

Contemporary issues of societal development

Patrícia Kaplánová (ed.)

Novo mesto, 2017

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Reviewers

prof. Boris Bukovec, PhD

prof. Uroš Pinterič, PhD

Publisher: Faculty of Organization Studies in Novo mesto, 2017

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Publication is available at www.fos.unm.si in .pdf format.

CIP - Kataložni zapis o publikaciji
Narodna in univerzitetna knjižnica, Ljubljana

316.42(082)(0.034.2)

CONTEMPORARY issues of societal development [Elektronski vir] /
Patricia Kaplanová (ed.). - El. knjiga. - Novo mesto : Faculty of Organization
Studies, 2017

Način dostopa (URL): <http://www.fos.unm.si>

ISBN 978-961-6974-13-4 (pdf)

1. Kaplanová, Patricia
290030848

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Introduction

There is no other popular word in current academic discourse that a crisis. There are several phenomena explained by a crisis narrative: economic crisis, social crisis, migration crisis, crisis of democracy and politics as such, crisis of structural systems like healthcare, education and many more. Therefore, the crisis narrative contains several perspectives on changes identified in contemporary societies. Some scholars „blame“ a technological progress, social and economic development, industrialization, virtualization of interpersonal relations, or overall digitalization of everyday life. Undoubtedly, societies, and civilization itself, has gone through serious changes in a very short time. Referring to the economic crisis, gender or social inequalities, political dealignment, migration flows, ongoing conflicts, poverty and starvation, or rigid educational systems are just small part of a whole list of civilization issues. A coping with such transformations and unsolved problems of societies needs also a development of scientific approach and its prompt reaction by challenging those processes and their continuous analysis.

The aim of this book was meant to gather ambitious approaches and research on contemporary issues. The book is composed of seven chapters attributing to different perspectives on societal development like methodology of current trends in scientific research, the impact of technology of European consumer policies at national level, financial literacy as a consequence of education policy, post-economic crisis regional development,. Each author of chapter is trying to demonstrate her/his scientific view and elaborate the analysis of a sequence of modern societal progress.

In the first chapter, *Thongsay Phongphanit* (University of Szeged, Hungary) is demonstrating part of his research on “Teacher management at teacher training institutes in Laos”. His research reports on the developmental process of the instrument. It aims to assess two sets of self-constructed questionnaires by focusing on detecting and eliminating the erroneous wording and phrases in each item in case of an inappropriate and incongruent wording between

sub-scales and items. This small scale study is examining the validity and reliability of research instruments. Moreover the analysis found two sets of instruments gradually satisfying the research purpose and being statistically appropriate. As the main outcome of his study can be considered a method suitable to be employed to collect data in the full-scale study in the future.

The second chapter written by *Katarzyna Południak-Gierz* (Jagiellonian University in Krakow, Poland) deals with a reaction of national civil law to the European Union initiatives to support the information society. In her study "From information asymmetry to information overload - technological society of consumers" she examines how a lack of information, especially problematic in distance transactions, influences situation of both parties. EU legislator imposes information obligations on the professionals to grant the weaker party access to information vital for conclusion of contract. The catalogue of information duties is detailed, precise and extensive. Yet, human capability to absorb and process data does not grow at the pace forced by the technology development. As the outcome consumers, despite having access to information, are not better informed. Instead of decreasing information asymmetry, regulation grants an overflow of information. It creates an illusion of improvement in consumer's situation. As the main outcome of her research is that the failure of protection by information paradigm is caused by rational factors and behavioural biases. Moreover, an insight on future of information duties in consumer law within the Digital Market sphere is given.

The third chapter composed by research team of *Beáta Gavurová, Eva Huculová, and Matúš Kubák* (Technical University of Košice, Slovakia) demonstrates an increasing drop in financial literacy among university students of economics in Slovakia. Generally, there are selected groups of people financially literate, the majority of world population does not have any basic financial knowledge as well as no access to education. This study is aimed to compare levels of financial literacy of the selected economic faculties in Slovakia, and to compare levels of financial literacy between the first year undergraduates and those

graduates who are in the final year of their studies. Among several results the most important confirm a significant gender differences in level of financial literacy. Consequently, the level of financial literacy among first year students of Bachelor study was comparable with students of Master study and do not prove any significant enhancing of financial skills acquired through the graduation from university study program at economic faculties. The results of research provide important information for policy makers who should reflect a quality of financial education and implement efficient education policies in Slovakia, as well as for policy maker in other countries.

The fourth chapter written by *Anna D'ascenzio* (Università Suor Orsola Benincasa di Napoli, Italy) on topic "Isochimica factory as a "paradigmatic case study" of industrial relations in the South of Italy" is dealing with consequences of environmental pollution in Italy. The study investigates the different political stages of the establishment of asbestos factory in South Italy specifying anomalies in agreement employments and their effects on the recruitment of workers. Isochimica, a small company established in a town of South of Italy in 1982, in order to remove asbestos panels from railway carriages for commission of Ferrovie dello Stato (Italian National Railway company) has produced extensive damages in terms of environmental pollution and public health. Indeed, due to the dispersal of asbestos fibres, a large part of the workers employed in the factory has contracted asbestos-related pathologies and is still struggling to claim basic rights such as early retirement and the recognition of work-related illness. The main conclusion is that the pollution and pathologies among workers are cases of industrial experimentation of peripheral late liberalism.

The fifth chapter from *Petra Szlafkaiová and Erika Liptáková* (Technical University of Košice, Slovakia) deals with the issue of economic development in regions of the Visegrad group countries. The process of regional development is conducted through the implementation of regional operation programs such as Cohesion Policy of the European Union. The aim of this work is to investigate and compare the actual

economic development of 35 regions (NUTS 2 level) within the V4 in order to find out, whether the disparities among regions are enlarging or getting smaller in time period 2004 to 2014. The main contribution of the research was to identify the main five indicators of economic development in the Central European regions. Moreover, the cluster analysis showed that more developed regions under the regional policy of the EU have improved in results and outcomes. On the other hand, those regions which were underdeveloped stayed at the same level of economic and social progress. To sum up, the European Union Cohesion Policy, based on this research, does not seem to be efficient in supporting economic equality and sustainable development among regions.

The fifth chapter written by *Franc Žohar* (Ministry of Public Administration, Slovenia) "Regional Development in Slovenia: Insist of Change?" shows a strategy of balanced regional development leading to a widening gap between statistical regions in Slovenia. The majority of unsuccessful work of regional development agencies is unable to realize major or regional projects, with a strong role in municipal localities; the question arises whether it can modify the system of regional development in Slovenia to improve the functioning of regional development. The research analysis the system of regional development in Slovenia and the role of regional development agencies to improve management capacity and performance of balanced regional development. On the basis of argumentative critical review of the operation of Regional Development Agencies and the results of their operations, the outcome of this research points out that the strategy of balanced regional development undermines the functioning of the state as a whole.

The sixth chapter written by *Anca-Olga Andronic* and *Razvan-Lucian Andronic* (Spiru Haret University, Romania) on „Refugees in Europe: From Media Accounts to Psychiatric Trauma“ performs a view on current migration crisis in Europe from a perspective of social psychology. The study discusses how the crisis of refugees is presented in the European media and in Romania, a country that until

now has not been included in the “Balkan route” followed by the masses of migrants. Although, there should be some detachments reported on refugees, the Romanian media discourse is full of stereotypes on both the refugees and the reaction of the residents of the countries transited by them. The research also presents an analysis of the major trauma suffered by refugees, described as psychiatric conditions. The chapter concludes that the treatment of mental disorders is not just about medication and psychotherapy; but also the cultural dimension and social involvement are essential in reducing symptoms.

The last chapter composed by *Patrícia Kaplánová* (Faculty of Organisation Studies, Slovenia) deals with “Theoretical Approaches to Social Identities”. The research offers an exhaustive overview of theoretical approaches to social identities arguing their importance in modern understanding of societies. The study discusses theoretical and methodological frameworks of a concept of self as a position of individual in society. The study considers identities from sociological, psychological and political point of view. In the cases of civic, political and national identities, the chapter concludes that social identities are complex influenced by historical and societal development and are still developing alongside a change of society itself.

Based on abovementioned brief overview of contents of this book, the contribution lies on the current importance of topics elaborated in each chapter. Therefore, the main purpose of each chapter is to demonstrate a comprehensive examination of challenges in modern society. In the following pages, a reader can acknowledge these different perspectives on societal reality and adopt several explanations of societal development.

