of large city and functionally related adjacent area as determined in National Spatial Development Concept (article 2, subparagraph 9). The same legislation notifies that metropolitan areas are to be outlined in provincial spatial development plans (article 39, paragraph 3, and subparagraph 4). Provincial authorities are obligated to include spatial development plans for metropolitan areas as a section of provincial spatial development plans (article 39, paragraph 6.).

National Spatial Development Concept is a main document describing strategy of national development. This document distinguishes metropolitan areas as a part of national settlement system alongside such elements as requirements concerning environmental and national monument protection, distribution of social infrastructure etc. First such concept was prepared in 1994 (before the reforms administrative division). In 2005 a new document - Actualized National Development Concept - was enacted by the Polish Cabinet on September 6th 2005.

In this document metropolitan area was defined as *an area of high quality of services, institutions and material resources; high innovative potential in technical, economic, social, political and cultural terms; high competitiveness of production and advanced specialty of services (including science and research, culture) on a national and international scales; strong internal relations evidenced by economic, social and institutional cooperation; intense connections with other national and foreign metropolises due to good transportation links; uniqueness and specificity of place as well as its attractiveness not only on a national, but also international level.*

Metropolitan area includes a core city and adjacent, spatially compact area comprising municipalities of high level and pace of development. Hinterlands of metropolitan area form a zone of intensified economic and social activity with municipalities of high level and dynamics of development. In the aforementioned document structural criteria are utilized in order to distinguish metropolitan areas. In the spirit of *Concept...*, the total population residing in a core city should not be lower than 300,000, and this limit in case of the city along with the entire metropolitan area equals 500,000.

As many as 10 core cities (Warsaw, Łódź, Cracow, Wrocław, Poznań, Gdańsk, Szczecin, Bydgoszcz, Lublin and Katowice), 9 metropolitan areas (warszawski, wrocławski, krakowski, łódzki, poznański, śląski, bydgosko-toruński, szczeciński, trójmiejski) and three potential metropolitan areas (Białystok, Lublin and Rzeszów) are distinguished using the above criterion. Regrettably, National Development Concept of 2005 did not sufficiently utilized integrated approach to the policy of development; hence this document was withdrawn from the lower chamber of the Polish parliament in 2006.

The most recent National Concept of Spatial Development 2030 distinguishes metropolises and metropolitan areas drawing on the experiences of other countries and analyses made by ESPON. The new criteria applied to qualify a city to metropolises include its role in economic management on at least national scale, high economic potential, multitude and diversity of human services, symbolic functions, high external touristic attractiveness, high educational opportunities and innovative capacity, ability to maintain trade, scientific, educational, and cultural relations with international metropolises and high internal and external transportation accessibility.

Ten metropolitan centers were identified based on the metropolitan functions in the national settlement system: Warsaw, Silesia conurbation, Cracow, Łódź, Tri-city, Poznań, Wrocław, Bydgoszcz-Toruń duopolis, Szczecin and Lublin (Fig. 1). The criteria included total population, employment in non-public service sector, the number of university and college students, cooperation with scientific and research institutions, airport location, the number of 4- and 5-star hotels, the number of international exhibitions.

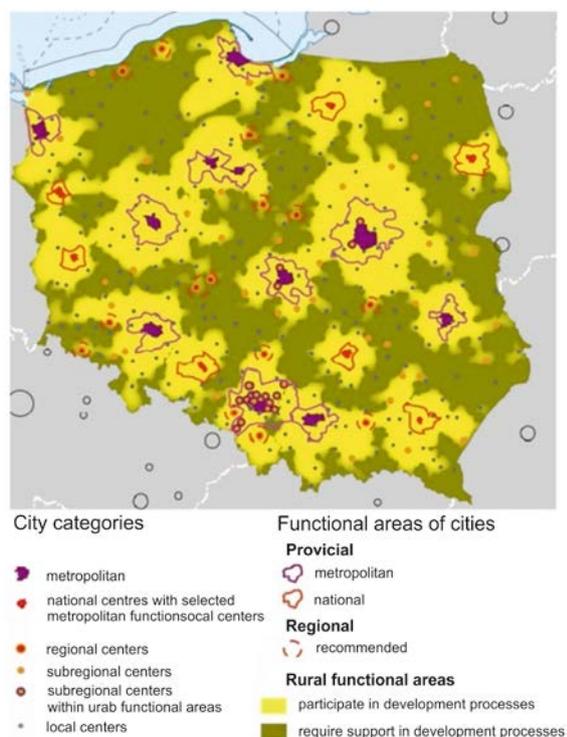


Figure 1. Metropolitan and functional areas of cities
Source: *Koncepcja Przestrzennego Zagospodarowania Kraju 2030*

Pursuant to National Development Concept 2030 all provincial seats are obligated to demarcate urban functional areas as well as to prepare strategies and development plans for the whole functional urban area. Furthermore, Ministry of Regional Development along with the municipalities and government departments must prepare a full list of basic criteria of the above-mentioned demarcation. Threshold criteria are to objectively underpin spatial policy conducted on a regional scale including national urban policy with regard to metropolises and provincial seats. In 2012, Ministry of Administration and Digitization of Poland released information about public consultations concerning metropolitan areas. A dedicated document - the Green Book - summarizes metropolitan experiences to date with regard to European experiences. The main goal of these consultations is to organize and systematize the current knowledge about the reforms and conduct a debate on the urgent issues and dilemmas. On this account, the government intends to prepare the White Book - a document with concrete proposals of legal solutions. The main topics of discussion include:

- significance of metropolitan areas
- public obligations regarding the whole metropolitan areas
- organization structure and political system of metropolitan areas
- relations of metropolitan areas with other administrative units
- financing of metropolitan areas,
- demarcation of metropolitan areas.

The most active discussants in the debate are municipal bodies of Silesia and Zagłębie, which by the metropolitan act would like to sort out several issues connected with e.g. urban transportation in the area where only road signs divides one city

from another. The latest information about the progress in the works on the act on metropolitan areas regards the results public consultations and debates in 2012. The following actions taken by the Ministry of Administration and Digitization are not fully specified.

5 Conclusions

The issues of metropolises and metropolitan areas remain one of the major Polish challenges in long-term national development policy. They are being discussed by scientists, municipal officials and ordinary people.

The decision on cooperation between cities still has not been made, nor did the ongoing debate bring the expected results. All documents prepared to date have been challenged by the local municipal officials and regional representatives.

The works on the new legislation consist of constant consultations and opinions about different solutions with sharp exchanges between discussion participants. It is difficult to predict the final outcome of these debates. Some cities take various initiatives on their own account and attempt to delineate the boundaries of metropolitan areas, yet with a lack of legislative power these areas have no more importance than contractual urban units. These units are often included into provincial spatial development plans (Korecki 2004).

Literature:

1. Czyż, T.: *Koncepcja aglomeracji miejskiej i obszaru metropolitalnego w Polsce*. 81(4). Warszawa: Przegląd Geograficzny, 2009. 445-459 pp. ISSN 0033-2143.
2. Domański, B.: *Rozwój polskich metropolii a regiony peryferyjne. Bezpowrotna separacja czy współzależność rozwoju?*. 120. Warszawa: Studia KPZK PAN, 2008. 135-143 pp. ISSN 0079-3493.
3. Gontarski, Z.: *Obszary metropolitalne w Polsce*. 109. Warszawa: Biuletyn KPZK PAN, 1980. ISSN 0079-3493.
4. Ilnicki, D.: *Miasta polskie jako potencjalne metropolie o znaczeniu kontynentalnym (próba identyfikacji)*. Łódź: XVI Konwersatorium Wiedzy o Mieście, Uniwersytet Łódzki, Łódź, 60-72 pp. ISBN 9788387749620.
5. Iwanicka-Lyra, E.: *Delimitacja aglomeracji wielkomiejskich w Polsce*. 76. Warszawa: Prace Geograficzne IGiPZ PAN, 1969. ISSN 0373-6547.
6. Jałowiecki, B.: *Metropolie*. Białystok: Wyd. Wyższej Szkoły Finansów i Zarządzania, 1999. ISBN 83-87256-08-0.
7. Jałowiecki, B.: *Spoleczna przestrzeń metropolii*. Warszawa: Wyd. Naukowe Scholar, 2000. ISBN 9788388495076.
8. Jałowiecki, B.: *Polskie miasta w procesie metropolizacji*, 1 (19). Warszawa: Studia Regionalne i Lokalne, 2005. 5-14 pp. ISSN 1509-4995.
9. Korcelli, P.: *Metropolie i funkcje metropolitalne – podstawowe pojęcia i ich zakres*. 53. Warszawa: Zeszyty IGiPZ PAN, 1998. 84-90 pp. ISSN 0012-5032.
10. Korcelli-Olejniczak, E.: *Funkcje metropolitalne Berlina i Warszawy w latach 1990-2002. Współzależność pozycji w systemie miast Europy Środkowej*. 198. Warszawa: Prace Geograficzne IGiPZ PAN, 2004. ISSN 0373-6547.
11. Korecki, D.: *Metropolitalność Krakowa*. 1-2. Kraków: Instytut Rozwoju Miast, 2004. 17-24 pp. ISSN 1733-2435.
12. Korenik, S.: *Metropolie we współczesnej gospodarce z uwzględnieniem realiów polskich*. 214. Warszawa: Biuletyn KPZK PAN, 2004. 22-31 pp. ISSN 0079-3493.
13. Lendzion, J.: *Znaczenie obszarów metropolitalnych i ich otoczenia oraz współczesnych procesów metropolitalnych w kształtowaniu polityki regionalnej Państwa*. Gdynia: Bałtycki Instytut Spraw Europejskich i Regionalnych.
14. Maik, W.: *Pojęcie metropolii a problem badania funkcji metropolitalnych*. Łódź: XVI Konwersatorium Wiedzy o Mieście, Uniwersytet Łódzki, 2003. 9-17 pp. ISBN 9788387749620.
15. Markowski, T. and Marszał, T.: *Metropolie obszary metropolitalne metropolizacja. Problemy i pojęcia*

- podstawowe, Warszawa: Biuletyn KPZK PAN, 2006. ISSN 0079-3493.
16. Marszał, T.: *Struktura funkcji gospodarczych w łódzkim obszarze metropolitalnym*. 216. Warszawa: Biuletyn KPZK PAN, 2005. 200-211 pp. ISSN 0079-3493.
 17. Nowak, M. J.: *Polityka przestrzenna w Polskich obszarach metropolitalnych*, Warszawa: Wyd. CeDeWu Sp. z o.o., 2010. ISBN 978-83-7556-189-0.
 18. Parysek, J.: *Metropolie: metropolitalne funkcje i struktury przestrzenne*. Łódź: XVI Konwersatorium Wiedzy o Mieście, Uniwersytet Łódzki, 2003. 19-40 pp. ISBN 9788387749620.
 19. Pirveli, M.: *Funkcja metropolitalna, a proces globalizacji*. 4 (4). Warszawa: Studia Regionalne i Lokalne. 33-40 pp. ISSN 1509-4995.
 20. Smętkowski, M. et al.: *Diagnoza problemów rozwoju obszarów metropolitalnych i rekomendacja delimitacji obszarów metropolitalnych w Polsce*, Warszawa: Centrum Europejskich Studiów Regionalnych i Lokalnych (EUROREG), Uniwersytet Warszawski, 2008.
 21. Szkurlat, E.: *Prestiż i specyfika miejsca jako kryterium metropolizacji polskich miast*. Łódź: XVI Konwersatorium Wiedzy o Mieście, Uniwersytet Łódzki, 2003. 73-81 pp. ISBN 9788387749620.
 22. Szymańska, D.: *Geografia Osadnictwa*. Warszawa: Wydawnictwo Naukowe PWN, 2009. ISBN 978-83-01-16106-4.
 23. *Ustawa o planowaniu przestrzennym z dnia 27 marca 2003, Dz.U. 01.142.1591*.
 24. *Zaktualizowana Koncepcja Przestrzennego Zagospodarowania Kraju 2007-2013*. Warszawa: Rządowe Centrum Studiów Strategicznych, 2005.
 25. *Koncepcja Przestrzennego Zagospodarowania Kraju 2030*.
 26. Zborowski, A.: *Przemiany struktury społeczno-przestrzennej regionu miejskiego w okresie realnego socjalizmu i transformacji ustrojowej (na przykładzie Krakowa)*, Kraków: Instytut Geografii i Gospodarki Przestrzennej UJ, 2005. ISBN 388424475.

Primary Paper Section: A

Secondary Paper Section: AD, AO, AP

IMPACT OF RECENT SHOPPING CENTER DEVELOPMENTS ON COMMERCIAL REAL ESTATE VALUE IN THE CITY CENTER OF ŽILINA

^aALEXANDRA POKORNÁ

*Institute of Forensic Engineering of University of Žilina, Ulica 1.mája 32, 010 26 Žilina, Slovakia
email: sandrapokorna@yahoo.com*

Abstract: The structure of market value of commercial real estate in the city center of Žilina was recently modified due to the development of two major shopping centers that dramatically increased the supply of commercial leasable area. This article aims to identify the key aspects influencing the drop in the rental asking prices for retail and office spaces with an effort to describe the most important ones including the increase of gross leasable area, availability of free parking, changes in opening hours and worsening of day light conditions in the existing surrounding indoors spaces.

Keywords: market value, commercial real estate shopping center.

1 Introduction

The city of Žilina lies in the northwestern part of Slovakia in the Upper Váh region in the north temperate zone with continental climate. Its geographical location made it into an administrative, economic and cultural center and a major international road and railway junction resulting in its attraction not only to local inhabitants but also to a considerable number of visitors and by-passers from a wide trade area. The population of Žilina is 84,290 (as of Oct.31, 2012) with the metro area population mounting to over 159,000 inhabitants and trade area of over 680,000. The city and its vicinity are home to significant industrial employers including Kia Motors, Siemens, Metsä Tissue, Váhostav, etc. Žilina also acts as a regional business and retail center and houses a University with more than 12,000 students.

2 Brief History of Shopping Centers in Žilina

After the velvet revolution in the 1989, the changes in the political constitution of former communist countries led to a fast growth of demand for retail industry. Prior to the transformation to open market economy, Žilina had one venue with 5,000 square meters of gross leasable area on 3 floors, which could be characterized as a shopping center by current standards¹ that opened in 1975. It is located in the city center as seen on the map in Fig.1 where it replaced mixed-use town houses that were torn down after expropriating the original owners by the communist regime. Apart from changing ownership from state to various companies in time intervals (Tesco at present), it has undergone modernization of interiors transforming most of the leasable units into a single brand store. Parking for the building is located outdoors on ground level and consists of 12 spaces.

Unlike expected, the first newly built post-communist shopping center in Žilina was not built on the outskirts of the city with an easy access by vehicles. On the contrary, open on Nov.16, 2001, the shopping center Dubeň was built between the mass housing area Vlčince and a town forest park following a controversial modification of town planning regulations where areas formerly reserved for sports were turned into land for commercial use. This encouraged other retailers to open their stores in the neighborhood, where all buildings including the shopping center have a ground level outdoor parking with more than 1,000 spaces for Dubeň and the area is serviced by a single road with three roundabouts. Unfortunately, lack of diligent traffic planning and its integration to the modified town plan has led to frequent traffic jams occurring permanently to this day.

On Dec.7, 2007 shopping center Max was open, located on the fringe of mass housing Solinky offering gross leasable area of 18,000 square meters on 3 floors and 490 parking spaces

outdoors and indoors². Comparably to the Dubeň shopping center it is serviced by a single road previously designed to meet traffic requirements of the housing area but unlike Dubeň it was not built on a green field as other retailers had already settled in this area (Metro). Apart from shopping centers, Žilina also houses a number of supermarkets and hypermarkets like Tesco, Baumax, Lidl, Billa, etc.

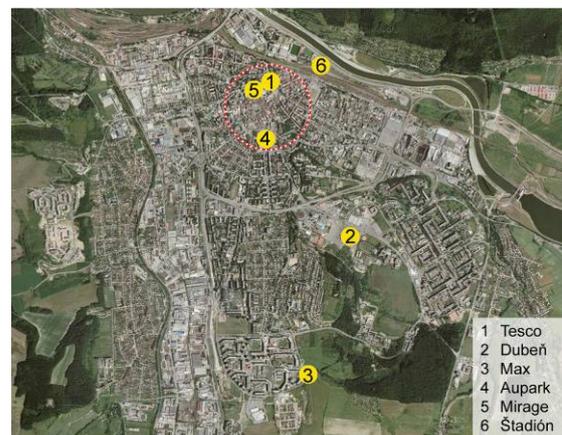


Fig.1: Map of Žilina with shopping centers (yellow) and the area of the city center (in the red circle).

Two most recent and largest additions to Žilina's collection of shopping centers were built in 2010, both inducing public protests and controversy. Shopping center Aupark opened Oct.21, 2010 after it won a law suit with the city of Žilina pertaining to town plan regulations. It is located in the city center where it replaced the largest public square in the city and offers around 26,000 square meters of gross leasable area on 3 floors and over 850 indoor parking spaces³. Mirage shopping center was opened on Nov.15, 2010 with over 21,000 m² gross leasable area on 7 floors⁴ and 388 indoor parking spaces⁵. It is situated in the historical city center on a site previously occupied by smaller mixed-use development torn down with strong public disapproval and was erected over a public parking house built by the city.

In the process of preparation and currently on hold is another shopping center Štadión close to the city center in Žilina making use of its pedestrian zone that should combine sports venue, specifically football and ice-hockey, with retail, entertainment and offices. This project should bring more than 66,000 square meters of gross leasable area and 1,750 parking spaces.

3 Influences on the Commercial Real Estate Value

Although the generally accepted opinion that shopping center development has prevalently positive influence on surrounding areas and society providing higher tax revenues, employment, regeneration, and key infrastructure⁶ is partly applicable in the situation of Žilina, it could be argued that the latest shopping centers built in the city center, Aupark and Mirage, yielded some more or less expected negative impacts as well. Most significant aspects of these developments with an influence on the commercial real estate value in their immediate vicinity lie in the

¹ Lambert, J.: *One Step Closer to a Pan-European Shopping Center Standard* [online] Research Review, Vol. 13, No. 2. New York: International Council of Shopping Centers, 2006. p.35-40. retrieved 2012-11-23 from www.icsc.org/srch/lib/euro_standard_only.pdf.

² Max Servis, s.r.o.: *Presentation of the Max network* [online], retrieved 2012-11-20 from www.maxservis.sk/max/5.Prezentacia_siete.

³ Aupark: *About Aupark* [online], retrieved 2012-11-20 from zilina.aupark.sk/page/sk/Informacie/O-AUPARKU.html.

⁴ Bielik, T., Štansky, P.: *Mirage* [online] Žilina: Mirage Shopping Center, a.s., 2010, 120 p. retrieved 2012-11-20 from www.mirageshopping.sk/info/zobrazo-obchodnom-centre-mirage/.

⁵ Žilinská parkovacia spoločnosť. (2012). *Parking house* [online], retrieved 2012-11-23 from www.zilinskaparkovacia.sk.

⁶ International Council of Shopping Centers: *ICSC and its Work in the EU* [online], retrieved 2012-11-23 from www.icsc.org/government/europe_work.php.

major increase of leasable retail and office area, the availability of free parking in city center, longer opening hours rendering the city center more attractive and changes in the day light conditions in surrounding indoor spaces with impact on their function.



Fig.2: Map of Žilina city center with shopping centers Aupark and Mirage and Národná street.

3.1 Increase of gross leasable area

Probably the most significant influence of the shopping centers built in the Žilina city center is the overall increase of gross leasable area with impact on average rental prices reaching most areas in the city. However, the effect of this influence is most present in the structure of commercial real estate value in the city center, where Aupark's and Mirage's combined added over 47,000 square meters to gross leasable area in this location representing a sudden major increase compared to previously available area in the main shopping street Národná with approximately 14,000 square meters (Fig.2). As this growth in supply was not exactly matched by demand, the average asking prices for retail and office spaces in the city center dropped. This is illustrated in the graphs in Fig.3 and Fig.4 where average rental asking prices for commercial spaces in Žilina city center are shown excluding the commercial spaces within shopping centers Aupark and Mirage⁷ (notice: asking prices are significantly higher in the mentioned malls).

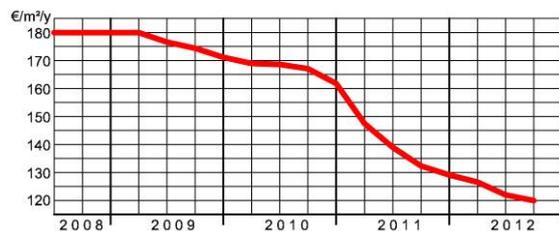


Fig.3: Graph of rental asking prices development for retail spaces in Eur/m²/year in Žilina city center.

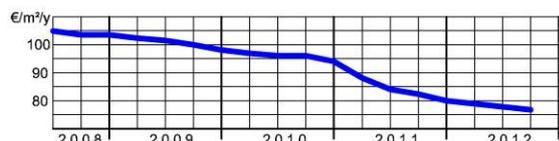


Fig.4: Graph of rental asking prices development for office spaces in Eur/m²/year in Žilina city center.

The influence of the ongoing global economic crisis on the commercial real estate value can only be analogically deduced from the data available for residential property since reliable information on commercial property is currently nonexistent in Slovakia⁸. The data processed by the National Bank of Slovakia showing the development of prices of residential real estate represented in the graph in Fig.5 indicate that the major decrease in real estate prices occurred in the years 2008 and 2009 with price changes comparably smaller afterwards. Consequently an assumption can be made that a similar scenario occurred in commercial real estate implying that the drop in average asking rental prices for retail and office spaces in Žilina was caused by the opening of the two shopping centers in October and November 2010.

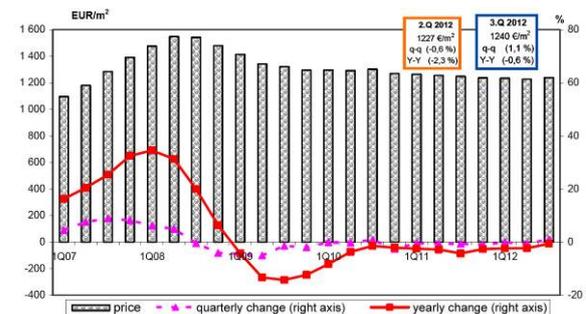


Fig.5: Graph of the development of residential real estate prices in Slovakia⁹.

Prior to existence of these shopping centers, the city's most attractive retail and office spaces were situated on a set of main pedestrian streets and squares. This natural pedestrian flow used to start at the railway station, continuing through city's pedestrian zone consisting of the principal shopping street Národná and interlinked squares Andreja Hlinku, Mariánske and Ludovíta Štúra, with the last-named being no longer in existence as the site was built up by Aupark.

Apart from adding new brand stores, the two developments drew in most of the existing ones previously located on the parts of the streets and squares not on the passageway connecting Aupark and Mirage. This happened mostly because the shopping centers advertise a more comfortable shopping experience independent of time and weather, with on site parking and a high concentration of shops, restaurants and entertainment facilities. As a result a change of the consumers' behavior took place, mainly in movement patterns, which now concentrate in the shopping centers themselves or between them. This affected the prices of commercial rental spaces on the pedestrian zone outside the shopping centers. Národná presently houses stores with products financially accessible to less economically powerful consumers consisting mostly of daily commuters migrating to and from railway and bus stations which reflects the decrease of asking prices for retail spaces in this area previously unavailable for these types of stores. Similar situation occurred in other parts of the city center not located directly in the current major pedestrian circulation area. By contrast, asking prices for commercial spaces increased in real estate situated in the pedestrian movement areas around the two shopping centers, even encouraging new rental spaces to be built there.

Although this change could be perceived partly positively, especially by the owners of the premium properties, the overall effect of the increase of the gross leasable area in the Žilina historical city center resulted in a drop of average asking prices for commercial rental spaces outside the shopping centers. This transformation has been also reflected in longer advertising

⁷ Realitné centrum RED: *Index RED 100/50* [online], Žilina: Realitné centrum RED, 2011, 2p. retrieved 2012-11-10 from www.red.sk/vztahy/red-index.

⁸ Čár, M.: *Current situation at the commercial real estate market*. In Biatec, ISSN 1335-0900, 2011, vol.17, no.7, p.8-14.

⁹ Department of macroeconomic analyses of Currency politics section of National Bank of Slovakia: *Development of residential property prices in Slovakia in 3Q/2012* [online], retrieved 2012-11-20 from www.nbs.sk/_img/Documents/_Statistika/VybrMakroUkaz/CenyNehnutelnosti/protected/VyvojCN_3Q2012.pdf.

periods when renting a property and a higher number of unoccupied commercial spaces not only in the city center but also in other parts of the city (i.e. shopping center Max).

3.2 Supply of free parking spaces

Parking availability and accessibility for customers and employees is among crucial factors influencing the value of commercial real estate. In Žilina on-street parking is in operation with fees varying from 0,80 to 2,00 Euro per hour in the center and due to a growth in the automobile usage, parking has become particularly difficult recently. As a result commercial properties without the possibility of restricted free parking in the city center lost some of their appeal to automobilized part of population who in turn preferred shops and offices with free or less expensive parking outside the city center.

Through the development of Aupark the city center of Žilina acquired 850 unpaid parking spaces located on its premises plus the 388 spaces in the park house below Mirage became free of charge too. This had a positive influence on commercial real estate value in the city center making it available to a larger spectrum of consumers. In fact the radius of this benefit stretches quite far beyond the city center, especially for those using it for longer time periods, such as owners or employees of local businesses and institutions mostly during winter. The parking spaces within the shopping centers are not reserved only for their visitors, but are available for public without restrictions and time limitations between the hours of 8,00 and 21,00.

However, based on the experience from different cities in Slovakia with shopping centers located in the center (i.e. Trenčín), it is highly probable that the possibility of free parking in Aupark and Mirage will be restricted in the future. This particular issue is nevertheless very sensitive for the shopping centers and the changes of their strategy will depend on the parking capacity usage and availability primarily for their customers. The situation is far better in the case of Aupark because the ratio of gross leasable area to the number of parking spaces is more favorable. The parking house used by Mirage's customers not only has a much weaker ratio but the layout of parking spaces meets merely the minimal requirements of the standards resulting in less comfortable parking. With the possible introduction of time restrictions of free parking on the side of the shopping centers limiting the stay to 1 or 2 hours, the positive influence of the free parking availability on the real estate value in the neighborhood will be modified depending on the rates compared to Žilina's on-street parking and the fact that consumers will most probably use this time period to shop only within the shopping centers without visiting other stores outside. If in effect, this new parking regulations would prevent long period stays hence reducing the radius of its positive influence outside the city center.

3.3 Change in opening hours

Before the operation of the two shopping centers in Žilina city center, the opening hours of majority of the stores located in this area were from 9,00 to 18,00 Monday to Friday and from 9,00 to 12,00 on Saturday, staying closed on Sundays, with the exception of Tesco. The city center appeared vacant during most of the weekend with a negative influence on restaurants and cafes located there.

The shopping centers stay open all week including bank holidays from 9,00 to 21,00 having positive influence on the operation of the eating-out facilities located in the historical city center that profit from a higher circulation of consumers during the weekends. The new opening hours created a lively environment, however, as already described the location of the beneficiaries of this positive effect is restricted to the zone of the highest pedestrian movement. The two shopping centers in this case substitute the role of public institutions that should take the lead role in creating attractive and vibrant public open spaces through incorporation of cultural, educational and sports events.

3.4 Changes in day light conditions in the surrounding indoor spaces

Perhaps not so obvious on the larger scale of real estate affected by the shopping centers, the aspect of changes in day light conditions in the surrounding existing indoor spaces is nonetheless significant in properties directly surrounding them. Requirements for hygienic conditions related to sun light and day light in existing indoor spaces with a permanent presence of people, e.g. apartments, offices, stores, etc. are set in the valid legislation, specifically the Slovak National Standard (STN) 73 0580-1 Z2: 10/2000. Parameters examined include the equivalent angle of outdoor shadowing that represents minimal required values of day light penetrating into the analyzed spaces and on unbuilt sites independently of insolation. The highest permitted angle in Žilina is 30 degrees without differentiation and should be guarded by county council's building department during planning permission process.

The development of Aupark and especially Mirage in historical center with dense built environment led to noticeable worsening of day light conditions in the surrounding buildings facing the shopping centers northern and western facade. Most affected are existing indoor spaces located on the ground floor where the minimal hygienic requirements cannot be met and thus if the equivalent angle of shadowing is higher than 30 degrees no longer qualify as offices or stores. It could be speculated why this particular aspect was not examined in detail by the authorities during the planning process; however the resulting decrease in the value of real estate housing the affected spaces is apparent.

4 Conclusion

The two shopping centers located in Žilina's city center had a strong impact on the value of commercial real estate in the surrounding neighborhood, with the most influential aspect being the increase of gross leasable area. Although the availability of free parking and longer opening hours rendered the city center more attractive to most consumers, this positive effect was outweighed by the unbalanced ratio of supply and demand of commercial rental spaces leading to a drop in asking prices for commercial real estate. The real estate market is constantly influenced by a large number of factors, one of them presently being the effect of the global economic crisis responsible for the decrease in real estate value in 2008 and 2009. However, the drop in commercial real estate value in Žilina city center was clearly caused by the new competitive environment created by the two shopping centers.

Aupark and Mirage might have drawn more people to the city but the beneficiaries of this situation are restricted to the pedestrian passageway between the malls. The two shopping centers used rather one-sidedly the favorable urban layout of Žilina's city center building on its historic tradition of pedestrian movement from Národná to Antona Bernoláka streets. That is also where most of the premium stores used to be located but now with the shift in the consumer behavior the commercial real estate value is higher elsewhere. Further analysis of possible town planning regulations in view of the sudden major increase of gross leasable area in city centers could be undertaken in the future so that large private estates' influence on the existing structure of urban fabric is more positive without preventing quality public open spaces from existence.

Literature:

1. Aupark: *About Aupark* [online], retrieved 2012-11-20 from zilina.aupark.sk/page/sk/Informacie/O-AUPARKU.
2. Bielik, T., Štansky, P.: *Mirage* [online] Žilina: Mirage Shopping Center, a.s., 2010, 120 p. retrieved 2012-11-20 from www.mirageshopping.sk/info/zobraz/o-obchodnom-centre-mirage/
3. Cár, M.: *Current situation at the commercial real estate market*. In Biatec, ISSN 1335-0900, 2011, vol.17, no.7, p.8-14

4. International Council of Shopping Centers: *ICSC and its Work in the EU* [online], retrieved 2012-11-23 from www.icsc.org/government/europe_work.php
5. Lambert, J.: *One Step Closer to a Pan-European Shopping Center Standard* [online] Research Review, Vol. 13, No. 2. New York: International Council of Shopping Centers, 2006. p.35-40. retrieved 2012-11-23 from www.icsc.org/srch/lib/euro_standard_only.pdf
6. Max Servis, s.r.o.: *Presentation of the Max network* [online], retrieved 2012-11-20 from www.maxservis.sk/max/5.Prezentacia_siete
7. Department of macroeconomic analyses of Currency politics section of National Bank of Slovakia: *Development of residential property prices in Slovakia in 3Q/2012* [online], retrieved 2012-11-20 from www.nbs.sk/_img/Documents/_Statistika/VybrMakroUkaz/CenyNehnutelnosti/protected/VyvojCN_3Q2012.pdf
8. Realitné centrum RED: *Index RED 100/50* [online], Žilina: Realitné centrum RED, 2011, 2p. retrieved 2012-11-10 from www.red.sk/vztahy/red-index
9. *Slovak National Standard STN 73 0580-1 Change 2: 10/2000, Daylighting in buildings, Part 1: Basic requirements*
10. Žilinská parkovacia spoločnosť. (2012). *Parking house* [online], retrieved 2012-11-23 from www.zilinska.parkovacia.sk.

Primary Paper Section: A

Secondary Paper Section: AH, AL, JN

PLANNING FOR PARTICIPATION IN TOURISM EVENTS – AN EXAMPLE OF SLOVAK CITIZENS

^aKRISTÍNA POMPUROVÁ, ^bIVANA ŠIMOČKOVÁ

*Matej Bel University, Faculty of Economics,
Tajovského 10, 975 90 Banská Bystrica, Slovakia
email: kristina.pompurova@umb.sk,^bivana.simockova@umb.sk*

The study is part of the project UGA I-12-001-01 Prerequisites of tourism entrepreneurship conditions improvement in Slovakia, addressed to the Faculty of Economics, Matej Bel University in Banská Bystrica.

Abstract: Tourism events represent a dynamic element of the destination primary offer. Destination stakeholders seek in hosting the tourism events augmentation of destination visitation, furthermore, it helps to overcome the seasonality, to enhance the destination marketing and to sustain a positive development of the area. The study investigates Slovak citizens' participation planning in tourism events while focusing on the demographic profile of individuals. The study findings are based on primary sources analysis of data collected via questionnaire survey. The purpose of this study is to investigate the frequency of Slovak citizens' participation in tourism events, their decision-making process, ways of travel organizing and main sources of information.

Keywords: *event, tourism, demand, planning.*

1 Theoretical background

The concept of tourism events has been examined by several domestic and foreign authors, such as Ritchie, Beliveau (1974), Gartner, Holecek (1983), Formica (1998), Gůčik (2001), Harris et al. (2001), Janeczko et al. (2002), Madden et al. (2002), Gibson et al. (2003, 2012), Hede et al. (2003), Šindler (2003), Cegielski et al. (2004), Deery et al. (2005), Fredline et al. (2006), Jago, Dwyer (2006), Getz (2007, 2012), Kmeco (2007a, 2007b), Jones et al. (2008), Stokes (2008), Macfarlane, Jago (2009), Musgrave, Raj (2009), Weed (2009), Crowther (2010), Robinson et al. (2010), Bowdin et al. (2011), Panyik et al. (2011), Tkaczynski, Rundle-Thiele (2011), Lović et al. (2012), Walker (2012), Coghlan, Filo (2013). For this reason, it is quiet demanding to find its single definition. While taking into consideration every common aspect of this term, we understand the organized event as a spatiotemporal purposefully created occasion of limited duration which in concentrated form facilitates, mediates and completes the original experience as a source of personal knowledge, making it unique in terms of both visitors and organizers.

From the point of view of roles and functions fulfilled by the tourism events, it is important to mention their capability to increase the destination incomes and to improve infrastructure facilities. Furthermore, tourism events give impulse to creation of a large variety of other tourist attractions and they increase the general awareness of the destination, stimulate the tourism development in the area, enhance the destination image and generate other positive economic, social, political and environmental effects in the territory. From this aspect, it is necessary to examine the tourism events demand.

Getz (2012) assumes that the demand of tourism events visitors differs in several aspects from the tourism demand. This is caused mainly by the fact that an event is being offered in the market as an experience, not as a concrete service. In case of tourism events, it is therefore difficult to express the relation between the amount of required goods and services and their prices. Besides, the economic determination, which gives the ratio of the number of required events and their costs, cannot be universally applicable as the entry to certain events is free of charge, or is subsidized. Price may not be considered as a key factor in the demand for events. Since participation in events can be identified with acquisition, or, buying an experience, it is necessary to emphasize its high substitutability and in case of paid events even high price elasticity.

Event participation is influenced by several factors, mostly by visitor's personality, his/her values, attitudes, lifestyle, needs and motives, personal and interpersonal factors such as culture, family, occupation, free time and expectations arising from

previous experiences and marketing activities (Getz 2012). Structural obstacles/challenges (event offer, knowledge of the event hosting, selection and event accessibility, time as a participation cost, age and health of individuals) together with personal obstacles (preferences, risk perception) and interpersonal barriers (social isolation) influence the decision-making process of each individual. A concrete decision to visit/attend the event results from consideration of the restrictions, accessible information and the possibility of substitution. The visitor's loyalty (vs. his/her desire to seek the news) and the event attractiveness pay a significant role too.

Kruger and Saayman (2012, p. 39-40) underline the need to reveal the information sources of potential visitors and the way they decide whether to visit or not a certain event (spontaneity vs. planning). The decision-making process originates at the moment of visitor's participation need recognition (eg. to attend an every-year music festival), it continues with the information search about the event offer and venue, cost judgment, evaluation of alternatives and it ends up with the decision realization. Own personal experience influences future decision-making process. Kruger and Saayman (2012) point at the fact that event participants prefer external information search before the internal. While the internal information search is related to own experience and gained knowledge, the external information search consists of the information obtained from neutral sources (tourist information centres, tourist guides), commercial sources (sales person, travel agents, brochures) social sources (relatives and friends), printed and electronic sources (newspapers, journals, radio, TV, internet).

Furthermore, Kruger and Saayman (2012, p. 40) point at the fact that while several individual event visitors do plan their participation in a detailed way and compare the event offer (basic and complex product), advertisements and prices, others are capable to decide spontaneously. Such a behavior can be either expressed via impulse buying without any previous judgment (pure impulse buying) or reminder impulse buying steaming from previous own experience or recall, suggestion impulse buying undertaken after first offer examination or planned impulse buying when the visitor travels to the destination with the aim to realize a not specified buying depending on the price, uniqueness, etc.

2 Aim and research material

The purpose of the study is to examine the way of tourism events participation planning of the Slovak citizens. The study findings are based on primary sources analysis obtained through the questionnaire survey.

The questionnaire survey was undertaken in the first quarter of year 2013. The sample selection consisted on quota selection respecting the age and gender structure of the Slovak population. From the overall 839 questionnaires obtained in the survey 23 wrong questionnaires were excluded in primary selection. Collected data were recoded and transformed into data matrix using the Excel programme. To control the representativeness of the sample, chi-square test was applied using the PASW SPSS (version 19) programme and other 42 questionnaires were excluded from further analysis.

Final research sample consisted of 774 respondents who according to the chi-square test represent the population of Slovakia from the point of view of age (Sig. = 0,994) and gender (Sig.=0.732). More than one seventh of the respondents are under 14 years, 14.3% of the respondents are between 15 and 24 years old, 17.1% of the respondents belong to the group of 25-34 years, 15.2% are between 35 and 44 years old, 14.2% of the respondents belong to the group of 45 to 54 years old, 12.4% of respondents are between 55 and 64 years old and 11.6% are

older than 65 years. The research sample consisted of 50.8% of women and 49.2% of men.

Different mathematical- statistical methods were used in order to analyze collected data. The statistical tests were verified with a reliability of 95%, ($\alpha=0.05$).

3 Study findings

Structured questionnaire focused on the participation frequency of Slovak citizens in tourism events; furthermore it examined decision-making process about the event participation, way of travel organizing and dominant information sources.

3.1 Participation frequency on the tourism organized events

More than 97.7% of respondents visit the organized events in average in a year. According to confidence interval for Mean, with reliability of 95%, between 97% and 99% of Slovak population attend organized events in average in a year. More than three quarters (76 - 82%) of the Slovak population attend the events at least few times in a year. They prefer cultural events (attendance of 92 to 95% of the population) and the least visited are the social- political events (attendance of 14 to 19% of the population). We assume that such a low percentage is caused by irregular periodicity of the events.