Patricia Kaplanova
Editor

A PILOT STUDY OF EXAMINING THE VALIDITY AND RELIABILITY OF RESEARCH QUESTIONNAIRES

Thongsay Phongphanit¹

*Doctoral School of Educational Sciences, University of Szeged,
Hungary*

thongsay@nuol.edu.la; thongsaiphongphanit@yahoo.com

Introduction

The research instrument is the main tasks of the research component and also became the priority activity that researchers inevitable, a thousand of publications widely discussed and controversial that associated to the examining of the well-research instrument designed in multi-methods in several times to be convergent amongst research objectives, sub-scale and item.

Refer to Oppenheim, (1992); Warwick & Lininger, (1975) suggested the words used in questions should be understandable to all respondents, and the meanings imputed to those words should be as universal as possible among respondents; Parten, (1950); Young, (1939) question wordings should avoid bias that would push answers one way or another; Likert, (1932); Thurstone, (1928) in order to minimize the impact of the idiosyncrasies of item wordings, it is best to aggregate answers to a battery of items into a single index and Krosnick (1999) viewed logically that the items used should be the few most efficient and effective ones tapping the construct of interest.

However, to maximize and minimize among easily and difficult

¹ Thongsay Phongphanit, the lecturer of course of Human resources Management and course of Educational research: theory and practice, A member of research team at the Department of Education administration and Management, Faculty of Education, National University of Laos.

wordings and phrases and helps the respondents to the best answers, it could be examined through the validity and reliability test of the self-constructed questionnaires. This paper will be overview the theoretical framework, Piloting study, Methods result, discussion and conclusion.

Theoretical framework

In the social science research field, questionnaire is one of several types of the research instrument and also most often used directly contact with respondents is not possible or necessary. It is probably the single most widely-used data source in educational research and it could be estimated that as many as half the research studies conducted use a questionnaire as a part of the data collection process. However, this broadly tools usage made some of an unforeseen circumstance related to anonymous words, terminology, item wording, phrases, asks about truism, ambiguity and others misunderstanding that motivated the author to overviews some concepts of the research questionnaires, validity and reliability test, responsiveness in term of truism and items.

Why questionnaire?

The mostly of the researchers and scholars preferred to employ the questionnaires in part of adapted, self-made either the mixed constructed would highly be a great usefulness and it also can be designed and used to collect vast quantities of data from a variety of respondents, large number of audiences in a short period, comfortable, feel free in selecting of scenarios using a scale of alternatives and anonymous, It basically seeks the opinions of individuals in a sample or a population on issues directly related to the objectives of the research study.

Aina, (2004:348), Siniscalco, & Auriat, (2005:4) viewed that the planner should also consider whether other means of data collections are more appropriate. Johnson & Christensen, (2007:162-163) stated they

can obtain information about thoughts, feelings, attitudes, beliefs, values, perceptions, personality and behavioral intentions of research participants; it can be used to collect quantitative, qualitative and mixed data; Wilkinson & Birmingham, (2003:8) viewed an effective questionnaire is one that enables the transmission of useful and accurate information or data from the respondent to the researcher, it has been centrally used to provide an indication of the make-up of society for centuries in the form of periodic census surveys and are often used by large organizations to establish people's views and opinions on a wide variety of topics.

(Sinjaru, (2012:71) it is broadly used in realm of scientific researches. (Likitwattana, 2000:90) offered two kinds of questionnaires as open and closed form questionnaires; (Sisaad: 2001:74-75) suggested two characteristics as open-ended or unstructured questionnaires which is a question offered the respondents' self-elicited freely in writing down answers, for instance, 'Tell us about your school?'; while other type are 'closed form or structure questionnaires' offered short-answer: yes/no; e.g Do you wear the glasses?; (Sinjaru, 2012:72-74) added on 'closed-ended question' in three characteristics are *checklist*: male/female; *Ranking*, by putting number: which fruit do you preferred mostly in three first? Cherry; apple; mango; pineapple; pear ; walnut; orange. *Rating scale or liker-scale* are 3; 5; 7 or 9 levels with 'rating statement' such as 1 = very difficult understanding, 2 = difficult; 3 = neutral; 4 = easy understanding; 5 = very easy understanding, this kind offered the respondents choose one number which is mostly fit to their current situation.

Wilkinson & Birmingham, (2003: 10-11) added one more different above mentioned as typical '*multiple choice question*' would be which of the following are important attribute of an employee?: good timekeeping; well-developed customer relation skills; good numeric skills; ability to liaise with other department staffs.

Principles of Questionnaire Construction

A hundred of publications viewed on the principle and step of constructed questionnaires in differentially based on the research field, topics, and aims or objectives, (Sisaad, 2001:77) suggested six principles: (1) identify aim or objective clearly of what we needs; (2) make the question match the research objectives; (3) chronology the questions with the draft's titles basis; (4) avoids the huge questions and redundant; (5) minimize of the respondents' barrier; (6) language communication should be awareness on wording, sentences and phrases clearly, easy understand; fit to the respondents' qualification background; one problem on each item; avoid the multiple answers; familiar or local word; do not ask the personal confidential. Johnson, B & Christensen, (2012:164) offered fifteen principles of questionnaires construction: (1) Make sure the questionnaire items match your research objectives; (2) Understand your research participants; (3) Use natural and familiar language; (4) Write items that are clear, precise, and relatively short; (5) Do not use "leading" or "loaded" questions; (6) Avoid double-barreled questions; (7) Avoid double negatives; (8) Determine whether an open-ended or a closed-ended question is needed; (9) Use mutually exclusive and exhaustive response categories for closed-ended questions; (10) Consider the different types of response categories available for Closed-ended questionnaire items; (11) Use multiple items to measure abstract constructs; (12) Consider using multiple methods when measuring abstract constructs; (13) Use caution if you reverse the wording in some of the items to prevent response sets in multi-item scales; (14) Develop a questionnaire that is easy for the participant to use and (15) Always pilot test your questionnaire in several times if possible.

Sinjaru, (2012: 85) recommended seven principles for questionnaires construction: (1) study and compiles the relevant theories and concepts then analyses and synthesis prior to draft the questionnaires structures; (2) identify and scope structures and items' language usage; (3) discusses with supervisor (improve more, if disagree); (4) specific experts check (improve more, if disagree); (5) meet supervisor

for piloting or tryout with 20-30 participants out of the main sampled; (6) analyzing data to see the questionnaires' quality; (7) improve and completing questionnaires package and offered it to supervisor for validating basis.

Likitwattana, (2000:103) offered five principles of questionnaires construction: (1) identify and scope the basic requirement; (2) select the type of researchers instrument appropriately; (3) draft the structure and consider wording each items questionnaires; (4) testing the quality with multi-methods and (5) improving and completing the package. Soukkhavong, (2010) offered three sections mainly instruction, respondents' personal data, the main aspect of the research study, additional opinions at the end of each aspect.

Type of questionnaires measurement

Measuring technique can either indicate directly the value of the measured quantity or only indicate its equality to a known measure of the same quantity and its value of the small difference between the measured quantity and the measure having a value very near to it.

Gay and Airasian, (2005) points out several types of measurement which depend on the research field, research topic and variables, those are *cognitive test* including achievement tests, aptitude test; *affective tests* consisted of attitude scales such as Strongly agree to Strongly disagree, and other five points-likert scale; *project tests* comprised of materials in such picture and people's feeling.

Besides, Gay and Airasian, (2005) also proposed measurement scales to be a reference in wight with the score produced likes *normal variable* also called categorical variable, represent the lowest level of measurement. For identification purpose, the normal variable is often represented by number, e.g male = 1 and female =2. *Ordinal variable* it is not only classified person or objects, they also rank them in term of the degree to which they possess a characteristic of interest, e.g if 50 people were rank from 1 to 50. *Interval variable* it has all the

characteristics of nominal and ordinal variables, but also have equal intervals and also used in field of educational research, such as achievement, aptitude, motivation, and attitude test are treated as interval variable, for example: that the difference between a score of 30 and a score of 40 is essentially the same as the difference between a score 50 and a score of 60 and etc....*Ratio variables* it represents the highest, most precise, level of measurement. In addition, it has a true zero point, for example, if 'no weight' is a meaningful one.

Validity tests

Validity is described as the degree to which a research study measures what it intends to measure. Hardesty & Bearden (2004) suggested four types of validity test as *internal validity* refers to the validity of the measurement and test itself that focused on face validity, concurrent, productive and construct validity, whereas *external validity* refers to the ability to generalise the findings to the target population which is comprised of population, setting, task or stimulus, social. Siniscalco and Auriat, (2005) offered three kinds as content (or face) empirical (or predictive) and concurrent validity. Gay & Airasian, (2005) added that validity is the most important characteristic a test or measuring instrument can possess, and it also crucial in all forms of research and all types of tests and measures as well as this involving three distinct approaches to test validity such as *content validity*, mean to compare content of the test to the domain being measured, and determined by expert judgment; *criterion-related validity*, to observe the correlate score from one test to the criterion measure either the same or different; *construct validity* is the amass convergent, divergent, and content related evidence to determine that the presumed construct is what is being measured.