Table 1: Respondents' participation frequency in organized events

Type of events	Respondents attending events in%				
	never	sometimes	few times in a year	few times in a month	weekly
Cultural	6.46	33.07	52.07	6.59	1.81
Religion	63.70	21.83	10.59	1.55	2.33
Sports	30.75	31.52	24.68	9.56	3.49
Business	42.38	36.69	17.31	2.84	0.78
Social-political	83.20	12.92	3.23	0.65	0.00
Multi-theme	57.36	31.65	9.43	1.16	0.39
Other	57.36	31.65	9.43	1.16	0.39
Sum	2.32	18.73	55.81	16.54	6.60
Number of Slovak citizens in%	1-3	16-21	52-59	14-19	5-8

Source: Own elaboration based on the SPSS outcomes, 2013.

We asked the respondents whether they visit the events more often in their place of residence or outside of it. The results of the questionnaire survey showed us that with the exception of business events respondents attend the events more frequently in their place of residence. These results correspond with the theoretical background of the organized events.

Although the events attendance in the place of residence prevails, we assume that more than 10% of the respondents yearly do not attend the events. The main reason is their economic situation related to a high level of unemployment and low disposable incomes. Other reasons are lack of time, health complications, other preferences of free- time use and other reasons (unattractive event offer, lack of knowledge of attractive events, missing company, and higher age). The highest number of respondents (41.9%) attends tourism events several times in a year.

According to confidence interval, we assume with reliability of 95% that between 88% and 92% of Slovak citizens attend tourism events (between 87% and 91% of same- day visitors and between 65% and 72% of visitors with overnight stays). The

individuals visit the events more frequently as same-day visitors without an overnight stay in the destination.

3.2 The decision- making about tourism organized events participation

We aimed to reveal whether the respondents plan their attendance to the event organized outside their place of residence or whether they decide spontaneously. More than 56.8% respondents plan their attendance in a detailed way. 43.2% of respondents decide in the last moment and they do not think about own participation forward. In general, we can assume that 52 to 59% of Slovak population plans their tourism events participation in a detailed way.

According to ANOVA, the event participation planning in tourism depends on gender of Slovak respondents (Sig.=0.011, F=6.493), but as well on their age (Sig.=0.000, F=4.855) and current economic activity (Sig.=0.000, F=4.351). We did not prove any dependence on the education, marital status and region of respondents' origin (Sig.> α).

Higher tendency of planning was proved for female respondents (61.4%), while only 51.9% of male respondents plan their tourism events participation.

From the point of view of age, a detailed tourism events participation planning is typical for people over 65 (82.1%), who have enough time to rethink their programme. It is less typical for those who are between 55 and 64 (60.2%), between 25 and 34 (59.5%) and between 35 and 44 (58.62%). On the other hand, children up to 14 years old decide spontaneously (55.9%) which partially relates to their dependence on parental decisions. Lower level of spontaneity is visible in the case of respondents who are between 45 and 54 (49.5%) and between 15 and 24 (49.1%).

When thinking about the economic activity, we assume that seniors with sufficient free- time plan mostly their event participation (82.3%), followed by individuals on parental leave (76.9%), employed person who at the same time carry their own businesses (66.7%), unemployed person (57.6%) and employed (54.6%). The number of students and self- employed who plan or decide spontaneously is almost identical.

We examined the visitors' decision-making time of events held outside their place of residence.

Table 2: Decision-making time of visitors attending events outside their place of residence

Decision-making time	Respondents in%	Slovak citizens in%
Day of event	5.49	4-7
1-3 days before	19.55	17-22
4-7 days before	18.14	15-21
8-14 days before	19.55	17-22
15-30 days before	19.55	17-22
1-2 month before	14.49	12-17
More than two month before	3.23	2-5

Source: Own elaboration based on SPSS outcomes, 2013.

Most of the respondents decide in advance from one to three days before the event (19.6%), from eight to fourteen days before (19.6%) and from fifteen to thirty days (19.6%). Only about 5.5% of respondents decide to participate the day of the event (Table 2). With a reliability of 95% we confirm that more than three quarters of the Slovak population (77- 83%) decide to participate in the event less than one month before it. About 17 - 23% of the population decides a longer time period before the event hosting. In general, we propose that an intensive event promotion campaign should not start earlier than a month before its hosting.

The decision- making time of respondents depends according to the Spearman coefficient on their age (Sig.=0.000, correlation coefficient=0.137) and education (Sig=0.001, correlation

coefficient=0.121) and according to ANOVA it depends on the current economic activity (Sig=0.027, F=2.280) and region of respondents origin (Sig=0.001, F=3.399).

From the point of view of age and education, there is a weak direct dependence. With augmenting age or education the time advance of decision-making is augmenting. While 55% of respondents under 14 decide in maximum one week before, 63.6% of respondents over 65 years old decide in maximum two weeks before.

More than 40% of respondents with secondary or lower education achieved decide about their participation in maximum seven days before (59.7% students of elementary school, 42.9% of respondents with finished elementary education, 42.2% of respondents with secondary education without school leaving exams, 46.7% of respondents with secondary education with school-leaving exams), prevailing part of the respondents with higher education decide from eight days up to two month before the event (61.9% of respondents with bachelor degree, 58.1% of respondents with second level education and 63.4% of respondents with PhD).

The biggest share of students (24.9%) decide one up to three days before the event, 66.7% of employed person carrying own businesses decide between four and seven days before the event, 20.1% of employed and 30.8% of person on parental leave consider their event participation from eight to fourteen days in advance. The most important part of self-employed (20.2%), unemployed (30.3%) and seniors (22.8%) decide from fifteen up to thirty days before the event.

In reference to the region of respondents' origin, more than one fifth of respondents from Žilina region (22.2%), Nitra region (26.2%), Prešov region (33.3%) and Košice region (25%) decide shortly before the event (one- three days before). 29.6% of respondents from Bratislava region decide between four and seven days before the event. The biggest share of respondents from Banská Bystrica region (23.7%) decide from eight up to fourteen days before the event, 27.7% of respondents from Trenčín region decide between fifteen and thirty days and 34.5% of respondents from Trnava region decide between one and two month before the event.

3.3 Way of event participation organizing in tourism

Dominant part of respondents (84.2%) organize their travel and related services to the event venue held outside their place of residence on their own/individually. Only 15.8% of respondent use services of intermediaries, mostly travel agencies and tour operators. With reliability of 95% we assume that between 82% and 87% of Slovak population organize their travel to tourism event venue on their own, only between 13% and 18% use services of intermediaries. This may be the result of a non-complex offer or insufficient promotion on relevant markets.

We used ANOVA to test the relationship between travel organizing and way of event participation planning. The results of each groups averages were statistically significant (Sig.=0.000, F=22.211). About 76.8% of respondents who use the services of intermediaries when organizing their travel to the event venue, plan their participation in a detailed way. This means that beside other information search, they study intermediaries offer and compare it with the possibility of individual travel organizing. More than 23% of respondents decide spontaneously about their participation in the event and use the easiest way to obtain provision of services.

The dependence between way of organizing participation and other variables was verified, such as age (Sig.=0.000, F=4.353), education (Sig.=0.047, F=2.138), marital status (Sig.=0.030, F=23.008), and economic activity of Slovak respondents (Sig.=0.012, F=2.591).

To generalize, we assume that together with augmenting age the use of travel agencies services increases. The only exception is

represented by children under 14 who attend the events with adults, and similarly, people between 25 and 34 (representatives of the Internet generation or generation Y) who are strongly influenced by information and communication Technologies development.

When obtaining services related to the event participation outside their place of residence less than one third of the individuals (32.1%) with elementary education achieved ask travel agencies. These are followed by one fifth (20.3%) of students of elementary schools and few less individuals with PhD achieved (18.2%). Others use intermediaries' services less: only 16.3% of individuals with second university degree achieved 14.9% individuals with secondary education without school-leaving exams, 13.7% individuals with school-leaving exams and only 8.3% individuals with first university degree achieved. We presume that these are represented predominantly by university students (currently undertaking their second degree).

From point of view of marital status, widowed respondents (30.6%) and married person (15.9%) use intermediaries' services which can be related mostly to their age. Single person (12.5%) and divorced respondents (11.4%) use intermediaries' services less often.

Seniors (30.9%) and employed person carrying own businesses (33.3%) ask travel intermediaries when organizing their event participation relatively the most. This may be caused in first case by lack of experiences with individual travelling and incapability to search the information on the Internet and in the second case by lack of time. Employed respondents (13.9%), self-employed (13.3%), students (13.2%), individuals on parental leave (7.7%) and unemployed (6.1%) use intermediaries' services less often.

3.4 Tourism events information sources

Respondents gain the information about events organized outside their place of residence predominantly from the Internet (37.6%), from their family, friends and relatives (33.9%), as well as from their previous own experiences (14.8%) (Table 3).

Table 3: Main information source of events organised outside the respondents' place of residence

Information source	Respondents in%	Slovak citizens in%
Personal experience and obtained knowledge	14.78	10-15
Tourist information offices, Tourism guides	2.58	2-4
Sales people, travel agents, brochures	3.44	2-6
Family, friends and relatives	33.86	36-44
Newspapers, journals	3.01	2-5
radio	1.43	1-3
TV	2.15	1-4
internet	37.59	41-49
other	1.15	0-2

Source: Own elaboration based on SPSS outcomes, 2013.

With a reliability of 95%, we assume that Slovak citizens prefer external information search (between 85 and 90%) rather than internal information search (between 10 and 15%). These external information sources are mostly represented by electronic sources (radio, TV, Internet) and social sources (family, relatives, friends etc.). Slovak citizens use less often commercial sources (sales people, travel agents and brochures), printed sources (newspapers, journals) and neutral sources (tourist information offices, travel guides).

Results after ANOVA confirm a statistically significant dependence between main information sources about tourism events and respondents' age (Sig.=0.000, F=12.464), education

(Sig.=0.000, F=6.762), marital status (Sig.=0.000, F=18.361) and economic activity of respondents (Sig.=0.000, F=7.417).

While young people under 34 prefer Internet as main information source (55% children under 14, 51% of respondents between 15 and 24, 53.5% of respondents between 25 and 34), older individuals prefer predominantly social information sources, (39.2% of respondents between 35 and 44, 45.4% of respondents between 45 and 54, 44.4% of respondents between 55 and 64 and 45.5% of respondents over 65). We assume that together with augmenting age and experience the preferences of personal recommendation of visitors increase.

Marital status of respondents is partially related to their age as well. The biggest share of single respondents (50.7%) search the information about organized events on the Internet. 37.1% of married respondents use predominantly social sources and 31.4% of them uses the Internet. Almost one third of divorced respondents (30.3%) use the Internet and few less of them use social and internal sources (own experience) (27.3%). Almost one half of widowed respondents (45.7%) prefer information about tourism events from their friends and relatives and 31.4% of these respondents profit from internal sources. We assume that these are mostly older respondents who prefer some kind of experience whether own personal or mediated.

When thinking about the education achieved, Internet, as a main source of information about events organized outside respondents' place of residence, plays a vital role in case of elementary school students (54.4%) and respondents with higher university education (56.8% of respondents with bachelor degree, 37.2% of respondents with Engineer, Master, Doctoral title and 54.6% of respondents with PhD degree achieved). Opposite, respondents with elementary education achieved (42.9%) and secondary education achieved (42.2% of respondents without school-leaving exams and 40.6% of respondents with school-leaving exams) get the information mostly from their friends and relatives.

From point of view of economic activity, Internet as main source of information is used mostly by students (55.6%) and person on parental leave (46.2%), social sources are predominantly used by seniors (48.5%) and employed person carrying own businesses.

Conclusion

Slovak citizens participate more often in domestic (overnight stays) rather than outbound tourism. One of the important activities undertaken in domestic tourism is the participation in organized events (Petrík, 2008).

As proved by the results of questionnaire survey, only about 8-12% of Slovak population do not yearly participate in tourism events. With augmenting age the event participation frequency in tourism decreases. Slovak citizens participate in the events in form of same-day tourism and without an overnight stay at the venue. Cultural events are the most visited, which is in conformity with study of Petrík (2008) about the most often undertaken activities in domestic tourism. Events attractive for visitors can attract participants from longer distances, eg. other regions.

Slovak citizens consider their attendance to the events about one month before its hosting (between 77% and 83% of the population). It would be appropriate for the organizers to start an intensive promotion only one month before the event. Considering the most important source of information about tourism events, it would be desired to use predominantly the Internet.

Significant part of Slovak citizens (between 85 and 90%) use external sources of event information (electronic, social, commercial, printed and neutral), which proved the presumption of Kruger and Saayman (2012).

Literature:

1. Bowdin, G. et al.: *Events management*. 3th edition. Oxford: Elsevier Butterworth-Heinemann, 2011. ISSN 978-1-85617-818-1.
2. Cegielski, M. et al.: *Canberra 2000 visitor satisfaction evaluation*. Canberra: Cooperative Research Centre for Sustainable Tourism, 2004. ISBN 1-920704-09-4.
3. Coghlan, A., Filo, K.: Using constant comparison method and qualitative data to understand participants' experiences at the nexus of tourism, sport and charity events. In *Tourism management*, Vol. 35, 2013, Number 2. ISSN 0261-5177, pp. 122-131.
4. Crowther, P.: Strategic application of events. In *International Journal of Hospitality Management*, Vol 29, 2010, Number 2. ISSN 0278-4319, pp. 227-235.
5. Deery, M. et al.: *The national business events study. An evaluation of the Australian business events sector*. Canberra: Cooperative Research Centre for Sustainable Tourism, 2005. ISBN 1-86335-576-6.
6. Formica, S.: The development of festivals and special events studies. In *Festival management and event tourism*, Vol. 5, 1998, Number 3. ISSN 1525-9951, pp. 131-137.
7. Fredline, L. et al.: *Host community perceptions of the impact of events. A comparison of different event themes in urban and regional communities*. Canberra: Cooperative Research Centre for Sustainable Tourism, 2006. ISBN 1-92070-35-3.
8. Gartner, W., Holecek, D.: Economic impact of an annual tourism industry exposition. In *Annals of tourism research*, Vol. 10, 1983, Number 2. ISSN 01607383, pp. 199-212.
9. Getz, D.: Event tourism: Definition, evolution, and research. In *Tourism management*, Vol. 29, 2008, Number 3, ISSN 0261-5177, pp. 403-428.
10. Getz, D.: *Event studies. Theory, research and policy for planned events*. Second edition. Oxon; New York: Routledge, 2012. ISBN 978-0-08-096953-4.
11. Gibson, H. J. et al.: Small-scale event sport tourism: fans as tourists. In *Tourism management*, Vol. 24, 2003, Number 2. ISSN 0261-5177, pp. 181-190.
12. Gibson, H. J. et al.: Small-scale event sport tourism: A case study in sustainable tourism. In *Sport Management Review*, Vol. 15, 2012, Number 2. ISSN 1441-3523, pp. 160-170.
13. Gúčik, M.: Podujatia ako faktor dynamiky mestského cestovného ruchu. In *Kultúra a cestovný ruch. Zborník z vedeckej konferencie*. Banská Bystrica: Ekonomická fakulta UMB, 2001. ISBN 80-8055-507-9, pp. 160-164.
14. Harris, R. et al.: Towards an Australian event research agenda: first steps. In *Event management*, Vol. 6, 2001, Number 4. ISSN 1525-9951, pp. 213-221.
15. Hede, A. et al.: An agenda for special events research: Lessons from the past and directions for the future. In *Journal of hospitality and tourism management*, Vol. 10, 2003, Number 3. ISSN 1447-6770, pp. 1-14.
16. Jago, L., Dwyer, L.: *Economic evaluation of special events: a practitioner's guide*. Canberra: Cooperative Research Centre for Sustainable Tourism, 2006. ISBN 1-86335-595-2.
17. Janeczko, B. et al.: *Estimating the economic impacts of festivals and events: A research guide*. Canberra: Cooperative Research Centre for Sustainable Tourism, 2002. ISBN 1-876685-35-2.
18. Jones, R. et al.: *Assessing the environmental impacts of special events: Examination of nine special events in Western Australia*. Canberra: Cooperative Research Centre for Sustainable Tourism, 2008. ISBN 978-1-92-096598-3.
19. Kmeco, L.: Podujatia organizované v cestovnom ruchu. In Gúčik, M. et al.: *Manažment regionálneho cestovného ruchu*. Banská Bystrica: Slovak-Swiss Tourism, 2007. ISBN 978-80-89090-34-1, pp. 142-150.
20. Kmeco, L.: Produkt organizovaného podujatia a jeho umiestnenia na trhu cestovného ruchu. In Gúčik, M. et al.: *Manažment regionálneho cestovného ruchu*. Banská Bystrica: Slovak-Swiss Tourism, 2007. ISBN 978-80-89090-34-1, pp. 161-168.
21. Kruger, M., Saayman, M.: Promotional decision-making time of visitors at a national arts festival. In *New challenges*

- for tourism promotion. *Tackling High Competition and Multimedia Changes*. Berlin: Erich Schmidt Verlag, 2012. ISBN 978-3-503-13838-8, pp. 37-49.
22. Lović, S. et al.: *Tourist event „Days of plum“ at Blance - Demographic and geographic analysis of visitors* [online]. [01-11-2013]. Available at: <<http://www.gi.sanu.ac.rs/en/>>
 23. Macfarlane I., Jago, L.: *The role of brand equity in helping to evaluate the contribution of major events*. Canberra: Cooperative Research Centre for Sustainable Tourism, 2009. ISBN 978-1-92-152189-8.
 24. Madden, J. et al.: *Estimating demand for a special event and the event's contribution to a regional economy*. Canberra: Cooperative Research Centre for Sustainable Tourism, 2002. ISBN 87668-77-8.
 25. Musgrave, J., Raj, R.: Introduction to a Conceptual Framework for Sustainable Events. In *Event Management and Sustainability*. Cambridge; Wallingford: Cabi, 2009. ISBN 978-1-84593-524-5, pp. 1-12.
 26. Panyik, E. et al.: Implementing integrated rural tourism: An event-based approach. In *Tourism management*, Vol. 32, 2011, Number 6. ISSN 0261-5177, pp. 1352-1363.
 27. Petřík, I.: Národný cestovný ruch v Slovenskej republike. In *Acta oeconomica No 24*. Banská Bystrica: UMB – Ekonomická fakulta, 2008. ISBN 978-80-8083-620-7, pp. 116-132.
 28. Ritchie, J. R. B. Beliveau, D.: Hallmark events: An evaluation of a strategic response to seasonality in travel market. In *Journal of travel research*, Vol. 13, 1974, Number 2. ISSN 0047-2875, pp. 14-20.
 29. Robinson, P. et al.: *Events management*. Wallingford; Cambridge: Cabi, 2010. ISBN 978-1-84593-682-2.
 30. Stokes, R.: Tourism strategy making: Insights to the events tourism domain. In *Tourism management*, Vol. 29, 2008, Number 2. ISSN 0261-5177, pp. 252–262.
 31. Šindler, P.: *Event marketing. Jak využít emoce v marketingové komunikaci*. Praha: Grada, 2003. ISBN 80-247-0646-6.
 32. Tkaczynski, A., Rundle-Thiele, S. R.: Event segmentation: A review and research agenda. In *Tourism management*, Vol. 32, 2011, Number 2. ISSN 0261-5177, pp. 426-434.
 33. Walker, M. et al.: “Win in Africa, With Africa”: Social responsibility, event image, and destination benefits. The case of the 2010 FIFA World Cup in South Africa. In *Tourism management*, Vol. 33, 2012, Number 1. ISSN 0261-5177, pp. 1-33.
 - Weed, M.: Progress in sports tourism research? A meta-review and exploration of futures. In *Tourism management*, Vol. 30, 2009, Number 5. ISSN 0261-5177, pp. 615–628.

Primary Paper Section: A

Secondary Paper Section: H, K

SELF – ASSESSMENT OF STUDENTS OF FINE ARTS EDUCATION IN THE CONTEXT OF THEIR PERCEIVED SUBJECTIVE PREDISPOSITIONS AND LEARNING OUTCOMES

^aADRIANA RÉČKA

*Constantine the Philosopher University, Faculty of Education,
Department of Creative Arts and Art Education, Dražovská 4,
949 74 Nitra, Slovakia
email: ^aarecka@ukf.sk*

Abstract: The paper is concerned with the problem of student self-assessment in the context of their subjectively perceived individual predispositions for the study and acquired learning outcomes. It is based on the results of research the author carried out at Department of Creative Arts and Art Education at Faculty of Education of Constantine the Philosopher University in Nitra in the winter semester of the 2011/2012 academic year, on the sample of students of the programme Training Teachers of Visual Arts as double major combining with other subjects. The author offers a quantitative analysis as well as interpretation and evaluation of partial results of research conducted through two anonymous questionnaires.

Keywords: self-assessment, individual predispositions, training teachers of fine arts

1 Introduction

Pedagogical evaluation is a frequently discussed topic nowadays. As for the higher education teacher practice, it is relevant in several respects. It is important both from the aspect of evaluation - grading of students by a teacher either through continuous evaluation or exam, or in the context of the evaluation of education quality assurance by students, which already has its tradition at the Faculty of Education and is required by law. Last but not least, what is also important is self-assessment, both related to the educational activity of a higher education teacher as well as students. The outcomes of research carried out at the mentioned university show that student self-assessment, which is part of the outcomes of pedagogical practice completed by students during their study in teacher training study programmes, prove to be an exceptionally valuable means of self-understanding and one of the instruments of developing personality qualities of a future teacher during the pregradual training (Satková, 2012).

2. Self-reflection in pregradual teacher training of visual arts students

The problem of teacher self-reflection has been currently discussed by many authors who consider it an inevitable predisposition for the success and efficiency of self-assessment process, and a condition of a teacher's development on the personal, ethical and professional levels (Hupková – Petlák, 2004, Babiaková, 2012). Others emphasise the need to develop the self-assessment abilities already in pregradual training of teachers (Švec, 1996, 1999). Self-reflection in pregradual teacher training of fine arts students is perceived as an exceptionally significant area of the development of professional competencies of future teachers, (not only) with regard to the difficulty and specific nature of evaluation in fine arts education. The products of educational process in a form of outcomes and effects as defined by Průcha (1997, s. 364) are very difficult to be exactly measured in the context of visual arts education, therefore any evaluation by an educator requires a sensitive approach and erudition. On the other side, the visual arts educational environment provides a whole set of opportunities for the development of emotional intelligence.

Our long time objective is a high quality preparation of future teachers of visual arts for practice; therefore we have decided to conduct a research aimed at the evaluation of education by students and self-assessment of students in the context of their subjectively perceived individual predispositions for the study and the acquired learning outcomes. The research outcomes are considered to be a significant source of information for a potential innovation of educational curricula at the university.

3. Research aimed at student self-assessment

3.1. Research objectives

The objective of the research conducted through two anonymous questionnaires was the evaluation of the quality of education and teachers by students with regard to the University and to the Department of Creative Arts and Art Education, as well as the self-evaluation of students in the context of their individual learning predispositions, real learning outcomes and their attitudes to the teaching profession. The questionnaires consisted of 21, or 30 items, but due to a limited extent of the paper the detailed quantitative and qualitative analysis of only some of them is provided here. In the analysis and interpretation of partial outcomes there are also references to the findings which were not included in a synthetic form into the paper, but are important from the aspect of various correlations between objective and subjective indicators of the evaluation of quality by students.

3.2 Research hypotheses

It was assumed that:

1. Our respondents will be more critical to themselves as regards their individual predispositions in the subject of visual arts than in their second subject.
2. Subjective assessment of individual study predispositions of the respondents from higher classes will be more in accordance with real learning outcomes than in the case of respondents from lower classes.
3. There will be more persons who think that their study outcomes realistically reflect their real knowledge, abilities and skills than of the ones who, on the contrary, think that their study outcomes do not quite reflect, or do not reflect at all, their real knowledge, abilities and skills.
4. There will be more of such respondents who think that their study outcomes realistically and adequately reflect their expended effort than the ones who, on the contrary, think that their study outcomes do not quite reflect, or do not reflect at all, their expended effort.

3.3. Research plan and research set

Our research sample consisted of 187 respondents for the first questionnaire and 146 for the second questionnaire, all studying full time in the study programme Training Teachers of Visual Arts (henceforth as UVU) as part of a double major programme, in all years of bachelor's and master's study of the 2011/2012 academic year. Table 1 shows the overview of sub-programmes combining with the UVU, indication of the belonging of the sub-programmes to individual faculties and the number of students in individual years. Of the total number (187) of respondents, 79 (42.30%) study UVU in combination with other subjects at Faculty of Education (in the table below as FE), 75 (40.00%) students combine with subjects from Faculty of Arts (in the table below as FA), 21 (11.20%) students have the second subject at Faculty of Natural Sciences (in the table below as FNS), and 12 (6.50%) students at Faculty of Central European Studies (in the table below as FCES). Of the total number (187) of respondents, 159 (85%) were female and 28 (15%) male.

With regard to a high percentage (93.5%) of participation of potential respondents – students of bachelor's and master's study whose current number (in the winter semester of 2011/2012) in the given study programme has reached 200 – as well as with regard to the anonymous nature of the questionnaire, we assumed adequate validity of research outcomes.

Table 1 Overview of the number of respondents and their belonging to study sub-programmes, studied in combination with Training Teachers of Visual Arts

Sub-programme which I study in addition to visual arts	1 st yr. BC.	2 nd yr. BC.	3 rd yr. BC.	1 st yr. MA.	2 nd yr. MA.	Total
English language and lit. (FE)	2	0	0	3	6	11
Pedagogy (FE)	3	10	7	5	2	27
Psychology (FE)	8	4	6	7	2	27
Training teachers of music (FE)	0	0	2	0	0	2
Physical education (FE)	0	4	1	5	0	10
Technical education (FE)	0	0	0	1	1	2
Slovak lang. and lit. (FA)	2	0	1	0	2	5
Russian lang. and lit. (FA)	1	0	0	0	0	1
German language (FA)	0	0	3	1	0	4
Spanish language (FA)	1	1	0	2	0	4
Italian language (FA)	0	0	1	0	0	1
History (FA)	2	0	0	1	0	3
Aesthetic of education (FA)	16	8	11	5	5	45
Ethics (FA)	1	1	2	2	0	6
Civic education (FA)	1	1	1	0	1	4
Religious education (FA)	0	1	0	1	0	2
Mathematics (FNS)	0	0	0	2	0	2
Physics (FNS)	0	1	0	0	0	1
Chemistry (FNS)	0	0	1	0	0	1
Biology (FNS)	0	1	2	1	0	4
Ecology (FNS)	0	1	1	1	1	4
Informatics (FNS)	3	1	0	0	0	4
Geography (FNS)	1	2	2	0	0	5
Hungarian lang. and lit. (FCES)	0	3	3	4	2	12
Total	41	39	44	41	22	187

Source: Own arrangements

3.4 Research methods

The data were acquired through two anonymous questionnaires containing closed questions, with scaled possibilities in individual items, and open questions with a possibility to develop the answers. The questionnaires consisted of 21, or 30, items aimed at the evaluation of quality of education (from the aspect of objective indicators as well as from the aspect of subjective indicators perceived and evaluated by students themselves) by students of visual arts teacher training programme as double major programme combining with other subject at Constantine the Philosopher University in Nitra. The research was carried out at the end of the examination period of the 2011/2012 winter semester, at the time when the evaluation of the completed subjects was made accessible in the academic information system. The data were processed through quantitative and qualitative analysis of answers from the questionnaires, projected into the tables, or into a verbal interpretation of answers, including verification or evaluation of hypotheses.

3.5 Analysis and interpretation of research outcomes

Our research has brought several interesting findings. Naturally, the main objective was to find out how respondents assess their individual predispositions for the study of fine arts teacher training; however, also individual predispositions with regard to the study of the second subject as part of the double major study programme as well as with regard to the whole study programme, are considered important. Our hypothesis no. 1, by which we assumed that our respondents will be more critical to themselves with regard to individual predispositions in the context of fine arts than in the second subject, was not

confirmed. The respondents perceive their individual predispositions for the study of fine arts more positively than for the study of the second subject. As many as 174 (93.05%) respondents expressed various levels of satisfaction with their individual predispositions for the study of fine arts teacher training. It was surprising that the total number of those who evaluate their individual predispositions in this item as "below average" was 13, because the acceptance to the study programme is conditioned by passing talent entrance exams in visual arts, within which – in our opinion – the ones who do not have individual predispositions for visual arts teacher training are singled out. On the contrary, we were glad that the option "insufficient" was not checked, though it has to be stated, based on real learning outcomes, that in each year one could find 1–3 students who, unfortunately, do not meet the criteria for some subjects (see Table 2).

Table 2 Assessment of individual predispositions in the study programme Training Teachers of Fine Arts

How do you assess your individual predisposition for the study of UVU?	1 st yr. BC.	2 nd yr. BC.	3 rd yr. BC.	1 st yr. MA.	2 nd yr. MA.	Total
As above average	6	3	4	4	8	25
As average	33	33	34	35	14	149
As below average	2	3	6	2	0	13
As insufficient	0	0	0	0	0	0
Total	41	39	44	41	22	187

Source: Own arrangements

For the sake of comparison, an overview of obtained evaluations in the 2011/2012 academic year in theoretical as well as in some practical disciplines is provided (source: AIS UKF in Nitra). Only the evaluations of those disciplines were included into the text in which the number of the signed up and evaluated (graded) students is about 40. In case of theoretical disciplines, the number related to a given year may be considered relevant, since these are the subjects which must be obligatorily attended by every student. As for practical disciplines, which are obligatory, obligatory upon election, elective, or selective, also the ones chosen by a group of students of about 40 in number are provided. In the brackets the form of evaluation is given (E – exam, CE – continuous evaluation). There is information on the number of signed up and graded students, the group's total average, and quantitative data on the evaluations based on current grading scale: A – excellent (1), B – very good (1.5), C – good (2), D – satisfactory (2.5), E – sufficient (3), FX – insufficient (4).

Theoretical disciplines:

- Introduction to visual culture (E), signed up 46, graded 44, average: 1.82, grades: A-17, B-8, C-13, D-3, E-3, FX-4, 2 students failed.
- History of medieval art (E), signed up 41, graded 41, average: 2.09, grades: A-9, B-8, C-11, D-8, E-5, FX-4.
- History of 20th century art (E), signed up 50, graded 48, average: 2.25, grades: A-13, B-10, C-10, D-8, E-7, FX-11, 2 students failed.
- Analysis and interpretation of a visual art work (E), signed up 28, graded 28, average: 1.64, grades: A-14, B-5, C-5, D-0, E-0, FX-3, 3 students failed.
- Didactics of visual arts education (S), signed up 44, graded 44, average: 1.18, grades: A-35, B-6, C-2, D-0, E-0, FX-1, 1 student failed.

Practical disciplines:

- Material drawing (CE) signed up 48, graded 47, average: 1.59, grades: A-10, B-21, C-14, D-2, E-0, FX-0, 1 student failed.
- Figural drawing and painting (E) signed up 44, graded 43, average: 2.01, grades: A-10, B-6, C-16, D-7, E-4, FX-3, 1 student failed.
- Free plastic (E), signed up 45, graded 45, average: 1.71, grades: A-16, B-12, C-10, D-2, E-2, FX-3, 3 students failed.
- Modelling – relief (CE), signed up 45, graded 44, average: 1.35, grades: A-27, B-8, C-7, D-1, E-0, FX-1, 2 students failed.
- Basics of photography (CE), signed up 46, graded 45, average: 1.39, grades: A-22, B-16, C-7, D-0, E-0, FX-1, 1 student failed.
- Free photography (E), signed up 43, graded 43, average: 1.64, grades: A-17, B-10, C-9, D-6, E-3, FX-0.
- Introduction to graphic arts (CE), signed up 39, graded 39, average: 1.59, grades: A-13, B-10, C-12, D-4, E-0, FX-0.
- Area, structure in textile creation (E), signed up 44, graded 42, average: 2.13, grades: A-8, B-5, C-14, D-9, E-8, FX-2, 2 students failed.
- Intermedial creation – installation (E), signed up 40, graded 40, average: 1.99, grades: A-6, B-8, C-15, D-3, E-8, FX-0.
- Basics of visual communication (E), signed up 44, graded 44, average: 2.02, grades: A-5, B-14, C-12, D-6, E-4, FX-3, 3 students failed.

Point 3 Art. 10 of Constantine the Philosopher University's Study Code says that a student is graded by A if he/she achieved excellent results, B for above average results, C for average results, D for acceptable results, and E for results which meet minimal criteria. Our hypothesis no. 2, which assumed that the subjective assessment of individual study predispositions by the respondents from higher classes (years of study) will be more compatible with real learning outcomes than in case of the respondents from lower classes, was confirmed. If data in Table 2 are compared, with regard to the respondents of the 1st and 2nd year of master's study in which no one checked the option of the below average individual predispositions, with real learning outcomes, for example, in two theoretical disciplines (Analysis and interpretation of a visual arts work – 2nd year of master's study and didactics of visual arts education – 1st year of master's study), it is found out that the respondents obtained grades A, B, C, no one was graded by D and E, with 1 student failing in the 1st year and 3 students in the 2nd year. Naturally, successful passing of a subject does not depend only on individual predispositions of students, but on his/her many other qualities and abilities.

The research also included identification of a type of previous secondary as well as spare-time art education the students had completed. The data were also obtained through questionnaires, with 146 respondents. The findings showed that as far as the assessment of individual predispositions for the study of visual arts teacher training is concerned our respondents are restrained, careful, and probably also "modest".

It was found out that the most numerous group (52.05%) of our respondents consists of the graduates of secondary vocational schools with art orientation, with an exceptionally wide spectrum of completed subjects. The secondary grammar school – "gymnasium" – (both the classical 4-year and 8-year type) was completed by 26.71% of the interviewed and the secondary vocational school without orientation on art was completed by 21.24% students.

The previous secondary school study of our students of visual arts teacher training shows that in case of more than a half of them, currently studying at the Department of Creative Arts and Art Education, one may expect a steady interest in visual arts, as well as adequate skills in individual theoretical and practical visual arts disciplines. Of the total number (146) of the interviewed, as many as 102 (i. e. 69.86%) said that as pupils

they had attended a basic art school. In addition to visual arts field, studied by 89 (i. e. 61%) of the participants, of the total number (146) of respondents, high percentage was obtained for music in all the years and a really wide scale of musical instruments. Of the total number (146) of respondents, 43 (i. e. 29.45%) indicated the completion of the musical field, 19 (i. e. 13.01%) indicated dancing, and 7 (4.79%) attended the literary-dramatic field. A detailed analysis of the findings will be published in another paper.

For the sake of comparison, the paper also brings the findings as regards the relation between the assessment of individual predispositions for the study of the programme as a whole, and for the study of the other subject that the respondents have in their double major programme – in addition to visual arts (see Table 3 and 4). It was surprising that with regard to this other subject, in addition to visual arts teacher training, three respondents – students of the 1st year of bachelor's study level - checked the option "insufficient" predispositions, and a relatively high number checked the option "below average" predisposition. It is surprising since these are the study programmes (for example, pedagogics, aesthetic education, civic education, and so on) which if compared with other sub-programmes combining with the UVU, do not require much special individual predispositions, abilities and skills.

Table 3 Assessment of individual predispositions in the context of their double major programme (the UVU programme combining with another subject) as a whole

How do you assess your individual predispositions for the study of the selected double major programme as a whole?	1 st yr. BC.	2 nd yr. BC.	3 rd yr. BC.	1 st yr. MA.	2 nd yr. MA.	Total
as above average	2	2	2	3	5	14
as average	32	33	31	38	17	151
as below average	5	4	11	0	0	20
as insufficient	1	0	0	0	0	1
No answer	1	0	0	0	0	1
Total	41	39	44	41	22	187

Source: Own arrangements

Table 4 Assessment of individual predispositions in the context of the other study programme studied in combination with visual arts

How do you assess your own individual predispositions for the study of the other subject combined with UVU?	1 st yr. BC.	2 nd yr. BC.	3 rd yr. BC.	1 st yr. MA.	2 nd yr. MA.	Total
as above average	2	6	3	2	2	15
as average	22	27	26	36	19	130
as below average	13	6	15	3	1	38
as insufficient	3	0	0	0	0	3
no answer	1	0	0	0	0	1
Total	41	39	44	41	22	187

Source: Own arrangements

It was assumed that there will be more of those respondents who think that their learning outcomes realistically reflect their real knowledge, abilities and skills than of those who, on the contrary, think that their learning outcomes do not quite reflect, or do not reflect at all, their real knowledge, abilities and skills. Hypothesis no. 3 was not confirmed. Only 83 (44.39%) respondents think that their learning outcomes realistically reflect their real knowledge, abilities and skills, and the remaining 55.61% checked various answers, which either negate this statement or are on a neutral level. This fact confirms the findings of still another research within which a similar

uncertainty, unwillingness or inability of self-evaluation by students emerged (Satková, 2012).

Similarly, it was assumed that there will be more of such respondents who think that their learning outcomes realistically and adequately reflect their expended effort than of those who, on the contrary, think that their learning outcomes do not quite reflect, or do not reflect at all, their expended effort. Hypothesis no. 4 was not confirmed either. The results are similar to the preceding item, even though the option of real and adequate reflection of the effort expended for the study by students in learning outcomes was marked by almost half of the respondents – 90 (48.13%). Compare Table 5 and 6.

Table 5 Assessment of learning outcomes with regard to individual predispositions for the study

What do you think of the learning outcomes of your study with regard to your individual study predispositions?	1 st yr. BC.	2 nd yr. BC.	3 rd yr. BC.	1 st yr. MA.	2 nd yr. MA.	Total
my learning outcomes realistically reflect my real knowledge, abilities and skills	17	16	21	18	11	83
my learning outcomes do not quite reflect my real knowledge, abilities and skills	19	22	20	20	11	92
my learning outcomes do not reflect at all my real knowledge, abilities and skills	0	1	2	0	0	3
I cannot judge this	4	0	1	3	0	8
no answer	1	0	0	0	0	1
Total	41	39	44	41	22	187

Source: Own arrangements

Table 6 Assessment of learning outcomes with regard to the effort for study expended by students

What do you think of the learning outcomes of your study with regard to your effort expended for the study?	1 st yr. BC.	2 nd yr. BC.	3 rd yr. BC.	1 st yr. MA.	2 nd yr. MA.	Total
my learning outcomes realistically and adequately reflect my expended effort	21	18	21	18	12	90
my learning outcomes do not quite reflect my expended effort	13	21	17	20	7	78
my learning outcomes do not reflect at all my expended effort	3	0	4	1	2	10
I cannot judge it	3	0	2	2	1	8
no answer	1	0	0	0	0	1
Total	41	39	44	41	22	187

Source: Own arrangements

4. Conclusion

Pedagogical evaluation is considered to be one of the key instruments of making education more efficient. The aim of our research was not to quantitatively measure educational results and effects, but to concentrate on the self-assessment of individual predispositions for the study of a selected study programme by the students of Faculty of Education at Constantine the Philosopher University in Nitra, studying the programme Training Teachers for Visual Arts as double major, that is combining with various other sub-programmes.