Sinjaru, (2012) viewed educational research consistency is crucial to make sure that research is validity and reliability and would be response all research questions, aims and hypothesis as well. Validity test could be conducted in multi-methods, depends on the field or area majoring and specific purpose, questioning, hypothezing. One of

the most preferred technique of validity test widely used as the Index of Item of Objective Congruence or IOC, Rovinelli and Hambleton, (1977) stated on IOC it is a procedure used in test development for evaluating content validity at the item development stage. The validity test is aims to assess two sets of self-constructed questionnaires by focusing on detecting and eliminating the erroneous wording and phrases in each item in case of an inappropriate and incongruent wording between sub-scales and items. Other words, it aims to extend to which the test in what it is supposed to measure and performs. It is generally measured in degrees as a process; it is also involved collect and analyzing data to assess the accuracy of an instrument through the statistical test. Likitwattana, (2010) suggested some methods of validity test by IOC technique with 3-5 specific experts to check and assess its validity toward the consistency based on accepting criteria average to be an instrumentality of research study. The IOC formula below as the main method to calculate or validity test.

$$IOC = \frac{\sum R}{N}$$

Where: IOC = Index of Item of Objective Congruence

R = index item score rate by specific expert

Σ = sum score

N = number of expert

IOC ≥ 0.5 (criteria of average IOC)

Table 1. The quality measure methods

Type of research instrument	The characteristic of measurement			
	Validity	Reliability	Difficulty	Discrimination
Questionnaires	✓	✓	-	-
Test	✓	✓	✓	✓
Attitude test	✓	✓	-	-
Interviews	✓	✓	-	-
Observation	✓	✓	-	-

Sources: (Gay and Airasian, 2005:151-175); (Likitwattana, 2000:105-116); (Sinjaru, 2012:65-85); (Sisaad, 2001: 94-113).

Based on the principles and component of questionnaires

construction that has had above-mentioned, it observed that questionnaires should be cleared and precise with familiar language, avoiding bias word, phrases, double-barrelled questions, offer five Points Likert- scale, so that the researchers take it into the drafted as the Set A for 'Teacher management' which is under the six sub-scales and Set B for 'Causal of teacher burnout' as the main scope of research study. The questionnaires sample has shown in the above and below are a part of six sub-scales of the Set A 'Teacher Management' that researcher designed to elicit information with the leader/administrator at the Teacher Training Institutes in Laos toward their awareness in functioning responsibility, also at the end of each sub-scale is provided freely for respondents' opinions in using some appropriate wordings or other relates for further revising of the item properly.

Table 2. Sample of the first draft of questionnaire, (Set A: Teacher Management)

No. item	Sub-scale: 'Teacher demands analysis'	Validity test				Reliability test					
		Experts check				Academic staff assess					
		A	Not sure	D		SA	A	Not sure	D	SD	
1	Title and nature of job										
2	Title of subjects taught demand urgently										
3	Imbalancing between math and social teacher										
4	Teacher personality				→						
5	Teacher communication skill										
6	Teaching skill or pedagogical										
7	Recruitment-selection process										
8	Teacher appraisal performance										
9	Teacher compensation										
Others comments, which words or phrases do you prefer to replace the inappropriate words, please specify.....						Others comments, please specify.....					

Table 3. Sample of the first draft of questionnaire, (Set B: Causal of Teacher Burnout)

No ite m	Cause of teacher burnout toward faculty board management	Validity test				Reliability test				
		Experts check				Teaching staff assess				
		A	Not sur e	D		S A	A	n/ s	D	S D
1	subject taught matter									
2	Taught several subjects per semester									
3	too teaching hours per week heavily									
4	Cynicism among leaders and teachers				→					
5	Lack of autonomy in career performance									
6	inadequate orientation session									
7	unfairness in using teaching tools									
8	fatigued on extra activities assigned									
Other comments, which words or phrases do you prefer to replace the inappropriate words.....					Other comments, please specify.....					

Besides, the measuring quality of research questionnaire, we need the criterion of the average mean score to verify the right interpretation of score produced.

Reliability test

Reliability is the degree to which a test consistency measures whatever it is measuring, the more reliable a test is, the more confidence we can have that the scores obtained from the test are essentially the same scores that would be obtained if the test were readministered to the same test takers. Joppe, (2000) stated reliability as the extent to which

results are consistent over time and an accurate representation of the total population under study is referred to as reliability and if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable.

Table 4. Rating and interpreting criteria

Questionnaires Rating criteria (Liker-scale)	Criteria of the average mean scores
Number 5 = mean to Strongly Agree Number 4 = mean to Agree Number 3 = mean to Neither Number 2 = mean to Disagree Number 1 = mean to Strongly Disagree/lowest	4.51 – 5.00 = Strongly Agree 3.51 – 4.50 = Agree 2.51 – 3.50 = Neither 1.51 – 2.50 = Disagree 1.00 – 1.50 = Strongly Disagree
Index of Item of Objective Congruence (IOC)	IOC Criteria
+1 = item in each sub-scale is congruent to objectives 0 = not sure - 1 = item in each sub-scale is not congruent to objectives	IOC \geq .50 – 1.00 (acceptance)
Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$ - to $0.6 > \alpha \geq 0.5$	Excellent Poor
KMO	Criteria
- 0.90 to 1.00 - 0.00 to 0.49	Marvelous Unacceptable
Correlation coefficient (r)	Criteria
= +0.30 to +1.00 = - 0.30 to -1.00	Positive Negative

Source: (Vigias, (2006); Sijaru, 2012:75); Sisaad, 2001:121) Johnson & Christensen, (2012)

However, the classical test theory, any score obtained by examining questionnaires is composed of both the "true" score, which is unknown, and "error" in the measurement process. The true score is

essentially the score that a person would have received if the measurement were perfectly accurate. Reliability can be thought of as consistency, there are four general estimators that it may encounter in reading research:

- Inter-Rater/Observer Reliability: The degree to which different raters/observers give consistent answers or estimates.
- Test-Retest Reliability: The consistency of a measure evaluated over time.
- Parallel-Forms Reliability: The reliability of two tests constructed the same way, from the same content.
- Internal Consistency Reliability: The consistency of results across items, often measured with Cronbach's Alpha. Cronbach (1951) points out that the Test the Reliability Coefficient for *Internal Consistency* of questionnaires with maximum 10-60 sampled to see the Alpha-Coefficient as Cronbach's alpha score is significance greater at $>.75$ totally and each item score is significance greater at $> .80$ is consider item homogeneity.

In addition, Tungsujarittam (2014) proposed some ideas to evaluate the test's reliability, the KR-20 (Kuder Richardson) was used in the study. The test's reliability shows accurate measures of the test takers' proficiency whenever the test is used, with different students and/or different test takers, Green, (1998). The KR - 20 values between 0-1. The closer the value is to the whole number 1.00, the greater the test's reliability. Conversely, the KR-20 gets close to 0.00, the low consistency of the test is. Hence, the criteria of the test's reliability at 0.60 and over are acceptable.

Table 5. Summary of methods for measuring reliability

Type of reliability	Number of Testing sessions	Number of format	Statistical procedure
Test-retest	2	1	Correlation coefficient
Equivalent form	1 or 2	2	Correlation coefficient
Internal consistency	1	1	Kuder-Richardson, coefficient-alpha or correlation coefficient
Inter-scorer	1	1	Correlation coefficient

Source: (Johnson, B & Christensen, L. 2012:138)

Piloting

Problem statements

The problems are facing challenges for upcoming of the research tilted 'Teacher Management at Teacher Training Institutes in Laos' it was rarely full reported in publications on the questionnaire to fit and adapted it, that's why author self-constructed and need to examine of its validity and reliability and determine the proper wording and phrase in each item. The main issues in self-made questionnaire is concerned on the wording, phrases which is frequently encountered among respondents. Besides, thousands of empirical studies provide undefined in detail and surprisingly unanimous advice on the issues.

Questions

In order to arrive the aim of this study, it would be to ask the following question that what does wording and phrases in the questionnaires sets needed to be omitted?; Is there statistically significant in reliability test? and which wording and phrase do the respondents reject frequently?