The acquisition of self-evaluation instruments is of an extraordinary significance for the higher education training of future teachers. The experience in the field of self-understanding and self-reflection may positively influence the formation of a student's personality and contribute to the development of an ability to objectively evaluate other people, which is an inevitable competence of an educator in current educational environment.

Literature:

1. Babiaková, S.: *Potreba autoevalvácie učiteľa pri plánovaní profesijného rozvoja*. In *Pedagogická diagnostika a evaluace 2012*. Ostrava : Ostravská univerzita, 2012. P. 78-89. ISBN 978-80-7464-167-1.
2. Hupková, M. – Petlák, E.: *Sebareflexia a kompetencie v práci učiteľa*. 1. vydanie. Bratislava : Iris, 2004. 135 p. ISBN 80-89018-77-7.
3. Průcha, J.: *Moderní pedagogika*. Praha : Portál, 1997. 495 p. ISBN 80-7178-170-3.
4. Satková, J.: *Sebahodnotenie študenta v kontexte odboru učiteľstva výtvarného umenia*. In *Pedagogická diagnostika a evaluace 2012*. Ostrava : Ostravská univerzita, 2012. P. 541-550. ISBN 978-80-7464-167-1.
5. Švec, V.: *Sebareflexie studentů v pregraduální didaktické přípravě*. In *Pedagogika*, XLVI. volume, 3. issue, p. 266-275. ISSN 3330-3815.
6. Švec, V.: *Pedagogická příprava budoucích učitelů*. Brno : PAIDO, 1999, 163 p. ISBN 80-85931-70-2.

Primary Paper Section: A

Secondary Paper Section: AM

SEARCHING THE MEANING OF FINE ART EDUCATION IN EDUCATION OF THE STUDENTS - FUTURE FINE ART TEACHERS

³JANKA SATKOVÁ

*Department of Fine Art Creation and Education, Faculty of Education in Constantin the Philosopher University in Nitra
Dražovská cesta 4, 949 74 Nitra, Slovakia
email: ⁴jsatkova@ukf.sk*

Abstract: In an environment of the changing circumstances, author of the paper seeks the base for the meaning of her teaching. The meaning is located not in „art“, but in „education“. The means of education are carried out in the space of three concepts: „personal centered education“, „creative-humanistic education“ and „animocentric stream“ of fine art education. The paper presents the possibilities of realizing the principles of affective education, imagination, relaxation, freedom, subjective interpretation of the art work and the cathartic experience of the student's artistic creation. Each of the principles is theoretically based, then concretized with activities and supplemented with comments from students. Written reflections from students illustrate how they experience and evaluate activities.

Keywords: meaning, fine art education, didactics, student.

1 Introduction

The paper contains subsections consisting of theoretical and practical part. The theoretical parts suggest an area of problems and concepts from the given area. The practical parts mention an application of the theoretical principles into the teaching visual arts disciplines. They are implemented at Department of Fine Art Creation and Education, Faculty of Education in Constantin the Philosopher University in Nitra. Some subsections include statements of students – both positive and negative. They are inspired by activities or they comment experienced activities. The paper is a collage producing a comprehensive system of our long-term educational activity, which phases were continuously published.

In the area of our teaching many things happened. The study system changed, including the new contents of the new subjects. The electronic systems was introduced, and the evaluation, educational, artistic and scientific work has changed. A scientific visual art literature changed and educational literature of fine arts expanded. Recent changes are concerning the new name and of course a new content of study program from "teaching of fine art education" to "teaching of fine art". Composition of our working team and superiors has also changed, and the students change constantly.

At first we taught practical and theoretical disciplines for the future teachers at the first grade of the primary schools. Now we teach only didactics disciplines two groups of students. The first specialization is "teaching of fine art" and in the second group are the future teachers for the first degree of elementary schools.

2 Searching for the meaning of fine art education

What has not changed is a sense of fine art education, without which is the teaching meaningless. We found the sense in our educational activity not in the content of fine arts, nor in the visual art qua, but in the formation of student's personality. Fine art creation and Fine Arts in general (including history of art present in the teaching of theoretical disciplines) find themselves in the position of means – medium for forming the future teacher's personality. The teacher will work in the different types of the schools, he/she will teach many different age groups in changing conditions in social, political and global context. Our goal is to offer opportunity to the students for finding their own understanding of fine art education, based on the experiences ingrained during their study.

2.1 The need of the new modern fine art education

The traditional fine art education has been characterized by being seen as a relaxation time. It has been taught mostly by the unqualified teachers. It has been clinged on obsolete methods and placed emphasis on the artwork, the product and the aesthetics (Šupšáková, 1999). It does not fit with the current

teachers and the pupils and it turned into the modern fine art education with the new goals. The aim of the modern fine art education is to enable children to perceive the world and themselves. A prerequisite are: openness of mind and heart, acceptance values of goodness and understanding. The creator expresses personal commitment and through inner experience, reflection on experienced, he/her can send the messages about him/her (Šupšáková, 1999). Unfortunately, we have to conclude, that the fine art education is still taught mostly by the unqualified teachers (Fichnová, Satková, Janková, 2008).

In our view the aim of the fine art education is through the personality of fine art teacher to develop child's personality in all its breadth. It begins from self-perception and self-evaluation, to perception and evaluation of others and of the world. It continues from development of communication with self and with others, through refinement of spirit, through increase of creativity, to problem solving and coping with the negative aspects of life. It ends in ability to live fully, to understand mission and purpose of life. We perceive this object as subjective and not as the only right one. Based on it we build our own pedagogical model, which is devoted to the paper.

3 Fine art education as means for development of personality

The means of our fine art education are realized in the area of awareness that fine art education must take into account also the artistically untalented pupils/students, because in the traditional classroom they feel unsuccessful. The basic concepts for our lessons are:

1. Personal centered education with the principles of freedom, trust, authenticity, empathy.
2. Creatively humanistic education and developing creativity through the development of emotional intelligence, empathy and synesthetic perception.
3. Animocentric stream of the fine art education using the principles of art therapy, artefiletics, spiritual fine art education and sensual fine art education.
4. Two of the art therapy's principles (relaxation and imagination) used for development of imagination and inner harmony.
5. The subjective interpretations of artwork and the cathartic experience of student's own artistic creation as the basis for student's positive relationship with fine art education.
6. The self-expression (verbal, written or practical art produced) as the principles of freedom and of creative atmosphere.

3.1 The new view on artistic talent

The new fine art education takes into account also children who do not have artistic talent in our traditional meaning. It is which is accepted, for example, on the aptitude tests at the fine arts high and higher schools. According to J. Belko (2001), if we are concerned about development of each pupil and we don't want to mark their genetic basis, we notice the less the pupil's level of manual dexterity, but we require the idea. Then we notice more the pupil's access to the task, passion and spirit.

Fine art education is an appropriate learning environment for application "creative and humanistic educational conception". It means to develop emotional and creative intelligency and socialization also with artistically untalented children. New fine art education wants to return joy of artistic games into the schools, where everyone has an equal chance (Belko, 2001). We perceive artistic talent as ability to: accept stimulus openly, find solutions in fulfilling the task of visual art, pick up the new procedures. Then the pupil/student can express boldly, creatively and authentically, and he/her can develop through the artistic creation. Our untalented students perceive this concept of talent positively, because they can develop without fear of failure.

In the reflections, our students wrote:

"I have found my drawing style. At first I was afraid that I will not have an idea what to paint, and I was surprised from myself. I liked most of my art works. I could let to work my imagination, I found that I enjoy that.

I thought it would be mark two, not mark one, but I am pleased that you liked my drawings.

I found that I was able to do, what I maybe even would not imagine."

3.2 Acceptance of individuality and freedom in the personal centered education

We believe that individuality of pupil is accepted more by alternative than by the traditional way of education. One of the most significant is an alternative system "person centered approach" created by C. R. Rogers, then applied in education, which is specified as "personal centered education" conception, known also as "PCE". In the conception are built motivation, self-development and teacher-pupil relationship, on four basic principles: a) congruence – the teacher's authenticity, truth, honesty and openness; b) teacher's acceptance of pupil; c) teacher's empathy; d) pupil's self-evaluation. Self-evaluation is seen as basis for personal development. Real self-evaluation leads to the positive motivation for overcome the negative sides of personality. It leads to tolerance and understanding for others. Parts of this conception are the notions of freedom and atmosphere supporting learning. This atmosphere is similar to atmosphere supporting creativity. In our quantitative research, we have gained the new knowledge about student's self-assessment (Fichnová, Satková, 2002).

In spirit of conception "PCE" are our students encouraged to self-evaluation, to solve problems on their own, not based on the teacher's solution. Each student performs and presents his/her own work in front of the class, expresses own opinion, leads a discussion. Students can comment (verbally or writing) a matter of the lessons, atmosphere and results of their work. They have freedom in their choice of themes, techniques, in processing of visual ideas, while respecting content of the subjects across the curriculum. At practical disciplines each student processed individually chosen topic, by any art technique, and he/she was motivated with teacher's non-assessment commentary. It did not concern the students-artist, but only the students of other fields having fine art disciplines in their study program, eg. the future educators and the future teachers of first degree at the elementary school. Their art-works were subjectively perceived as the master-work, over student's expectations. Also objectively the artworks were at a higher level than artwork formed by the classical method, which means 1 common theme + 1 common technique in 1 group. The students perceived freedom mostly positive, but some of them needed some guidance, they did not know what to do, they were confused. Others students perceived freedom in its absolute meaning and when the teacher tried to teach students some aesthetic artistic principles and how to use art techniques, they perceived the teacher's correction in the negative way. Informal relationship teacher-student was perceived positively, but the authenticity of the teacher was not always accepted. Teacher's humor was sometimes seen as irony and teacher's traits were sometimes seen as a strange behavior. Some students came to learn and accepted it, others did not. Student's reflections:

"I really liked the lessons of the fine art education. I was released at these lessons. The relationship teacher-student was very good. I really liked that we were able to express our own creation at these lessons.

I did not like that sometimes the lecturer interfered to my work, because everyone sees and feels it in a different way. Sometimes I did not know what to do, any topic would help me. I liked the lessons, there was a good atmosphere, there was a very good and friendly relationship teacher-student, tolerance etc. We formed what we wanted and the teacher did not interfere into it very much. Certainly after this semester I'll be able to harmonize colors and to continue create the images, more - less abstract. Thank you for a very nice time with a good humor, openness, etc."

3.3 Development of creativity by fine art education

In a general public opinion, there is an idea that each artwork is creative. However, according to psychology of creativity, it is not nearly so, if we do not identify so called "small/subjective" and so called "great/objective" creativity. Since creativity can be increased (Zelina, 1990), it is also possible to develop the properties useful for development of creativity: curiosity, independence, self-confidence, courage, motivation, self-esteem, fancy, imagination, intuition and empathy. Creativity is accentuated also by the concept-makers of "creative humanistic education": M. Zelinová and M. Zelina. Their aim is to perceive creativity as a means for achieving a self-actualization. According to this concept, we include the activities for directly or indirectly developing creativity into our lessons. Our quantitative research (Fichnová, Satková, 2006) shows the possibilities of increasing creativity in the fine art oriented disciplines in the university environment. Development of the synesthetic perception is regarded as one of the indirect ways of development a creativity.

Here's an example. The students should choose one from the several reproductions with some country theme and they should create the interpretation in this way: 1. to associate to country the music, sounds, smell (odor); 2. to figure out, from which movie could be the shot; 3. to determine, what was in that movie before and after.

"1. J. Mařák - Blaník: murmur of water, smell of forest, dramatic orchestral music; movie: In the shadows; before: slow twilight, after: suddenly a huge storm, tempest.

2. V. Beneš - From Talín by Písek: noise of the grain, mill and animals, smell of grass, folk songs; movie: Sun, hay, strawberries; before: subtitles, after: concrete event in the village (followed by a spontaneous debate about real and famous movie).

3. J. Mařák - Forest still life: the sounds of forest, birds twitter, murmur of lake; music of flute, guitar, piano; movie: A guide to the forests and mountains; before: shot at the forest clearing, its location and the place; after: a brief description of the forest clearing with the comment; and the whole movie would be shaded by oratory with Haydn's Seasons."

3.4 Development of emotional intelligence through the fine art education

The conception of "creative humanistic education" emphasizes the importance of the affective education. This education should include the pupil's feelings, experiences, memories, hopes, aspirations, attitudes, needs (Zelina, 1990). The emotional education is an important element in our effort to harmonize the personality, because people in their lives are experiencing a little emotional heat, thus limiting their ability to feel, to be themselves and to be good (Zelina, 1990). Fine art creation brings the opportunity to express feelings, using the principles of art therapy and the methods developing the empathy.

Students at our lessons are managed to expression their moods by their fingers, by body posture, gesture, grimace, or using the cube illustrated with the various mood expressions. Empathy - feeling in, is also one of the principles of the conception "PCE". The principle of empathy was realized through reproduction of the painting "Venus and Mars" from artist S. Botticelli. The students should write what happens between Mars and Venus. Student's reflections:

"They are trophy for each other. She has the property, he has the most beautiful woman, worthy of comparisons to his glory.

He is happy that he is happy, and she has sad face, pensively, wonders what she did and also about their relationship.

She has got her own world, her feelings hidden deep within herself, he does not care, he is acting possessive.

She feels guilty, but she does not want to make it clear and he's such a cool guy.

She feels guilty, she did something wrong and he is very sad - he is wounded.

She looks like she's remorse. She does not know whether she wants him or not. Maybe she does not know how to say it. He is now in another dimension.

She is sad, reflects on something, he does not care of anything. She really thinks about it, why she is with him, she wants to leave him, but he feels happy and satisfied, thinking only on himself, he is very selfish and did not notice that something bothers her."

3.5 Catharsis as unique experience of fine art creation

The experience play major roles in some alternative methods of education (Zelina, 1990). The student's experience can start a conversations about art, eg. presenting holiday's photos with the sights in the lesson of art history.

In the school is rarely present a cathartic/cleansing effect of artistic creation, because students rarely internalize the theme. However, well taught lessons have an aesthetic pleasure, experienced by both - students also teacher. Pleasure is associated with trouble as a part of the creative problem solving. After initial struggle with the issue and with art methods, pupil/student transforms these challenges into art through his/her own abilities and ambitions. Then comes a solution, satisfaction and release, which are related with identification of their art work (Štofko, 2010).

In order to convey this precious experience to students-nonartist, in the classroom we focus on active support of authentic creative self-expression. Means become the principles of the animocentric stream and according to the student's feedback it has very positive effect. During this process, the students are happy and satisfied with the results of their artistic creations. Many students continue work at home and they share their home art works with the teacher. Many of them are artistically active also after the lessons beyond their student's obligations.

4 Animocentric stream in the fine art education as one of the pedagogical models

From 4 existing streams of fine art education (art-, gnozeo-, animal-, video-centric stream), the animocentric stream is the closest to our notion. It understands the fine art education as a means of development children's personality (Slavík, 1997 in Šupšáková, 1999). Next close conceptions are mentioned by V. Roeselová (2000). "Learning, experience and evaluation of the world" has global and ecological direction. "Spiritual Art Education" finds value and meaning of life. "Sensory Art Education" shows how natural processes, including physical sensations, can be foundation for understanding the world. "Artefiletics" is the processing issues based on the archetypes, presentation the opinions in a safe group, with aim to harmonize imbalance between consciousness and unconsciousness (Roeselová, 2000). The further means of developing the future teacher's personality is art therapy, which has the ability to influence positively on people (Šicková, 2002).

Fine art processing of the subjective contents, with aim to know pupils and help them, is very attractive for many teachers and students, but teacher of the fine art education should be aware of the pitfalls connected with it. The pitfalls lie in sensitivity and intimacy processed contents and in their presenting in group. Some students fail to develop protective interior borders, and they may feel threatened and manipulated. The seemingly innocent topics and techniques can revive wounds from the past. Teacher should have an estimate, sensitivity, tact and ability for psychological treatment of these cases and teacher should inform students about risks of subjective contents of visual expression.

4.1 Relaxation and imagination as methods of the fine art education

Art therapy offers us the methods of relaxation and imagination (Šicková, 2000). Relaxation as a psychological action to achieve harmony of the body, soul and spirit, leads us to liberation of a bonded energy. By a change of internal experience we achieve the change of our behavior. Relaxation may be associated with visualization inspired by art work or it may be aimed to release. The students saw the picture with the garden from C. Monet and they should imagine that they are there with someone they like. Student's reflections:

"I have been in the garden with sunflowers. I gasped at the bench with my friend, we look at nature and surroundings.

In the garden, I set in the middle of flowers, I lay on swing and a little boy has been swinging me.

I sailed down the river on raft. Then I gasped under tree in the tall grass.

I have been sitting in the garden on a huge lawn and then I fell asleep there.

I have been in a garden full of the beautiful sunflowers. As a little girl I sat and I ate the sunflower seeds. Suddenly I heard the voices in the background of some people and I quickly got up and I ran at home, which was located near the garden.

I have been in the garden with my girlfriends and we sat on the grass and we talked."

Another way of imagination was inspired by knowledge and images of prehistoric and ancient fine art. It was implemented when the students were transferred in the led imagination into spirit of any historical period with an idea of the place, their clothing and their imagined activities.

"I have been in the prehistoric time, wearing the draped leather and I painted murals in the caves.

In the prehistoric times, I was wearing the leader, I toasted some animal in the nature near the water.

I have been in Egypt in the temple, I has something like a satin with jewels, I rode a horse in the desert. I went with my master to the water spring.

I have been in the city Rome, in the atrium building. I sway in the wooden chair. I ate a fruit from the big bowl and I was wearing a princess dress.

I have been in ancient Coliseum in the city Rome, wearing a soft sail pinned with a gold buckle, gold jewelry. I watched a gladiator wrestled with a lion. I ate the grapes and I drank a wine."

Relaxation was used also during the familiarizing students with the stream of art - symbolism, which has motifs, inter alia, fairies, angels, sphinxes. Students should imagine that they are in a beautiful place with an angel.

"I have been on the high rock, on that was a white green meadow with tall grass, I was sitting there, then a little boy appeared - it was the angel. Then from the rock incurred the white stairs and we walked up.

I have been next the river Danube in the meadow. We played there with my parents and my friends. When an angel appeared, he began to play with us. He had golden hair and white dress. We flew, it was nice.

I have been at the sea, I watched the sunset. My angel looked like a little girl. It was very nice when we flew over the sea a long time.

I have been in a meadow, everything was green, all around me were the beautiful flowers, the grass was very high. An angel was a boy with the big wings. The angel stroked me.

My little angel had a large wings and a long hair. We flew a lot and then the wings grew also onto me.

I have been in Italy in the city Lignam. There we played, swam, collected the shells. An angel have come, he had a white dress, shining golden yellow hair and a crown. Together we flew, it was enjoyable."

These techniques are received by students mostly positively. After relaxation there is the intensified positive experience in a group and this positive spirit is capable to correct the rare negative individual experiences. The students often complain that relaxation was too short.

4.2 Self-expression as a way to communicate with the world

It is necessary for every student to have the opportunity of verbal expression of feelings, experiences and personal attitude. Through the verbalised feelings and experiences they connect with the art work and they can get easier to the demanding verbal interpretation. The reflective nature of assumption formulation is typical for the visual interpretation, which creates the conditions for free expression of opinions (Gero, Tropp, 1999). These principles are conducted with our students by

interviews during lessons and by possibility to express their feelings and their thoughts in the written reflection about the lesson. They can verbal reflect on their own or their classmate art work, also they can do the individual interpretation of art works. Then our lesson's aim is eg. to create reflections about origin and meaning of fine art, to create poems and stories inspired by art work, to create poems using Dada and Surrealist creative principles, to create the manifesto of a new artistic trend, using the helpful questions. The samples of student's fictional manifestos:

"Original art

1. The artist cannot focus on creating copy, it has to be unique and original.
2. Art must not act disgustingly, it has have a positive effect on people.
3. Art should be engaging, aesthetic, it has something to radiate.

Realism

1. The artist can take his ideas from an actual, real life.
2. The purpose of art is to make the knowledge in human.
3. Art should not be idealized.

Šulilejlizmus

1. The artist has to be creative, open-minded.
2. The picture should be such as the artist himself, what he feels, what he sees.
3. The aim of the artist is to express his/her own feeling.

Optimistic art

1. The artist is a man who can express their balanced attitude towards life.
2. The artist must not create a work from which radiates despair and hopelessness.
3. The aim of the artist's works is to show to public an opportunity for cheerful life through the art works."

The students initially tend to feel fear and uncertainty of creation and its presentation in their classmates group. They express these feelings verbally and nonverbally, immediately after entering the job. With an acceptance from the educator, they overcome that fear and that uncertainty. At last they see positively the possibility of self-expression:

"I enjoyed the opportunity to try practically create the art works belonging to fine art streams.

Lessons were free and we were able to show ourselves, it was great that we were able to say our own opinion, what was not during the last semester.

We did not spend a lot of time for prepare, in fact we educated ourselves among classmates."

5 Interpretation of art work as a means of education by art

Art has power to change lives of teachers and pupils. According to Š. Gero and S. Tropp (1999) art helps teachers and their students to deal with the certain life situations, to navigate in them, to find the key for issues of the contemporary life. This way art comes into people's lives as an indispensable element of education. History of fine arts inspires us by its development, the new techniques and procedures as well as the personalities of artists. Š. Gero and S. Tropp (1999) referred to various interpretations of artwork: verbal/explanation and practical/implementation. It makes the reproductions of art work more interesting, with aim to look at ourselves through art. The student discovers experiences and skills in contact with values enshrined in art and he/she can accept the values that go far beyond her/his current experience realm (Gero, Tropp, 1999).

Our students cut, glue, illustrate and paint the copy - reproduction of art work. They invent stories, poems, the new names for art work, they find associations connected with art works, copy them and paraphrase. During the lessons they create the new experiences through the actions, by animation art in our university gallery, through their own artistic creation, sometimes inspired by art work. For example: building dolmens and menhirs from the stones, creating the vivid images with the available props by using the reproductions, making performances and happenings in the classroom, creation inspired by the principles of land-art implemented in the outside area of the school. Except of the rare cases, when the student feels

action or experiment as unpleasant, embarrassing and pointless, this type of activity meets with positive response.

6 Sense of the fine art education – opinions of our students

According to our latest research findings, there is not a big difference in the views about spirit and purpose of fine art education between students of teaching fine art and students of the other specializations. The difference is expected that students-artists see as much important also the artistic and aesthetic principles.

Here are some views of the students-nonartists. Reflections were created at the beginning of semester, yet unaffected by animocentric stream concept of teaching.

"Fine art education enables the process of realization. It is possibility how to learn to perceive everyday things a little differently. It offers the opportunity to stop for a moment in this hectic world. At the fine art education lesson every child should feel that she/he can enjoy creatively, to feel free and to create what he/she feels.

Fine art education is important to me as a part of relaxation, introspection, psychological selfcleaning. In the fine art education lessons, I want to inspire the children's curiosity and creativity through the games, listening music, through walks and creative activities.

It is important that fine art teacher could encourage development of each child - not just those with talent. Being a man who learns to perceive the beauty in everyday life, look for beauty in ourselves.

For me will be the most important thing, that I will be able to motivate the children to express their personality effortlessly, spontaneously, with joy and gusto.

Fine art education should develop all aspects of personality. It should be friendly, motivating, relaxation and developing.

Fine art education should be the subject when students need not learn the craft. They should learn to like discover the new things and to see under the surface."

7 Conclusion

Personality can be developed through the theoretical, practical also didactic disciplines. The theoretical disciplines of fine art education have the great potential to develop the student's personality (Réčka, 1996, Réčka, 2000, Réčka, 2010), applying the principles of education through art. In our opinion, own experience with the growth of personality, own reflections of maturing, is the most important part of education. To summarize experiences gained during the implementation of animocentric education, almost all students joyfully welcomed any new creative work in the classroom and they have been released and active. The students-nonartists significantly changed their attitude to the subject of fine art education and to the art creation as a whole. While previously they have seen the content of subject only in the obtaining information and some craft skills, later they perceived the lessons as their opportunity for self-fulfillment. We believe that the issue of objectives and purpose of the fine art education is essential in education of art.

Literature:

1. Belko, J.: *Profesionálne zručnosti výtvarného pedagóga v humanistickej škole*. B. Bystrica: 2001. 63 p. ISBN 80-8055-564-8.
2. Fichnová, K., Satková, J.: *Sebahodnotenie a reálny výkon u študentov učiteľstva prvého stupňa ZŠ a na študenta zamerané vyučovanie*. In: *Psychológia v škole*. Košice: UPJ, 2002. p. 262 - 267. ISBN 80-7097-497-4.
3. Fichnová, K., Satková, J.: *Psychologické aspekty pôsobenia umenia na tvorivosť recipienta*. In: *Vplyv globalizácie na mediálnu kultúru*. Nitra: UKF, 2006. p. 357-368. ISBN 80-8050-942-5.
4. Fichnová, K., Satková, J., Janková, G.: *Učiteľia výtvarných disciplín a informačné technológie*. In: *Individualita žiaka v elektronickom prostredí*. Nitra: PF UKF v Nitre, 2008. p. 14-31. ISBN 978-80-8094-399-8.
5. Freiberg, H. J., Rogers, C. R.: *Sloboda učiť sa*. Modra:

- Persona, 1998. 429 p. ISBN 80-967980-0-6.
6. Gero, Š., Tropp, S.: *Ako porozumieť výtvarnému dielu?* Banská Bystrica: Metodické centrum, 1999. 66 p. ISBN 80-8041-279-0.
 7. Réčka, A.: *Špecifická príprava učiteľov 1. stupňa ZŠ z aspektu disciplíny Základy výtvarnej kultúry. In: Vysokoškolská príprava učiteľov.* Banská Bystrica: PF UMB, 1996. p. 487-489. ISBN 80-8055-020-4.
 8. Réčka, A.: *Rozvoj všestrannej osobnosti študenta prostredníctvom disciplíny Základy a dejiny výtvarnej kultúry na pedagogických fakultách VŠ.* In: *Výtvarné aktivity ako prostriedok humanizácie v pedagogickom procese.* Banská Bystrica: FHV UMB, 2000. p. 97-100. ISBN 80-8055-430-7.
 9. Réčka, A.: *Axiologický rozmer racionálneho a emocionálneho aspektu v príprave učiteľov výtvarnej výchovy.* In: *Hľadisko kvality v prípravě učiteľů.* Plzeň: ZU v Plzni, 2010. p. 106-113. ISBN 978-80-7043-869-5.
 10. Roeselová, V.: *Proudy ve výtvarné výchově.* Praha: Sarah, 2000. 217 p. ISBN 80-902267-3-6.
 11. Šicková - Fabrici, J.: *Základy arteterapie.* Portál, Praha 2002. 165 p. ISBN 80-7178-616-0.
 12. Štofko, M.: *Psychodidaktika procesuálnej výtvarnej výchovy.* Bratislava: VEDA, 2010. 383 p. ISBN 978-80-224-1110-3.
 13. Šupšáková, B.: *Projekty a alternatívne formy vo výtvarnej výchove.* Bratislava: Gradient, 1999. 123 p. ISBN: 80-967231-4-6.
 14. Zelina, M., Zelinová, M.: *Rozvoj tvorivosti detí a mládeže.* Bratislava: SPN, 1990. 129 p. ISBN 80-08-00442-8.

Primary Paper Section: A

Secondary Paper Section: AM

MANAGEMENT OF ECONOMIC EFFICIENCY IN SMALL AND MEDIUM-SIZED ENTERPRISES

^aJAN ŠTĚPÁNEK

Mendel university, Zemědělská 1 Brno 613 00, Czech Republic
email: ^ajan-stepanek@centrum.cz

Abstract: The ability to measure and manage economic efficiency in small and medium-sized enterprises is highly valued competitive advantage. Economic efficiency reveals the absolute size of indicators of efficient usage of resources employed, efficiency and effectiveness of business processes, products and services. While measuring and managing economic efficiency, it is necessary to reflect the influence of internal and external business environment and take into account the diversity of assessment of subject position. Sources of information for assessing the overall economic efficiency of enterprises with subsequent management can be derived from the financial statements of financial accounting. In the proposed plan of economic efficiency it is important for business owners and managers in the to establish appropriate indicators of economic efficiency and to follow and support the long-term strategic goals of the company.

Keywords: economic efficiency, management, small and medium-sized businesses, return on equity

1 Introduction

The ability to manage economic efficiency in small and medium-sized enterprises is a highly esteemed competitive advantage in the period after the economic crisis, because it has a very important role in the company's success. All business activities can be characterized by the economic efficiency quantifying the benefits of final effects in more practical terms. The main goal of the owners and managers of companies should be the constant increase of economic efficiency, and the identification of the main factors influencing the effectiveness and a subsequent implementation of findings in the activities of the company with maximal utilization. Economic efficiency examines the absolute size of indicators, economical use of resources embedded in business processes, efficiency of business processes and effectiveness of products. The aim of the paper is to propose a plan of measurement and management of economic efficiency of small and medium-sized enterprise based on the categorization of economic efficiency reflecting the internal and external environment of the company and owner's perspective of the company.

2 Categorization of economic efficiency

Owners of small and medium-sized enterprises during their business activities often make decisions that fundamentally affect their long-term competitive position, efficiency and profitability. Therefore, the formulation of a strategy to achieve those objectives is of a crucial importance. Strategic management is basically a dynamic process that helps the company to avoid future obstacles. It is necessary because it includes the setting up of corporate goals, motivation, organization, and determination of standards of economic efficiency of enterprises. Business strategy, however, only shows the way how to achieve the objectives; measures of economic efficiency are only the means that makes them easier to achieve.¹ The effectiveness is a functional feature of the enterprise. It reflects the overall rationality of its activities as a dedicated system that works effectively only on the basis of secure relationships with others.²

Efficiency is a relative value representing the ratio between the final effect and the resources used to create this effect. Efficiency can be characterized as a unitary effect of sources respectively costs.³

Achieving economic efficiency is therefore the main objective in the implementation of economic and financial activities of the

company. It becomes an increasingly important aspect of business processes.⁴ The effectiveness of the enterprise is expressed using evaluation of inputs and outputs⁵:

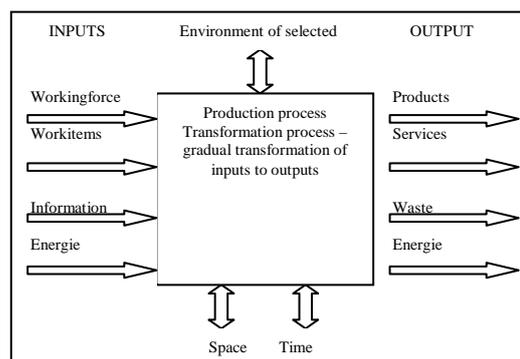
- Inputs are factors of production that have been employed into the enterprise or are consumed in the enterprise. Employed factors of production are expressed as the amount of capital consumed by production factors such as cost of business.
- The output is the output produced for a certain period. Several quantitative indicators are used, most of them are expressed by the volume of production, which is considered as a natural output of the company, or is expressed by value indicators of revenue, sales, value added, etc. The profit is considered to be the main financial output.

Values of production consist mainly of realized products and services, output of business in relation to consumed production factors, which constitute the inputs. Relational defining of performance can be carried out through the following relationship:

$$\text{Efficiency} = \frac{\text{produced products and services}}{\text{production factors consumed}} \quad \text{or} \quad \text{Efficiency} = \frac{\text{input}}{\text{output}}$$

Quantitative calculation of effectiveness is based on a comparison of inputs employed and outputs achieved. Economic output and input categories can be interpreted differently.⁶

Fig. 1 Business process illustrating the transformation of inputs into outputs



3 Management of economic efficiency

Historically, the measurement and management of economic efficiency shows the evolution from traditional approaches based on measurement of financial metrics to modern approaches of measuring the value for the owner and shareholder. Theoretical and practical field of measurement and management of economic efficiency have been extended in recent years by a variety of methods and approaches, such as the Balance Scorecard, QFD, Kanban, EFQM and more. The disadvantage of current approaches to be used in small and medium-sized enterprises are unaffordable sophisticated tools used to measure and manage economic efficiency, high cost of implementation, operation and updating. The main disadvantage is the unavailability of methodologies of implementation and the predominance of non-financial measures. For this reason, small and medium-sized enterprises still prefer approaches which are mainly focused on financial measures.

¹ REMEŠ, D., GOSWAMI, K. Měření výkonnosti podniku. *E+M Ekonomie a Management*, 2004, roč. 7, č. 3, s. 59-64. ISSN 1212-3609.

² AZIMI, N.A., WELCH, H. G.,: The effectiveness of cost-effectiveness analysis in containing cost. *J Get Intern Med*. 1998, 13:664-9.

³ BOBKOVÁ, D.: Zvyšovanie produktivity práce ľudských procesov v produkčných systémoch. In: *Transfer inovácií*. č. 10 (2007), s. 243-245. Internet: <<http://web.tuke.sk/sjf/icav-stranky/transfer/10-2007/PDF/243-245.pdf> ISBN 9788080738327>

⁴ MIHOK, J. JANEKOVÁ, J., VIDOVÁ, J.,: *Podnikové hospodárstvo – ekonomika podniku*. Košice: Strojnícká fakulta TU, 2005. ISBN 80-8073-406-2.

⁵ LIBERKO, I., VIDOVÁ, J.: *Ekonomická hodnotenia ekonomickej efektívnosti podniku*. 20 In: *Interkatedra*, Poznaň: 2004, ISSN 1640-3622, s. 96 – 100.

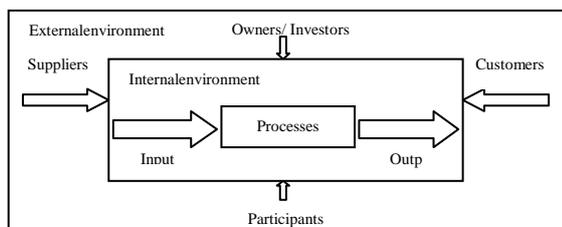
⁶ KUCHARČIKOVÁ, A., TOKARČIKOVÁ, E., ĐURIŠOVÁ, M., JACKOVÁ, A., KOZUBÍKOVÁ, Z., VODÁK, J.,: *Efektívni výroba*. 1. Vydání. Brno: Computer Press, 2011. 344s. ISBN 978-80-2512524-3

To measure the economic efficiency it is necessary to take into account the diversity of valuation according to the positions of subjects that are associated with the operation and existence of the company. Such subjects are owners, managers or customers. Owners consider the business effective, if it is able to reach the maximal appreciation of employed capital in the shortest time possible. Customers prefer companies with quality products at a price corresponding to their requirements. Managers, sometimes simultaneously in the position of an owner, evaluate the efficiency of business according to the level of prosperity, market stability, the level of economy and productivity, current status and future trends of cash flows, liquidity, reaction time at changes of the external environment.

3.1 Economic efficiency with regard to the external and internal environment

While measuring and managing economic efficiency, it is necessary to reflect the influence of internal and external business environment. The internal environment is to transform inputs into outputs. Consideration shall also be taken to the external environment that affects the performance of the company – the involved subjects are suppliers, customers, investors and other persons participating affecting the economic efficiency of enterprises. The internal environment can be simply defined in terms of three significant variables inputs, outputs and processes.

Fig. 2 External and internal business environment

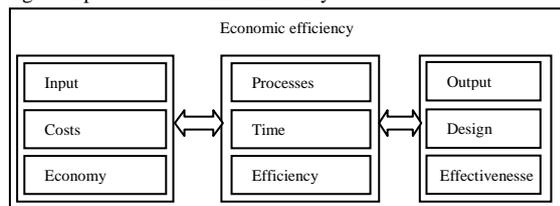


Economy, efficiency and effectiveness are the top criteria of rationality of economic resources employed. All three aspects of economic efficiency are interrelated, interdependent, yet are characterized by specific features. Economy is measured as a relation to the input costs, efficiency is related to the actual process of transformation of business processes and the social effectiveness of production is associated with business processes. Economy is generally referred as an aimed action to minimize the resources spent, especially financial resources. From the perspective of business management it is important to maintain a low financial cost, hence the low resource consumption.

Efficiency in its general form indicates the effectiveness of resources employed and benefits they earned. In other words, the efficiency can be expressed as the ratio of output and input of any process, activity or system. In case of a company it is a ratio of the quantity and quality of the final product and the amount of resources invested in the production process.

The effectiveness generally refers to the ability to produce the desired utility. Rating utility takes place at the output level of the final products. Effectiveness is therefore usually the assessment of whether an organization does not produce useless, unwanted or unimportant products.

Fig. 3 Aspects of economic efficiency



Information sources for the assessment of economy, efficiency and effectiveness, thus overall economic efficiency of enterprises with subsequent management are derived from the financial statements of financial accounting. It is a balance sheet, income statement and cash flow statement. These reports contain a summary of the progress and success of economic activity and its impact on the financial situation of the company.⁷ Information sources contain two types of variables:⁸

- Stock variables that characterize the size of each item on a particular day. They result from the balance sheet.
- Flow variables that characterize the size of individual items for a certain period. They explained the change of stock variables at the end of a period compared to the beginning. They result from the profit and loss account and the cash flow statement.

The economic efficiency can be considered as follows: evaluation indicator of economy aimed at the allocation of inputs. Costs may be linked to products directly or indirectly. Indicators of effectiveness indicate the intensity of use of inputs to outputs. These indicators are influenced by both cost efficiency, quality and time. They aim at measuring and controlling the final output (product or service) and have the task to verify its properties and customer satisfaction with the final outcome. Defining of indicators design is therefore based on the final output. In case of intangible output it is necessary to define product requirements. For these reasons, it is insufficient to use financial indicators, but it is necessary to use both financial and non-financial indicators.