Aims of pilot study

This pilot study is aims to assess two sets of self-constructed questionnaires by focusing on detecting and eliminating the erroneous wording and phrases in each item in case of an inappropriate and incongruent wording among item question, sub-scales and research objectives.

Methods

Participants: this small-scale study is a part of my full-scale research study titled 'Teacher Management at Teacher Training Institutes in Laos'. Thus, the participants were five specific experts and 20 academic staff in the department of personnel and organization, Ministry of Education and Sports and five senior teachers and 20 teaching staff in the Faculty of Education, Souphanouvong University with 50 totally

and these were asked to check and assess the questionnaire set A Teacher Management and set B Cause of teacher burnout respectively. The data collection took place in Laos by personally during July-August 2016.

Instrument: There are two sets of self-constructed questionnaires, the set 'A' for teacher management, consisted of six sub-scales with 63 items totally, break down as job analysis (9 items); recruitment and selection (9 items); pre-service training (9 items); performance appraisal (11 items); compensation (18 items); training needs assessment (7 items). The set 'B' for 'Cause of teacher burnout' comprised of three sub-scales with 25 items totally as Teaching loaded (8 items); teacher compensation (10 items) and Teaching career development (7 items)

Data analysis and statistical applications: author cleaning, encoding data and analyze through SPSS by using basic and inference statistics and present output on the tabulate with explanation and interpretations based on the criteria of the average mean scores has had mentioned in the theoretical framework.

Results

Result 1. Regarding to the personal data

Table 6 (see appendix) Shows the frequency and percentage of the respondents' distribution, the analyzed, the finding there was more females (53.75%) and mostly possessed the master degree (56.25%) and they have been working experiences more than 16 years (42.5%) and it was wonderful that only two out of 50 participants possessed Ph.D level.

Result 2. Relate to the questionnaires set 'A' & B of the validity and reliability test.

This study is part of a study of 'Teacher management at teacher training institutes in Laos' in the future. The present paper reports on the developmental process of the instrument. It aims to assess two sets (Set A and B) of self-constructed questionnaires by focusing on

detecting and eliminating the erroneous wording and phrases in each item in case of an inappropriate and incongruent wording between sub-scales and items.

The results indicated in the table 6, 7, 8, 9 and 10 (see appendices) found that 19 out of 63 items under the six sub-scales in the set A 'teacher management'; and 7 out of 25 items in the set B 'cause of teacher burnout' found needed to be omitted. The average score of IOC test technique at $\leq .50$ and the sum scores were of the sets 'A' $\sum M = .60$; and Set 'B' $\sum M = .68$, respectively. As regards reliability, for the set A the agreement was at a moderate level ($M = 3.27$; $SD = 0.22$, $\alpha = .801$; $r = .395$; $KMO = .588$) and for the set B, a moderate level was found, too ($M = 3.31$; $SD = 0.82$, $\alpha = .956$; $r = .996$; $KMO = .652$) respectively.

Discussion and answer to the questions

This study is part of a study of 'Teacher management at teacher training institutes in Laos' in the future, this paper present the test score of validated of both set A and B which is rated and assessed by ten specific experts and senior teachers, regarding the test each sub-scale and items with the acceptable in generally. However, to answer some question in such what does wording and phrases in the questionnaires sets needed to be omitted?; Is there statistically significant in reliability test? the immense result of the study shown in tables 6,7,8,9 and 10 that could be observed in the appendices and there were twenty-six items of both sets that need to be eliminated or improve in some particular items as due to low average of mean score, the test of reliability was statistically significant in both set A and B that means questionnaires structure, sub-scale, item loaded and research objective were gradually consistent.

For the question to 'which wording and phrase do the respondents reject frequently?', this stud, mostly of the respondents including experts, senior teachers and academics staff was concerned and felt low foresee in responding, especially ambiguous, complex and double-barreled question, terminology, these terms and phrases were

reflected by respondents in part of their opinions drained on the space at the end of each sub-scale provided, in this case it was congruence to the Oppenheim, (1992); Warwick & Lininger, (1975) suggested the words used in questions should be understandable to all respondents, and the meanings imputed to those words should be as universal as possible among respondents; Krosnick (1999) confirmed that the words used in questions should be understandable to all respondents, and the meanings imputed to those words should be as universal as possible among respondents; Sisaad, (2000) commented word loaded to each items must be tighten to the sub-scale and research objectives; Likitwattan (2000) viewed language is inherently ambiguous as the major of missing data in the survey questionnaires.

Besides, the issues regarding erroneous wording and phrases, Parten, (1950); Yanprasart, Y. (1982). question wordings should avoid bias that would push answers one way or another; Likert, (1932); Thurstone, (1928) in order to minimize the impact of the idiosyncrasies of item wordings, it is best to aggregate answers to a battery of items into a single index and Krosnick (1999) viewed logically that the items used should be the few most efficient and effective ones tapping the construct of interest.

In addition, the applications wording into questionnaires should be examined in multi-methods that Johnson and Christensen (2012) pointed out the pilot test to determine whether the it operate properly before using it in a research study and the test should note any points of confusion; Martin, (2006) Constructing questionnaire involves many decisions about the wording and ordering of questions, selection and wording of response categories, form acting and mode of administration of the questionnaire.

It had has above mentioned, this study would highly given the invaluable lessons in planning to draft and draw research instrument by own researcher, particular questionnaire which is widely applications in educational research realm, it should be self-awareness

on the research topic, scope of research, conceptual framework, material supports, advisor in field available, experiences, read the right books to draft questionnaire, meet the right people in the right field or area to share ideas as peer reviews, linguistic, practice in the field work to gathering the most familiar, local and career words. Besides, it seem concerned to the target organizations that planned them involve our research doing, examinee's education background, language knowledgeable, context and contents.

Conclusion

This study is part of a study of 'Teacher management at teacher training institutes in Laos' in the future and researcher self-constructed questionnaire and it on the process of instrumental development. It could be overviews the theoretical framework and result of piloting as: Questionnaires is a research instrument and commonly used for collecting data from the samples defined, particular quantitative research which is consists of a set of self-constructed and develop by researchers to obtain data and it can be said examined the quality of it through the validity and reliability test methods, both never separately each other.

Validity is the accuracy of the inferences, interpretation, or action made based on test scores, while reliability refers to the consistency or stability of the test score. Coefficients of reproducibility and reliability such as Cronbach's alpha and the Guttman coefficient of reproducibility, it the consistency or stability of test scores. Thus, both are tools of an essentially positivist epistemology to consider in using a test.

Pilot study is the first stage of research practical work and it can help researcher get more vital information about feasibility of the research instrument use for the full-scale research, doing the researcher in any field will be needed to ensure of its validity and reliability, particular in part of questionnaires must intend of language knowledge, appropriateness of wording and phrases.

The result of the pilot study in examining the validity and reliability of self-constructed questionnaires of the both sets A and B found the moderate level and there is no statistically significant in the reliability test of both questionnaires sets and there was gradually satisfying appropriate. However, it seem to be examined once again while compare between the scorers and the criteria of mean average.

This study also faced many unforeseen circumstances in such material supports, data collection, time allowance, relevant organizations, target participants and budget strictly. In this occasion, I personally like to have deepest thanks to the Hungarian Government in offering the scholarship through the Stipendium Hungaricum Scholarship Program to me and come to study in Hungary so far.

References

1. Aina, L.O. (2004). Library and Information Science Text for Africa. Ibadan: Third World Services Limited, P= 103-104.
2. Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrical*, 16,297-334. Retrieved from: https://www.psychometricsociety.org/sites/default/files/cronbach_citation_classic_alpha.pdf
3. Gay, L.R & Airasian, P. (2005). Educational Research: Competencies for Analysis and Application, Prentice-Hall, Inc. Pearson Education, Upper Sadle River, New jersey 07458, 6th edition. P 147.
4. Green, A. J. F. (1998). Using verbal protocols in language testing research: A handbook. Cambridge, UK: Cambridge University Press. Hardesty & Bearden.
5. Johnson, B & Christensen, L. (2012:164). Educational Research: Quantitative, Qualitative and Mixed Approaches. SAGE publication, Inc. 2455 Teller Road, Thousand Oaks, California 91320. 4th edition. P 9.
6. Joppe, M. (2000). The Research Process. Retrieved February 25, 1998, retrieved from <http://www.ryerson.ca/~mjoppe/rp.htm>