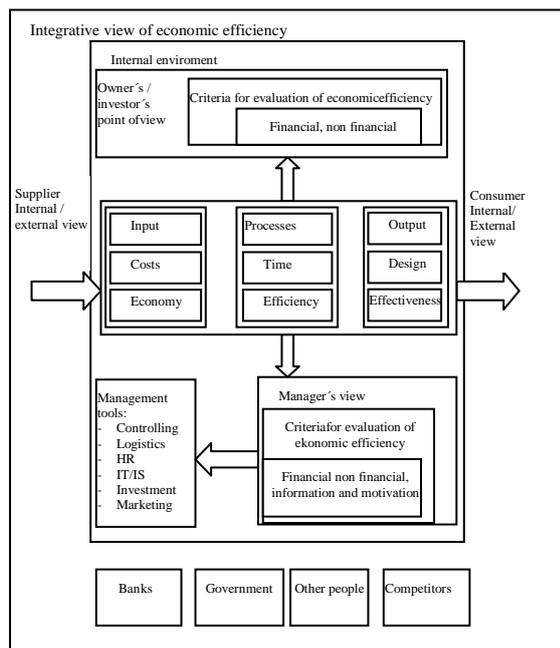
3.2 Plan of the measurement and management of economic efficiency in small and medium enterprise

Based on the above consideration a plan of measurement and management of economic efficiency in small and medium-sized enterprise was created with mutual merging of internal and external view of economic efficiency. A view of customers, competitors, financiers, suppliers and possibly other person is included in the external environment of the company. Economic efficiency of internal business environment can be seen from the perspective of the business owner and manager. The owner can sometimes be seen from the outside view if it is a limited company with freely tradable shares. Each area may be divided with respect to the sub-processes.

⁷ BAČOVÁ, I., HYSKO, M.: *Informačné systémy malých podnikov*. 1. vyd. Bratislava: Ekonóm, 2003. ISBN 80-225-1749-6.

⁸ FETISOVÁ, E., VLACHYNSKY, K., SIROTKA, V.: *Finance malých a stredných podnikov*. 1.vyd. Bratislava: IURA EDITION, 2004. ISBN 80-89047-87-4.

Fig. 4 Plan of measurement and management of economic efficiency of small and middle-sized enterprises



It is important for business owners and managers to establish in the proposed plan of economic efficiency appropriate indicators of economic efficiency and to follow and support the long-term strategic goals of the company.

3.3 Metrics – indicators and their types in the context of economic efficiency

Generally speaking, the successful management is hardly possible without setting the economic efficiency standards since the determination of economic efficiency based on measures affects all actions towards achieving the targets. Using the appropriate measures leads to the right decision, therefore increasing economic efficiency, and thus to increase the company's competitiveness.

Metric means strict financial or non-financial measure that is used to assess the level of economic efficiency of specific areas of business performance and management or of the entire enterprise. It serves as a tool for efficiency and performance, with a primary focus on the goal, critical success factors, processes, activities and performance of resources. The metric has the following attributes: name, identification, definition, owner, dimensions, default values, target values, sources of measurement data, measurement procedures and verification procedures. Indicators are classified according to different criteria as absolute and relative, stock or flow, synthetic and analytic. Synthetic indicators display the economic reality very complex. They provide information of the reflected state and development that contains all the relevant characteristics and properties. Synthetic indicators of effectiveness are based on the assessment of the resulting effect of the business activity, which is reflected in net income. They are mainly indicators of profitability. Technically they are measured as the ratio of net income and resources spent. The most commonly used indicators of profitability are return on sales (ROS), assets (ROA), equity (ROE).⁹

4 Return on equity

4.1 Return on equity

Economic efficiency is typically measured as the ratio between profit (before taxes, respectively after tax) and the average amount of either total invested capital (ROA), or equity employed (ROE).¹⁰

Return indicates how large the return flow of money is in proportion to the capital used for business activities. At the same time return gives the company investors important information and enables comparison with alternative forms of deposit money.¹¹

Return on equity expresses a measure of appreciation of own resources. It measures how much net profit is attributable to one crown of capital employed. The basic equation is as follows:¹²

$$ROE = \frac{\text{Net profit}}{\text{Equity}}$$

Profit is the difference between revenues and costs respectively capital increase from the economic activity of the business. It is the most synthetic one of value indicators and criteria of business. Net profit for the period EAT specified in the numerator of ROE indicator is intended for distribution to owners and business development. It can be received as the sum of operating income and extraordinary income minus income tax.¹³

The capital is a production factor with a form of physical capital (buildings, machinery, supplies, etc.) and human capital. The accumulation of capital in addition to technical progress is the main factor of economic growth. Capital is also a residual item of the assets of business after deducting its liabilities. It is synonymous with the net assets. Act No. 513/1991 Coll., The Commercial Code uses the term equity specified in the denominator of the ROE.¹⁴

The rate of profit calculated on equity is an indicator whether capital has sufficient yield, ie whether it is used with an intensity corresponding to the size of the investment risk. Investor understandably requires that the price he receives from the company for the capital (dividends from shares share from invested deposit, etc.) was higher than the price that would be received in any other form of investment (eg by buying bonds, saving money on financial institution, etc.). This requirement is justified because the investor, who put his capital into equity firm, carries a relatively high risk. If the value of long-term ROE is less than or equal to the yield of securities guaranteed by the government (treasury bills, government bonds, etc.) the company will probably fail. Rational investor in such case will seek to invest his capital in a more convenient and more profitable way.¹⁵

4.2 Maximizing return on equity

Maximizing the profitability is one of the main goals of the company. A positive sign of its success is the growth of the firm's profitability over time. Increasing the profitability is quite challenging, but there are several options to help. The company should focus on influencing following determinants of profitability or their effects: production structure, natural conditions, economic conditions, the quality of production, the procedures and technologies, the level of utilization of labor, strike price, liquidity, the costs, the turnover of assets, method of business financing, other factors.¹⁶

¹⁰ KRÁL, B.: *Manažerské účetnictví*. 1. Vyd. Praha: Management Press, 2003. 547s. ISBN 80-7261-062-7

¹¹ SEILER, A.: *Financial Management: BWL in der Praxis*. Band 2. 3., überarb. Auflage. OrellFüssli, Zürich. 528 S.

¹² KISLINGEROVÁ, E a kol. *Manažerské finance*. 3. Vydání. Praha: C. H. Beck, 2010. 824s. ISBN 978-80-7400-194-9

¹³ KRÁL, B.: *Manažerské účetnictví*. 1. Vyd. Praha: Management Press, 2003. 547s. ISBN 80-7261-062-7

¹⁴ HOLMAN, R. *Ekonomie*. 3. Vyd. Praha: C. H. Beck, 2002. ISBN 80-7179-681-6

¹⁵ KOVANICOVÁ, D a KOVANICA, P.: *Pokladyskruté v účetnictví* 2. vyd. Praha: POLYGON, 1995. 566s. ISBN 80-85967-07-3.

¹⁶ KUCHARČIKOVÁ, A., TOKARČIKOVÁ, E., ĎURIŠOVÁ, M., JACKOVÁ, A., KOZUBÍKOVÁ, Z., VODÁK, J.: *Efektivní výroba*. 1. Vydání. Brno: Computer Press, 2011. 344s. ISBN 978-80-2512524-3

⁹ KUCHARČIKOVÁ, A., TOKARČIKOVÁ, E., ĎURIŠOVÁ, M., JACKOVÁ, A., KOZUBÍKOVÁ, Z., VODÁK, J.: *Efektivní výroba*. 1. Vydání. Brno: Computer Press, 2011. 344s. ISBN 978-80-2512524-3

Return on equity is the result of the combined effects of liquidity, asset management and debt management.¹⁷

$$ROE = \frac{Net\ profit}{Equity} = \frac{Net\ profit}{Revenues} \cdot \frac{Revenues}{Assets} \cdot \frac{Assets}{Equity}$$

The equation indicates that the management company has three tools to increase ROE with its management.¹⁸

1. The profit margin - the ratio of net profit per unit of sales. It reflects the company's pricing strategy and ability to control operating costs. A high profitability of sales is mostly the result of good cost control and efficiency in spending of resources and consumption of capital. Profit margin and asset turnover tend to inverse relationship (companies with high profit margins typically achieve low turnover and vice versa).
2. Asset utilization measured by the ratio of sales per unit of assets - can be called asset turnover, therefore the company's ability to use the total assets of the company. The more is the capital capable to produce sales the better. High turnover is a sign of efficient use of capital, or assets which company manages.
3. Leverage - the amount of equity used to finance assets. Increasing the share of foreign capital in the total capital of the company has a positive effect on ROE under the condition that the company can add a value to every crown of debt and this value is higher than the interest rate of debt. Asset turnover and financial leverage tend to inverse relationship (a company with a low turnover of assets using debt financing)

4.3 Disadvantages of indicator of return on equity

While ROE is generally considered to be the main financial indicator of the business effectiveness, its evaluation must be cautious, as there are three problems related:

1. The problem of time (some activities, such as introducing a new product, cause an increase in costs and thereby reduce the value of ROE, but will grow in the coming years),
2. Problem of the risk, which is ignored by ROE (in general, the higher the risk, the higher the required value of ROE,)
3. Problem of assessment, since it calculates the accounting (historical) values rather than market values, which are crucial for investors.¹⁹

Despite all the shortcomings ROE analysis is widely used in practice. It represents on the basis of a systematic work with reports a simple concept to identify problem areas in the management of enterprise economic efficiency and their subsequent correction.²⁰

5 Conclusion

Every business that wants to work and be successful in the industry should continuously improve the economic efficiency. Economic efficiency is characterized by quantification of all business activities with the resulting effect. Incurred inputs and outputs achieved are compared mutually. Inputs entering into a business process are labor, work items, work equipment and information. Inputs are transformed into individual output process in interaction with time, space and company environment. Outputs are products, services, information and waste.

Measurement and control of economic efficiency can be done by a variety of new methods and approaches (Balance Scorecard, QFD, Kanban, EFQM, etc.), which are financially unaffordable in small and medium-sized enterprises and hence these

businesses tend to prefer approaches that focus on financial measures.

Economy, efficiency and effectiveness are three aspects of economic efficiency, which are interconnected, interdependent, while maintaining its own specificities and constitutes the internal environment of the company. Economic efficiency is achieved by minimizing the resources spent. Efficiency is the ratio of the quantity and quality of the end product and the amount of resources invested in the production process. Effectiveness assesses whether the company does not produce unnecessary, unwanted, or unimportant products. Financial accounting is the source of information for the evaluation of economic efficiency.

While measuring and managing economic efficiency, it is important to take into account the diversity of viewpoints from the outside of the business (owners, managers and customers). Owners expect to maximize the shareholders' capital in the shortest possible time. Managers evaluate the level of prosperity, stability in the market, the level of efficiency, productivity, status and trends of cash flows, liquidity, speed of reaction to changes in the external environment. Customers prefer companies with quality products at a price corresponding to the customer's wishes.

The plan of measurement and management of economic efficiency in small and medium-sized enterprises is based on mutual merging of internal and external view of economic efficiency. The external environment consists of customers, suppliers, financing parties, competitors and others. The internal environment of economic efficiency can be seen from the manager and owner. The individual partial areas of the company can be branched with respect to the sub-processes.

It is not possible to manage the business without measuring the economic efficiency. Determination of standards affects negotiations towards achieving the targets. Synthetic indicators have a complex and explicit role in illustrating the economic reality of the company. They are mainly indicators of return on equity (ROE). The company has three tools to increase ROE through its management. This is the profit margin, asset utilization and financial leverage. For more accurate measurement and control of economic efficiency, owners and managers use further decomposition of ROE profitability indicators such as DuPont analysis and dynamic analysis of ROE to help you find the factors most affecting the return on equity and assess their impact on the development of sales, equity, assets and profits.

Literature:

1. AZIMI, N., A., WELCH, H., G.: The effectiveness of cost-effectiveness analysis in containing cost, *J Get Intern Med.* 1998, 13:664-9.
2. BAČOVÁ, I., HYSKO, M.: *Informačné systémy malých podnikov*. 1. vyd. Bratislava: Ekonóm, 2003. ISBN 80-225-1749-6.
3. BOBKOVÁ, D.: *Zvyšovanie produktivity práce finálnych procesov v produkčných systémoch*. In: *Transfer inovácií*. č. 10 (2007), s. 243-245. Internet: <<http://web.tuke.sk/sjf-icav-stranky/transfer/10-2007/PDF/243-245.pdf>> ISBN 9788080738327
4. FETISOVÁ, E., VLACHYNSKY, K., SIROTKA, V.: *Finance malých a stredných podnikov*. 1.vyd. Bratislava: IURA EDITION, 2004. ISBN 80-89047-87-4.
5. HOLMAN, R. *Ekonomie*. 3. Vyd. Praha: C.H. Beck, 2002. ISBN 80-7179-681-6
6. KISLINGEROVÁ, E a kol. *Inovace nástrojů ekonomiky a management organizací*. 1. Vydání. Praha: C. H. Beck, 2008. 293s. ISBN 978-80-7179-882-8
7. KISLINGEROVÁ, E a kol. *Manažerské finance*. 3. Vydání. Praha: C. H. Beck, 2010. 824s. ISBN 978-80-7400-194-9
8. KOVANICOVÁ, D a KOVANICA, P.: *Pokladyskrýté v účetnictví* 2.vyd. Praha: POLYGON, 1995. 566s. ISBN 80-85967-07-3.
9. KRÁL, B.: *Manažerské účetnictví*. 1. Vyd. Praha: Management Press, 2003. 547s. ISBN 80-7261-062-7
10. KUCHARČIKOVÁ, A., TOKARČIKOVÁ, E., ĎURIŠOVÁ, M., JACKOVÁ, A., KOZUBÍKOVÁ, Z.,

¹⁷ SYNEK, M. a kol.: *Manažerská ekonomika*. 4.vyd. Praha: Grada Publishing, 2007. 464s. ISBN 978-80-247-1992-4.

¹⁸ KISLINGEROVÁ, E a kol. *Inovace nástrojů ekonomiky a management organizací*. 1. Vydání. Praha: C. H. Beck, 2008. 293s. ISBN 978-80-7179-882-8

¹⁹ SYNEK, M. a kol.: *Podniková ekonomika*. 3.vyd. Praha: C.H. Beck, 2003. ISBN 80-7179-736-7.

²⁰ PARRINO, R.; KIDWELL, D. S. *Fundamentals of Corporate Finance*. Wiley, 2009. 765, ISBN 978-0470418444.

- VODÁK, J.: *Efektivní výroba*. 1. Vydání. Brno: Computer Press, 2011. 344s. ISBN 978-80-2512524-3
11. LIBERKO, I., VIDOVÁ, J.: *Ekonomická hodnotenia ekonomickej efektívnosti podniku*. 20 Inthercathedra, Poznaň: 2004, ISSN 1640-3622, s. 96 – 100.
 12. MARCH, J.G. (1991): Exploration and Exploitation in Organizational Learning. *Organization Science*, Vol. 2, No. 1, Special Issue: Organizational Learning, s 71-78
 13. MIHOK, J. JANEKOVÁ, J., VIDOVÁ, J.: *Podnikové hospodárstvo – ekonomika podniku*. Košice: Strojnícká fakulta TU, 2005. ISBN 80-8073-406-2.
 14. REMEŠ, D., GOSWAMI, K. Měření výkonnosti podniku. *E+M Ekonomie a Management*, 2004, roč. 7, č. 3, s. 59-64. ISSN 1212-3609.
 15. SEILER, A.: *Financial Management: BWL in der Praxis*. Band 2. 3.,übererb. Auflage. OrellFüssli, Zürich. 528 S.
 16. SYNEK, M. a kol.: *Podniková ekonomika*. 3.vyd. Praha: C.H. Beck, 2003. ISBN 80-7179-736-7.
 17. SYNEK, M. a kol.: *Manažerská ekonomika*. 4.vyd. Praha: Grada Publishing, 2007. 464s. ISBN 978-80-247-1992-4.

Primary Paper Section: A

Secondary Paper Section: AE

QUALITATIVE CHARACTERISTICS OF FINANCIAL INFORMATION PRESENTED IN FINANCIAL STATEMENTS ACCORDING TO IFSRI/IAS VERSUS THE INFORMATION FUNCTION – CONTRIBUTION TO THE DISCUSSION

*MARZENA STROJEK-FILUS

University of Economics in Katowice, 1-Maja street, Katowice, Poland

email: "marzena.strojek@ue.katowice.pl"

Abstract: In the work the qualitative characteristics of financial information presented in financial statements, as adopted and interpreted in the Conceptual Framework for Financial Reporting in 2008 and 2010, have been subjected to critical analysis. Doubts and concerns regarding the emphasis placed on financial information usefulness for decision-making purposes as an overriding characteristic have been presented. The concept of financial information usefulness for decision-making purposes from the point of view of the users' interests has been analysed. It has been pointed out that adding further details to financial statements and allowing the application of multiple variants makes it difficult to use them in practice, also for such users as private investors. Threats related to data comparability limitation and the resulting consequences have been pointed out. The necessity to highlight the reliability and credibility of financial information in order to enhance the users and societies' trust for financial reporting and the whole accounting system has been emphasised

Keywords: qualitative characteristics of financial information, decision-useful information, financial reports, conceptual framework

1. Introduction

Financial reporting is playing an increasingly significant role in global economy as a basic source of financial information about economic entities. For this reason, legal solutions related to the scope, the degree of detail, the manner of financial information presentation in a financial statement as well as basic principles of drawing up such a statement are gaining importance. Questions concerning the quality of information contained in financial statements are especially justified in the period of global economic crisis.

In 2002, on the basis of the Norwalk Agreement, two organisations: Financial Accounting Standards Board (FASB) and International Accounting Standards Board (IASB) started joint works so as to establish new accounting standards. These works among others led to a change in the Conceptual Framework for Reporting, which is a kind of „guide” and „base” for International Financial Reporting Standards. The Framework specifies the main objectives and the principles of drawing up financial reports as well as their qualitative characteristics. The changes introduced in the years 2008 and 2010, referred to as the Improved Conceptual Framework for Financial Reporting, are in particular related to the qualitative characteristics of financial information presented in financial statements and reflect the „new philosophy” of a financial statement. This resulted in a number of doubts concerning the direction of these changes, the interpretation of provisions contained in the Framework and their effects in the economic practice. The aim of this article is to subject the provisions adopted in the Framework to critical analysis and to indicate the resulting threats to the economic practice. The author has presented her doubts regarding the evaluation of the quality of financial information contained in financial statements.

2. Financial reporting objectives

Financial statements are a synthetic set of financial information which, when properly presented and interpreted, makes it possible to determine the financial condition of an economic entity. This complex set of information reflects various economic relations between the current and prospective economic partners, such as contractors, owners, managerial staffs, employees, local communities. The effects of these activities are determined on the basis of the adopted assumptions and accounting principles. Financial statements present the results of an entity's activity on various planes in past periods. It is therefore a „statement on the past”.

Financial reporting should satisfy the information needs of different users in a highly aggregate manner, which is consistent

with the adopted model of accounting based on the capital maintenance concept (Weetman, 2003, p. 17).

First attempts to regulate the issue of objectives, basic assumptions and qualitative characteristics were undertaken in the 1970s by FASB, which resulted in Statements of Financial Accounting Concepts (SFAC). The conceptual framework “was to be used as a guide in the development of consistent accounting standards, hopefully leading to a more coherent set of accounting principles to aid practice” ((Kaminski K. A., Carpenter J. R., 2011, p. 16). In 1989 the International Accounting Standards Committee (IASC) worked out its own version of the conceptual framework, referred to as „Framework for Preparation and Presentation of Financial Statements” (hereinafter referred to as the „Framework”). This work was continued by International Accounting Board (IASB). Since 2002 FASB and IASB have been carrying out joint work on the development of new standards, which has been divided into 8 stages. Stage A is related to the objectives and qualitative characteristics of financial statements. The stage was completed, resulting in appropriate changes introduced in the Framework in 2008 and 2010.

The Framework defines a financial statement as a general purpose statement. This means that information contained in it is directed to a wide (as wide as possible) range of users who do not have access to data prepared specially to meet their specific information needs. This means that the information scope of financial statements should be determined so as to comprise properly diversified contents, adjusted to different information needs of the users.

According to the Framework, the objective of the general purpose financial statement is to provide financial information about a reporting entity which is useful to existing and potential investors, lenders and other creditors when they take decisions to provide resources to the entity. These decisions involve transactions related to equity and debt instruments, loans and various forms of credit. The Framework contains extensive grounds for such a solution. It has been pointed out that broadly understood investors must have information about future receipts of net financial resources to the entity. Therefore, they must be provided with information about the resources of a given entity, its claims and the effectiveness of these resources management by the entity's managerial staff.

Therefore, the information scope of a financial statement should in the first place meet the needs of one group of users.

Thus appears the first contradiction regarding the financial statement nature. In the Framework the priority of one group of users has been adopted – the ones who provide equity, which in turn puts a constraint on the character of the financial statement as a general purpose statement.

At this point it is worth reminding the accounting system functions that are most frequently quoted in the accounting theory:

- Informative function,
- Controlling function (information-identification stage and regulation-identification stage),
- Reporting function,
- Analytical and interpreting function,
- Statistical function (Messner, 2001, p 27-28).

The above mentioned functions should be reflected in the financial accounting product – the financial statement. The scope and structure of financial statements should be selected so as to enable and make it easier for various stakeholders to fulfil the remaining functions. This in turn forces appropriate qualitative characteristics of information contained in financial statements, which will be discussed in the further part of the study.

According to the Framework, financial statements are not aimed at showing the value of a reporting unit, but to provide

information that will help investors, lenders and other creditors to estimate the value of this entity. Financial reports are to a large extent based on estimates, evaluations and models, and not on faithful representations.

According to the Framework, financial statements should provide information on the entity's economic resources and claims against it. It is also important to report changes in these resources and claims which result from the entity's financial activity or other events, e.g. the issue of additional shares. The financial results of activity are reflected chiefly by net financial flows in the future.

3. Usefulness of financial information in the decision-making process

The Framework defines the basic objective of financial statements as providing the investors, lenders and other creditors with information they can use to take particular decisions. A question then arises: when can a piece of information be regarded useful from the point of view of stakeholders? Financial statement users take different decisions. Gearing financial reporting towards the information needs of the users made it possible to specify three paradigms referring to financial reporting usefulness (Riahi-Belkaoui A., 2000, p. 274 cited by Mućko P., 2007, p. 246):

- The paradigm of accounting usefulness for decision-making purposes, examined through analysis of users' decision-making models,
- The paradigm of accounting usefulness for decision making purposes in the opinion of individual users,
- The paradigm of accounting usefulness for decision-making purposes measured as a reaction of financial market information users.

Classification of financial information into useful and useless and less or more useful requires a particular decision goal to be identified. This in turn makes it necessary to point to a specific decision-making model, in which the function of the goal is determined as a criterion maximizing the decision-making usefulness. Only such a point of view allows arranging the significance of information in a hierarchy. The decision-making model is always a result of a specific application by the economic entity (Smejda, 2006, p.175).

According to the second paradigm, it is the users themselves who should reveal their information needs. In interviews and surveys, users frequently point to their need for too detailed information, which is ahead of their actual needs. On the other hand, the published results of research into the use of financial information revealed entire areas of financial statements that had been almost completely passed over by the shareholders (Bartlett S.A., Chandler R.A., 1997, p.248-254).

According to the third paradigm, the usefulness of a particular item or a set of information should be observed with reference to the reaction of capital markets, e.g. the stock exchange. Studies involve checking the reaction of investors to a particular item of information. If there are no reactions, it can be assumed that the information was useless. However, the behaviour of stock exchange investors is frequently irrational or dependent on factors other than financial information presented in financial statements. The last 5 years of analysing the Stock Exchange in Warsaw show that information which is unquestionably useful, namely the information on companies' financial results, frequently did not trigger investors' reactions or caused a reaction opposite to the expected one. The announcement of the companies' high profits was accompanied by a fall in the price of their shares.

The concept of information usefulness regards the future whereas the data contained in financial statements concern the past, which naturally limits their usefulness. In the opinion of the author, the high level of information generalisation is also a constraint in its use in the decision-making process. On the other hand, excessive detail may be desired by a particular user, but for the others it may be „information chaos”, in consequence leading to disinformation due to excess of information. The

subject literature quotes lists of financial statement information scope according to the groups of financial statement users (Luty Z. 2010, pp 128-129). In the lists all the main groups of users have been treated equally, without highlighting solely the needs of investors. Thus, rating companies expect an „information package” containing:

- Risk,
- Manipulation tendency,
- Financial condition,
- Value in the future.

On the other hand, transnational institutions expect information about the following issues:

- Rationality of behaviour,
- Market flexibility,
- Behaviour towards inflation,
- The influence on the global market,
- The influence on the level of unemployment.

Contractors are interested in information concerning the continuation of activity, solvency, financial flow.

The scope of sought-after information is quickly expanding, which in near future may mean that one financial statement will not be able to live up to the expectations of all users. Information overload will make it unintelligible. Perhaps a good solution will be to prepare two types of financial statements, directed to different groups of users. The research on a group of private investors (36 000 completed surveys) carried out in Germany, published in 2009 by Deutsches Aktieninstitut, indicates that most investors feel overwhelmed by the excess of information contained in financial statements. The increasingly extensive statements are more and more difficult to understand (Białas M.). The experts analysing the data came to the conclusion that the majority of private investors do not analyse financial statements. How do they draw knowledge about the financial condition of economic entities then? It turned out that approximately 75% of the surveyed were guided by press information, which they considered to be the most important and reliable source of information (Szewc M., 2009, p. 24-26 cited by Białas M., 2011, p. 220-221). The results of studies are surprising as it is the investors that were specified in the Framework as major recipients of reporting information.

According to the Framework as of 2010, financial information is useful when it is relevant and faithfully represents what should be reported in financial statements. Therefore, fundamental qualitative characteristics are usefulness and faithful representation. A piece of information is deemed useful when it can influence a change of decisions taken by the users, i.e. when it has a predictive value, a confirmatory value or both values at the same time. In the opinion of the author of the publication, the explanations regarding the above mentioned value contained in the Framework are not clear. Each piece of information concerning the evaluation of assets or result elements which is generated by the financial accounting system may be predictive and, in the event business continuity is maintained, also confirmatory. The author's proposal related to a slightly extended interpretation is presented in Table 1. These characteristics can be referred to as auxiliary characteristics for the fundamental one – usefulness or its components.

Table 1. Auxiliary characteristics (components) of financial information usefulness

AUXILIARY CHARACTERISTIC	INTERPRETATION
Predictive value	Information which can be used by the user to predict future results, but also other values related to future periods
Confirmatory value	A piece of information which makes it possible to confirm previous evaluations which were made in the preceding period and concern the current or future periods

Source: own study based on the Framework

Another thing which is not completely clear is the interpretation of information significance as an aspect of usefulness. Every significant item of information is useful, but not every piece of information that is useful is necessarily significant. For example detailed information about stocks may have a predictive or confirmatory value for a particular user, usually a contractor, but it may also be of little importance from the point of view of the entity's financial position. For this reason, useful information should be hierarchized with regard to its significance from the point of view of the main objective of drawing up financial statements.

Also explanations regarding faithful representation raise doubts in the opinion of the author of the publication. In this case the auxiliary characteristics include:

- Completeness,
- Neutrality,
- The absence of errors.

Representation of information free of errors is understandable, whereas neutrality of information in the context of the accounting policy, which is being increasingly extended in IFSR in the areas regarding the adopted methods and estimates, is no longer understandable. If an entity, within the framework of the adopted financial reporting policy (accounting) allowing choice options, adopts a particular solution (method, estimate) the consequence of which will be its presentation in a more favourable light, can we say that such information is still neutral? Explanations regarding the adopted method or estimate which are contained in a statement may be complete, but for the information user who does not know how a given item would have been evaluated if another method or estimate had been used, a particular phenomenon will still be incomplete, therefore, it will not be faithfully represented. At this point it is worth mentioning that the financial statement user must have a thorough knowledge in the field of accounting in order to interpret data contained in financial statements in a proper way. A. Lennard draws attention to the diversified scope of financial statements and financial reporting (Lennard A., 2007, p.54). The scope of the latter may be much broader.

4. Complementary qualitative characteristics of financial information

In the Framework as of 2010, the following have been identified as complementary characteristics of financial information:

- Comparability,
- Verifiability,
- Timeliness,
- Intelligibility.

In the previous version of the Framework (as of 1989) comparability was one of the four major characteristics of a financial statement. The introduced change results from adjusting the financial statement to the needs of investors (Lalević Filipović A., 2012, p.88). The high degree of discretion when determining the usefulness of information and its faithful representation is likely to considerably constrain the comparability of information contained in financial statements of different entities. The lack of a proposal for a „model“ financial statement in terms of the arrangement and possible levels of detail makes it difficult to compare financial statements of various entities (Strojek-Filus, 2012). In the opinion of the author, maintenance of fundamental qualitative characteristics does not guarantee maintenance of data comparability.

A particularly important characteristic is verifiability, as it guarantees the credibility of information. Information which is not verifiable cannot be deemed fully reliable. Verifiability may be direct or indirect in character. Direct verifiability involves the application of measurement or direct observation. Indirect verifiability consists in using a particular technique or method with the same initial data and checking the correctness of the initial data. The comparability characteristic should be ensured

by a properly carried out financial revision. Based on accounting, it is assumed that proper application of general accounting principles and detailed provisions contained in legal regulations is a guarantor of information credibility (Mućko P., 2007, p.242).

An institution which to a large extent guarantees that a financial statement presents credible, correct and reliable information, making it easier to safely invest the capital, grant loans and credits, take proper investment decisions and minimise threats related to the lack of expected economic benefits from mutual trading relations, should be the institution of certified auditor (Sawicki K., 2002, p.179). The subject literature presents analyses of reporting information credibility (Luty Z., 2010, p. 132-133). The highest level of credibility has been noted for historical data recorded on the basis of source documents. Included in the accounting books, it provides controlling and analytical evidence. On the other hand, the lowest level of credibility has been observed for data on intangible assets, including the ones resulting from capital and legal ties. Timeliness means that the users will be able to have a given item of information at their disposal in appropriate time from the point of view of a decision making moment. Interpretation of the intelligibility characteristic corresponds to the previously binding version. Information in a financial statement should be presented in a clear, transparent and concise way, which makes it more intelligible. If a presented phenomenon is more complex by nature, so will be the information, which is its faithful representation. It cannot be distorted so as to make it understandable to the user. It is also assumed that the user has a basic accounting knowledge, which allows him to read this information.

Fig. 1. A hierarchy of financial information qualitative characteristics in a financial statement

I level - Overriding characteristic - Information useful for decision-making purposes
II level - Fundamental characteristics: usefulness, faithful representation
Auxiliary characteristics (components) of usefulness: significance, predictive value, confirmatory value
Auxiliary characteristics (components) of faithful representation: completeness, neutrality, absence of errors
III level - Complementary characteristics: Comparability Verifiability Timeliness Intelligibility

Source: own study based on the Framework.

In the Framework it has been pointed out that benefits resulting from the provision of a particular item of information cannot be smaller than the costs incurred in order to provide and make use of this information. This is a logical solution based on a simple economic calculation of costs and benefits.

5. Conclusions

It should be stressed that changes made in the Framework as of 2010 introduce a greater degree of discretion in the evaluation of financial information usefulness. Also faithful representation raises a lot of doubt and the extent to which entities can and want to fulfil it might only be verified by the economic practice in the future. Departure from the overriding principle of true and fair view and emphasising the importance of useful information in its place may be interpreted as permission to the multiple variants of a given piece of information presented in financial statements. The highlighting of information needs and the necessity of satisfying them in a financial statement for one group of users (investors, lenders and other creditors) questions the general purpose of a financial statement. One may get an impression that it is a special purpose statement, geared mainly at reducing the investment risk. However, the results of previously conducted studies on private investors should encourage boards to analyse the problem more thoroughly. The question arises whether the introduced changes serve the

interests of investors, and if so, which group of investors? If the introduced changes serve only the biggest investors having the strongest position on capital markets, it might be worth directing a separate „information package” to them, while maintaining the general purpose character of previous financial reports. It should also be emphasised that in the period of global crisis and stagnation observed in many countries, especially the ones belonging to EEA, the controlling function of the accounting system, including in particular that of financial reporting, seems to be gaining importance. In the opinion of the general public, financial information should be reliable and credible to the highest possible degree. Changes introduced in the Framework as of 2010 regarding the qualitative characteristics of financial information push the characteristic of comparability into the background, which according to the author is necessary to maintain the transparency and intelligibility of reporting information sets.

Literature:

1. Białas, M.: *Problemy z ustalaniem wyniku finansowego w rachunku zysków i strat*, Zeszyty Naukowe Uniwersytetu Szczecińskiego, nr 625, 2011. 220-221 p. ISSN 1640-6818.
2. Bartlett, S.A., Chandler, R.A.: *The Corporate Report and the Private Shareholder: Lee and Tweedie Twenty Years On*, British Accounting Review, 29, 1997. p.248-254.
3. Kaminski, K. A., Carpenter, J. R.: *Accounting Conceptual Frameworks: a comparison of FASB and IASB Approaches*, International Journal of Business, Accounting and Finance, Winter 2011, Vol. 5 Issue 1. p. 16-17. ISSN 1936699X.
4. Lalević Filipović, A.: *Revised qualitative characteristics of financial statements as precondition for strengthening information power on capital market*, FACTA UNIVERSITATIS, Series: Economics and Organization Vol. 9, No 1, 2012. 88 p.
5. Lennard, A.: *Stewardship and the Objectives of financial statements: A Comment of IASB's Preliminary Views on an Improved Conceptual Framework for Financial Reporting: The objective of Financial reporting and Characteristics of decision-Useful Financial Reporting information*, Accounting in Europe, Vol. 4, no 1. 2007. 54-55 p. ISSN 17449480.
6. Luty, Z.: *Kierunki zmian sprawozdawczości finansowej*, Zeszyty Teoretyczne Rachunkowości, SKwP, 56 (112), 2010. 128-133. ISSN 1641-4381.
7. Messner, Z.: *Podstawy rachunkowości*, Wydawnictwo AE w Katowicach, 2001. 27 p. ISBN 83-7246-077-9.
8. Mućko, P.: *Metody badania użyteczności sprawozdawczości finansowej*, *Rachunkowość w teorii i praktyce*, red. W. Gabrusewicz, tom III, Wyd. Akademii Ekonomicznej w Poznaniu, 2007. 242-247 p.. ISBN 978-83-7417-262-2.
9. Sawicki, K.: *Kontrola jakości badania sprawozdań finansowych podmiotów gospodarczych*, Zeszyty Teoretyczne Rachunkowości, SKwP, tom 8 (64), 2002. p.179. ISSN 1641-4381.
10. Smejda, M.: *Użyteczność decyzyjna informacji zawartych w sprawozdawczości finansowej*, Zeszyty Teoretyczne Rachunkowości SKwP, tom 32 (88), 2006. 174-179 p. ISSN 1641-4381.
11. Strojek-Filus, M.: *Information on Capital Relations in a Unit Financial Reports on the Basis of Polish and International Accounting Standards*, Journal of international Scientific Publications, Economy and Business, Vol. 6, 2012. 14-16 p. ISSN:1313-2555.
12. Szewc, M.: *Czy inwestorzy doceniają sprawozdania finansowe?*, *Rachunkowość*, nr 9, 2009. 24-26 p.
13. Weetman, P.: *Financial and Management Accounting*, Prentice Hall, 2003. 17-18 p.
14. Commission Regulation (EC) No. 1126/2008 dated 3rd November 2008, adopting particular international accounting standards pursuant to the order (EC) No. 1606/2002 issued by the European Parliament and Council.
15. International Financial Reporting Standards 2011, part A, SKwP. ISBN 978-1-907877-01-8.
16. International Accounting Standards 2011, part A, SKwP. ISBN 978-1-907877-01-8.

Primary Paper Section: A

Secondary Paper Section: H, E

THE NOTION OF GROSSLY EXCESSIVE STIPULATED PAYMENT IN THE POLISH CIVIL CODE

³JAROSŁAW MARCIN SZEWCZYK

*Jagiellonian University, Faculty of Law and Administration,
Chair of Civil Law, Gołębia 24 St., Cracow, Poland
email: "szewczyk.jaroslaw@gmail.com"*

Abstract: The article concerns criteria for reduction of contractual penalties (liquidated damages) in Polish law. The first part of the article discusses general conditions for contractual penalty's reduction. The second part regards specific criteria used in assessing whether a contractual penalty should be considered "grossly excessive" or not. Each criterion is accompanied with a commentary containing indication of basic advantages and defects of a given criterion. Analysis of criteria is supplemented with examples of the recent Supreme Court's judgments. The article wraps up with a proposition of a criterion that seems to be the most appropriate for assessing contractual penalties in terms of their excessiveness.

Keywords: contractual penalty, reduction of stipulated damages, grossly excessive penalty, Supreme Court's judgments

1 The introduction

Stipulated payment has been regulated in Articles 483- 484 of the Polish Civil Code. By and large, an introduction of a penalty clause allows for a quite prompt enforcement of claims due to the creditor from the debtor in the event of non-performance or improper performance of an obligation. Under Article 484 § 1 of the Civil Code, contractual damages are due in the stipulated amount irrespective of the value of the actual loss.

Even so, clarity of this system is undermined by the existence of Article 484 § 2 of the Civil Code, enabling judges to interfere in a contractual relationship and reduce an amount of stipulated damages. Due to relatively lenient conditions for pursuing contractual penalties, having this kind of "safety valve" seems to be necessary though. There is a risk that a debtor, unaware of consequences of a stipulated penalty may agree to pay the amount that many times exceeds the level of legitimate creditor's interests. Nonetheless, the judicial discretion is quite often abused and *prima facie* quite straightforward proceeding turns into a full civil remedies proceeding, in which the court decides on its own what the amount of damages is due to the creditor. Moreover, even if the decision itself concerning reduction of the stipulated payment is right, criteria used by courts are often so vague that any predictability of a final judgment becomes illusory. Many wrong practices developed regarding criteria used for contractual penalty's reduction. Therefore, it is worth a while to put all collected data in order and organize it all in a systematic way.

2. Reduction of stipulated payment

As rightly indicated Janusz Szwaja, the reduction of contractual penalty means "abridgement of the amount of the contractual penalty due to the creditor, as a result of a request made by the debtor to the relevant court." *Ratio legis* of this possibility shall be sought in the need to protect the debtor, who agreed to stipulate contractual penalty in the excessive amount (extending legitimate creditor's interests).

Despite the absence of express provision to that effect, it is quite clear that Article 484 § 2 of the Civil Code (providing for the possibility of reducing excessive payments), has the character of the peremptory norm (*ius cogens, compelling law*). The aim of this norm is to safeguard interests of the debtor. Introduction of clauses which have the effect of preventing one or both of the parties from demanding penalty's reduction have no legal effect. It is also worth noting that the „reduction of repression“ is not one of the aims of this institution, neither the desire to strike the right balance between conflicting interests of the parties (so that those who suffered were not unjustly enriched at the expense of debtors – in line with the latin dictum: „*ne quis ex damno suo lucrum faciat*“).

Article 484 § 2 of the Civil Code provides for only two grounds which allow a stipulated penalty to be reduced. It is possible:

- (i) "if the obligation has been performed in the significant part", and
- (ii) where the stipulated penalty is grossly overstated („*grossly excessive*“).