7. Krosnick, J. A. (1999). Maximizing measurement quality: Principles of good questionnaire design. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.), *Measures of political attitudes*. New York: Academic Press.
8. Likert, W. J. (1970). *Research in education*. (2nd ed). Englewood Cliffs, New Jersey: Prentice-Hall.
9. Likitwattana, P. (2010) *Educational Research*, Printed: Faculty of industrial Pedagogy, King Mongkut's Institute of Technology Ladkrabang, Srongkrung road, Latkrabang, Bangkok, Thailand, 5th edition, P 89.
10. Martin, E (2006) *Survey Questionnaire Construction*, Director's Office U.S. Census Bureau Washington, D.C. 20233, <https://www.census.gov/srd/papers/pdf/rsm2006-13.pdf>
11. Oppenheim, A N. (1992) *Questionnaire design, interviewing, and attitude measurement*. London: Pinter Publishers, retrieved 14.3.2017. [http://onlinelibrary.wiley.com/journal/10.1002/\(ISSN\)1099-1298](http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1099-1298)
12. Parten, M. (1950) *Surveys, polis, and samples: Practical procedures*. New York: Harper and Brothers.
13. Rovinelli, R. J., & Hambleton, R. K (1977) On the use of content specialists in the assessment of criterion-referenced test item validity. *Dutch Journal of Educational Research*, 2, 49-60.
14. Siniscalco, M,T & Auriat, N.(2005:4) *Educational research: some basic concepts and terminology*, (Module 1: Quantitative research methods in educational planning, UNESCO. 7-9 rue Eugène-Delacroix, 75116 Paris, France.
15. Sinjaru, T. (2012:71) *Researches and Statistical Analysis through SPSS and AMOS: Basic to advances*: SR Printing Mass Production LTD, 2/103-106 Group9, Cheng watthana street, Parkred district, Nonthaburi Bangkok, PO BOX 11120, 13th edition, P 65.
16. Sisaad, B. (2002:74-75) *Basic researches*, 122/107-109 Prachauthit, Soi91/1 Thoongkhru, Bangkok, Thailand. P=94.
17. Soukkhavong, S. (2010). *Handbook of Research in Education*: Faculty of Education, National University of Laos, Dongdok village, Saithani distirct Vientiane capital, Laos.
18. Thurstone, L.L.(1928). *Attitudes Can Be Measured*, University of

Chicago, retrieved from:

19. https://brocku.ca/MeadProject/Thurstone/Thurstone_1928a.html
20. Natanan Tungsujarittam, N. (2014). Quality Evaluation of The English Proficiency Test for Automotive, Specification Certificate Students at Nakhonsawan Technical College. Retrieved from: <http://164.115.22.25/ojs222/index.php/LEARN/article/view/343/284>
21. Warwick, D. P, & Lininger, C. A. (1975). The sample survey: Theory and practice. New York: McGraw-Hill. 1st edition. Retrieved from:
22. <https://www.amazon.com/Sample-Survey-Theory-Practice/dp/0070683956>
23. Wilkinson, David & Birmingham, Peter. (2003:8). Using Research Instruments: A guide for researchers. NY: RoutledgeFalmer. ISBN 0-415-27279-3, retrieved from: www.routledgefalmer.com
24. Yanprasart, Y. (1982). The design of the diagnostic reading test of word recognition skills for Mathayomsuksa 1 in Chiangmai. M.Ed. Thesis, Srinakharinwirot University.

Appendices:

Table 6. The percentage of the gender distributions (N=50)

Valid	Gender			Qualification			Working experiences (Years)				
	M	F	Total	BA	MA	PhD	Total	<10	10-15	16 >	Total
Frequency	22	28	50	21	27	2	50	16	15	19	50
(%)	46.25	53.75	100.0	41.25	56.25	2.5	100.0	23.75	33.75	42.5	100.0

Table 7. Set A ' teacher management, the test of validity by IOC technique

Six sub-scales	N	No. of items	ΣIOC	Result		Interpret
				Accepted	Rejected	
Job analysis		9	.80	8	1	High
Recruitment-Selection		9	.44	7	2	Low
Pre-service training	5	9	.64	7	2	High
Performance appraisal	specific	11	.65	8	3	High
Compensation	experts	18	.63	12	6	High
Training needs assessment		7	.48	2	5	Low
Total =	5	63	.60	44 Items	19 items	High

(Index Of Item of Objective Congruence or IOC = .05)

Table 8. Show the test score of mean, SD, Cronbach, Correlation coefficient and KMO

Six sub-scales	N	No of items	\bar{x}	SD	α	r	KMO
Job analysis	20	8	3.22	.30			
Recruitment-Selection	20	7	3.32	.35			
Pre-service training	20	7	3.31	.62			
Performance appraisal	20	8	3.13	.44	.80	.395	.588
Compensation	20	12	3.22	.38			
Training needs assessment	20	2	3.45	.45			
Total		44	3.27	.22			

Table 9. Validity test of Set B 'Cause of teacher burnout'

Three sub-scales	N	No of items	$\sum IO C$	Result		Interpret
				Accepted	Rejected	
Teaching loaded	ior teachers	8	.65	5	3	High
Teacher compensation		10	.70	8	2	High
Teaching career development		7	.71	5	2	High
Total =	5	25	.68	18	7	High

(Index Of Item of Objective Congruence or IOC = .05)

Table 10. Reliability test of Set B 'Cause of teacher burnout'

Six sub-scales	N	No of items	$\bar{\Sigma X}$	SD	α	r	KMO
Teaching loaded	20	5	3.23	.90	.956	.996	.652
Teacher compensation		8	3.41	.73			
Teaching career development		5	3.31	.99			
Total		18	3.31	.82			

FROM INFORMATION ASYMMETRY TO INFORMATION OVERLOAD - TECHNOLOGICAL SOCIETY OF CONSUMERS

Katarzyna Południak-Gierz²

Jagiellonian University, Str. Gołębia 24, 31-007 Kraków, Poland

k.poludniak-gierz@doctoral.uj.edu.pl

Problematic regulation of information duties

The purpose of the research is to identify the major issues connected with regulation on information duties in consumer law. EU legislator has implemented a model of protection by information. He obliged the professional to provide a weaker market participant (consumer) with data necessary to assess the risks and benefits of particular agreement: i.e. details on the object of the contract, costs and the parties of transaction. It is believed that providing weaker party with data on the matters can diminish information asymmetry between contractual parties.

Notwithstanding, current studies on consumer behaviour suggest that this assumption may be erroneous, especially in case of transactions concluded via Internet. Discrepancy between human capability to absorb and process information and the amount of data an average person is exposed to on daily basis undermines the functionality of this protective model. The economic analysis of law itself delivers arguments against the functionality of expanded information duties. Cognitive limitations, costs of acquiring and processing data, possible benefits of familiarizing oneself with it, compared with the effort

² Katarzyna Południak-Gierz is a PhD Candidate at Jagiellonian University, Krakow, Poland, Legal Advisor Trainee, and since 2017 she is conducting research program "PRELUDIUM 11" on "Personalized agreements in the light of civil law" under the supervision of prof. dr. Fryderyk Zoll.

taken, weight against the rationality of reading information provided by the professional. Studies on consumer behaviour demonstrate that there are also several factors diminishing the effectiveness of such information given by the trader according to his pre-contractual obligations. The most significant are: information overload effect, endowment effect, unrealistic optimism, status quo bias, loss aversion, regret avoidance and the sunk cost fallacy.

What are the weaknesses of the contemporary legislative approach? What does lead to the partial failure of protection by information paradigm? Can the system be repaired or should we look for other model of protection in case of consumer law?

Examining the aforementioned can let one determine the main issues the EU legislator has to cope with in the forthcoming years when regulating the status of the consumer. The main goal of this research is, therefore, to give an insight on future of information duties in consumer law within the Digital Market sphere.

Hypothesis and methodology

Despite the complexity of regulation on information duties in B2C online transactions, the consumer is frequently not aware of the aspects of the contract that are vital in his or her situation. Contractual terms are rarely read and pre-contractual details play a minor role during the decision making process.

The aim of this research is to localize illusions of functionality in the contemporary regulation model. Therefore, it is highly recommended to supplement traditional dogmatic law analysis with other investigation methods in order to obtain a broader perspective. Legal regulation might be flawless but some other, extra-legal factors – e.g. law subjects characteristics, market failures, technology – may undermine its effectiveness. Accordingly, to identify the elements impeding protection by information in the online environment, an interdisciplinary approach is recommended. Theory triangulation

seems the most adequate tool of research. Taking multiple perspectives while interpreting the data enable one to define issues that are not clearly visible from the legal point of view but can influence application of law.

Firstly, the current law provisions are presented and analysed in the light of the requirements of good legislation. Then the issue is assessed from economic analysis of law perspective. The factors that can reduce its practical utility are to be enumerated and challenged. Afterwards, the results of research on consumer behaviour are examined and the correlation between the effectiveness of the regulation on the pre-contractual information duties and behavioural tendencies is stated. Finally, taking into consideration the flaws and issues diminishing the accuracy of current protection by information model, postulates de *lege ferenda* are to be formulated.

The requirements of good legislation

The EU legislator decided to introduce a model of protection by information based on a wide catalogue of information duties. Due to the conviction that more information provided equals better informed consumer the main effort was put into enumerating all the pieces of data potentially necessary to assess the benefits and risks of every transaction.

In the Article 6 of Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council EU legislator decided to introduce a closed list of pre-contractual specifics the trader shall provide the consumer with. The enumeration covers nineteen issues:

the main characteristics of the goods or services, the identity of the trader, his address and contact details, price, costs of delivery and communication, arrangements for payment, way of delivery,

performance of contractual obligation, the right of withdrawal and its conditions, the legal guarantee of conformity for goods, after sale customer assistance, services and commercial guarantees, the existence of relevant codes of conduct, the duration of contract (where applicable), the minimum duration of the consumer's obligations, the existence and the conditions of deposits or other financial guarantees, the functionality of digital content, its interoperability with hardware and software, possibility of having recourse to an out-of-court complaint and redress mechanism.

All that information requirements have obligatory character and cannot be altered or changed neither by the state legislator nor by the trader. The information forms an integral part of the distance or off-premises contract and can be altered only if the contracting parties expressly agree to do so.

Less stress has been put on the requirement of transparency. Despite establishing this long and detailed list of information requirements the EU lawmaker underlines, that the information should be provided in a clear and comprehensible manner. Here strikes a paradox – this amount of data is highly unlikely to be transparent. The abundance of aspects the consumer has to be informed about by itself must obscure the picture.

Additionally, the character of agreement can make it a subject of another regulation and the aforementioned list may be lengthened by sector-specific provisions. Requirements of the Directive on Consumer Rights are amplified by information duties of Directive 2006/123/EC on Services in the Internal Market and Directive 2000/31 / EC on Electronic Commerce. What is more, EU Member States retain the possibility to impose additional information requirements applicable to service providers established on their territory. If any provision of the Directive on Consumers Rights stays in conflict with a provision of an European Union act governing specific sector, the specific regulation should be given priority. This conflict of law norm is a legislative recognition of current rules concerning the mutual relations

between laws - *lex specialis derogat legi generali*. It is important, however, that the derogation by the provisions of sectoral laws do not include provisions of Directive on Consumer Rights *in extenso*, but only these rules which collide with specific regulation of particular sector (Lubasz, Namysłowska, 2015, commentary on Article 12).

In the light of the rule of law principle, good law should be consistent, free of contradictions, stabile, possible to fulfil and - last but not least – transparent. Legal provisions ought to be clear, obvious and understandable without doubt or ambiguity. It facilitates creating “foreseeable” legal environment and supports the principle of legal certainty. Realisation of the principle of transparency of law in context of information duties in the light of current regulation is dubious.

Although Directive 2011/83/EU requires maximum harmonisation, the scope of information obligations of the entrepreneur can be significantly broader than provisions of Directive on Consumer Rights suggest. In order to determine what are information duties, different laws are to be taken into account (Lubasz, Namysłowska, 2015, *passim*). Frequently it is necessary to utilize various interpretation methods to clarify, which information duties apply in a particular case. This diminishes the clarity of law and is strongly undesirable in the light of the rules of law principle. Regulation remains non-transparent, shattered and lengthy, sometimes contradictory. Those elements lower the quality of legislative technique. It is especially alarming due to the fact that those norms apply to private individuals, as a rule not having legal formation. If the act were to support consumers in executing their rights, it should be clear enough to be understood by them without asking for legal counsel.

To sum up, regulation on information duties aims to combat the information asymmetry between the consumer and the trader. Yet the legislative technique chosen by the lawmaker obscures the normative content of the act. The provisions are not sufficiently transparent, what *per se* reduces their effectiveness. If it is not clear for both the consumer and the trader what the information duties of the latter are,

the former is unlikely to benefit from such an undetermined protection. The consumer cannot easily verify, what he should be informed about. Not being aware of scope of data he ought to be provided with, he cannot practically exercise his right to be informed. This lack of transparency brings inconvenience to the trader as well. Even proceeding with due diligence, frequently in case of a dispute he finds himself unsure of meeting all the legal requirements regarding information duties (Grochowski, 2012, p. 191).

Economic analysis of law perspective

A rational consumer before concluding a contract seeks information to assess whether the transaction will be beneficial for him. Borders of search, in the light of the economic analysis of law, are drawn by its costs. The moment in which expenditures incurred in order to find the information outweigh the benefits it brings an end to such search. However, in case of distance contracts the possibility to assess the object of the contract and the credibility of the trader – or, more generally speaking, risks and benefits of the transaction – is limited to analysis of information published by the entrepreneur (Mikłaszewicz, 2008, pp. 59-60, p. 72). In such situation consumer is likely to be lacking vital information on the contract. The need for legislative intervention becomes clear. The EU lawmaker imposes catalogued disclosure obligations of the entrepreneur.

Notwithstanding, the consumer, who is presented with a very extensive catalogue of data, is likely to resign from reading the information given. The decision not to get acquainted with the information folder can be induced by many rational factors.

Firstly, so-called information costs include expenses associated with the search of data but also with its processing: effort to perceive, extract and understand the information (Mikłaszewicz, 2008, pp. 70-72). If the legislator aims at diminishing the information costs it is highly recommended to ensure not only its attainability but also that it is ready to use. Complex, detailed or long information, written in a

way difficult to read or comprehend, requires a significant effort to be transformed into applicable knowledge about the issue.

A person aware of her cognitive limitations is not willing to make an effort, which will most likely fail to improve the situation or expand her knowledge. Absorbing all the provided information, understanding it, selecting data relevant in a particular situation and processing it in order to take the best decision is often time consuming, intellectually demanding and tiring. As a consequence, its costs are disproportionate to the value of the concluded agreement, not to mention the possible benefits of knowing pre-contractual information. Therefore, *homo oeconomicus* is willing to take the risk of concluding a transaction without familiarizing himself with all the pre-contractual specifics. In this manner he avoids unnecessary and disproportionate costs of processing information.

An average consumer has neither the expertise on the subject of the contract, nor the knowledge of the law, allowing accurate interpretation of all provisions of a standard contract. Decoding the content of the agreement concluded exceeds his capabilities. Due to the aforementioned, frequently consumer's investigation will finish after confirming the object of contract and its price. The verification of payment method and the time and place of delivery will take place after decision on conclusion of contract.

In addition, a consumer is often not able to find the pieces of information he needs to successfully compare offers. Here the phenomenon of an adverse selection appears (Wilson, 1987). A consumer is provided with a significant amount of information. Assuming that he is a regular participant of the market, lacking special knowledge, considerable experience or deep market insight, he will not be able to extract from these data the pieces of information that are really important in his situation efficiently not putting additional effort. Thus, being unable to evaluate quickly the utility of the information, he will treat in the same way pieces of information that are potentially useful and both totally irrelevant.

Thus, from the point of view of the entrepreneur, providing key details, which could discourage the consumer from the agreement, is economically unjustified. Similarly, trader is not motivated to verify the accuracy of data, if the other party is not able to distinguish between correct and invalid statements.

Therefore, although the information duties are obeyed by the professional, the principle of transparency is not fully implemented. Even with due diligence of the entrepreneur the pre-contractual information prospect is too long and too complicated for the consumer to comprehend. From the pragmatic point of view, absorbing and processing all that data would be economically unjustified.

As a result, the consumer is no longer interested in reading the pre-contractual. It is not economically justified to make the effort of absorbing and processing the additional information that appears pre-contractual information folder. On the other hand, none of us is a perfect *homo oeconomicus*. Therefore there might be other reasons, i.e. of psychological character that may enhance the effectiveness of extensive catalogue of information duties.

Behavioural studies approach

The first problem, addressed by the behaviourist in the eighties of XXth century, is the information overload effect: too much information hinders the understanding of the case. Having too much data makes it difficult to make an optimal decision. However, in 2003 (Hoyer, MacInnis, Pieters, 2012, p. 197; Foxall, 2015, p. 316.) these thesis were challenged - information overload was rather associated with the structure of data, its distribution then with its amount. It was claimed that information overload effect appears because of chaotic, uncomprehensive way in which the data is presented.