In comparison to the Code of Obligations (1934), the Civil Code does not mention any other examples constituting additional grounds for reduction of stipulated payments, such as "no injury" or "minor loss."

2.1 Performance of the significant part of the obligation

The first basis for reducing stipulated payments is quite obvious ("performance of the obligation in the significant part"). In order to determine whether the obligation has been performed in the significant part Article 354 § 1 of the Civil Code should be applied. The starting point for any further analysis is always the question whether the creditor has derived any benefit (in any way) from a partial performance of the obligation.

In the decision of the Supreme Court dated March 25, 2011 the Supreme Court held, that "an admissibility of the reduction in stipulated damages by reason of the performance of the obligation in the greater part is based on the assumption that the partial performance of the obligation satisfies the legitimate creditor's interest". Insofar as this assumption cannot be met the reduction in stipulated damages cannot take place. The reduction does not deserve to be admitted in particular where the partial performance of the obligation has for the creditor no relevance whatsoever. If the partial performance has no relevance for the creditor, then cannot be said that the obligation has been performed "in the significant part".

If the partial performance was consistent with the creditor's interests, then the next step is to consider whether it was "the performance in the significant part." The performance of the obligation in the significant part means that the creditor's interests are satisfied in the essential part. It is not right to reduce stipulated damages if any of the creditor's interests has been satisfied. Furthermore, it is possible to reduce stipulated payments on this basis only if they were stipulated "wide". If the contractual penalty was stipulated in proportion to the number of violations, or depending on the degree of debtor's default, or the weight of a specific breach, then the reduction in stipulated damages on this basis is incorrect.

There is also an opinion that it is wrong to reduce the amount of stipulated damages on account of "performance of the obligation in the significant part" where a contractual penalty has been reserved for delay in performing the whole obligation. Nonetheless, the Supreme Court in its decision dated September 21, 2007 held that: "as a rule, the reduction in stipulated damages reserved for delay in performance of the obligation is permissible also because of the performance of the obligation in the significant part." It seems that this decision is wrong. In such a case, the contractual penalty should be reduced because it is "grossly excessive" not because the obligation has been performed in the significant part.

2.2 Gross excessiveness of contractual damages

The second basis for reduction is much more controversial. The term "gross excessiveness" is vague, therefore it allows for quite broad interpretation. The Supreme Court in its decision dated May 12, 2006 stated that: "Article 484 § 2 of the Civil Code does not provide for any criteria for reducing contractual penalties (...) therefore the catalogues of possible criteria is open-ended and belongs to the discretion of the judge; likewise a hierarchy of those criteria. (...)." According to the Supreme Court, different criteria may be taken into account. It is possible to take into account criteria having absolute values (e.g. an amount of stipulated damages in itself), relative criteria (assessment of the amount of stipulated damages relative to other elements, such as,

total value of consideration, the amount of loss suffered, the amount of damages due to the creditor under general rules of civil liability), or even other criteria of non-pecuniary nature (what is right, what equity demands in particular circumstances etc.)."

However, an important restriction stems from the fact that not every overstatement of contractual payments entitles debtors to their reduction. Only those contractual penalties which are "grossly excessive" are allowed to be reduced. In particular, the contractual damages are liable to be reduced if they are stipulated in such an amount, that the excessiveness of the penalty is obvious. According to K. Zagrobelny: "the debtor may request the court to reduce the contractual penalty only if the disproportion of stipulated damages is substantial and visible to anyone." The judge should not even start to examine whether the contractual penalty is (in given circumstances) "adequate", "accurate", or "right", if in the first place a potential disparity is not "excessive".

3. Assessment's criteria

The most important reason for existing discrepancies in judicial decisions is the application of different criteria in assessing similar factual situations. This state of affairs is obviously undesired. The term "gross excessiveness" should be construed and applied in consistent way. Therefore, there is a need to develop and establish coherent criteria of assessment whether a given contractual penalty should be deemed "excessive" or not. Janusz Szwaja made a careful study of criteria that may be of relevance for assessing "gross excessiveness" of contractual payments. With the aid of this analysis it is worth examining the following criteria:

3.1. Absolute value of stipulated damages

The criterion is inappropriate because it is not possible to identify any level of penalty which is "right" or "reasonable". It is impossible to recognize a particular penalty as excessive in isolation from other factors. It is wrong to seek any indicator of adequacy in judicial precedents or any particular practice (e.g. average amount of penalties stipulated on the market). Nonetheless, the Supreme Court does not exclude such possibility. In the decision dated January 26, 2011, the Supreme Court decided that: "the court - using Article 484 § 2 of the Civil Code - should consider all circumstances of the given case. It shall not limit its assessment to sole comparison of stipulated damages to the rates commonly used for reserving such penalties on the market."

3.2. Relation of stipulated damages to the value of performance

This criterion does not seem to be correct either. It is incompatible with the function of contractual penalty. Stipulated payment replaces damages and not the debtor's performance. It is worth noting that losses incurred by the creditor as a result of debtor's default can often exceed the value of the performance. Even so, the Supreme Court does not mind using this criterion. For instance, in a decision dated January 16, 2009 the Supreme Court held that: "the Court of Appeal correctly took into account other criteria of a quantitative nature, including (...), the relation of stipulated penalties to the total value of mortgage upon acquired real estates, and the total prices paid for those properties." It should be noted that the debtor's obligation was to delete mortgages from the Land and Mortgage Register.

Using this criterion, even auxiliary, is quite 'tempting', because often the value of performance (or consideration) is only information which can be relatively easily established by the court. This does not mean that this is a correct practice. The value of the performance should not have any major impact on the amount of stipulated damages.

3.3. Relation of stipulated damages to legitimate creditor's interests

It is criticized because it is based on subjective criteria, and pays no attention to repressive function of the contractual penalty. This criterion is approved by, among others, Jacek Jastrzebski. In this context it is worth quoting the decision of the Supreme Court dated April 14, 2005, in which the Supreme Court held that: "besides easily calculable the loss suffered (...) negative consequences may also include the loss of confidence of business cooperators in connection with the failure to perform, and consequently, the loss of market position."

3.4. Relation of stipulated damages to damages suffered

This is the criterion that was explicitly mentioned in Article 85 of the Code of Obligations (1934). It is endorsed by many legal scholars, among others, Zbigniew Radwański and Andrzej Rembieliński, and the recent decisions of the Supreme Court, inter alia, the judgment of June 20, 2008, in which the Supreme Court held that: "In the case of reduction of stipulated penalty by reason of its excessiveness, the main criterion should be the relation between the amount of stipulated damages and the amount of damages incurred by the creditor."

According to Janusz Szwaja, the stipulated payment replaces statutory remedies, not all damages suffered. Therefore, this criterion is unsound. It also should be added that such an approach leads to numerous complications. It is not clear which damages should be taken into account, only damages to the property or maybe personal injuries as well. It also requires the examination of damages (their amount), while the contractual penalty is due regardless of the amount of the actual loss. Finally, this approach does not allow for taking into account the contribution of an aggrieved party to damage arising or increasing.

3.5. Relation of stipulated damages to statutory remedies

This criterion was endorsed by Janusz Szwaja. He believed that it is the most appropriate and the most flexible of all contemplated criteria. It allows for taking into account other factors than just the amount of loss suffered. This criterion is advocated by other scholars as well, among others, by Joanna Dąbrowa, Mirosław Bączyk and Krzysztof Zagrobelny.

In the judgment of September 28, 2010, the Court of Appeal in Katowice found this criterion to be the most important: "the essential criterion for reducing stipulated damages by reason of their excessiveness is the relation of the amount of stipulated damages to the amount of remedies due to the creditor under general rules of civil liability." However, it is problematic whether it is correct to compare the amount of contractual damages to the amount of statutory remedies, in all those cases where the contractual penalty is supposed to compensate not only for damages compensated on the basis of the general rules of civil liability but also for other damages.

3.6. Conciliatory position

There is also the conciliatory position available. It is represented by, among others, Tadeusz Wiśniewski, who thinks that the "gross excessiveness" should be assessed on the basis of variety of factors, such as the amount of damages suffered, the level of debtor's fault, the value of the principal obligation, the contribution of the aggrieved party to the amount of loss etc.

In this context it is worth noting the position presented by the Supreme Court in the decision dated November 30, 2006, where the Supreme Court held, that the legislator introduced to Article 484 § 2 of the Civil Code a vague term of "gross excessiveness" on purpose. The aim of this was to provide the appropriate level of flexibility. The reduction of stipulated damages is subject to the judge's discretion, who should always take into account all specific circumstances of the given case. Besides, the judge should also pay heed to the basic functions of the contractual penalty, such as, stimulation to the proper performance of

assumed obligations, dissuasion from breaching the agreement, and compensation for incurred damages.

This approach is one of the most common. However, it has a one major drawback - the final decision of the court is for parties unknown and hard to predict. It seems that the mere degree of excessiveness - "gross" provides sufficient flexibility and there is no need to increase it by using quite arbitrary criteria.

4. Conclusions

Stipulation of the contractual payment can serve as an instrument of extending the scope of 'relevant damages' (damages which are due from the debtor as a result of the breach of contract). In consequence of introduction of a penalty clause into an agreement, the debtor may be obliged to compensate the creditor not only for all property damages but personal ones as well. Given that, comparing the amount of stipulated damages to the creditor's interest means de facto the same as comparing it to the amount of damages suffered. In this sense approach presented in point 3.3 and 3.4 are consistent.

As regards the criterion described in point 3.5, it is clear that the parties stipulating contractual payment regulate the extent of relevant damages in a distinct and autonomous way. Therefore, there is no reason to compare the amount of stipulated damages to the amount of statutory remedies. However, it should be noted that in many cases (if no damage other than compensated within the limits of Article 361 of the Civil Code is to be remedied) this criterion will be consistent with the criteria mentioned in points 3.3 and 3.4 as well.

Janusz Szewja rejects the criterion of legitimate creditor's interest (point 3.3) due to the fact that it makes the assessment dependent on subjective criteria, specific to particular features of the creditor. According to Jacek Jastrzębski: "Subjective nature of the creditor's interest does not preclude protecting it by stipulation of the contractual penalty (...)." All in all, through stipulation of the contractual penalty, the parties autonomously estimate the value of creditor's interest. The estimation is made by both parties, and as long as the debtor knows exactly what it is obliged to do, it should not be worried about the meaning of the proper performance to the creditor.

It seems that the creditor's interest criterion is the most appropriate. However, one important reservation is required. The assessment of "gross excessiveness" of stipulated damages should be based on a comparison of the amount of stipulated damages to the value of the creditor's interest, which was taken into consideration by the parties at the time of the agreement's conclusion. For the purposes of reduction of stipulated damages certain objective values are necessary. For the assessment of "gross excessiveness" only the creditor's interests that were foreseeable at the time of the agreement's conclusion should be of any relevance. The loss actually sustained, or creditor's interests actually affected should not influence the assessment of the contractual payment in terms of its "gross excessiveness". It is necessary to caveat that this is only a postulate *de lege ferenda*. As the above cited Supreme Court's decisions demonstrate, at present, none of the criteria contemplated herein is considered to be more legitimate than others.

Literature:

1. Bącznyk M.: *Przyczynienie się wierzyciela do powstania szkody a wysokość kary umownej* (in:) Księga pamiątkowa ku czci Sędziego Stanisława Rudnickiego, Warsaw 2005, p. 48.
2. Bilewska K., Jastrzębski J.: *Kary umowne w spółkach kapitałowych i w umowach wspólników lub akcjonariuszy*, PPH 2006, No 10, pp. 8-9.
3. Dąbrowa J.: *System prawa cywilnego. Prawo zobowiązań – część ogólna*, Vol. III, part 1, (ed.) Radwański Z., Wrocław 1981, p. 833.
4. Domański L.: *Instytucje kodeksu zobowiązań. Komentarz teoretyczno – praktyczny. Część ogólna*, Warsaw 1936.

5. Granecki P.: *Glosa do wyroku SN z dnia 8 lipca 2004 r., sygn. akt IV CK 522/03*, OSP 2006, No 1, item 2.
6. Jastrzębski J.: *Kara Umowna*, Wolters Kluwer, Warsaw 2006, pp. 338-340, ISBN 6-955-2304.
7. Jastrzębski J.: *Kara umowna a ochrona interesów niemajątkowych w reżimie kontraktowym*, *Kwartalnik Prawa Prywatnego*, No 4, 2006, pp. 992-994, ISSN 1230-7173.
8. Korzonek J., Rosenbluth I.: *Kodeks zobowiązań. Komentarz. t. I*, 2ed ed., Kraków 1936.
9. Radwański Z.: *Zobowiązania – część ogólna*, C.H.Beck, Warsaw 2001, p.89, ISBN 11759188.
10. Rembiewski A. (in:) Winarz J. (ed.) *Kodeks cywilny z komentarzem*, Vol.1, Wydawnictwo Prawnicze, Warsaw, 1989, p. 500.
11. Szewja J.: *Miarkowanie kar umownych*, PUG No 6, 1965, p.190.
12. Szewja J.: *Miarkowanie kary umownej według polskiego kodeksu cywilnego* (in:) Grzybowski S. (ed.) *Odpowiedzialność cywilna za wyrządzenie szkody (zagadnienia wybrane)*, Warsaw 1969.
13. Wiśniewski T.: (in:) Bieniek G. (ed.) *Komentarz do kodeksu cywilnego. Księga trzecia. Zobowiązania. Tom 1 i 2*, LexisNexis, Warsaw 2005, p. 859.
14. Zagrobelny K.: (in:) Gniewek E., *Kodeks cywilny. Komentarz*, C.H. Beck, 2010, p. 829.
15. The decision of the Supreme Court dated March 25, 2011, Ref. No IV CSK 401/2010, LexPolonica no 2810271.
16. The decision of the Supreme Court dated July 16, 1998, Ref. No I CKN 802/97, OSNC 1999, no 2, item 32.
17. The decision of the Supreme Court dated September 21, 2007, Ref No V CSK 139/07, OSN 2008, no 3, item 72.
18. The decision of the Court of Appeal in Białystok dated September 26, 2012, Ref. No I ACa 426/12, Lex no 1223147.
19. The decision of the Supreme Court dated May 12, 2006, Ref. No V CSK 55/2006, LexPolonica no 1631127.
20. The decision of the Supreme Court dated January 26, 2011, Ref. No II CSK 318/2010, LexPolonica no 2578250, OSNC 2011/D item 80.
21. The decision of the Supreme Court dated January 16, 2009, Ref. No III CSK 198/2008, LexPolonica no 2375459.
22. The decision of the Supreme Court dated April 14, 2005, Ref. No II CK 626/2004, LexPolonica no 2339854.
23. The decision of the Court of Appeal in Katowice dated September 28, 2010, Ref. No V ACa 267/2010, Orzecznictwo Sądu Apelacyjnego w Katowicach i Sądów Okręgowych 2011/1 item 5 p. 28.
24. The decision of the Supreme Court dated November 30, 2006, Ref. No I CSK 259/2006, LexPolonica no 2050832.

Primary Paper Section: A

Secondary Paper Section: AG

IMPLEMENTATION OF TEAM TEACHING IN ECONOMIC EDUCATION

^aLUDMILA VELICHOVÁ, ^bDARINA ORBÁNOVÁ

The University of Economics in Bratislava, Faculty of National Economy, Department of pedagogy, Dolnozemska cesta 1, 852 35 Bratislava, Slovak Republic
 email: ^aludmila.velichova@euba.sk, ^bdarina.orbanova@euba.sk

The paper created as a part of the Research Project N.: G002 EU-4/2012 "Innovation of curriculum and methods of Teaching Programmes at secondary schools".

Abstract: Teamwork is prevalent in business, industry and administration and is becoming common in classes. Team Teaching uses the principles and advantages of teamwork in relation of teaching team and students. Team Teaching is not only an alternative teaching approach, but an effective method of simulating real life conditions, full of conflicting demands and competing values, in the classroom. In this paper we attempt to assess advantages and disadvantages of Team Teaching and offer some examples of successful implementation of this approach in teaching of economic subjects.

Keywords: Team Teaching, economic subjects, training firm, models of Team Teaching, experiences with implementation

1 Theoretical aspects of Team Teaching

Team teaching is a strategy that many see as new and experimental and does not so far belong in Slovak secondary and higher education to often used and developed teaching approaches. Team Teaching can be defined, according to K. Goetz [2000, p. 2], as "a group of two or more teachers working together to plan, conduct and evaluate the learning activities for the same group of learners." I. Shafer [2001, p. 1] defines this term following: "Two or more instructors are involved in the same course". This definition is very general and is used for collaborative teaching (co-teaching), a broader category, as well. Experts describe from four to six common types of co-teaching, one of them is Team Teaching. This subcategory is defined by S. Quinn and S. Kanter [1984] as "simply team work between two qualified instructors who, together, make presentations to an audience." Teachers or instructors building a team may come from closely allied disciplines, or they may derive from different interdisciplinary interconnected fields. J. Skalková [2007, p.79] describes Team Teaching as a collaboration of teachers (e.g. teacher of theoretical subjects and master of vocational education, teachers of physics and chemistry) and as approach, which supports the interdisciplinary relations and contributes to the synthesis of cognition.

We can take in consideration three basic patterns of Team Teaching. In Category A the teachers, working together in team, share the responsibility for setting goals for a course, designing a syllabus, preparing lesson plans, teaching students and evaluating their results. They are in interaction with students; they discuss with them various topics from different points of view. Their specialization enables them to make their presentation more complex and attractive. They are teaching the same students at the same time within the same classroom. For Traditional Team Teaching is shared delivery of instruction typical, so in this case the teachers actively share the instruction of content and skills to all students, one may present new material to the students, while the other is setting up some important points drawing a concept or mind map and interjecting his own points.

In the category B is the responsibility for curriculum and grading shared as well, the team members work together, but they do not necessarily teach at the same time or the same group of students. They can share ideas and common resources, but function independently. They share planning, but each of them teaches his specialized skills area, or is applying different frame of reference. Other members of the team not presenting the content participate in discussion and monitor student understanding, activity and behaviour. In the category C is a person of coordinator involved in Team Teaching. This individual plans the instructions and designs the program for the entire team and

is responsible for the curriculum and grading. This pattern is missing the shared responsibility and the structure of category A and B and does not take the full advantage of the team concept.

2 Advantages and disadvantages of Team Teaching

In comparison with a conventional model of teaching, has Team Teaching a multitude of benefits and drawbacks for both, the teachers and the students. Working as a part of a team has a lot of advantages, which represent the positive consequences of team principles:

- Team knows more
- Team has a synergic effect
- Team incites, develops and cultivates
- Team teaches respect to the others
- Team gives to its members some kind of credit

These overall team benefits are transformed in the environment of Team Teaching to a synergy of knowledge, skills and experiences of the teachers, taking part in Team Teaching. They have got common goals, so they can inspire, support and motivate each other. They make use of different styles of planning, organization and class presentation. This gives them an opportunity to enhance their own teaching methods, allows them to develop new teaching approaches. Every participating teacher may emphasize different point of view on the issue, thereby interest and attention of the students increases. Team members complement each other. Teaching team provides students with essential models of team behaviour, teaching them principles of mutual respect and esteem. Students can benefit from seeing their teachers collaborate and cooperate on a goal, which is not possible in single-teacher classroom. In such environment students realize that important issues are complex and often raise a number of contradictory interpretations. Students should also come to conclusion that learning is sometimes of paradoxical nature. Expert opinion is not limited to the boundaries of their academic competence. Even if interdisciplinary boundaries are temporarily removed, students will return to them in the upper grades, when it will be closer to their specialization. Students learn to accept more than one opinion and to act more cooperatively with others. Team Teaching gives students the chance to develop independent critical thinking, as they learn to choose from alternatives in appropriate way. Plurality of opinions helps students to understand that absolute certainty and ultimate truth does not exist.

The successful teaching team does not bring only the expected measurable effects of pedagogical activity, but can also receive recognition from the school management, students, and last but not least from student parents. Another benefit of team teaching is that cooperation with one or more colleagues enables teachers to overcome the isolation inherent in teaching. By working together, team teachers can discuss not only professional issues and improve their solutions, but issues relating to students, like their expectations and motivation.

Just as we have indicated general positives of the team, which are reflected in Team Teaching, we can mention some of the general negatives. These include: risk of conflicts between teachers, who are involved in Team Teaching; risk of suppressing the individuality of team members, additional time needed for preparation of Team Teaching not only for individual lessons, but also for the whole concept. This requires awareness of constant information exchange not only previous to the start of Team Teaching program, but also during the whole program. Compared to traditional way of teaching, Team Teaching presentation requires thorough preparation in advance, to make the presentation output clear and without leaving any essential points disregarded. It is also important to learn, how to share giving instructions and discussion, to master cooperative and time management skills. Necessity of common goal may in

individual cases arise as counterproductive. Not all teachers are eligible for Team Teaching, as not all of them are able to conform to the rules of Team Teaching. Because of input from several team members, there may be too much material and too many activities in a course. This danger is considerably bigger among teachers with no Team Teaching experience. Team Teaching requires in comparison to traditional teaching much more introspection, teamwork and planning. In our opinion, the most of interpersonal difficulties are caused by insufficient planning and lack of coordination.

Team teachers are always confronted with fact, that they are being compared by students, who generally do not have the competence to evaluate the opinions of the teachers. They look at them, as if they were two rival "actors". This raises a risk of greater popularity or unpopularity of one of them. Some students are not satisfied with Team Teaching; they are too much accustomed to a single teacher teaching method, and they do not like changes and new methods. They may be surprised, even upset or frustrated by unusual atmosphere in the classroom, where Team Teaching takes place. On the other hand, it may happen indeed that one teacher is more responsible and demanding. Again, this can be a source of frustration and dissatisfaction of the second teacher's pedagogical performance. Any success as well as any failure is carried altogether by team members, which can once more lead to conflicts. Team teaching is very sensitive to the permanent communication of team members, with the school management, classroom teachers and with parents. Even communicating outside the classroom needs to be coordinated.

3 Implementation of Team Teaching

According to K. Goetz these "key elements appear to be necessary for a successful team teaching program:

1. compatibility of team members,
2. shared commitment to team teaching and ongoing communication,
3. keen interest in connecting the content or curriculum to real life,
4. strong desire to ignite students' thirst for knowledge." [2000, p.10 – 12].

These are very important points not only in the period the program is running, but during the project preparation and prior to implementation, too.

Decision-making process at the level of school management is an important part of the implementation of Team Teaching. Firstly, it is essential to make a decision on the issue, what subjects should be Team Teaching applied for and determine the staff composition including salaries. This is followed by defining the roles of team members, adaptation, curriculum, teaching goal setting, sharing of time and of teaching materials and adjusting the teaching schedule.

Decision on classroom size, material facilities, time management, and training management are also a part of the team teaching management. Not less necessary is to negotiate practical issues such as sharing of workspace, textbooks and teaching aid; and even the selection of suitable teaching methods is very important. In Team Teaching is the preference given to discussion methods (e.g. Socratic dialogue, Brainstorming, etc.). This approach is based on the premise that education should provide us with methods of approach, not definitive solutions. For that reason a frequent use of problem solving teaching is very important. Significant role in team teaching is played by modern information and communication technologies, which are used by the members of the team, so they can gain more time for the application of activating teaching methods.

As a potential barrier we can mention personal concerns, expressed by the teachers during the implementation period of Team Teaching. They expect that not all team members will contribute equally, what can cause personality conflicts. Some

teachers prefer working alone and do not understand how to share the team work; some of them are afraid, that team meetings will be only a waste of time and are in doubt whether this teaching method will be worthwhile.

4 Experiences with Implementation of Team Teaching in teaching of economic subjects

The first experiences with implementation of Team Teaching in Slovakia we have gained in the secondary school (Business Academy) environment by teaching the subject: Training Firm, where we have been experimentally verifying the participation of foreign language teachers (English and German) as members of teaching team for teaching Training Firm. We used pattern B, which permits team member's involvement also in another teaching unit, preferably in a part of the teaching block. The subject was taught in a block of four lessons. Foreign language teachers have been training students in international trade topics, focusing on improving their foreign language skills and competences, preparing them for high-quality processing of various marketing outcomes in foreign languages and in particular preparing them for direct communication with business partners during school lessons and at International Training Firms Fair. This model has met with a positive response among students as well as parents. It brought positive transfer to the teaching of general language lessons and on the other hand it had created more space for language teachers to apply their skills in teaching professional terminology and correspondence.

Currently, we apply the Team Teaching at the University of Economics in Bratislava in the subject Training Firm with the team of two teachers and in teaching the subject Creation of Scientific Papers there is a team of seven teachers. In Training Firm we use pattern B, i.e. teachers take turns throughout the semester. The only exception is the end of the semester, when students defend their business projects before two members of the team. In the subject Creation of Scientific Papers we apply pattern C. The coordinator in the role of professional sponsor is a member of the team, evaluating the outcomes of the students. Every of these two teaching teams has worked together to develop a plan of seminars in terms of content, goals, schedule and methodology of teaching. Team members have cooperated on several scientific projects together; they know each other's teaching styles and are motivated to improve the quality of their own teaching. They regularly inform each other about partial results, feedback from the students and they are constantly trying to find the way how to improve the motivation of students. Teaching in these courses is evaluated by the relevant faculty management and by the students. The responses and our experiences are so far positive.

We feel that Team Teaching is more than an alternative approach, because it leads to a new kind of relationships between teachers and their students.

Literature:

1. DAVIS, J. R.: *Interdisciplinary Courses and Team Teaching. New Arrangements for Learning*. Phoenix, Anz.: American Council on Education and the Oryx Press, 1995, 271 p. ISBN 0897748875.
2. GOETZ, K.: *Perspectives on Team Teaching* [online], <http://people.ucalgary.ca/~egallery/goetz.html>
3. ORBÁNOVÁ, D.: *Aktivizujúce vyučovacie metódy v ekonomickom vzdelávaní*. Bratislava: Vyd. EKONÓM, 2008. 105 p. ISBN 978-80-225-2535-0.
4. QUINN, S. – KANTER, S.: *Team Teaching: An Alternative to Lecture Fatigue* (JC 850 005) Paper in an abstract: *Innovation abstracts*, 1984, (Eric Document Reproductive service No. ED 251 159).
5. SHAFER, I.: *Team Teaching: Education for the Future*. [on line], <http://www.usao.edu/~taschateri/teamteaching.htm>.
6. SKALKOVÁ, J.: *Obecná didaktika*. Praha: Grada, 2007, 322 p. ISBN 8024718217.

7. VELICHOVÁ, E.: Didaktika cvičnej firmy – teória a prax. Bratislava: Vyd. EKONÓM, 2010. 189 p. ISBN 978-80-225-3055-2.
8. VELICHOVÁ, E.: Nové trendy v cvičnej firme. Bratislava: Vyd. EKONÓM, 2008. 60 p. ISBN 978-80-225-2592-3.

Primary Paper Section: A

Secondary Paper Section: M

AN OPINION OF COURT EXPERT IN MATTERS OF PROPERTY MANAGEMENT – SELECTED ISSUES

*MICHAŁ WDOWIAK

*Academy of Law and Diplomacy, ul. Śląska 35/37,
81-310 Gdynia, Poland
email: ^apiastowska5@gazeta.pl*

Abstract: In Poland, the court cannot establish an expert in the field of domestic law. The expert is preparing an opinion on behalf of the court, requiring special knowledge. If the court does not specify the task of an expert correctly, he can express unauthorized conclusions, as the settlement of case, but the court cannot accept it. In practice of the judiciary, it happens that the court instructs the expert preparation of an opinion relating to the content of legal relationship of joint ownership of residential real estate, but he is acting in wrong way. The article is undertaking issues: the content of thesis of evidence, tasks of a court expert, the subject of common property, the division of common property, entities entitled to determine the content of legal relationship of residential real estate ownership.

Key words: expert, opinion, thesis, evidence, management, property

1 Introduction

In Poland, the court cannot establish an expert in the field of domestic law¹. The expert is preparing an opinion on behalf of the court, requiring special knowledge². If the court does not specify the task of an expert correctly, he can express conclusions, as the settlement of case, but the court cannot accept it³.

In practice of the judiciary, it happens that the court instructs an expert preparation of opinion relating to the content of legal relationship of joint ownership of residential real estate, e.g. part of the common property (article 3 paragraph 2 OP)⁴, terms of participation in the cost of property management and carry out of the repair: roof, chimneys, facade, balconies, staircase or elevator⁵.

Questions arise: how the court has to formulate the thesis of evidence? how an expert should proceed to the preparation of opinion? whether an expert has a permission specifying the content of constitutional rights and obligations of individuals, especially the content of property rights and the scope of its implementation?

In order to answer these questions to be clarified: the purpose and tasks of an expert in drawing up the opinion of property management; the concept of common property; who can and how to specify the content of legal relationship of joint ownership of residential real estate; who can investigate the circumstances, whether the content of legal relationship does not oppose its essence and the rules of social coexistence.

2 The purpose and subject of an opinion of court expert in matters of property management

The court in cases that require special knowledge after hearing the proposals of parties, as to the number of experts and their choice may invite one or more experts to the preparation of the

opinion (article 278 § 1 CCP)⁶. The court may order to present a case file for an expert (article 284 CCP). An opinion should contain a descriptive part - indication of expert, his specialization, court order and its scope (thesis of evidence)⁷, description of the subject matter on which the expert has delivered an opinion, description of method and way of conducting study and the conclusions and the justification (article 285 § 1 CCP)⁸.

The subject of opinion is to explain the "causes and consequences specific events or other issues in the light of status of knowledge in a particular branch of science or the principles of life experience in the field of human activity"⁹. The expert may collect in procedural way information and explanations from the parties, which help him to express a position, but this information may not create facts¹⁰.

The question is about the ability to collect information and clarification by the expert in out-of-process way? The question that must be answered affirmative, but information collected in this mode also cannot create new facts. The rules of civil procedure do not prohibit expert collect information and explanation from the parties, do not impose on the parties an absolute obligation to participate in the activities of expert¹¹. The expert does not set the facts of case, but explains the circumstances of case in light of the special knowledge, taking into account harvested information¹².

The expert should not estimate the rest of evidence, in this regard, his opinion as any other means of evidence is subject to the assessment of court (article 233 paragraph 1 and 2 CCP), in recognition of "positive or negative values of the reasoning contained in the opinion and the justification, why the opinion has convinced or not the court"¹³. In the opinion further assessment is made from the point of view of the logical formulation of policy proposals, the sources of knowledge and degree of confidence in the knowledge of expert, in terms of expertise, integrity and consistency with the possibility to miss obvious errors or mistakes (e.g. accounts) contained in the opinion¹⁴. The conclusions of opinion must be categorical and firm¹⁵. If the court has doubts as to the opinion of expert or the parties have raised the allegations, the expert can to comment on them in the mode of oral explanations to the written opinion (article 286 CCP), or additional opinion (article 158 paragraph 1 point 2 of the CCP). The expert cannot mention on their own observations of facts, which arrangement is made by the court. This person should be heard as a witness, while the activities of expert should be entrusted to another person¹⁶.

3 Collecting information about the status of real estate

By the status of real estate it should be understood: land use, legal status, technical data, including size, nature and degree of urbanization of locality, in which property is situated (article 4 pct. 17 ERE)¹⁷.

¹ Broniewicz, W. *Postępowanie cywilne w zarysie*. IV. issue. Warszawa: Wydawnictwo Prawnicze PWN, 1995. 188 p.; Resich, Z., Jodłowski, J. *Kodeks postępowania cywilnego. Komentarz*. I. issue. Warszawa: Wydawnictwo Prawnicze, 1969. 443 p.; Siedlecki, W., Świeboda, Z. *Postępowanie cywilne. Zarys wykładu*. I. issue. Warszawa: Wydawnictwo Prawnicze, 1998. 239 p.

² By special knowledge to be understood "messages from the various areas of science, technology, art, crafts, trade or economic turnover". Siedlecki, W., Świeboda, Z. *Postępowanie cywilne. Zarys wykładu*. I. issue. Warszawa: Wydawnictwo Prawnicze, 1998. 239 p.

³ Resich, Z., Jodłowski, J. *Kodeks postępowania cywilnego. Komentarz*. I. issue. Warszawa: Wydawnictwo Prawnicze, 1969. 444 p.

⁴ The Act of 24.06.94 on ownership of premises (consolidated text: O.J. of 2000, No 80, item 903, with further amendments), hereinafter referred to as OP.

⁵ judgement Court of Appeal in Warsaw 3.11.10, VI ACa 307/10, LEX No 794140; decision Supreme Court 7.04.00, IV CKN 8/00, LEX No 52677; judgement Supreme Court 3.11.10, V CSK 139/10, LEX No 738135; decision Court of Appeal in Poznań 22.07.09, I ACa 286/09, LEX No 756557.

⁶ The Act of 17.11.64, the code of civil procedure (O.J. of 1964, No 43, item 296, with further amendments), hereinafter referred to as CCP.

⁷ Siedlecki, W., Świeboda, Z. *Postępowanie cywilne. Zarys wykładu*. I. issue. Warszawa: Wydawnictwo Prawnicze, 1998. 241 p.

⁸ Jodłowski, J., Piasecki, K. *Kodeks postępowania cywilnego z komentarzem*. I. issue. Warszawa: Wydawnictwo Prawnicze, 466 p.

⁹ Jodłowski, J., Resich, Z., Lapiere, J., Misiuk-Jodłowska, T. *Postępowanie cywilne*. I. issue. Warszawa: Wydawnictwo Prawnicze PWN, 1996. 341 p.

¹⁰ judgement Court of Appeal in Katowice 10.01.08, V ACa 816/07, LEX No 398729.

¹¹ *Ibidem*.

¹² resolution Supreme Court 11.07.69, I CR 140/69, LEX No 1001.

¹³ Resich, Z., Jodłowski, J. *Kodeks postępowania cywilnego. Komentarz*. I. issue. Warszawa: Wydawnictwo Prawnicze, 1969. 445 p.

¹⁴ *Ibidem*.

¹⁵ Jodłowski, J., Piasecki, K. *Kodeks postępowania cywilnego z komentarzem*. I. issue. Warszawa: Wydawnictwo Prawnicze, 467 p.

¹⁶ judgement Supreme Court z 8.11.76, I CR 374/76, LEX No 2109.

¹⁷ The Act of 21.08.97, on economy of real estate (O.J. of 1997, No 115, item 741 with further amendments.), hereinafter referred to as ERE.

The expert uses all the necessary and available data about real estate, in particular contained in: property registers, cadastral, land records, notarial acts of extracting the individual flats and the contract for management of common property - where on the basis of principle of autonomy of will expressed in article 353¹ CC¹⁸ - specified the subject of common property.

The expert collects information about the condition of components of building: usable area, surface, volume, number of storeys – underground, aboveground, condition assessment-foundations and isolation, walls of cellars, external walls and facades, interior walls, ceilings, roof, inner and outer staircase, floors, boiler room and heat exchangers, windows, doors, installation of water, electricity and gas, lightning protection, sanitary, chimney pipe (smoke, exhaust, ventilation), fences and small architecture. Therefore, the description shall be made of all the structural elements of common property, which are functionally connected to each other, but do not make the legal settlement.

4 The subject of the common property

The common property consists of land and parts of building and equipment, which does not serve only for owners of the separated flats (article 3 paragraph 2 OP)¹⁹. Common property is not separated flats or other premises, which appease housing or useable needs of their owners. In the building can be highlighted structural elements, which cannot be the subject of separated property, therefore, they are common property. The relationship of component parts of complex things determines the objective assessment of economic importance existing between functional and physical connection. If they are functionally and physically related, and create the economic integrity, they are the components of complex things, even if it could be technically dismantled²⁰. The common property are structural elements and operational building, which the functional relationship with all elements of the building has an integral nature, as the organized economic integrity. The necessary elements are indispensable for using by the all owners of flats. It is compulsory joint ownership, which contain e.g. stairway, external walls, and roof²¹.

The common property are also elements, which the functional relationship with all elements of building also has an integral nature, they are not of the nature of the necessary equipment, but most of all it is distinguished their usable asset because of using other flats. They can also be components of the separated flats (article 2 paragraph 4 OP), depending on the status of real estate²². Walls, ceilings and floors, as structural elements-functionally and physically connected- determine the scope of separated flats and are the subject of the joint ownership of building²³. The particular elements of usable equipment in flats such as: floor panels, suspended ceiling, paneling are usable outlay of the owners of separated flats or tenants and their property.

The separated property is an independent flat or premises for other purposes (article 2 paragraph 1 OP). As independent flat²⁴ is considered the room or group of rooms intended for permanent residency for people, separated by supporting walls in a building, which serve for satisfying housing needs (article 2

paragraph 2 OP). To the creation of separate flat property it is necessary to make the entry at the land register (article 7 paragraph 2 OP). The establishment of separate flat property occurs on the date of submitting an application for founding a land register for it²⁵. Entry application to the land register is constitutive, exerts retroactive results from the date of submission of application²⁶. Disclosure of ownership in the land register is acting the creation of a separated flat property²⁷. With flat can be also connected other premises, even though they were not directly connected or were laid down in the border of plan construction outside the building, where the ownership of separated flat was created (article 2 paragraph 4 OP)²⁸.

The ownership of separated flat is the main law, which is connected with a share in the common property²⁹, as the dependent law, and its function to the main law is servient. For the component parts of real estate are also considered the rights connected with the main law (article 50 CC)³⁰. In judiciary and writing expressed the view that the common property is also foundations and interior technical installations³¹. Owners have also obligations to participate in the cost of real estate management (article 13 paragraph 1 OP).

5 Protection of property rights. Determination of the content of the legal relationship of joint ownership

The right of ownership shall be protected and may be limited only by the legislator in the act and only in such scope, which does not violate the essence of ownership (article 64 paragraph 2 and 3 CRP)³². Property right may also be restricted by the entities to which it is entitled and may be burden another obligation or property rights by agreement, however, similarly the limitation cannot to violate the essence of ownership.

The joint owners can decide in the agreement on the basis of principle of autonomy of will (article 6 OP connected with article 353¹ CC) the way of possessing of common property, while co-possessing and co-using can be acted in the way not disturbing the subjective right of joint ownership of individual owners³³. None of the joint owners shall not be entitled to a part of common property, and "joint owner can do only so much, how much does not disturb similar use by other owners"³⁴. The owner of premises may not acquire the common property by acquisitive prescription, because enlargement or reduction of the common property can occur only by the interaction of all owners on the terms set out in article 5 and 32a OP³⁵.

6 Dissolution of the legal relationship of join ownership

The dissolution of relationship of joint ownership can take place only in the mode as specified in article 4 paragraph 3 and article 5 OP and auxiliary applied article 210-218 CC. The dissolution of joint ownership can be made by division, judgment, revocation or abolition of joint ownership (article 210-212 CC)³⁶. The exception are situations, when the division would be contrary to the provisions of act or socio-economic purpose of thing or entail significant change things or a significant reduction of its value (article 211 CC).

¹⁸ The Act of 23.04.64, the civil code (OJ of 1964, No 16, item 93 with further amendments.), hereinafter referred to as the CC.

¹⁹ In further the regulation of 24.10.1934 on ownership of premises (O.J. of 1934, No 94, item 848 with further amendments) in article 1 paragraph 2 determined the concept of the common property as: "ground, yard, garden, exterior walls, structural walls and walls separating premises, roofs, chimneys and any equipment used for all owners of premises or certain groups of owners, as attics, basements, stairwells, hallways, gate, shared toilet, shared bathrooms, laundries, drying rooms, lifts, sewer, water supply equipment, central heating, lighting etc."

²⁰ judgement Supreme Court 28.06.02 r. I CK 5/02, LEX No 56604.

²¹ The „necessary equipment" are the entrance door to the building. Puch. P. *Czy drzwi wejściowe do lokalu mieszkalnego stanowią część nieruchomości wspólnej?* Doradca prawny w zarządzaniu nieruchomościami, 2009, No 2, 7 p.

²² resolution Supreme Court 3.10.03, III CZP 65/03, LEX No 80876.

²³ Gola, A., Suhecki, J. *Najem i własność lokali, Przepisy i komentarz*. I. issue. Warszawa: Wydawnictwo Prawnicze, 2000, 243 p.

²⁴ Starosta decides about independence of premises in the form of certificate (article 2 paragraph 3 OP).

²⁵ judgement Supreme Court 26.01.81, III CRN 283/80, LEX No 10111.

²⁶ resolution Supreme Court 21.05.02, III CZP 29/02, LEX No 53268.

²⁷ judgement Supreme Court 7.01.04 r. III CK 186/02, LEX No 599540.

²⁸ The apartment with belonging premises are marked on the drawing, the associated spaces located outside the building - on the identification report (article 2 paragraph 5 OP)

²⁹ judgement Supreme Court 7.01.04, III CK 186/02, LEX no 599540.

³⁰ decision Supreme Court 24.11.10, II CSK 267/10, LEX no 738095.

³¹ judgement Supreme Administrative Court 6.01.06, II OSK 858/06, LEX No 319169; judgement Court of Appeal in Wrocław 15.07.09, I ACa 592/09, LEX No 521998; Also. Bończak-Kucharczyk, E. *Własność lokali i wspólnota mieszkaniowa. Komentarz*. I. issue, Warszawa: Wolters Kluwer business, 2010, 93 p.

³² The Constitution of the Republic of Poland of 2.04.97 (O.J. of 1997, No 78, item 483 with further amendments.), hereinafter referred to as CRP.

³³ resolution Supreme Court 19.06.07, III CZP 59/07, LEX No 270441.

³⁴ Ignatowicz, J. *Prawo rzeczowe*. VII. issue. Warszawa: Wydawnictwo Prawnicze PWN, 1997, 137 p.

³⁵ decision Supreme Court 19.11.10, IV CSK 437/2009, LEX No 585880.

³⁶ decision Supreme Court 7.05.2008, III CSK 664/07, LEX No 424311.

It cannot be required the division of joint ownership of residential real estate as long as it has been lasting the ownership of separated flats (article 3 paragraph 1 sentence 2 OP). This prohibition applies to the necessary equipment, without which it would be impossible the functioning of separate flats, does not apply to such parts of the common property as: cellar or attic³⁷. The court may settle down the division of joint ownership, if it is possible to divide a building in the way of physical division³⁸. It is not possible, when for example, there is one entrance to a building³⁹. The joint owners can divide up a ground real estate developed of a building, if it is greater than the surface of plot construction (article 5 paragraph 1 OP).

7 Conclusions

The opinion could not be the base of determining the of legal nature of common property, the court should independently make interpretation⁴⁰.

The appointment of expert for determination of the content of law is meaningless and it is a privilege reserved for the court⁴¹. The expert in his conclusions contained in the opinion does not have the power to determine the rights and obligations of owners – to specify what parts of the common property, for example: balcony or individual chimney pipe is connected with the right of ownership of separated flat. Only the legislator can specify the concept of common property in the sources of universally binding law. At the same time, the owners of separated flats have entitlement to formulate their rights and obligations by agreement, which is describing the subject of common property.

If the expert - is going beyond the thesis of evidence next to the conclusion expressed on the basis of special knowledge - gives suggestions as to the legal nature of each part of common property, the court should to omit it⁴², because in this area the opinion has character of the private document (article 245 CCP). In the case of a dispute only the court has the power to make findings of fact, which are the basis for the settlement of case, to verify, that the content of legal relationship joint ownership does not object to the properties (nature) of this relationship and the principles of social conduct.

Literature:

1. Bończak-Kucharczyk, E. *Własność lokali i wspólnota mieszkaniowa. Komentarz*. I. issue, Warszawa: Wolters Kluwer business, 2010. 93 p. ISBN 978-264-0283-8.
2. Broniewicz, W. *Postępowanie cywilne w zarysie*. IV. issue. Warszawa: Wydawnictwo Prawnicze PWN, 1995. 188 p. ISBN-83-86702-20-6.
3. Decision Court of Appeal in Poznań 22.07.09, I ACa 286/09, LEX No 756557.
4. Decision Supreme Court 7.04.00, IV CKN 8/00, LEX No 52677.
5. Decision Supreme Court 16.09.03, IV CK 461/01, LEX No 523591.
6. Decision Supreme Court 7.05.08, III CSK 664/07, LEX No 424311.
7. Decision Supreme Court 19.11.10, IV CSK 437/2009, LEX No 585880.
8. Decision Supreme Court 24.11.10, II CSK 267/10, LEX No 738095.

9. Gola, A., Suchecki, J. *Najem i własność lokali, Przepisy i komentarz*. I. issue. Warszawa: Wydawnictwo Prawnicze, 2000, 243 p. ISBN 83-219-1067-X.
10. Ignatowicz, J. *Prawo rzeczowe*. VII. issue. Warszawa: Wydawnictwo Prawnicze PWN, 1997, 137 p. ISBN 83-86702-52-0.
11. Jodłowski, J., Piasecki, K. *Kodeks postępowania cywilnego z komentarzem*. I. issue. Warszawa: Wydawnictwo Prawnicze, 1989. 466-467 p. ISBN 83-219-0243-X.
12. Jodłowski, J., Resich, Z., Lapiere, J., Misiuk-Jodłowska, T. *Postępowanie cywilne*. I. issue. Warszawa: Wydawnictwo Prawnicze PWN, 1996, 341 p. ISBN 83-86702-04-4.
13. Judgement Court of Appeal in Katowice 10.01.08, V ACa 816/07, LEX No 398729.
14. Judgement Court of Appeal in Warsaw 3.11.10, VI ACa 307/10, LEX No 794140.
15. Judgement Court of Appeal in Wrocław 15.07.09, I ACa 592/09, LEX No 521998.
16. Judgement Supreme Administrative Court 6.01.06, II OSK 858/06, LEX No 319169.
17. Judgement Supreme Court z 8.11.76, I CR 374/76, LEX No 2109.
18. Judgement Supreme Court 26.01.81, III CRN 283/80, LEX No 1011.
19. Judgement Supreme Court 28.06.02, I CK 5/02, LEX No 56604.
20. Judgement Supreme Court 7.01.04 r. III CK 186/02, LEX No 599540.
21. Judgement Supreme Court 3.02.10, II PK 192/09 LEX, No 584735.
22. Judgement Supreme Court 25.05.10, I PK 192/09, LEX No 585693.
23. Judgement Supreme Court 3.11.10, V CSK 139/10, LEX No 738135.
24. Puch, P. *Czy drzwi wejściowe do lokalu mieszkalnego stanowią część nieruchomości wspólnej?* Doradca prawny w zarządzaniu nieruchomościami, 2009, No 2, 7 p. ISSN: 1895-9784.
25. Puch, P. *W jaki sposób można przeprowadzić podział wspólnoty mieszkaniowej.* Doradca prawny w zarządzaniu nieruchomościami, 2009, No 8, 9 p. ISSN: 1895-9784.
26. Resich, Z., Jodłowski, J. *Kodeks postępowania cywilnego. Komentarz*. I. issue. Warszawa: Wydawnictwo Prawnicze, 1969, 443-445 p. No ISBN number.
27. Resolution Supreme Court 11.07.69, I CR 140/69, LEX No 1001.
28. Resolution Supreme Court 21.05.02, III CZP 29/02, LEX No 53268.
29. Resolution Supreme Court 3.10.03, III CZP 65/03, LEX No 80876.
30. Resolution Supreme Court 14.07.06, III CZP 53/06, LEX No 188829.
31. Resolution Supreme Court 19.06.07, III CZP 59/07, LEX No 270441.
32. Siedlecki, W., Świeboda, Z. *Postępowanie cywilne. Zarys wykładu*. I. issue. Warszawa: Wydawnictwo Prawnicze, 1998. 239-241 p. ISBN-83-87558-32-X.
33. The Act of 23.04.64, the civil code (OJ of 1964, No 16, item 93 with further amendments).
34. The Act of 17.11.64, the code of civil procedure (O.J. of 1964, No 43, item 296, with further amendments).
35. The Act of 24.06.94, on ownership of premises (consolidated text: O.J. of 2000, No 80, item 903, with further amendments).
36. The Act of 21.08.97, on economy of real estate (O.J. of 1997, No 115, item 741 with further amendments).
37. The Constitution of the Republic of Poland of 2.04.97, (O.J. of 1997, No 78, item 483 with further amendments).
38. The Regulation of 24.10.1934, on ownership of premises (O.J. of 1934, No 94, item 848 with further amendments).

Primary Paper Section: A

Secondary Paper Section: AG

³⁷ resolution Supreme Court 3.10.2003, III CZP 65/03, LEX No 80876.

³⁸ resolution Supreme Court 14.07.06, III CZP 53/06, LEX No 188829.

³⁹ For the physical division of common property must address "practical considerations, expressing in purposefulness, both from the point of view of legitimate interests of joint owners and socio-economic interest". decision Supreme Court 7.05.08, III CSK 664/07, LEX 424311; Vertical division of building is allowed, if followed, along with land and if the line of division passes through the wall, which is dividing the building for regular and independent parts. Puch, P. *W jaki sposób można przeprowadzić podział wspólnoty mieszkaniowej.* Doradca prawny w zarządzaniu nieruchomościami, 2009, No 8, 9 p.

⁴⁰ decision Supreme Court 16.09.03, IV CK 461/01, LEX No 523591.

⁴¹ judgement Supreme Court 25.05.10, I PK 192/09, LEX No 585693.

⁴² judgement Supreme Court 3.02.10, II PK 192/09 LEX, No 584735.

PUPILS WITH MENTAL HANDICAP IN PEDAGOGICAL COMMUNICATION

^aEVA ZEZULKOVÁ

University of Ostrava, Pedagogical Faculty, Department of Special Pedagogy, Varenská 40a, 701 03 Ostrava
email: ^aeva.zezulkova@osu.cz

The paper is one result of the research project entitled „Edukace žáků se speciálními vzdělávacími potřebami z pohledu rámcových vzdělávacích programů.“ – SGS 2010 at University of Ostrava.

Abstract: Article deals with the context of special educational needs defined by currently valid legislative and other methodical or curricular documents with respect to the socially excluded Romani pupils and pupils with mild mental disability. It defines basic key factors which affect the process of education and the quality of pedagogical communication. The space is given to the personality of teacher, their competences and qualities. Partial empirical investigations which are the result of research aims carried out at the Pedagogical Faculty of the University of Ostrava are presented in the individual chapters.

Keywords: a pupil with mild mental disability, language and communicative competence, speech education, methods of speech education, pedagogical communication

1 Education of Pupils with Mental Handicap

The speech development of pupils with mental handicap is mainly due to unfavourable inner conditions disrupted to the extent that it does not reach the standard even at optimal stimulation by stimuli from external environment. (cf. Sovák, M. 1965, Lechta, V. 2002) The support of speech development is thus an uneasy task, although from the perspective of achievement of appropriate level of socialization it is also necessary. With the beginning of school attendance child's way of life changes and the basic kind of activity becomes systematic learning. Communication through speech is basic means of learning and our whole school system is based on appropriately developed speech abilities and skills – spoken and written language, on basic level of language and communicative competences that is acquired by the child in pre-school age. The teacher gives pupils information, they process the knowledge, they reproduce it, read and write. Therefore it is a complex mental function. (Zelinková, O. 2003) A new psychological profile of the child is formed in the process of learning. All the aspects of child's psyche – memory, attention, thinking – develop and change. Abilities and qualities of personality necessary for transition to working process are formed. From that moment the child uses the communication more effectively in the contact with other people – they enter *social interaction*. Intentional and purposeful effect on development of partial abilities of language and communicative competence in pupils with mental handicap have to be at the forefront of interest of teachers involved in their education. Pupils with mental handicap very often receive inappropriate verbal instructions, they are difficult for them to orientate in, they do not understand their content. These very often lead to frequent school failure and pupils' demotivation to learning. We suppose that by the application of positive speech model¹ and by systematic stimulation of partial abilities of language and communicative competence the acquisition of elements of spoken and written form of language can be influenced positively. At the same time by those optimize the conditions of the learning process in pupils with mental retardation. The speech education has to penetrate the entire educational process, while it can be done in shorter time sequences within the lesson or as a separate subject matter.

The speech education is an important part of pedagogical rehabilitation of children with mental handicap and its focus lies both in stimulations of undeveloped or delayed functions and in re-education of defective speech functions. Deficiencies in content and formal part very often result from incorrect understanding of the meaning of the word, in this area we thus primarily focus on the development of content feature of the speech which we sensitively complement by modification of

pronunciation. (Lechta, 2002) The speech education at primary school has to penetrate the entire educational activity as intentional, directed and controlled. The necessity of complex care for speech education of pupils with mental handicap arises from recognition that the more some feature as a secondary product (symptomatic speech defects) is distant from the basic core features of the disability, the more it becomes the subject of educational influence.² Children with mental handicap can learn to generalize but the process is slower and it is necessary to use different means of education than with healthy children. Mentioned psychological point of view is a starting point of pedagogical practice and also a challenge to seek new methods and use specific principles in the education of pupils with mental handicap in order to lower secondary consequences arising from the presence of health disability and in order to prevent possible social isolation. The necessity of systematic professional care arises due to the high occurrence of speech defect in pupils with mental handicap not only in younger, but also in older – school age. Some of the experts consider intentional acquisition of partial abilities of language and communicative competence as effective up to the puberty age. (Lechta, V. 2002)

Foundations of pedagogical intervention (not only) in the development of language and communicative competence result from the following areas:

- determination of preconditions of a pupil to succeed in planned education
- creation of sufficient motivation for education (which is formed mainly by mastering the learning method and also positive expectations of the teacher)
- removing of demotivating factors and influences of the learning process, accommodation of the environment and speed of learning to individual abilities and qualities of the pupil
- application of pedagogical methods, approaches and devices in the learning process corresponding to specific needs of pupils with mild mental disability.

The precondition to form positive conditions for education of pupils with mental handicap is professional qualification of the teacher in the didactic, diagnostic and communicative sphere with focus on specific peculiarities of development and formation of personality of those pupils. To the mentioned aspects the teacher has to adapt not only conditions but also means and methods used to reach the aim of primary education stated in curriculum documents. They cannot rely on primary use of some commonly used methods and form of education successful with intact pupils.

2 Methods of Speech Education

Intensive stimulation of speech development at the beginning of compulsory school attendance should be done by means of natural game activities with the use of appropriate methods³:

- **By the method of the support of speech need** we arouse pupil's interest to acquire language means of expression. Examples:
 - With appropriate phrase we comment on current situation, our action, imagination about the specific activity, towards what aim we are leading, what means we will use, what we are going to praise, etc. We lead the pupils to careful listening⁴, at the same time we check the understanding of expressed, on which basis we plan the content and length of thematic units.
 - We verbalize present action or feelings of pupils: *You didn't understand it, did you? Do you like it? You*

² Vygotskij, L. S. (in Lechta, 2002) suggests to distinguish basic (core) features of mental retardation from secondary of tertiary layers.

³ cf. Lechta, V., Matuska, O. 1995, Belz, H., Siegrist, M. 2001, Janoušek, J. 2007, Rádlová, E. et al., 2004, Svobodová, J. et al., 2003, etc.

⁴ at the same time the verbal memory is trained

¹ with respect to specific peculiarities of pupils with mental handicap

can't remember, can you? Did you think of something else? Did you forget it? Do you want to try again?

- **The method of corrective feedback** we use in the way that we repeat pupil's incorrect expression in the correct form. Example: "Které zvíře vidíš na obrázku?" [What animal can you see in the picture?"] The pupil answers: "Leva (Iva)" [lion mispronounced]. Teacher: "Vidíme lva, jak odpočívá" [We can see a lion resting.]
- **By the method of broadened imitation** we repeat the statement of the pupil and appropriately extend it: An example can be the dialogue according to the picture: *What can we do outside during the winter?* The pupil answer: *We can sledge.* Teacher: *If there is a lots of snow, do we sledge, ski or slide the ice?*
- **By the method of alternative questions** ("Is it x or y...") we activate the vocabulary. E.g. How is the dog – big or small? Good or bad?
- **By the method of completion of the sentences** we encourage the pupil to finish the sentence we start. E.g. Who fishes? The (fisherman) fishes. What fishes can the fisherman fish? Fisherman can fish (carp, pike, catfish ...).
- **By the method of model situations** we prefer social aspects of speech education. During them the pupils memorize the necessary speech stereotypes applicable in everyday situations. We model e.g. the situation in the shop, at the doctor, ...
- **Method of homonymy, synonymy and antonymy** is based on the use of word with certain lexical meaning towards meaning of different words (e.g. towards words of the same meaning or similar meaning, to words of opposite meaning, to words from the perspective of meaning superior or subordinate, etc.). Example: The meaning of the word *tough* the pupil understand in case he knows the synonym *rough*, and the antonym *soft*. Similarly the voice can be *rough*, the antonym in this case can be *low, kind*, etc.
- **By the dialogical method** we fill the request for the largest space for verbal expression of pupil, that is supported by verbal activity of the teacher⁵.
- **The method of repetition** we use in order to fix newly deducted speech connector. The pupil has to have the possibility to practice them under the professional supervision of the teacher repeatedly and very often.

3 Pupils with Mental Handicap in Pedagogical Communication

Methodological research questions

The main aim of the research was to find out proportional representation of communicative activities of teacher, teacher's assistant and pupils with mild mental disability during the Czech language lesson. The following partial research questions were determined to fulfil the aim:

- 1) *What is the frequency of the observed communicative activities of the teacher during the Czech language lessons?*
- 2) *What is the frequency of the observed communicative activities of the teacher's assistant during the Czech language lessons?*
- 3) *Which communicative activities predominate in individual pupils of selective set L during the Czech language lesson?*
- 4) *Which communicative activities predominate in the selective set L as a unit during the Czech language lesson?*
- 5) *In what frequency were communicative activities of the teacher towards individual pupils of selective set L observed?*
- 6) *In what frequency were communicative activities of the teacher's assistant towards individual pupils of selective set L observed?*

⁵ At the same time we minimize in time some of the frequent teaching methods in progress with the exclusion of speech activity of pupils.

The following criteria were determined for the purposes of the observation in the research:

Criteria for the observation of the communicative activities of the teacher and the teacher's assistant (Table no. 1)

Table no. 1: Criteria for the observation of the communicative activities of the teacher and the teacher's assistant

Communicative activity	Description of observed phenomenon
praising and encouraging	evaluating the pupil in a positive way, encouraging them, releasing the tension
asking questions	the questions related to the subject matter, way of working or organizational matters
explaining and presenting of subject matter	introducing facts to pupils, opinions, clarifying and commenting on subject matter, explaining the steps or way of working
giving instructions and orders to one pupil	asking particular pupil or instigating them to an activity
giving instructions and orders to the pupils as a unit	talking to all pupils and requesting collective activity from them
criticising and asserting their own authority	criticising concerns wrong answer or breaking the rules, justifying their steps, or claiming their own authority
answering pupil's questions	pupil's questions can be related to current subject matter, but not necessarily (e.g. request to leave for a toilet, etc.)

Criteria for the observation of the communicative activities of pupils (Table no. 2)

Table no. 2: Criteria for observation communicative activities of pupils

Communicative activity	Description of observed phenomenon
answering the question	answer is induced by the questions or by an instruction of the teacher
spontaneous speaking about the topic	The answer falls outside the scope of teacher's request, the pupil starts to speak themselves, explains their own suggestion or opinion, however, it is always related to the topic.
speaking out of topic	the pupil speaks outside the scope of the topic and speaks without being asked a questions, given instruction or order by the teacher
asking question	it includes both questions related to the topic and unrelated to the topic
being silent	does not cooperate or has a vacant look

To achieve the aims of the research the **qualitative research** was chosen. In it the emphasis is placed mainly on the interpretation of the observed phenomena. The sources of the data are natural environments (e.g. the classroom), the product is often a detailed description of individual cases. (Průcha, J., Walterová, E., Mareš, J. 1995)

The collection of the data was done by the method of **participant observation** in the classroom. Švaříček, R. (2012) defines participant observation as a long-term, systematic and reflexive observation of ongoing activities directly in the observed area in order to discover and represent social life and process. To ensure the validity and reliability of the observation the observation sheet was used. The sheet was created by modification of **Flanders' system of the observation of the communication in classroom** (Gavora, P. 2005, pg. 114). Recording of observed categories was done by natural coding and registration by audio-record. The program Microsoft Excel was used for statistical processing.

The selection of research sample was intentional. The basic set (Z) introduces 32 pupils with mild mental disability on the 1st phase of primary school. The selective set (L) if formed by 6 pupils with mild mental disability in the 2nd year of primary school (4 boys and 2 girls), a special education teacher and teacher's assistant, who guarantee education of chosen pupils.

Pre-research

The research was preceded by pilot testing of the planned strategy both to choose the lesson and to specify chosen partial communicative activities of teachers and pupils (see attachment

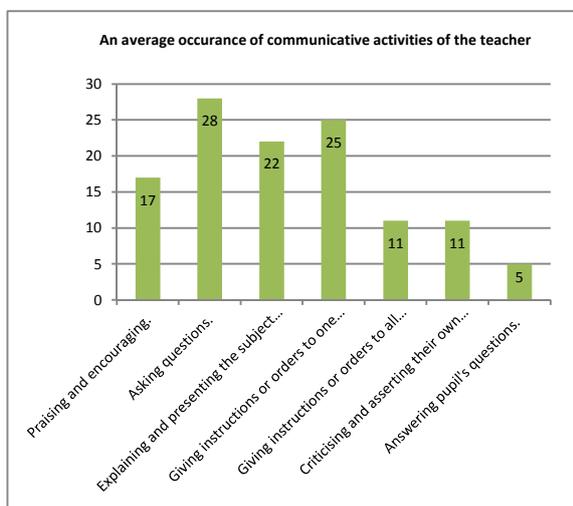
no. 1, 2). On the basis of pre-research results it was necessary to add to the communicative activities of the teacher the criterion – *answering pupil's questions*. Communicative activities of pupils were extended by criterion – *spontaneous speaking about the topic*.

Research progress

The actual research took place during 12 lesson in the period of 2 weeks. The observation was subordinated to the fixed timetable of the Czech language lesson (1 lesson daily, 2 lessons on Wednesday). The observed phenomena were recorder into prepared observation sheets and on the Dictaphone (with the consent of the teacher and the teacher's assistant). Then it was followed by an analysis of observed criteria, the results are recorded in tables accompanied by graphical representation with verbal interpretation.

Research results and their interpretation

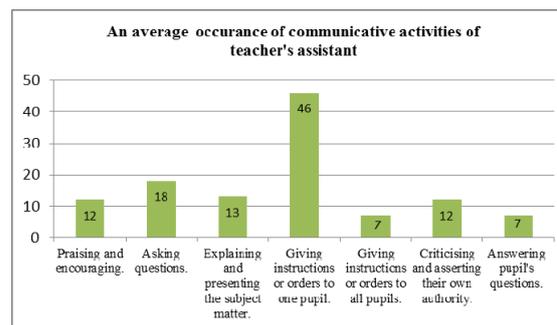
Research question no.1: What is the frequency of the observed communicative activities of teacher during the Czech language lesson?



Graph no. 1: The frequency of communicative activities of the teacher during the Czech language lesson

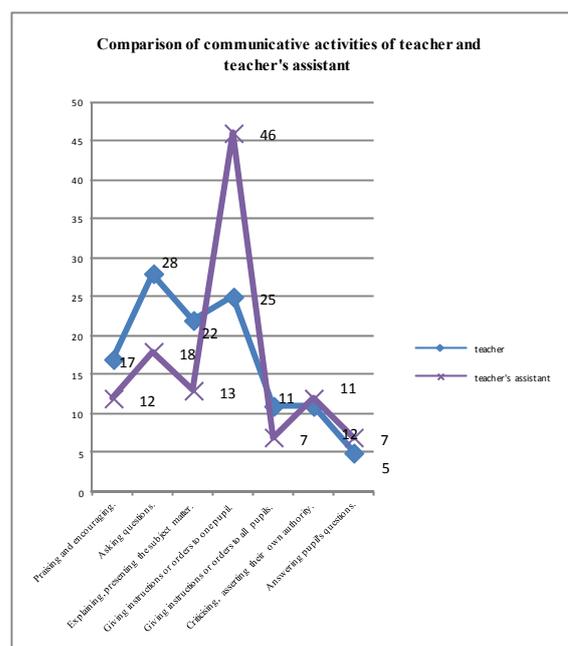
The results of the research (in more details in the attachment no. 3) confirm theoretical backgrounds about specific peculiarities of the psychomotor development of pupils with mild mental disability resulting from lower mobility of cortex processes that are manifested by e.g. undifferentiated perception, short-term attention, limited imagination, limited ability to remember, etc. The most common communicative activities of the teacher during the lesson are: asking questions (28x), giving individual instructions (25x), explanation of subject matter (22x). The teacher continuously motivates the pupils by praise and encouragement (17x). In a lesser extent the teacher gives instructions to pupils, eventually criticize them (11x). The teacher almost does not reply pupils' questions (5x), which emerges among other things from the fact that the questions very often are not connected to the subject matter of the lesson.

Research question no. 2: What is the frequency of the observed communicative activities of teacher's assistant during the Czech language lesson?



Graph no. 2: The frequency of communicative activities of the teacher's assistant during the Czech language lesson

On the basis of analysis of collected research data (see attachment 4) during 12 lessons of Czech language we observe that the teacher's assistant uses in the chosen sample of the research **in one lesson the following communicative activities on the average** (from the most frequent to the least one): **46x giving instruction or order to a particular pupil, 18x asking pupils a question, 13x explaining and presenting the subject matter, 12x in a lesson the teacher's assistant praises and encourages the pupils and 12x criticizes and asserts their own authority, 7x gives instructions or orders to all pupils and 7x answers the pupil's question.**



Graph no. 3: Comparison of average frequency of the teacher and the teacher's assistant communicative activities during the Czech language lesson

Table no. 3: Comparison of average frequency of teacher and teacher's assistant communicative activities during the Czech language lesson

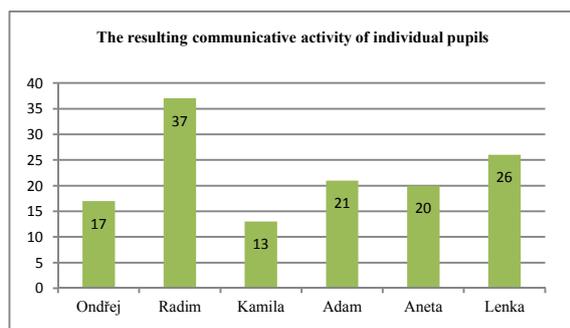
Communicative activity	teacher θ	teacher's assistant θ
praising and encouraging	17	12
asking questions	28	18
explaining, presenting of subject matter	22	13
giving instruction or orders to one pupil	25	46
giving instructions or orders to all pupils	11	7
criticising, asserting their own authority	11	12
answering pupil's questions	5	7

The frequency of observed communicative activities of the teacher and the teacher's assistant differs significantly in the category of *giving instructions and orders to one pupil*, which is in agreement with their professional competences. The teacher leads the educational activity and coordinates the teacher's assistant activity in order to increase the efficiency of education of pupils with special educational needs. The teacher's assistant performs the pedagogical educational activity according to the teacher's instructions with a focus on individual needs of pupils.

Research question no. 3: Which communicative activities predominate in individual pupils of selective set L during the Czech language lesson?

Table no. 4: An average frequency of partial communicative activities of pupils in the Czech language lesson

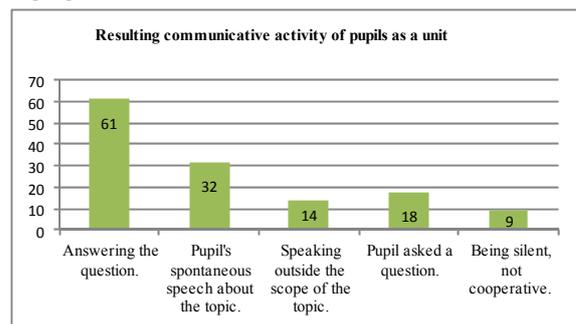
Communicative activity	Ondřej	Radim	Kamila	Adam	Aneta	Lenka	Total
answering the question	5	14	9	8	14	11	61
spontaneous pupil's speech about the topic	7	11	2	4	1	7	32
speaking outside the scope of the topic	2	7	0	2	1	2	14
the pupil asks a question	3	4	1	2	3	5	18
being silent, not cooperative	0	1	1	5	1	1	9
Total	17	37	13	21	20	26	



Graph no. 4: Communicative activities of individual pupils in one lesson of Czech language

The research results confirm individual differences between pupils in observed phenomena, which is also reflected in the overall level of their communicative activities. Disruption of neurological processes negatively influences the creation of differentiation conditioned connection with all analysers (sometimes with greater predominance of one of them). The maturing of partial brain functions proceeds unevenly and also below average. We observe limited development of children with mental handicap because of the extent of anomaly of the central nervous system. Deficit in the maturing of partial function is always evident in acquisition of key competences, especially communicative competence and competence towards learning.

Research question no. 4: Which communicative activities predominate in the selective set L as a unit during the Czech language lesson?



Graph no. 5: Communicative activities of all pupils during one Czech language lesson in total

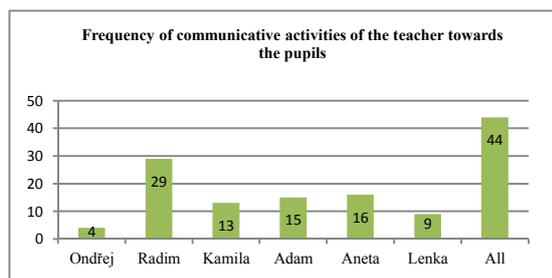
Table no. 5: Summary of communicative activity of all pupils in one lesson of Czech language

Communicative activity	Ondřej	Radim	Kamila	Adam	Aneta	Lenka	All
answering the question	5	14	9	8	14	11	61
spontaneous pupil's speech about the topic	7	11	2	4	1	7	32
speaking outside the scope of the topic	2	7	0	2	1	2	14
the pupil asks a question	3	4	1	2	3	5	18
being silent, not cooperative	0	1	1	5	1	1	9

Hierarchy and interpretation of observed communicative activities of pupils:

- **Answering the question (61 ×)** – pupils have space for individual speech expressions, for acquisition of speech experience.
- **Spontaneous speech of pupil about the topic (32 ×)** – pupils with mental handicap do not communicate appropriately to the situation, they cannot apply communicative patterns to real communicative situation. Due to disrupted dynamics of neurological processes the differentiation conditioned connections form with difficulties, which is reflected in slower understanding (awareness) of given instructions (e.g. the communication rules). Due to the frequency of the criterion it is obvious that the speech need of observed pupils is supported.
- **Pupils asks a question (18 ×)** – The frequency of answers of the teacher (5) and of the teacher's assistant (7) during the lesson is lower than the frequency of pupils' questions. The result illustrates the fact, that the questions of pupils do not always relate to the subject matter, or they are asked spontaneously.
- **Speaking outside the scope of the topic (14 ×)** – the obtained result proves the condition of limited development of higher cognitive processes, weak managing function and inconsistent thinking, significant lack of judgement, etc. The pupil wants to say something, but meanwhile they are attracted by a different thought. Their intention is therefore not finished, but they try to communicate the new thought that is not related to the topic.
- **Being silent and not cooperative (9 ×)** – it can be regarded as an attention deficit disorder, easy exhaustion, lack of will, indecisiveness, etc.

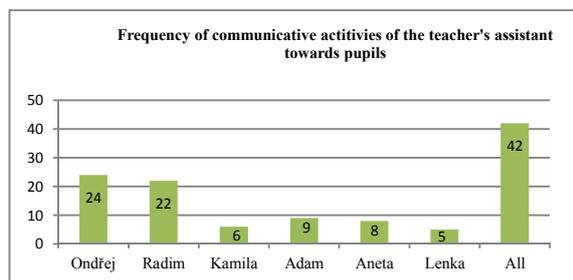
Research question no. 5: In what frequency were communicative activities of the teacher towards individual pupils of selective set L observed?



Graph no. 6: Frequency of communicative activities of the teacher towards pupils

The obtained results show (for more details see the attachment 6) that during one lesson the teacher most frequently addresses all pupils (44 ×). Towards individual pupil the frequency differs, where they most frequently communicate with the pupil who is the most communicative in the class (Radim 37x – see graph no. 4). Low frequency of communicative activity of the teacher was found out towards pupils that communicate the least (Ondřej 17x, Kamila 13x – see graph no. 4). We believe that the cause of the unbalanced frequency of communicative activity of the teacher towards individual students is the organisation of the lesson when the pupils are according to the teacher's instructions divided into two groups, where the teacher is in charge of one of them and the teacher's assistant of the second one.

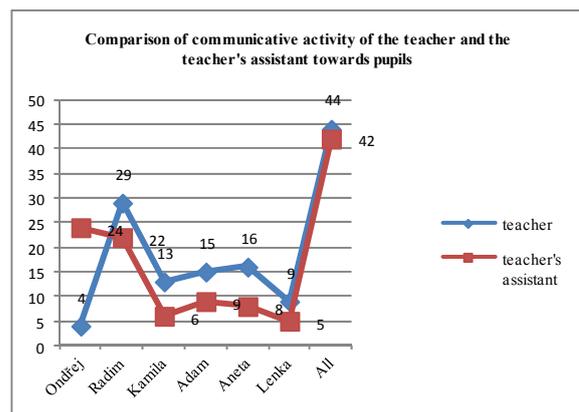
Research question no. 6: In what frequency were communicative activities of the teacher's assistant towards individual pupils of selective set L observed?



Graph no. 7: Frequency of communicative activities of the teacher's assistant towards pupils

On the basis of the obtained results (for more details see the attachment no. 7) it is obvious that during one lesson the teacher's assistant most frequently addresses selected pupils (Ondřej 24 ×, Radim 22x). Towards other pupils the frequency is significantly lower. An interesting observation is that the teacher's assistant most frequently communicate with the pupil who is the most communicative in the class (Radim 37x – see graph no. 4), and with only one pupil from the group of the least communicative pupils (Ondřej 17x – see graph no. 4).

The comparison of communicative activities of the teacher and the teacher's assistant towards individual pupils in one lesson



Graph no. 8: Comparison of communicative activity of the teacher and the teacher's assistant towards pupils during one lesson

The results of the observation show that the communicative activity of the teacher and the teacher's assistant towards pupils differs significantly only with an individual pupil. The frequency of communicative activity towards the others is comparable.

Research conclusion

The aim of the primary education is to provide pupils with key competences, which are represented as a summary of knowledge, skills, attitudes and values important for personal development and successful participation in the society. The development of children with mild mental disability is delayed from the point of view of social, mental and physical development, school maturity is thus reached in later age than in the other population. And to this situation is adapted also the content of primary education embedded in the *Annex to the Frame Educational Programme which organizes the education of pupils with mild mental disability*. With respect to the special needs of these pupils the emphasis is placed mainly on key competences of working, social, personal and communicative nature. The key competences are not isolated from each other, but they mingle, they have cross-subject nature and they can be acquired only as a result of overall educational process. All educational content and also activities that take place at the school thus has to lead and contribute towards their creation and development. The level of speech is related to the development of cognitive processes, it is a reflection of the knowledge about the world and the precondition of the orientation in the space. The speech education in primary school must penetrate within the whole educational activity as an intentional, directed and controlled process.

Increased attention and space is then paid to the education of partial abilities of language and communicative competences in the subject called Czech language and literature, which is due to the demanding character of the content justifiably given the highest number of lesson in frame educational programme for 1st phase of practical primary school (in the 2nd phase the number of lessons is comparable to the practical education). The content of the subject *Czech language and literature* is divided into three specific parts: *Communicative and essay education*, *Language education and Literature education*. In the education the educational content of individual parts is mingled. *Communicative and essay education* helps pupils to develop their vocabulary, speech abilities and communicative abilities, also it helps them perceive and understand various linguistic expressions. The main goal is to teach pupils correctly and clearly express, acquire the correct writing technique, write short notices and read with understanding. Speech education can be done in smaller time units or as a separate lesson. In the 1st phase the part of communicative and essay education has a separate part *Writing*. *Language education* is focused on the acquisition and usage of mother tongue in its written and spoken form. It is a means of functional communication of pupils. *Literature*

education is concentrated on gradual establishment of basic reader's abilities and habits and on corresponding reproduction of read text. Through reading the pupils meet with the basic literature forms and they learn to distinguish the imagination from the reality.

In the speech education we thus apply educational technologies with respect to special needs of pupils with mild mental disability. Besides the types of learning and valid educational principles the educational technologies include also usage of some specific principle and methods of speech education.

We recommend teachers to plan the content of the speech education:

- for "their" pupils and familiar conditions,
- on the basis of what we manage well,
- in the way that we set ourselves and that we will continue to develop,
- with the knowledge of the preference of content aspect of speech over the formal aspect,
- together with teachers that participate on the education of "our" pupils, and we will connect what we might have done so far separately and with different intentions,
- with the aim to improve not only the communicative competence of pupils, but also the educational activity in general because it is always easier to implement and defend own materials to the "borrowed" ones.

The school success is not only the achievement of the pupil, their abilities, cognitive styles, learning strategies, motivation and diligence, but also the achievement of teaching or educational technology, teaching style and the teacher's personality. It is necessary to remind the crucial importance of family and other participants on the child's upbringing. Improved level of language and communicative competence prevents social isolation of people with mental handicap and it is a significant indicator of the quality of their life.