Further research, however, still indicates a positive correlation between

the adequacy of person's activities and the amount of data she disposes of (Eppler, Mengis, 2004, pp. 325-344). However, this link exists only to a certain point. When a sharp decline exceeded in the adequacy of the actions taken is noticed. It was concluded that when there is too much information available, it ceases to be a factor in the decision-taking process. It was pointed out that with the increase of the amount of details it becomes more difficult to find pieces of information vital in the situation of a given consumer.

Interestingly, this critical point of information overload in case of online transactions comes surprisingly fast. It became especially visible during a behavioural research carried out for European Commission. Results of Testing of a Standardised Information Notice for Consumers on the Common European Sales Law Request for Services JUST/2011/JCIV/FW/ 0135/A4 in the context of the framework service contract EAHC/2011/CP/01 from 2013 proved that normally consumers do not read notice of consumer rights in detail. Half of consumers spends no longer than 6-7 seconds on reading it and less than 15% of the people interviewed look at the information more than once. Only 32% of the consumers scroll all way to the end of the presented document. Approximately one in five respondents claim to have read it in full. As a result only a minority benefits from disclosed information.

Respectively, there was a particularly illustrative empirical study conducted by Gamestation. The entrepreneur put in the contract an opt-out clause, under which the consumer concluding the contract agrees to convey ownership of his soul. To make this clause even less attractive for the consumer, people who opted it out were entitled to receive vouchers worth £5. Notwithstanding, 88% of consumers have not benefited from the possibility of exclusion of that clause.

Another issue, frequently raised by behaviourist, is the endowment effect. An average person prefers what he already has in possession to the thing he can obtain. Similarly, a subject about which the person has already learnt tends to be considered more appealing than the

one about which she still has no data. What is more, a consumer who has made an effort to read the available information is usually already too involved to actually assimilate some new specifics that should (in the light of the rationality principle) affect his decision. These tendencies automatically diminish the weight of pre-contractual information in consumer's decision process.

In addition, the trust in the known entity as well as unrealistic optimism of consumer can also disrupt the process of decision making. Rationality of the consumer is also biased by the tendency to ignore information that undermines the accuracy of the earlier decision. In this way a person protects herself from cognitive dissonance. Behavioural biases that speak against the rationality are as well: status quo bias, loss aversion regret avoidance or the sunk cost fallacy. Having a disturbed sense of equivalence means that one is convinced that a change can only deteriorate his situation. Loss aversion is a tendency to prefer avoiding losses over acquiring gains. Similarly, regret avoidance prevents a person from changing a bad decision due to the fear that it can bring further deterioration of her situation. Finally, there is a Concorde fallacy, that forces one to continue investing resources on a project, product, etc. in order not to waste the money or effort he has already put into it, regardless the unlikelihood of success.

All the aforementioned biases and effects, present in consumer behaviour, hinder absorbing and processing information as well as decision –taking. Those phenomena have universal character and, in order to complete the picture, it is needed to take into consideration also behavioural biases that are characteristic for human activities in the online environment.

So far, preliminary studies on consumer behaviour operating via the web and beyond it (Sagarin, Britt, Heider, Wood, Lynch, 2008, pp. 4–17). indicated that on the Internet consumers has greater difficulty in noticing and assimilating even simple information. This is caused by the following factors: the intensity of the exposure to data, personal

irrelevancy of information, conviction that the information is already known and various distractions (Luzak, 2015).

On the Internet we are constantly inundated with information: mostly commercials but also news, messages, pictures and videos. The consumer ceases to pay attention to this messages because of the intensity of exposure. Information overload changes general consumer's attitude towards data, increasing likelihood of neglect. What is more, pre-contractual specifics provided by the trader are frequently personally irrelevant to the consumer. If the catalogue includes mostly data that is uninteresting for the individual, not corresponding with his situation or needs, it is highly improbable that he reads it. Often the information is disregarded as already known. It is especially the case of standardized contract. The consumer is convinced that he will not find in the document he received any new or unexpected pieces of information. In those situations it is often believed, that reading one standard form is sufficient as standard forms in case of such type of contract should not differ. Finally, in online environment consumer gets easily distracted. Pop out windows, aggressive commercials, bold font, colour, movement, sounds, *etc.* – they are all constantly fighting to attract his attention. Aware of the aforementioned, entrepreneurs sometimes do not put an effort necessary to capture and hold the attention of consumer.

Those issues, typical for person's online activities, have to be added up to the common behavioural tendencies diminishing the effectiveness of pre-contractual arrangements. As a result, one is to discover that functioning of current form of protection by information in case of Internet users is even more dubious than in traditional face-to-face consumer transaction.

On the other hand new technologies provide consumers with extra-judicial tools of protective character. These are for instance: search engines, price filtering, reputation based mechanisms and trust marks. They enable consumer to compare the pricing, sellers credibility and quality of service of the good in question. Yet, they do not enhance

the effectiveness of regulation on pre-contractual information itself, they are rather the private response on the lack of efficient state regulation of the matter.

Lesson to be learnt

Empirical research, behavioural studies and economic analysis prove that consumers do not acquaint themselves with the information provided by the trader. The fight against this trend appears now not only doomed to failure, but also irrational. Absorbing and processing given data is unprofitable and senseless for the consumer.

Firstly, it requires substantial effort and time. In addition, those costs may not lead to the intended purpose. Consumer is rarely an expert aware of practical and legal implications of obtained information. For example an average consumer does not know which contractual provision - though seemingly very unfavourable - is irrelevant in his situation because it would be considered void due to the content of mandatory rules. Similarly, he is not able to identify circumstances that apparently have little importance but actually can significantly worsen his legal position. Because of that comparison of the pre-contractual information provided by different traders (time consuming and difficult) frequently will not lead to correct conclusions. Even if consumer understands the available information, he will have a very limited reaction options. He can withdraw from concluding the agreement and begin to look for another offer. He can attempt to influence the entrepreneur (success highly unlikely in case of automatized online procedures) or conclude the contract in spite of these negative, in his view, circumstances.

Not only the rational arguments speak against effectiveness of required by law complex and elaborated pre-contractual information catalogues. There are also numerous behavioural biases that impede the consumer to benefit from this kind of protection. In order to create law that can diminish information asymmetry the legislator should take into consideration following behavioural tendencies and

phenomena: information overload, endowment effect, unrealistic optimism, status quo bias, loss aversion, regret avoidance or the sunk cost fallacy. When regulating legal status of the consumer operating via Internet, the legislator should also consider that in this environment the one is rather passive and has diminished capability to notice and process even simple communication. The consumer disregards data that is personally irrelevant, presumably known, not visible enough or impersonal.

The costs of absorbing and processing pre-contractual information are disproportionately high in the context of: the value of the object of the agreement and possible benefits of having the information. Thus, taking into account the specifics of online market, we should reconsider whether in fact model of protection by information in its current form could result in reducing the asymmetry between the consumer and the professional entity.

Postulates de lege ferenda

The results economic analysis and behavioural studies allow to formulate a list of demands in the context of legislative technique. Firstly, pre-contractual information should be simplified, standardized, disclosed in a clear and legible manner as well as be easy to compare. This can diminish the costs of absorbing and processing information in general.

Secondly, the scope and details of information provided should be tailored to match the characteristics of the consumer - his knowledge, needs and abilities. Both: content and form should be adjusted to consumer's needs, situation and interests. Fewer but more accurate pieces of pre-contractual information are required. This way the data provided would be applicable and useful for the consumer. What is more, positive effects can be produced by introducing assistants to help consumers in decision-making process. These assistants can be either of human or virtual nature, giving advice on the matter, attracting his attention to vital pieces of information and therefore

making contractual relationship more personal. Basically, prioritization and personalization of pre-contractual information is needed. It enables us to eliminate irrelevant, impersonal, not easy to understand data and provide pieces of information that are personally vital, easy to absorb and process as well as reasonably short.

The implementation of those postulates can contribute to increase in the efficiency of statutory disclosure duties. However, it is easier said than done. The doctrine suggests that in order to increase the effectiveness of the protection of the information it is necessary to adopt one of two strategies: either to introduce prioritization of information (e.g. by using Big data technology to select and order information – personalize it), or restrict the freedom of shaping the legal relationship through the establishment of compulsory rules (Tereszkiewicz, 2015). The current model of protection by information can possibly be adjusted to the needs of its subjects by prioritization of information. (Bush, 2016). However, this method would mean a drastic change in legislative techniques. Sceptics underline personal data protection issues and problems of verification of compliance with law. Legitimacy of the law stated by code is questioned and the certainty of law is endangered (Porat, Strahilevitz, 2014, pp. 1453-1470). In conclusion, until today no widely accepted manner of prioritization has been proposed.