Literature:

1. Baláž, J. a kol. *Komunikačné problémy detí s viacerými chybami*. Bratislava: SPN, 1980.
2. Bartoňová, M. *Současné trendy v edukaci dětí a žáků se speciálními vzdělávacími potřebami v České republice*. Brno: MSD, 2005. ISBN: 80-866633-37-3.
3. Belz, H., Siegrist, M. *Klíčové kompetence a jejich rozvíjení : východiska, metody, cvičení a hry*. Praha: Portál, 2001. ISBN 80-7178-479-6.
4. Černý, J. *Dějiny lingvistiky*. Olomouc: Votobia, 1996. ISBN 80-85885-96-4.
5. De Vito, J. A. *Základy mezilidské komunikace*. Praha: Grada, 2001. ISBN 80-7169-988-8.
6. Fontana, D. *Psychologie ve školní praxi*. Praha: Portál, 1997. ISBN 80-7178-063-4.
7. Franiok, P., Kaleja, M., Zezulková, E. *Transformace speciálních vzdělávacích potřeb v kontextu kurikulárních dokumentů*. Ostrava: PdF OU, 2010. ISBN 978-80-7368-921-6.
8. Gavora, P. *Učitel a žáci v komunikaci*. Brno: Paido, 2005. ISBN 80-7315-104-9.
9. Hartl, P., Hartlová, H. *Psychologický slovník*. Praha: Portál, 2000, 2004. ISBN 80-7178-303 X.
10. Janoušek, J. *Verbální komunikace a lidská psychika*. Praha: Grada, 2007. ISBN 978-80-247-1594-0
11. Krivohlavý, J. *Jak si navzájem lépe porozumíme*. Praha: Svoboda, 1988.
12. Krivohlavý, J. *Neverbální komunikace*. Praha: SPN, 1988a.
13. Lehečková, H. *Jazyk, komunikace a řečové poruchy*. In KULIŠŤÁK, P. *Afázie*. Praha: Triton, 1997. ISBN 80-85875-38-1.
14. Lechta, V. (ed.) *Základy inkluzivní pedagogiky: dítě s postižením, narušením a ohrožením ve škole*. Praha: Portál, 2010. ISBN 978-80-7367-679-7.
15. Lechta, V. a kol. *Diagnostika narušené komunikační schopnosti*. Martin: Osveta, 2002. ISBN 80-88824-18-4.
16. Lechta, V. *Logopédia IV. Rozvíjanie reči*. Trnava: PdF UK, 1985.
17. Lechta, V. a kol. *Terapia narušenej komunikačnej schopnosti*. Martin: Osveta, 2002. ISBN 80-8063-092-5.
18. Lechta, V. *Symptomatické poruchy řeči u dětí*. [ze slovenského originálu přeložila J. Křížová]. Praha: Portál, 2008. ISBN 978-80-7367-433-5.
19. Lechta, V., Matuška, O. *Rozvíjanie reči mentálne retardovaných detí raného a predškolského veku*. Bratislava: Invocentrum, 1995.
20. Nakonečný, M. *Psychologie osobnosti*. Praha: Academia 1995. ISBN 80-200-0525-0.
21. Nelešovská, A. *Pedagogická komunikace v teorii a praxi*. Praha: Grada 2005. ISBN 80-247-0738-1.
22. Pipeková, J. *Pedagogika osob s mentálním postižením- psychopedie*. In VÍTKOVÁ, M. (ed.) *Integrativní speciální pedagogika*. 2. přepracované a rozšířené vydání. Brno: Paido, 2004. ISBN 80-7315-071-9.
23. Průcha, J. *Moderní pedagogika*. 2. přepracované aktualizované vydání. Praha: Portál, 2002. ISBN 80-7178-631-4.
24. Průcha, J., Walterová, E., Mareš, J. *Pedagogický slovník*. Praha: Portál, 1998. ISBN 80-7178-525.
25. Sovák, M. a kol. *Logopedická péče ve zvláštní škole*. Praha: SPN-MŠK, 1965.
26. Svobodová, J. a kol. *Didaktika českého jazyka s komunikačními prvky. Počáteční fáze výuky mateřštiny*. Ostrava: PdF OU, 2003. ISBN 80-7042-301-3
27. Švarcová, I. *Mentální retardace*. Praha: Portál 2000, 2001. ISBN 80-7113-175-X.
28. Šedřová, K., Švaříček, R., Šalamounová, Z. *Komunikace ve školní třídě*. Vyd. 1. Praha: Portál, 2012, 293 s. ISBN 978-80-262-0085-7.
29. Valenta, M., Müller, O. *Psychopedie. Teoretické základy a metodika*. Olomouc: Parta, 2003. ISBN 80-7320-039-2.
30. Vančová, A. *Základy pedagogiky mentálně postižených*. Bratislava: Sapientia, 2005. ISBN 80-968797-6-6.
31. Vítková, M. (ed.) *Integrativní speciální pedagogika*. 2. přepracované a rozšířené vydání. Brno: Paido, 2004. ISBN 80-7315-071-9.
32. Vygotskij, L.S. *Psychologie myšlení a řeči*. České vydání J. Průcha. Praha: Portál 1970, 2004. ISBN 80-7178-943-7.
33. Zezulková, E., Rakusová, J. *Výchova řeči u žáků se speciálními vzdělávacími potřebami. Speciálně pedagogická diagnostika logopedická*. Distanční text. Ostrava: PdF 2010. 59 s.
34. Zezulková, E., Rakusová, J. *Výchova řeči v pedagogické praxi*. Distanční text. Ostrava: PdF , 2011. ISBN 978-80-7368-974-2
35. Zezulková, E. *Logopedická prevence v předškolním věku*. [elektronický zdroj]. 2. vyd. Ostrava: Ostravská univerzita v Ostravě, 2008. ISBN 978-80-7368-562-1.
36. Zezulková, E. *Výchova řeči. Náměty pro rozvoj řečových a jazykových dovedností žáků s lehkým mentálním postižením v ZŠ*. Ostrava: PdF OU, 2011. 65 s.
37. Zezulková, E. *Jazyková a komunikativní kompetence dětí s mentálním postižením*. 1. vyd. Ostrava: PdF OU, 2011. ISBN 978-80-7368-991-9.

Primary Paper Section: A

Secondary Paper, Section: AI, AM, AN, DF

D EARTH SCIENCES

DA	HYDROLOGY AND LIMNOLOGY
DB	GEOLOGY AND MINERALOGY
DC	SEISMOLOGY, VOLCANOLOGY AND EARTH STRUCTURE
DD	GEOCHEMISTRY
DE	EARTH MAGNETISM, GEODESY, GEOGRAPHY
DF	PEDOLOGY
DG	ATMOSPHERIC SCIENCES, METEOROLOGY
DH	MINING INDUSTRY INCLUDING COAL MINING AND PROCESSING
DI	POLLUTION AND AIR CONTROL
DJ	POLLUTION AND WATER CONTROL
DK	CONTAMINATION AND DECONTAMINATION OF SOIL INCLUDING PESTICIDES
DL	NUCLEAR WASTE, RADIOACTIVE POLLUTION AND CONTROL
DM	SOLID WASTE AND ITS CONTROL, RECYCLING
DN	ENVIRONMENTAL IMPACT ON HEALTH
DO	PROTECTION OF LANDSCAPE

SPATIAL ANALYSIS OF CURRENT MIGRATION DIFFERENTIATION OF MUNICIPALITIES IN CZECH REPUBLIC

¹LINDA KREJNÍKOVÁ

Department of Demography and Geodemography, Faculty of Science, Charles University in Prague, Albertov 6, 128 43 Prague 2, Czech Republic
 email: *linda.krejnikova@gmail.com*

Abstract: At present, the spatial dependence of geographic phenomena, where the level of some variable in one region correlates with the level of this variable in the nearby region, is emphasized. The focus of this paper is to evaluate the current state of migration spatial differentiation in the Czech Republic on data for municipalities (1) regardless of the spatial conditionality of this phenomenon using cluster analysis and (2) with respect to the spatial conditionality of the phenomenon using the principles of spatial autocorrelation. The aim is to create and interpret clusters of municipalities according to the similarity of the intensity of migration balance and the intensity of migration turnover for both applied approaches, and finally to compare the outputs of these two approaches.

Keywords: Keywords migration, cluster analysis, spatial autocorrelation.

Introduction

In the last few decades, the issue of spatial autocorrelation is received considerable attention, not only in geography but also in economics, biology, epidemiology, ecology, urban planning and sociology (Getis 2008). Geographers have long recognized the role of distance on spatial phenomena, as evidenced by Tobler's First Law of Geography that says "everything is related to everything else, but near things are more related than distant things" (Tobler 1970). Spatial autocorrelation tests whether the value of observed variable is independent on values of the variable at neighbouring localities (Cliff and Ord 1973). When modelling spatial data, it is necessary to work not only with the characteristics of observed phenomenon but also with the influence of spatial scale to avoid errors in the results interpretation (Anselin 1988).

Pioneers in exploring the spatial autocorrelation were authors Cliff and Ord (1969, 1973, 1981). They also generalized and fully developed the Moran's I (author is Moran 1950) which is currently the most widely used statistics for measuring spatial autocorrelation. In the nineties, the research in the field of spatial autocorrelation focused on local conditions (Getis and Ord 1992) and subsequent local Moran's I statistics, named as LISA – Local Indicators of Spatial Association, which is used to identify possible centres of statistically significant clusters, was proposed (Anselin 1994). In this paper, both mentioned statistics of spatial autocorrelation are used.

The aim of this paper is to conduct a detailed analysis of the current state of migration spatial differentiation in the Czech Republic based on data for the smallest possible territorial units - municipalities. This paper focuses on the identification of spatial units consisting of municipalities with similar migration indicators (net migration intensity per 1000 inhabitants and the intensity of migration turnover per 1000 inhabitants). Quantitative analysis of migration spatial differentiation of the Czech Republic at the municipal level provides a framework for spatial differentiation at the micro level, which can be regarded as necessary to address new research questions as well as for the formulation of local development policies and strategic documents. The paper is divided into two parts: the methodological part, which includes introduction to dataset and its processing and also basic theoretical approaches and the empirical part, focusing on actual quantitative analysis (cluster analysis and analysis of spatial autocorrelation using global and local Moran's I), comparison of two applied approaches and interpretation of results.

1 Data and methodology

Analysis of migration spatial differentiation was made based on data for municipalities of Czech Republic in 2011. Data come

from the public database of the Czech Statistical Office and was processed in an IBM SPSS statistical software and geographic ArcGIS software.

Two approaches have been used and then compared in order to describe the migration spatial differentiation. The first is the cluster analysis as a method of multivariate statistical analysis, a second the analysis of spatial autocorrelation. Initially, the variables intensity of migration balance and intensity of migration turnover (per 1,000 mid-year population of 2011) for each municipality in the Czech Republic were created.

Cluster analysis uses tools and methods to detect and create "natural" groups of entities (individuals, objects, phenomena) that occur in the analyzed multidimensional dataset. Detecting and creating clusters is based on grouping elements according to their mutual similarities. Created groups should be as homogeneous as possible, while differences between the groups should be as large as possible (Härdle and Simar 2003; Norušis 2012). Lack of cluster analysis, view of the analysis of geographic data, is its insensitivity to the spatial connections between the observed territorial units (Novák and Netrdová 2011). Cluster analysis was applied to the both monitored variables separately. In both cases, hierarchical clustering was used, type of scale proximity was the Euclidean distance and the clustering algorithm was based on intragroup linkages. Number of clusters was determined on 4.

Analysis of spatial autocorrelation is based on the calculation of a global and local Moran's I criteria. First, the degree of spatial variability (spatial clustering) of surveyed variables using the global Moran's I criteria were measured. It is calculated as

$$I = \frac{n \sum_{i=1}^n \sum_{j=1}^n w_{ij} (x_i - \bar{x})(x_j - \bar{x})}{\sum_{i=1}^n \sum_{j=1}^n w_{ij} \sum_{i=1}^n (x_i - \bar{x})^2}$$

where I is the global Moran's I, n is the number of surveyed units (municipalities), x_i is the value of the monitored variable in the unit i , x_j is the value of the monitored variables in the unit j , \bar{x} with stripe is the arithmetic average of the monitored variable and w_{ij} indicates the matrix of spatial burdens (Cliff and Ord 1973). Using this matrix, neighbouring units (municipalities) are defined on the basis of established criteria for defining of "neighborhoodness" (the spatial weighing scheme).

In this study, the threshold distance 10 km was chosen as the spatial weighting scheme based on the results of studies already carried out on a similar statistical sample (Blažek and Netrdová 2009; Spurná 2008). Moran's I reaches values from -1 to +1. The negative Moran's I indicates negative spatial autocorrelation, the positive value of Moran's I indicates positive spatial autocorrelation. The closer the value of Moran's I to -1 or +1, the stronger is the spatial autocorrelation.

To identify spatial clusters, local spatial autocorrelation statistics (the local Moran's I) were further calculated as

$$I_i = \frac{(x_i - \bar{x}) \sum_{j=1}^n w_{ij} (x_j - \bar{x})}{\sum_{i=1}^n \sum_{j=1}^n w_{ij} (x_i - \bar{x})^2}$$

where I_i is the local Moran's I (Anselin 1994). The sum of these local statistics must be equal to the global Moran's I, therefore,

$$I = \sum_i \frac{I_i}{n}$$

The positive value of local Moran's I indicate that the municipality is surrounded by municipalities with similar values of the observed variable. This municipality is then part of the cluster. The negative value of local Moran's I on the other hand means that the municipality is surrounded by municipalities with

different values of the monitored variable. Such municipalities are then “outliers”. Local Moran’s I can be interpreted only in the context of the calculated z-score and P-values. To interpret the clusters of spatial autocorrelation, the types of spatial association (COType) entered into maps of spatial associations are therefore used. Types of spatial association distinguish between statistically significant cluster of high values (high-high clusters), a cluster of low values (low-low clusters), a cluster of outliers in which high values are surrounded particularly by low values (high-low clusters) and a cluster of outliers in which are low values surrounded mainly by high values (low-high clusters). High-high and low-low types of spatial associations indicate positive spatial autocorrelation and vice versa high-low and low-high types the negative spatial autocorrelation (Anselin 1994).

2 Migration spatial differentiation of Czech Republic

2.1 Application I: Cluster analysis

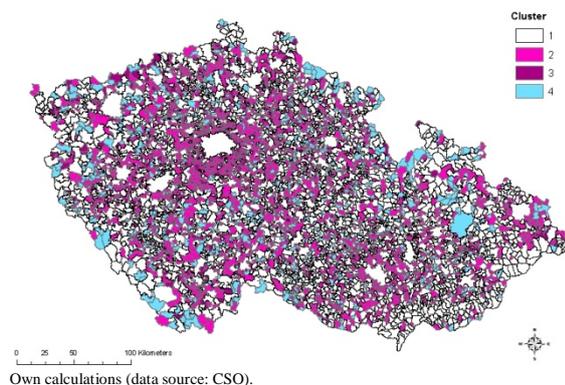
Division of municipalities into individual clusters according to both variables show cartograms in Figure 1 and 2. Descriptive characteristics calculated to better understand the differences between clusters are recorded in Table 1 and 2.

Table 1: Descriptive statistics for clusters of the intensity of migration balance (IMB)

IMB	N	Min	Max	Average	St. dev.	Var.
Cluster 1	2864	-666,67	292,99	-2,29	23,16	536,52
Cluster 2	1946	8,93	243,84	21,28	17,24	297,06
Cluster 3	542	35,26	85,11	50,51	12,67	160,46
Cluster 4	899	-107,14	-11,15	-21,23	9,96	99,12

Own calculations (data source: CSO).

Figure 1: Cartogram of IMB clusters



Own calculations (data source: CSO).

For the IMB, following clusters were created: *Cluster 1* contains 2,964 municipalities incl. Prague, Brno-city, Ostrava, Plzen-city and other large cities. It is a cluster with the second lowest average IMB. The difference between immigrants and emigrants per 1,000 inhabitants is on average slightly below zero in these municipalities. However this cluster has the highest variance, therefore, its internal variability is relatively large. *Cluster 2* contains 1,946 municipalities. It is a cluster with the second highest average IMB per 1,000 inhabitants. The values of IMB are positive in all municipalities within this cluster, therefore these municipalities are migration profitable. The variance of the values of IMB in this cluster is also considerable. *Cluster 3* contains 542 municipalities and it is a cluster with the highest average IMB. Municipalities belonging to this cluster are significantly migration profitable. These municipalities, together with the municipalities of cluster 2, form migration profitable periphery of large cities such as Prague, Brno, Plzen-city and more. *Cluster 4* contains 899 municipalities. It is a cluster with the lowest average IMB. Municipalities belonging to this cluster are migration loss and are widely dispersed in the neighbourhood of the state border. This area is represented

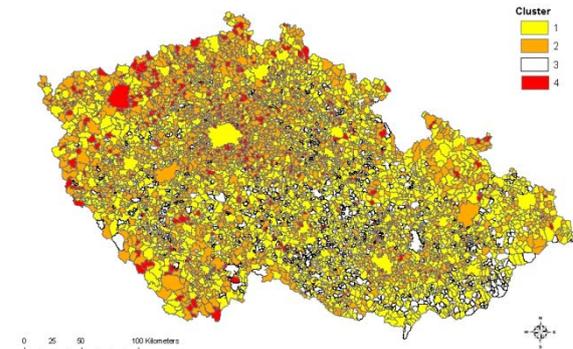
mainly by municipalities from this or the first cluster and it is therefore a migration loss or neutral region.

Table 2: Descriptive statistics for clusters of the intensity of migration turnover (IMT)

IMT	N	Min	Max	Average	St. dev.	Var.
Cluster 1	2586	28,82	352,49	46,37	27,57	760,06
Cluster 2	2352	53,12	314,74	70,57	19,22	369,20
Cluster 3	899	0,00	666,67	19,53	23,22	539,00
Cluster 4	414	95,51	133,33	109,95	10,67	113,83

Own calculations (data source: CSO).

Figure 2: Cartogram of IMT clusters



Own calculations (data source: CSO).

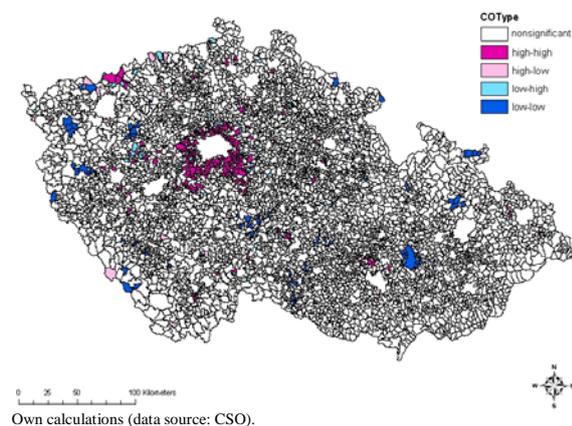
For the IMT, following clusters were created: *Cluster 1* contains 2,586 municipalities incl. Prague, Brno-city and Ostrava. This is a cluster with the second lowest average IMT. It is also a cluster with the highest variance, hence its internal variability is relatively large and municipalities may vary greatly in their values of IMT. *Cluster 2* contains 2,352 municipalities and represents the largest share of the total migration. It is also the cluster with the second highest average IMT per 1,000 inhabitants. *Cluster 3* contains 899 municipalities and it is the cluster with the lowest average IMT. Municipalities belonging to this cluster are significantly migration passive and shapes geographic belt on the border with Slovakia and also on the border between Bohemia and Moravia. *Cluster 4* contains 414 municipalities and it is a cluster with the highest average IMT. Municipalities from this cluster together with the municipalities from the second cluster are migration most active. Geographically form Prague periphery, a strip of municipalities in northwest Bohemia and smaller cluster by the state border in southern Bohemia.

2.2 Application II: Analysis of spatial autocorrelation

For the analysis of spatial autocorrelation, two following null hypotheses were expressed: *H0a: The variable IMB is not spatially autocorrelated* against the alternative hypothesis *H1a: The variable IMB is spatially autocorrelated* and hypothesis *H0b: The variable IMT is not spatially autocorrelated* against the alternative hypothesis *H1b: The variable IMT is spatially autocorrelated*.

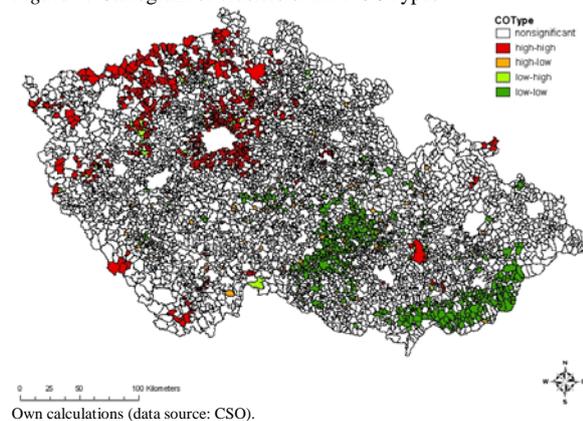
Based on the value of global Moran’s I, converted to z-scores for the first variable (14.86), the hypothesis H0a was rejected and significant positive spatial autocorrelation (at 1% significance level) of IMB was found. In the case of the second variable, the value of global Moran’s I, converted to z-score (45.44), also led to rejection of the null hypothesis H0b and significant positive spatial autocorrelation (at 1% significance level) of IMT was found. Both variables prove statistically significant level of clustering in space. To identify spatial clusters, local Moran’s I for each municipality was calculated. In the case of significant value of local Moran’s I, types of spatial associations were established. The resulting maps of spatial associations for both variables show Figure 3 and 4.

Figure 3: Cartogram of clusters of IMB COTypes



In the case of IMB, only clusters of high-high type of spatial association are accumulated, particularly in the adjacent municipalities around Prague. Other types of spatial association prove rather scatter character.

Figure 4: Cartogram of clusters of IMT COTypes



Regarding the IMT variable, positively spatially correlated high-high clusters and low-low clusters of municipalities are accumulated. High-high clusters of significantly high values are accumulated around Prague but in addition it creates a belt of northwest Bohemia. Interesting are also low-low clusters of significantly low values that stretch in two northeast-oriented strips on both sides of Brno.

Conclusion

This paper brought the analysis of current state of migration spatial differentiation of municipalities in the Czech Republic with focus on the identification of homogeneous clusters formed by municipalities with similar migration indicators (the intensity of migration balance and the intensity of migration turnover per 1000 inhabitants) using cluster analysis and analysis of spatial autocorrelation.

Cluster analysis led to the formation of four clusters for each variable. After that, the analysis of spatial autocorrelation was performed in two steps. Firstly, using the global Moran's I, significant positive spatial autocorrelation of both variables was demonstrated. Based on the type of spatial association, spatial autocorrelated clusters of municipalities for each of the variable were identified subsequently. Regarding the intensity of migration balance, only municipalities with statistically significant high values (migration profitable municipalities) were accumulated. In case of the intensity of migration turnover, only clusters of significantly high values (high-high types of spatial association) and significantly low values (low-low types of spatial association) were created.

To sum up conclusions of both analyses performed, it can be said that the Czech municipalities are generally more migration active than the Moravian. Municipalities around Prague form the most significant intersection of high values of both monitored variables, and therefore it is migration active and migration profitable region. Using analysis of spatial autocorrelation, it is possible to observe that these municipalities are in the case of both monitored variables positively spatial autocorrelated. Therefore migration profit (positive migration balance) and migration activity (positive migration turnover) of certain municipality in this region are significantly affected by the high profitability and high migration activity of surrounding municipalities. With the contribution of spatial autocorrelation analysis, it is easier to notice clusters of migration most passive municipalities on the border of Bohemia and Moravia and along the border with Slovakia. These municipalities are positively spatial autocorrelated and therefore migration passivity (low migration turnover) of certain municipality in this region is significantly affected by migration passivity of surrounding municipalities. Comparing the two approaches applied, spatial autocorrelation seems to be very appropriate to supplement or clarify the outputs of cluster analysis when modelling migration spatial differentiation of municipalities in the Czech Republic.

Literature:

1. Anselin, L.: Spatial Econometrics: Methods and Models. Kluwer Academic Publishers, Boston, 1988.
2. Anselin, L.: Local indicators of spatial association—LISA. *Geographical Analysis*, 1995, 27.2: 93–115.
3. Blažek, J.; Netrdová, P.: Can Development Axes be Identified by Socio-economic Variables. The Case of Czechia. *Geografie*, 2009, 114.4: 245–262.
4. Cliff, A. D.; Ord, J. K.: The Problem of Spatial Autocorrelation. In Scott, A. J. (Ed.): *London Papers in Regional Science, Studies in Regional Science*. Pion, London, 1969, 25–55.
5. Cliff, A. D., Ord, J. K.: *Spatial Autocorrelation, Monographs in Spatial Environmental Systems Analysis*. Pion, London, 1973.
6. Cliff, A. D.; Ord, J. K.: *Spatial Processes, Models and Applications*. Pion, London, 1981.
7. Czech Statistical Office (CSO): Public Database. [Online]. Available from http://vdb.czso.cz/vdbvo/maklist.jsp?filtr_uz_emi=on%2C50%2Con&filtr_obdobi=2011&q_text=&kapitola_id=369&vo=null&q_rezim=1 [cit 14. 12. 2012].
8. Getis, A.: A History of the Concept of Spatial Autocorrelation: A Geographer's Perspective. *Geographical Analysis*, 2008, 40.3: 297-309.
9. Getis, A.; Ord, J. K.: The Analysis of Spatial Association By Use of Distance Statistics. *Geographical Analysis*, 1992, 24.3: 189-206.
10. Härdle, W.; Simar, L.: *Applied Multivariate Statistical Analysis*. Springer Verlag, Berlin-Heidelberg-New York, 2003.
11. Moran, P. A. P.: Notes on continuous stochastic phenomena. *Biometrika*, 1950, 37.1/2: 17-23.
12. Norušis, M. J.: *IBM SPSS Statistics 19 Statistical Procedures Companion*. Prentice Hall, NJ, 2012.
13. Nosek, V.; Netrdová, P.: Regional and Spatial Concentration of Socio-economic Phenomena: Empirical Evidence from the Czech Republic. *Ekonomický časopis*, 2010, 04: 344–359.
14. Novák, J.; Netrdová, P.: Prostorové vzorce sociálně-ekonomické diferenciacie obcí v České republice. *Sociologický časopis*, 2011, 04: 717-744.
15. Spurná, P.: Prostorová autokorelace – všudypřítomný jev při analýze prostorových dat? *Sociologický časopis*, 2008, 04: 767-787.
16. Tobler, W. R.: A Computer Movie Simulating Urban Growth in the Detroit Region. *Economic Geography*, 1970, 46: 234-240.

Primary Paper Section: D

Secondary Paper Section: AO, BB, DE

J INDUSTRY

IN	INFORMATICS
JA	ELECTRONICS AND OPTOELECTRONICS
JB	SENSORS, DETECTING ELEMENTS, MEASUREMENT AND REGULATION
JC	COMPUTER HARDWARE AND SOFTWARE
JD	USE OF COMPUTERS, ROBOTICS AND ITS APPLICATION
JE	NON-NUCLEAR POWER ENGINEERING, ENERGY CONSUMPTION AND UTILIZATION
JF	NUCLEAR ENERGY
JG	METALLURGY, METAL MATERIALS
JH	CERAMICS, FIRE-PROOF MATERIALS AND GLASS
JI	COMPOSITE MATERIALS
JJ	OTHER MATERIALS
JK	CORROSION AND MATERIAL SURFACES
JL	FATIGUE AND FRACTURE MECHANICS
JM	STRUCTURAL ENGINEERING
JN	CIVIL ENGINEERING
JO	LAND TRANSPORT SYSTEMS AND EQUIPMENT
JP	INDUSTRIAL PROCESSES AND PROCESSING
JQ	MACHINERY AND TOOLS
JR	OTHER MACHINERY INDUSTRY
JS	RELIABILITY AND QUALITY MANAGEMENT, INDUSTRIAL TESTING
JT	PROPULSION, ENGINES AND FUELS
JU	AERONAUTICS, AERODYNAMICS, AEROPLANES
JV	COSMIC TECHNOLOGIES
JW	NAVIGATION, CONNECTION, DETECTION AND COUNTERMEASURE
JY	FIREARMS, AMMUNITION, EXPLOSIVES, COMBAT VEHICLES

THE EFFECT OF INTERNAL COOLING ON BLOW MOLDED PRODUCTS

^aPAVEL BRDLÍK, ^bPETR LENFELD

Technical University of Liberec, Department of Engineering Technology, Studentská 2, 464 17, Liberec 1, Czech Republic.
email: ^apavel.brdlik@tul.cz, ^bpetr.lenfeld@tul.cz

This paper was prepared due to the financial support from Student Grant Contest project 28005 (SGS 28005) from the TUL part within the support of the specific university research.

Abstract: The article presented deals with the production of blow molding products where the cooling phase is one of the most important. The method of reducing the heat energy directly determines the production time and dictates product quality. One very efficient way to improve the cooling ability, and consequently to reduce production time, is to implement at this stage internal cooling systems. These systems make it possible to ensure savings 50% of the production time. This is an interesting result, but the next important question is how the intensive internal cooling influences product quality? The aim of this published research is therefore focused on finding an answer to the question posed. To achieve this target, theoretical research was used to create a series of experiments which measured and evaluated the microstructure, mechanical, visual behavior and also the stability of the shape of the product.

Keywords: internal cooling, blow molding process, microstructure, behavior of products, carbon dioxide

1 Introduction

Extrusion blow molding is the most commonly-used technology for the production of hollow parts (GARCIA-REJON, 1995). The process can be divided into three main steps: the formation of the parison, clamping and inflation of the parison, and the cooling and solidification of molten form. Of these 3 stages, definitely the cooling stage takes the longest. This is because the polymer materials have a low heat transfer coefficient (ROSAT, 2004). Consequently a number of improvements have been recorded. Internal cooling is one of the most efficient. The principle of internal cooling is based on the ability to increase heat reduction inside the parts of the product. These days there are several suitable solutions in use. The circulation of air is the easiest variant, which requires the lowest initial investment. On the other hand, the resultant increase in production efficiency is not as high as with the following cooling methods (HUNKAR, 1973). The use of deep-cooled air (-35°C) is clearly more efficient (STIPSITS, 1993). An even more efficient possibility is to connect to a cooling mixture system of pressurized air and water droplets. This system uses the Joule-Thomson effect to change water droplets into ice crystals (MICHAELI, 2007). Another method which uses an atomized medium to perform the cooling process is the injection of an inert gas such as carbon dioxide (-78°C) or nitrogen (-196°C). This cooling variant is by far the most efficient with a possible process improvement of up to 50% (JORG, 2006). The exact value depends on the volume of the product, its thickness, intricacy, injection setting, used gas, and so on. This is of great interest for producers who are continuously looking to speed up production. But the issue of product quality must not be forgotten. Although the quality is a very important part of blow molding production, there is not a lot of research recorded that deals with this topic. One of the most interesting studies was written by Professor Dilhan M. Kalyon et al.. They focused their research on investigating the influence of different heat transfer methods on the microstructure, the crystallinity and the birefringence of the blow-molded article (KALYON, 1983, 1991). In their study, the changes in the distribution of density, residual stress and molecular orientation were observed. S. B. Tan and P.R. Hornsby were part of another research group. This group explored the effects of cooling rate on the morphology, shrinkage, warpage and impact properties (TAN, 2011). Their results indicate that internal cooling could significantly influence the nature of the products. Hence experimental measurements were taken to explore the changes to the microstructure, the mechanical and visual properties and the shape stability of products by connecting a progressive internal cooling system to the common blow molding process.

2 Experiment

To investigate the influence of internal cooling on the quality of blown products, the liquid carbon dioxide injection system was chosen. This system has the biggest cooling effect due to the introduction of innovative internal cooling variants and therefore can produce the most obvious results. The cooling effect is evaluated on two products of different volume and wall thickness. They are a seven liter container with a 4mm average wall thickness and a 0,5 liter bottle with a wall thickness of 1,5mm (figure 1). The conclusions can be generally applied. The next important decision was the selection of test material. From the polymers used, polyolefin was selected. This is because polyolefin is by far the most common material in the production of hollow products. Two variants were selected. The first one is a common linear, high-density semi-crystal copolymer called PE-Liten BB 29 and the second one is a homopolymer, PP-Mosten EH 0.1. Production took place on 2 classic, single station, pneumatic, blow-molding machines: a GM 750 (0,5l product) and a GM 5000 (7l product) at the company G D K spol. s.r.o. The concept of the planned experimental measurements is shown in Table 1. In first part, the common blow molding process running at the maximum production limit was measured. The speed of production was restricted by the demolding temperature. Next, the carbon dioxide cooling system was connected to the common blowing process. The CO₂ was injected for 50% of the total cooling time. The last part of the experiment was to assess the increase in productivity corresponding to the used period of CO₂ loading.

Thermographic pictures and test specimens were taken from each setting to additionally analyze the microstructure, mechanical and visual properties, and also the stability of the shape of the product. Several different areas of the form were selected to involvement differences across the product. The specific areas are shown in figure 1.

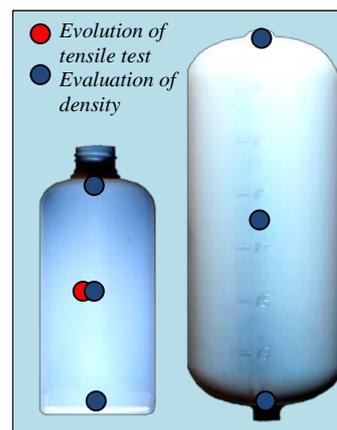


Fig. 1 Examined products

Tab.1 Process parameters of the experiment

Products	Melt temperature	Cooling temperature of mold	Critical cycle time of blow molding setting	Cooling time of blow mold cooling system	Machine time	Time of injection of liquid CO ₂	Increase of efficiency (evaluated form max. temperature)	Increase of productivity
0,5l	190 °C	5°C	22s	16s	4s	8s	43%	45%
7l	190 °C	5°C	95s	80s	10s	40s	17%	21%

3 Results and discussion

The morphology and consequently also the material properties of the polymer are strongly affected by the thermal-kinetic conditions during the process of solidification. This is because the initial temperature and intensity of cooling determine the number, size and distribution of spherulites, which determine the

mechanical, visual and other properties of the semi-crystal polymer (KREBS, 2006). The thermal reduction phase of the cooling process is therefore of enormous importance. Blow molding production is a complicated non-isothermal, cyclic process with two cooling interfaces. These are the interface between the polymer and the mold and the interface between the air and the polymer (ROSAT, 2004). If they are compared it is evident that their cooling ability is not the same. The inflated parison touches the cold wall of the mold, initiating the intensive heat transfer ($500 \text{ W/m}^2 \text{ K}$). On the other side of cooling interface, the heat transfer between the still air and the polymer (free convection) is very low ($20 \text{ W/m}^2 \text{ K}$). These differences in cooling rates could cause the non-uniform structure throughout the wall thickness, as well as changes of density, molecular orientation, birefringence, shrinkage or even warpage (KALYON, 1983, 1991, TAN, 2011).

3.1 Structure

The microstructure of the polymer is composed of deposited (crystals) and amorphous fragments. Their rate is specified as percentage of crystalline. The quantity of fragments created is mainly influenced by the ability of the material to crystallize, but the thermal-kinetic conditions also have a considerable impact (KREBS, 2006). For example, if slower cooling is applied, it gives the spherulites more time to grow than with faster cooling and the result is the creation of fewer, but bigger spherulites. Conversely, using more intensive cooling causes the creation of more, but smaller spherulites (KREBS, 2006). For blow molding process, this means that by intensively cooling the effective interface, polymer/ mold, a large number of small spherulites should be created. Low heat transfer of the effective interface, air/ polymer, gives the spherulites enough time to grow to larger sizes. The difference in morphology increases with increasing product thickness and a faster cooling rate of the mold (external cooling system). How does this influence the connection to a progressive internal cooling method? From the theoretical statement introduced above, it can be assumed that the spherulites would be smaller and the structure more uniform. The influence of the different cooling rates at both interfaces on the microstructure across the product was observed using polarization microscopy. The results, which are shown in figure 2, showed that no structural changes were noted. This result was found for all tested samples of both of the examined materials. The explanation could be found through experimentation of the cooling settings. Water at five degrees centigrade is circulated in the mold, which is the lowest recommended temperature to produce the product without causing rejection (through the effect of sweating). If a higher cooling temperature or a thicker product were tested, the results could be different.

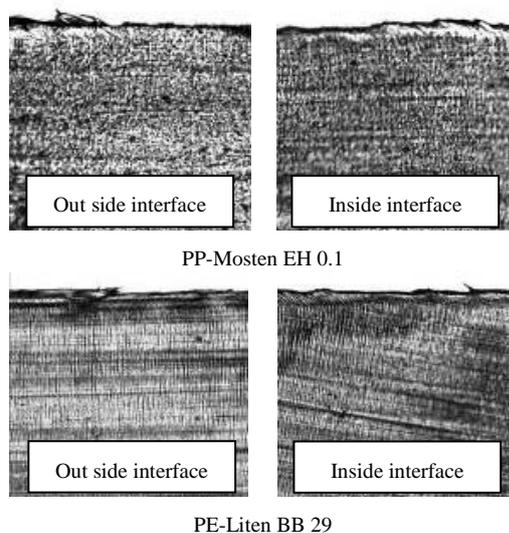


Fig. 2 The distribution of microstructure

3.2 Density

As previously mentioned, the microstructure is defined. But, how was the percentage of crystals changed? The easiest test for crystalline changes is the determination of the density. The crystal fragments contain macro-molecules which are closer together than the macro-molecules in amorphous locations. Consequently these areas have a higher density (KREBS, 2006). The increase in density then clearly indicates an increase in the percentage of crystals. To explore the changes in density, and hence crystal percentage, three areas on each product were examined (figure 1). Different temperatures were recorded in these locations. This could cause different thermal-kinetic conditions and therefore different crystal percentages. The results which are shown in figure 3 confirmed this theory. Higher densities were recorded in locations with higher measured temperature. Connection to a liquid carbon dioxide injection system brings about an increase in cooling efficiency. The products were re-tested using a lower temperature and the test specimens reached lower density. But by increasing productivity the demolding temperature was increased and therefore the density was similar to the first experimental measurements. This discovery allows us to declare that increasing productivity does not change the percentage of crystals.

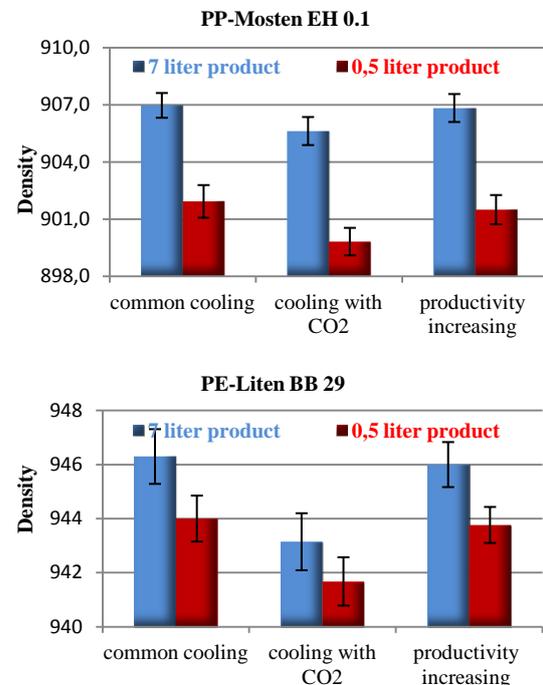


Fig. 3 Average values of measured density with standard deviation

3.3 Mechanical properties

For the evaluation of mechanical properties of semi-crystal polymers, it is necessary to know that crystal fragments have different mechanical properties from amorphous ones. Their closer ordering leads to higher adhesive forces. Consequently, the increasing percentage of crystals leads to increased strength, mechanical stiffness and hardness by several degrees of toughness. The amorphous segments are possible to imagine as joints about which the crystals can rotate by deformation. It contributes to improving toughness and elongation (KREBS, 2006). With respect to the results of density and the declared theory that, as the density (percentage of crystals) was changed by more intensive cooling, so the mechanical properties could be changed too. The tensile test didn't confirm this premise, as can be seen in the figure 4 and figure 5. The differences between the results are very small and could be with relation to reached values of standard deviations neglected.

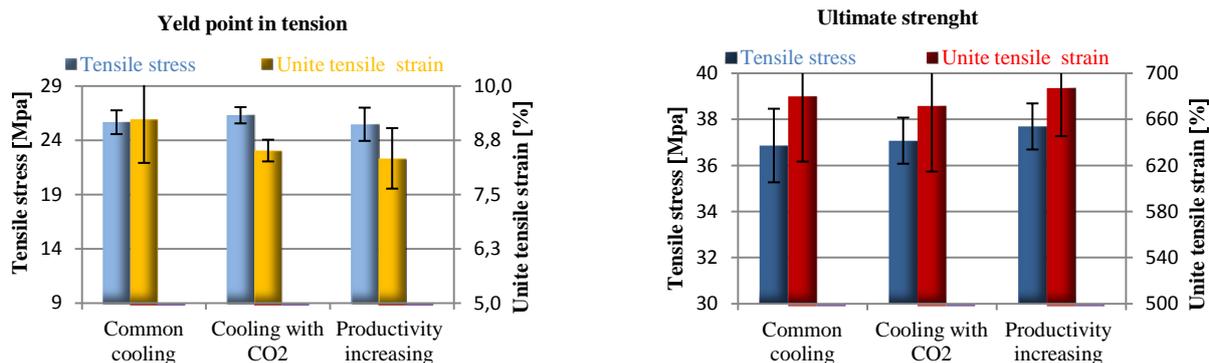


Fig. 4 Results of tensile test for PP-Mosten EH 0.1

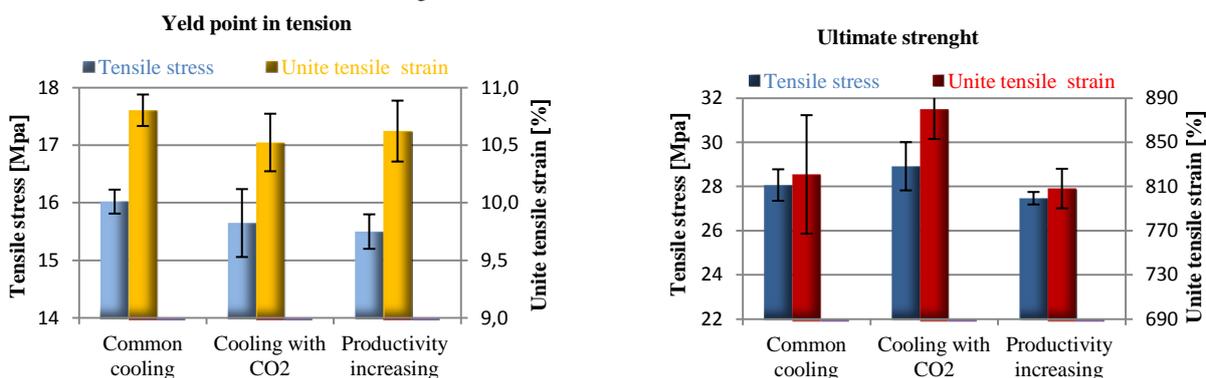


Fig. 5 Results of tensile test for PE-Liten BB29

3.4 Visual properties

The visual properties of semi-crystal polymers can be evaluated with the help of birefringence (KALYON, 1983). Professor Dilhan M. Kalyon proved in his publications that the distribution of birefringence is a function of the distance from the outer surface. "The rapid cooling rates at the interface polymer/ mold induce the retention of the orientation and generate high values of birefringence (especially at low initial parison temperature)" (KALYON, 1991). Conversely, the low heat transfer at the interface air/polymer causes a decrease in the orientation of the macromolecules and gives rise to negligible birefringence values. This means that the birefringence decreases from a maximum at the outer surface to a minimum at the inner surface (KALYON, 1983). The measured rate and distribution of birefringence for the experimentally created, cooling variant did not show any significant variations. This behavior corresponds with the earlier conclusion concerning the structure across the product.

3.5 Warpage

Warpage is directly related to residual stress which is built up by locally varying strain fields during solidification of the polymer. Non-uniform cooling therefore causes temperature variations, strain gradients and lead to an uneven residual stress, which induces a bending moment in the part. The bending moment leads to warpage of the part in order to balance the residual stress (TAN, 2011). It can be supposed that increasing the external cooling rate will increase the unbalanced residual stress. As a consequence, the induced bending moment and the part warpage also increase. On the other hand, increasing the cooling ability at the air/ polymer interface should decrease the potential warpage or distortion during molding because the thermal heat transfer is more uniform on both sides (TAN, 2011). Because the structure is uniform and no-residual stress was detected, warpage distortion is not an issue. Comparison of the shape stabilities of the products confirmed this association.

4 CONCLUSIONS

The aim of this article is to investigate the influence of an internal cooling method on the structure, the mechanical and visual properties and the stability of shape of semi-crystal products. Theoretical research states that differences in thermal conductivity at the polymer/ mold interface and the air/ polymer interface could lead to a non-uniform structure throughout the product regarding wall thickness, as well as changes of density, molecular orientation, birefringence, shrinkage and even warpage. Improving the cooling ability of inner surfaces should ensure more uniform structure and a decrease in potential warpage or distortion in the mold. Consequently the use of a progressive internal cooling method should have a positive effect. Experimental examination of the changes in heat transfer on the internal interface did not show any changes in the structure. This is probably because a very intense cooling setting of the mold was applied which caused fast and uniform cooling of the structure. The question is how the structure would look with thicker products or materials with higher thermal-kinetic requirements for crystallization. The crystal percentage decreased with the more intensive cooling setting. However, no differences were noted with increased productivity. Neither in the evaluation of shape stability of the product nor in its visual behavior and mechanical properties were any significant differences of tested variants observed. This allows us to state that using the liquid carbon dioxide injection system for 50% of the total cooling period brings about an increase in efficiency of 21% in a 7l container, and 45% in 0,5l container and it does not cause any structural, mechanical or visual changes, nor were there any product shape differences in either of the tested polyolefins (PP, PE).

Literature:

1. GARCIA-REJON, A. *Advances in Blow Moulding Process*. Rapra Technology Limited, Shrewsbury, p. 3, 17-30. 1995.

2. ROSAT, D. V. ROSAT, A.V. DiMathia, D.P. *Blow Moulding Handbook*. Munchen, p. 227-257, 2004. ISBN 1-3446-22017-8.
3. HUNKAR, D. B. *Coolin Blow –Molded Bottles From the Inside Out*. Journal of Plastic Engineering. vol . 29, p. 25-27, 1973, ISSN: 0091-9578.
4. STIPSITS, B. *Using -30°C Internal Cooling Air to Achieve Faster Extrusion Blow Molding Machine Cycle Via the CAC – Compressed Air Cooling System*. 9th Annual High Performance Blow Molding Conference, New Jersey, USA, Conference Proceedings, p. 253-262, 1993.
5. MICHAELI, W., BRUMER, T. *Reduction o Cooling Time by Using Atomized Watter in Blow Molding*. ANTEC 2007, Ohio, USA, Conference Proceedings. vol. 4, p. 2137-2141, 2007, IBSN 978-1-60423-24-1.
6. JORG, CH. *Carboxyl dioxide cooling method may take the waiting out of plastic parts*. Journal of Automotive Engineering, p. 40-41, 2006, ISSN 2008-9899.
7. KALYON D. M., KAMAL,M.R. *Heat Transfer and Microstructure in Extrusion Blomolding*. Journal of Polymer Engineering and Science. vol . 23, no. 9, p. 503-509, 1983, ISSN 1548-2634.
8. KALYON D. M., JEONG S. Yu. *Microstructure Development in Blow Molded Amorphous Engineering Plastic*. Journal of Plastic, Rubber and Composites Processing and Applications. vol .15, no. 2, p. 95-101, 1991, ISSN 0959-8111.
9. TAN, S.B, HORNSBY P.R, MCAFEE M.B, KEARNS M.P., MCCOURT M.P. *Internal Cooling in Rotational Molding – a Review*. Journal of Polymer Engineering and Science. vol . 51, p. 1683-1692, 2011, ISSN 1548-2634.
10. KREBS, J. *Teorie zpracování nekovových materiálů*. Liberec: Technická univerzita v Liberci, p.20-30, 48-55, 90. 2006, ISBN 80-7372-133-3.

Primary Paper Section: J

Secondary Paper Section: JP

QUALITY IMPROVEMENT METHODS FOR IDENTIFICATION AND SOLVING OF LARGE AND COMPLEX PROBLEMS

³JAN KOSINA

VŠB – Technical University of Ostrava, Faculty of Metallurgy and Materials Engineering, 17. listopadu 15, 708 33 Ostrava-Poruba, Czech republic
email: ⁴jan.kosina@continental-corporation.com

Abstract: This article is analyzing three methodologies used for identification and resolving of large and complex quality problems: Six Sigma, Shainin and Kepner-Tregoe problem management. To compare these three methodologies the general quality improvement roadmap was defined consisting of 5 phases: Problem definition, Diagnosis, Generation and selection of solutions, Enhancement and New routines. The aim of comparison was to identify whether the methodologies, methods and tools can supplement each other. This would allow to work on quality improvement within one general problem solving pattern. The Six Sigma as the most generic methodology can serve as the base to develop such pattern while DMAIC roadmap can be used as the backbone.

Keywords: Shainin, Six Sigma, Lean Six Sigma, Kepner-Tregoe, quality improvement, problem solving.

1 Introduction

In today's business environment defined by increased globalization, rapid development of technologies and other competitive pressures the shareholders expectations are becoming stronger in respect of the costs reduction and improvement of business performance while customer satisfaction is increasing. One of the main contributors to meet the mentioned business expectations is quality. Quality integrated in all processes which are necessary to run the business. The activities to assure quality in each company consist of three basic groups (Juran, 1989): quality planning, quality control and quality improvement. We will focus on quality improvement area. Quality improvement is playing important role in business as the successful quality improvement project leads to the decrease of the production costs, improved market share, higher pricing and increase of customer value. No wonder today the most of the companies and organizations are interested in the continuous quality improvement. Quality improvement process is based on proactive identification of the process variation, structured way of the root cause identification and systematic implementation of the appropriate action to improve and stabilize the situation.

In each business the quality problems appears sometimes. Some of them are easy to correct on day-to-day basis but the most critical for each business are the large, complex quality problems which are usually leading to long-term variation or reoccurrence of the symptoms with heavy impact to business performance. Typical large, complex quality problem is difficult to correct, there are several attempts done to resolve the problem, several root causes can be identified and corrected but the effect of the problem persists. It indicates that the real root cause is not identified and properly corrected. The large, complex quality problems are kind of special cause problems, problems that prevent restoration of the established level of performance or the status quo (Palady, 2002). They are different from common cause problems. Common cause problem is characterized by the stable performance level and the problem solution lies in the optimization of the performance level. Special cause problems must be resolved before common cause problems. Large, complex special cause problem has to be solved using a systematic quality improvement methodology. We will focus on three methodologies: Six Sigma (Lean Six Sigma), Shainin RedX® strategy and Kepner-Tregoe problem management.

2 Methodologies to approach large and complex quality problems

2.1 Six Sigma and Lean Six Sigma

Six Sigma was originally developed by Motorola in 1985 as the set of the tools for process improvement.

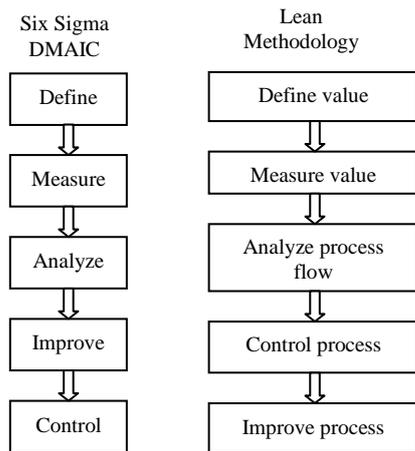
Table 1 DMAIC roadmap of Six Sigma methodology

Define	<ul style="list-style-type: none"> ▪ Define the customer and their "Critical To Quality" characteristics (VOC) ▪ Define the business processes that are involved (VOB) ▪ Create a process map ▪ Decide on the metrics ▪ Form a project team and develop a project charter ▪ Evaluate the financial savings of the six sigma project
Measure	<ul style="list-style-type: none"> ▪ Establish and measure Ys ▪ Create sampling plan for data collection ▪ Validate measurement system ▪ Identify possible Xs
Analyze	<ul style="list-style-type: none"> ▪ Data analysis ▪ Gap analysis between current and required performance ▪ Identify the sources of variation ▪ Test hypotheses ▪ Decide on the processes to be improved
Improve	<ul style="list-style-type: none"> ▪ Propose solutions ▪ Perform pilot studies, design of experiments etc. to evaluate proposed solution ▪ Create an implementation plan ▪ Implement changes and prove effectiveness
Control	<ul style="list-style-type: none"> ▪ Implement controls to ensure improvement is reached and stable ▪ Develop procedures and train the staff ▪ Update control plan, FMEA and related quality documentation ▪ Evaluate the financial savings of the six sigma project ▪ Define feedback loop

Six Sigma is a robust continuous improvement strategy focused on improvement of the quality of process outputs by identifying and removing the causes of defects and minimizing process variability. Six Sigma provides a structured data-driven methodology with set of tools and techniques which are used to measure process performance both before and after corrective action implementation, to analyze the data, to find a most effective solution and implement it. No changes are made until the current process and its individual steps are completely understood, documented and measured. The revised process is measured and verified as soon as correction is done. We have to consider Six Sigma is strongly focused on the customer requirements by translation customer needs into operational terms and definition of the processes critical to quality (Juran, De Feo, 2010). Six Sigma's roadmap consists of five steps known as DMAIC roadmap (Table 1).

Lean Six Sigma is a problem solving concept combining Lean and Six Sigma approach which was first published by Michael George in 2002 (George, 2002). Lean Six Sigma applies the Six Sigma DMAIC (Define, Measure, Analyze, Improve, Control) roadmap where the tools are based on combination of the Lean and Six Sigma tool kit. The aim is to improve quality and efficiency of the process which is defined as the value stream (Nave, 2002). This approach allows us to evaluate process as the costs flow and identification of the waste in the process while defects are considered as waste. It means a Lean Six Sigma project is the fusion of the Lean waste elimination project and the Six Sigma project (Scheme 1). The joint point where both methodologies meet are the Six Sigma's critical to quality characteristics which represents waste in the lean concept. Target of Lean Six Sigma is a sustainable improvement of quality, decrease of costs, reduction of waste, improved metrics and introduction of the change in company culture.

Scheme 1 Six Sigma DMAIC concept and Lean Methodology concept



2.2 Shainin Red X® strategy

The Shainin Red X® methodology was developed by Dorian Shainin from 1950s to 1990s. The basic concept can be summarized by 6 statements:

- Variation exists in all processes
- Understanding and reducing variation are keys to success
- In the real world nothing happens without a mason
- There is always a Red X® (the main root cause)
- Finding and controlling the Red X® is the only way to reduce variation
- Executing a progressive search by “talking to the parts” is the best way to find the Red X®

Today the Shainin Red X® methodology consists of about 30 techniques and tools – the known as well as newly developed techniques – which create the comprehensive stepwise system for process improvement (Shainin, 1993). Shainin problem solving roadmap is called FACTUAL™ (Focus, Approach, Converge, Test, Understand, Apply, Leverage) is shown in Table 2. (Hysong, Shainin and Six Sigma).

Table 2 Shainin roadmap: FACTUAL™

Focus	<ul style="list-style-type: none"> ▪ Leverage probable events ▪ Project Definition ▪ Estimate the impact
Approach	<ul style="list-style-type: none"> ▪ Green Y Identification and Description ▪ Development of Investigation Strategy ▪ Measurement System Verification
Converge	<ul style="list-style-type: none"> ▪ Converging on the Red X ▪ Compare best and worst case ▪ Red X Candidate Identification
Test	<ul style="list-style-type: none"> ▪ Risk Assessment ▪ Red X Confirmed by Trial
Understand	<ul style="list-style-type: none"> ▪ Green Y to Red X Relationship Understood ▪ Optimization of interactions ▪ Customer needs translated to limits ▪ Appropriate Tolerance Limits Established
Apply	<ul style="list-style-type: none"> ▪ Corrective Action Implemented and Verified ▪ Procedures updated ▪ Green Y monitoring ▪ Project Benefits and Cost Savings
Leverage	<ul style="list-style-type: none"> ▪ Read Across Red X Control ▪ Savings Calculated ▪ Lessons Learned

The Shainin methodology is established on convergent approach. What does it mean? It is absolutely necessary to understand the output – the Green Y® – of the process. No problem can be solved without knowledge of the output and related processes, symptoms of the failure as well as difference between good and bad parts. This is ensured by approach which is described as “talking to parts”, set of techniques used to converge the problem as elimination of suspects, comparison between good and bad parts, finding extremes. To express this approach

mathematically we have to understand the relation $\Delta Y = f(\Delta X)$. The key difference between Shainin Red X® strategy (FACTUAL™) and Six Sigma methodology (DMAIC) is the phase Approach. The problem solver develops a strategy based upon the physics of the problem and the comparison of BOB (Best of Best) and WOW (Worst of Worst) parts (Dao, 2009).

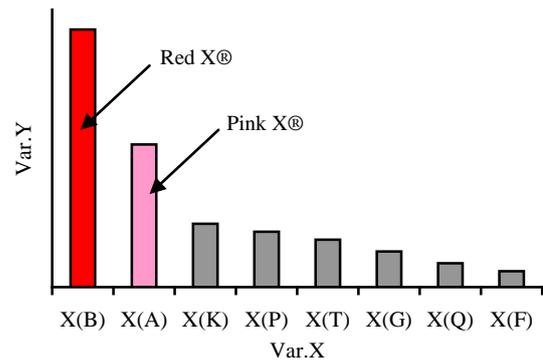
The key idea of Shainin Red X® methodology is Red X® paradigm. This paradigm is coming out of the application of the Pareto principle to the causes of the variation (picture 1). By application Pareto 80/20 principle you would get contribution of the Xs (process inputs) to the ΔY (increment of the output) as shown on picture. There could be cases three causes are identified - called Pink X and Pale Pink X - which are usually in the interaction with Red X. The RedX paradigm is in strong contradiction with so called Quincunx paradigm where all factors contribute equally to the change of the Y. If we express the variance of the output Y as

$$\sigma(y)^2 = f(\sigma(x)^2) \text{ therefore}$$

$$\sigma(y)^2 = A_1^2 \sigma_{x_1}^2 + A_2^2 \sigma_{x_2}^2 + \dots + A_{12}^2 \sigma_{x_{12}}^2 + \dots + \varepsilon^2$$

Following the Quincunx paradigm the contributions of each process input is absolutely equal. This is unlikely in the real conditions taking in account the coefficients depend on the chemical, physical, geometrical and mechanical properties of a system and its component.

Picture 1 Red X® paradigm



Source: www.shainin.com

2.3 Kepner-Tregoe problem management

This methodology has been developed in 1958 by Benjamin Tregoe and Charles Kepner (Kepner, 1981). They discovered that successful decision making depends on the logical process to gather, organize, and analyze information before taking action. Their research focused on observing the practices of both effective and ineffective decision makers who acted in critical business situations was published in the book The Rational Manager (McGraw Hill, 1965).

The Kepner-Tregoe problem management consists of four methods (Scheme 2) which can be used independently. The roadmap (Table 3) shows the related tools.

The problem analysis phase is most important regarding quality improvement. We gather and analyze just the information needed to find and correct the true cause of a problem in this phase. Intention is to understand the explaining the observed effects in order to take proper corrective action. To specify the problem correctly four areas are questioned: What - Identity, Where - Location, When - Timing, Extent - Size. The most frequently used tool within the Kepner-Tregoe method is so called Is/Is Not analysis used for detail description of problem in order to identify the real root cause.

Scheme 2 Four methods of Kepner-Tregoe problem management

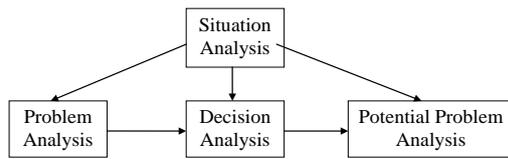


Table 3 Roadmap of Kepner-Tregoe analysis

Situation Analysis	<ul style="list-style-type: none"> ▪ Identify Concerns ▪ Set Priority ▪ Plan Next Steps ▪ Plan Involvement
Problem Analysis	<ul style="list-style-type: none"> ▪ Describe Problem ▪ Identify Possible Causes ▪ Evaluate Possible Causes ▪ Confirm True Cause
Decision Analysis	<ul style="list-style-type: none"> ▪ Clarify Purpose ▪ Evaluate Alternatives ▪ Assess Risks ▪ Make Decision
Potential Problem Analysis	<ul style="list-style-type: none"> ▪ Identify Potential Problem (Opportunities) ▪ Identify Likely Causes ▪ Take Preventive Action ▪ Plan Contingent Action and Set Triggers

3 Comparison of the techniques

Looking at the overview mentioned before we have three powerful methods available to solve the quality problem or to improve the quality. Lets assume there is a quality engineer staying in front of requested quality improvement action. This is already a challenge itself. The question is how to apply the above mentioned techniques in a most effective way? Do we need a decision tree to pick the most powerful technique for a particular problem? I do not think this is the case. If we look on the application of the methodologies in practice we would find the boundaries are not strict. Six Sigma is probably the most generic methodology among these three as we are talking about set of tools as described earlier in this article. The Six Sigma set of tools is not exactly defined. This reflects the real quality improvement process: we will use the most valuable tool which will help us to move project further. In other words we can use a Shainin tool or a Kepner-Tregoe tool in frame of DMAIC method in a related phase.

To have an option of tool choice we have to align these techniques in a common framework as each methodology used different terminology as well as project planning. There are several ways to categorize the phases of the problem solving methodologies within one common framework in order to make comparison of the different techniques (de Mast, 2000)(de Mast, 2004). We can define the general quality improvement program consists of 5 phases: Problem definition, Diagnosis, Generation and selection of solutions, Enhancement and New routines (Table 4).

The most critical phase is diagnosis. The efficiency in this step strongly depends on the chosen investigation strategy which predetermines the set of tools to be used for diagnostics purposes. Elimination strategy contained in Shainin methodology and Kepner - Tregoe problem management is based on strategy called branch-and-prune (De Maast, 2012). Branch-and-prune strategies seek to balance between excessive divergence of the search space and excessive convergence by treating the search space as a hierarchical tree structure, in which high-level and general causal directions are branched into more detailed causal explanations. The problem solver works top-down, aiming to prune high-level branches in their entirety, before elaborating only a limited number of branches into more detail.

There are some limitations to use the tools independently. The first one is related to the type of data. We have to consider preference in the Shainin methodology is the work with quantitative data. Other limitation can be related to "key user" of the methodology: Six Sigma and Kepner-Tregoe projects are

usually designated for multidisciplinary teams while Shainin project can be done by an individual engineer.

4 Conclusion

This paper compares three main methodologies which are most frequently used to solve large, complex quality problems. The aim of the comparison is not to find the best one but to find out whether these methodologies can supplement each other. The general quality improvement roadmap was defined consisting of 5 phases: Problem definition, Diagnosis, Generation and selection of solutions, Enhancement and New routines. If we align all three methodologies within this framework we can recognize the individual steps as supplementary. This would allow us to combine the tools which are normally used by within individual methodologies. The most generic methodology - Six Sigma – and the related roadmap DMAIC (Define, Measure, Analyze, Improve, Check) can be used as the backbone. The next step of the research will be selection of suitable tools to develop a system which could be used for quality improvement of the products consisting of large quantity of the components.

Note: Red X®, Green Y®, FACTUAL™ are legally protected marks of Shainin LLC.

Literature:

1. Dao, H., Maxson, B.: *A Convergent Approach to Problem Solving*, Proceedings from ASQ's World Conference on Quality and Improvement, Minneapolis, Minnesota, May 18-20, 2009, vol. 63, s. 1-5
2. de Mast, J.: *A methodological comparison of three strategies for quality improvement*, International Journal of Quality and Reliability Management, Vol. 21 No. 2, 2004, s. 198-213, ISSN: 0265-671X
3. de Mast, J., Lokkerbol, J.: *An analysis of the Six Sigma DMAIC method from the perspective of problem solving*, International Journal of Production Economics, Volume 139, Issue 2, October 2012, s. 604–614, ISSN: 0925-5273
4. de Mast, J., Schippers, W., Does, R., van den Heuvel, E.: *Steps and strategies in process improvement*, Quality and Reliability Engineering International, Vol. 16, No. 4, 2000, s. 301-11, ISSN: 1099-1638
5. George, M.: *Lean Six Sigma: Combining Six Sigma with Lean Speed*, New York: McGraw-Hill, 2002, 300 s., ISBN: 978-0-07-138521-3
6. Hysong, C., Shainin, R.: *Shainin and Six Sigma*, available at <https://shainin.com/library/FACTUALvDMAIC>
7. Juran, J.: *Juran on Leadership for Quality: An Executive Handbook*, New York: Free Press, 1989, 376 s., ISBN: 978-0-02-916682-6
8. Juran J.M., De Feo, J.A.: *Juran's Quality Handbook, Sixth edition*, New York: McGraw-Hill Professional, 2010, 1136 s., ISBN: 978-0-07-162973-7
9. Kepner, CH., Tregoe, B.: *The New Rational Manager*, Princeton: Princeton Research Press, 1981, 224 s., ISBN: 978-0-93-623101-3
10. Nave, D.: *How To Compare Six Sigma, Lean and the Theory of Constraints*, Quality Progress, Vol. 35, No. 3, March 2002, s. 73-78, ISSN: 0033-524X
11. Palady, P., Olyai, N.: *The Status Quo's Failure In Problem Solving*, Quality Progress, Vol. 35 No. 8 ,August 2002, s. 34-39, ISSN: 0033-524X
12. Shainin, R.: *Strategies for Technical Problem Solving*, Quality Engineering, Vol. 5, No. 3, 1993, s. 443-448, ISSN: 1532-4222

Table 4 Definition of the common framework and related phases

Phase	Six Sigma	Shainin	Kepner-Tregoe
Problem definition	<ul style="list-style-type: none"> ▪ Project definition ▪ Definition CTQs ▪ Estimation of financial benefits 	<ul style="list-style-type: none"> ▪ Define project ▪ Establish measurement system ▪ Green Y® description 	<ul style="list-style-type: none"> ▪ Strategy Formulation ▪ Situation Appraisal ▪ Project Selection
Diagnosis	<ul style="list-style-type: none"> ▪ Validate measurement system ▪ Create sampling plan ▪ Measure characteristics 	<ul style="list-style-type: none"> ▪ Validate measurement system ▪ Investigation Strategy Selected ▪ Converging on RedX® 	<ul style="list-style-type: none"> ▪ True Cost Analysis ▪ Statistical Process Control
Generation and selection of solutions	<ul style="list-style-type: none"> ▪ Statistical analysis ▪ Gap analysis ▪ Identify the sources of variation ▪ Identification of processes to be improved ▪ Propose solutions ▪ Perform pilot studies to evaluate proposed solution 	<ul style="list-style-type: none"> ▪ Red X® Candidate Identified ▪ Trial to confirm RedX® ▪ RedX® Confirmed ▪ Green Y® to RedX® relationship understood 	<ul style="list-style-type: none"> ▪ Problem Analysis ▪ Performance System Analysis
Enhancement	<ul style="list-style-type: none"> ▪ Plan implementation ▪ Implement changes ▪ Prove effectiveness 	<ul style="list-style-type: none"> ▪ Appropriate Tolerances Defined ▪ Corrective Action Implemented and Verified ▪ Related Procedures Created 	<ul style="list-style-type: none"> ▪ Decision Analysis ▪ Potential Problem Analysis
New routines	<ul style="list-style-type: none"> ▪ Implement controls Develop procedures Update control plan Modify FMEA ▪ Evaluate the financial savings ▪ Define feedback loop 	<ul style="list-style-type: none"> ▪ Process control implemented ▪ Lessons learned ▪ Project Benefits Calculated 	<ul style="list-style-type: none"> ▪ Performance System Design ▪ Gatekeeper

Primary Paper Section: J

Secondary Paper Section: S

MATHEMATICAL MODEL OF MOBILE ROBOT FOR PURPOSE OF PATH TRACKING OF THE ROBOT

^aLUBICA MIKOVÁ, ^bRÓBERT SUROVEC, ^cERIK PRADA,
^dMICHAL KELEMEN

Technical University of Košice, Faculty of Mechanical Engineering, Department of Applied Mechanics and Mechatronics, Letná 9, 042 00 Košice, Slovakia
email: ^alubica.mikova@tuke.sk, ^brobert.surovec@tuke.sk,
^cerik.prada@tuke.sk, ^dmichal.kelemen@tuke.sk

Abstract: This article is about designing and constructing a four-wheel chassis, which will possess better negotiability of diverse terrain. One of the main features of mechatronic approach to designing advanced products is complex understanding of the technical object and its computer modeling. Simulation model of a mobile robot equipped with the sectional undercarriage it is useful to apply methods of kinematic analysis and synthesis of bonded mechanical systems.

Keywords: mobile robots, simulation

1 Introduction

The kinematic description of mechanical system issue from an abstraction – simplification of reality. In simulation model we integrate mechanical, electrical and control subsystem and thus acquire information about their mutual interactions. Analyzed is a used concept of chassis motion control of mechatronic systems on the principle of differential wheel control for the task of active tracking of planned chassis path. It is possible to verify a large spectrum of applications, which can be typical for operation of the simulated subject.

2 The differential mobile robot

Differentially controlled mobile robots usually have three or four wheels. Driving wheels are fixed on both sides of robot and one or two wheels are supportive while being positioned in front or in rear. Robot can move forward or backward and is able to change head angle through speed control of driving wheels station.

2.1 Mathematical model of mobile robot

Computer-aided simulation of kinematics of mechanisms is an important integrated part of the modern approach to the design of technical subjects. Deformations of individual parts of the mechanisms can be neglected in a great number of practical tasks and that is why it is possible to apply the so-called system of rigid bodies with mutual interrelations. Many principles of kinematics and dynamics of the three-dimensional mechanisms are very complicated to be understood without a necessary theory.

This mathematical model describes positions and velocities of the individual wheels. However, if the complex movements are disintegrated into the individual sequences of simple, basic steps, so the solution process can be simplified efficiently. Such disintegration is a standard part of all tasks concerning movement of bodies, practically. The so-called method of matrix kinematics is a very efficient and general method for solution of body movements and for all branch of kinematics, actually [1].

Application of the coordinate system instead of the body for definition of the positions and orientations is a more accurately method. The coordinate system can be connected directly with the body or not. The homogenous coordinates are applied for a simplification of operations with bodies in the three-dimensional space [2, 3].

For the mathematical description of a serial kinematic chain is best to use Denavit-Hartenberg principle of deployment of joint chain to the coordinate system [4].

The kinematic model of undercarriage takes into consideration the real dimension of the robot.

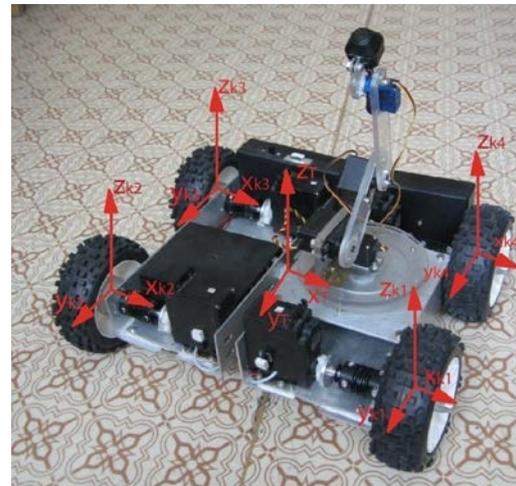


Fig. 1 Local coordinate systems

Chassis frame is composed of two pieces connected by a passive joint. Robot chassis has a four-wheel drive that does not lose traction even on diverse terrain surface thanks to the passive joint. It enables both parts of frame to randomly tilt depending on terrain difficulty.

Hence it is achieved that every wheel in any moment keeps contact with terrain surface [2].

Transformation corresponding to shift in axes x,y,z, or transformation corresponding to rotation around defined axes represents coordinate qi [5,6].

Resulting transformation matrix of wheel 1 position and rotation to geometric center of gravity of chassis:

$$T_{s1} = \begin{pmatrix} \cos(q_1) & -\cos\left(\frac{q_4}{2}\right)\sin(q_1) & \sin\left(\frac{q_4}{2}\right)\sin(q_1) & q_2 \cos(q_1) - 95 \cos\left(\frac{q_4}{2}\right)\sin(q_1) - 175 \cos(q_1) - q_3 \sin(q_1) \\ \sin(q_1) & \cos\left(\frac{q_4}{2}\right)\cos(q_1) & -\sin\left(\frac{q_4}{2}\right)\cos(q_1) & 95 \cos\left(\frac{q_4}{2}\right)\cos(q_1) - 175 \sin(q_1) + q_3 \cos(q_1) + q_2 \sin(q_1) \\ 0 & \sin\left(\frac{q_4}{2}\right) & \cos\left(\frac{q_4}{2}\right) & 95 \sin\left(\frac{q_4}{2}\right) \\ 0 & 0 & 0 & 1 \end{pmatrix}$$

Based on constructed transformation matrices it is possible to construct simulation models for defining center of gravity geometric position of chassis and wheels in Matlab/Simulink environment.

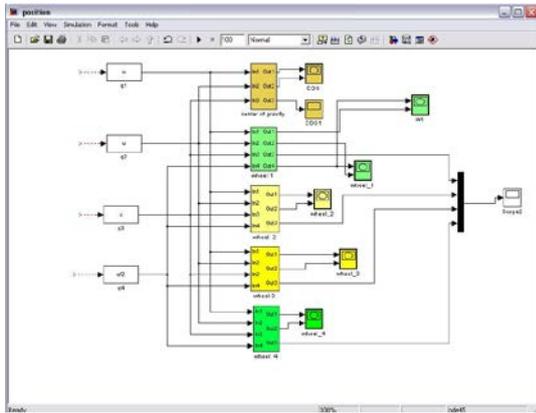


Fig. 2 Simulation model of position of center of gravity and wheels

Simulation model of position of geometric center of gravity of chassis and individual wheels comprises of several subsystems that have common input. Every subsystem represents position of wheel, or position of center of gravity to beginning O (Instantaneous Center of Rotation).

2.2 Control concept of chassis

There are particular restrictions for chassis motion which result from chassis parameters (wheels diameter, wheel base and geometry of wheels layout). Chassis motion should be stable and fluent to avoid slipping between wheels and terrain and to avoid mechanical shock resulting from rapid changes in chassis motion. However during chassis motion unavoidable trajectory deviations between current position and requested trajectory do occur because of path tracking control imperfection using wheels velocity and fault variables from environment (terrain roughness, friction forces changes between wheels and terrain and so forth) [7,8,9].

Trajectory deviations should be corrected online using requested linear and rotational chassis motion velocities by path tracking control.

In work [7] layout of kinematic control is designed, comprising of three levels of links (dynamic, kinematic and planning). This approach is similar to those, which are applied in robotic manipulators.

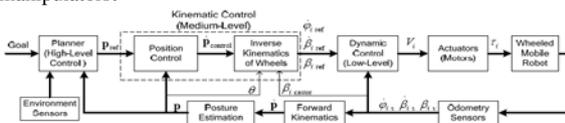


Fig. 3 Control scheme of the wheeled mobile robot [7]

3 Conclusion

Hence it is possible to use the model for calculating estimated or requested trajectory of chassis center of gravity and wheels. At the same time it is possible to examine model behavior in any given combination of chassis dimensions and relating to this there is an option of chassis geometry optimization in terms of obstacles negotiability on diverse terrain.

The created simulation model can be applied for calculation of assumed or intended path of the undercarriage centre of gravity and path of wheels.

Acknowledgements

The paper was created in the frame of project APVV-0091-11.

Literature:

1. GREPL, R. Mechatronika-vybrané problémy. Brno, 2008. ISBN 978-80-214-3804-0.

2. BRÁT, V., ROSENBERG, V., JÁC, V. Kinematika. STNL Praha, 1987.
3. BRÁT, V. Maticové metody v analýze a syntéze prostorových vázaných mechanických systému. Praha, 1981.
4. SVETLÍK, J., DEMEČ, P. Curved rotary module for modular construction of motion structures. Acta Mechanica Slovaca. Vol. 15, n. 1, 2011. ISSN 1335-2393.
5. ŠKARUPA, J., MOSTÝN, V. Methods and tools of design industrial and service robots. Viena Košice, 2002.
6. M. VALÁŠEK. Kinematics of robotic systems. 2011
7. GRACIA, L., TORNERO, J. Kinematic control of wheeled mobile robots. Latin American Applied Research, Vol. 38, p. 7-16, 2008.
8. CHIH-FU, CH., CHIN-I, H., LI-CHEN, F. Nonlinear Control of a Wheeled Mobile Robot with Nonholonomic Constraints. IEEE International Conference on Systems, Man and Cybernetic, ISBN 0-7803-8566-7, p. 5404-5410.
9. IVANJKO, E., KOMSIC, E., PETROVIC, I. Simple off-line odometry calibration of differential drive mobile robot. Proceedings of 16th International Workshop on Robotics in Alpe-Adria-Danube Region, Ljubljana, Slovenia, June 7-9, 2007, p. 164-169.

Primary Paper Section: J

Secondary Paper Section: JD, JW