As an alternative, introduction of compulsory normative standards was proposed. Dispositive norms tend to favour the stronger contractual party. On the contrary, compulsory rules serve the weaker one at the price of limiting contractual freedom. The weaknesses of the model may be cured by implementing minimal standards for performance of the contract in the form of peremptory norms. This could contribute to eliminating the most evident cases of information asymmetry abuse.

Behavioural touch in consumer law – towards better legislation

Nowadays, the EU legislator is inclined to apply peremptory norms,

but he also tries to take into account some of behavioural tendencies (e.g. art. 5-6, art. 8 of Directive on Consumer Rights). The lawmaker has stricter requirements in case of entrepreneurs acting online on how to make information available to the consumer. Offline, it is sufficient to provide information in a manner that forces consumers to certain activity e.g. looking for a needs hyperlink (obligation to provide information). Online, the consumer has to be provided with information in a way that does not force him to make any additional steps in order to familiarize himself with data (obligation to give information). By this small but significant variation in the wording of provision the inclination of consumer to be more passive online than offline is addressed (Luzak, 2015).

In this context, also the initiatives to incite consumers to get familiar with provided information in case of transactions of the utmost importance is to be positively assessed (e.g. regulation of consumer credit agreements). Here the standardization of the information provided as well as introducing an assistant (adviser or informer) involved in the decision-making process of the consumer are highly recommendable. Similarly, frequent use of opt-in mechanisms instead of opt-out option can be useful. Imposing these may actually substantially alter consumer's situation due to behavioural biases connected with the fear of change. This kind of legislative tricks permits to promote attitudes and behaviours desirable in the eye of the lawmaker without restricting freedom of the subjects of law.

Conclusion

In the summary – current regulation on pre-contractual obligations of the professional in case of B2C transactions, especially in online environment is not effective. Instead of diminishing asymmetry between the parties it creates a false illusion of functionality. Scientific world should not turn the blind eye towards the results of empirical and behavioural studies but benefit from them. The idea of this study is therefore to attract attention to the issue of pre-contractual information duties. Regulation of the matter is not flawless and

interdisciplinary approach can help to substantially improve it. For the time being it is not possible to use personalization to prioritize information duties (possibly will never be), therefore it is rational to use the tools that are available at the moment. Interdisciplinary approach enables the legislator to efficiently promote good practises without imposing peremptory norms. Knowledge on behavioural biases gives us an opportunity to substantially improve consumers' situation taking small steps – e.g. by application of nudges, opt-in and opt-out clauses and assistants. Considering seriously the implications of behavioural studies can increase the efficiency of contemporary protection by information model.

References

1. Bush, Ch. (2016). The Future of Pre-contractual Information Duties: From Behavioural Insights to Big Data, Research Handbook on EU Consumer and Contract Law edited by Ch. Twigg-Flesner, Cheltenham, UK, Northampton, MA, USA: Edward Elgar Publishing. eISBN: 978-1-78254-737-2, 221-241.
2. Eppler, M., Mengis, J. (2004). The concept of information overload: a review of literature from organization science, accounting, marketing, MIS, and related disciplines, *The Information Society: An International Journal* 20(5), 325-344.
3. Foxall, G. R. (2015). *The Routledge Companion to Consumer Behavior Analysis*, Routledge, ISBN-10: 0415729920.
4. Grochowski, M. (2012). Obowizki informacyjne w umowach z udziałem konsumentów a nadmierny formalizm prawa, *Kierunki rozwoju europejskiego prawa prywatnego*, edited by: M. Jagielska, E. Rott-Pietrzyk, A. Wiewiórowska-Domagalska, Warszawa: C.H.Beck, ISBN: 978-83-255-1994-0, 178-203.
5. Hoyer, D W., MacInnis, D. J., Pieters, R. (2012). *Consumer behavior*, Cengage South-Western, ISBN-101133435211.
6. Ustawa o prawach konsumenta. Komentarz. (2015). edited by D. Lubasz, M. Namysłowska, Warszawa: Wolters Kluwer Polska S.A., ISBN: 978-83-264-8130-7.
7. Luzak, J. (2015). *Online Disclosure Rules of the Consumer Rights*

- Directive: Protecting Passive or Active Consumers?, *Journal of European Consumer and Market Law*, 4(3), 79–87.
8. Mikłaszewicz, P. (2008). *Obowizki informacyjne w umowach z udziałem konsumentów na tle prawa Unii Europejskiej*, Wolters Kluwer Polska S.A.: Warszawa, ISBN: 978-83-7601-049-6.
 9. Porat, A., Strahilevitz, L. J. (2014). Personalizing Default Rules And Disclosure With Big Data, *Michigan Law Review* (112), 1417-1478.
 10. Sagarin, B. J., Britt, A., Heider, J. D., Wood, S. E., Lynch, J. E. (2003). Bartering Our Attention: The Distraction and Persuasion Effects of On-line Advertisements, *Cognitive Technology* (8), 4–17.
 11. Tereszkiewicz, P. (2015). *Obowizki informacyjne w umowach o usługi finansowe. Studium instrumentów ochronnych w prawie prywatnym i prawie unijnym*, Warszawa: Wolters Kluwer Polska S.A., ISBN: 978-83-264-3426-6.
 12. Wilson, Ch. (2008). Adverse selection. In S. N. Durlauf, L. E. Blume, M. Palgrave (ed.), *The New Palgrave Dictionary of Economics*. Second Edition. Retrieved from:
<http://www.dictionaryofeconomics.com/article?id=pde2008_A000040> doi:10.1057/9780230226203.0011

SUFFICIENCY OF FINANCIAL LITERACY: A CASE STUDY OF UNIVERSITY STUDENTS IN SLOVAKIA

Beáta Gavurová³, Eva Huculová⁴, Matúš Kubák⁵

*Technical University of Kosice, B. Nemcovej 32, 040 01 Košice, Slovak
Republic*

beata.gavurova@tuke.sk;

eva.huculova@tuke.sk;

matus.kubak@tuke.sk

Introduction

Financial literacy is increasingly brought to common people's attention and there are evident activities of policy makers aimed at the support of financial education in many countries of the world. Financial literacy (FL) represents a basic and inevitable skill that is important for human existence in the 21st century. Who is not sufficiently financially literate, cannot fully participate in the modern

³ Beáta Gavurová, PhD, MBA, Associate Professor, works as assoc. professor at the Faculty of Economics, Technical University of Kosice. In her research work she has focused primarily on measurement and management of performance and efficiency in hospitals, process optimization in public sector, social and health policy, health-demographic analysis, addressing the regional disparities in the availability and quality of health care. For the last five years she coordinated and participated in 15 significant international as well as national grant projects focused on the issue of implementation of ICT systems, the efficiency of health systems and the implementation of specific metrics of efficiency, optimization of processes in the public system, multidimensional analysis of one day surgery and so on.

⁴ Eva Huculová is a doctoral student working under the supervision of Beáta Gavurová and joined the Department of Banking and Investment at the Faculty of Economics in 2016. Her thesis is concerned with the measurement and management of efficiency in social and health policy. Her main research interests are health care utilization, quality of health care, process optimization in public sector, education support and measurement of efficiency in education system in context of the implementation of financial literacy.

⁵ Matúš Kubák, PhD, is fellow at the Faculty of Economics of Technical University in Kosice. His professional specialisation is aimed on experimental economics, agent based modelling, quantitative methods and econometrics.

economy and its relations. Indebtedness of the population has changed over few decades and the consumption with its consequent financial burden on individuals increase. Loans are in globally well founded, loans may helps in some undesirable situations and thus make it easier to properly deal with the circumstances. Unfortunately, money lending has became for many people as a traditional way of life and short-term loans they use as financial aid for acquiring things that actually do not need either. However, such behaviour may lead to difficult life situations and financial problems. Trunk & Dermol (2015) emphasize a necessity and importance of FL for individuals in order to manage a family budget optimally, or to create monetary reserves. The appropriate financial education may also eliminate inequalities in social-economic status of students. Without basic financial skills individuals cannot make eligible financial decisions on family budget with implications on further generations (Szovics, 2012). FL should be translate in education of secondary school students to support management of their personal finances which may lead to higher preconditions for successful and quality life (Totenhagen et al., 2015).

In this sense, it is also appropriate to focus on the use of modern methods that promote creativity and initiative of students (Belás et al., 2016). Education has effects on society as to a whole as to the individual and play important role at national and local level (Johnes, Portela & Thanassoulis, 2016; Starček & Trunk, 2013). Education of finance and money management skills are key determinants of financial outcomes. These basic financial skills and knowledge lead to diminution debt-to-income ratios of individuals or student loan debt that are under the financial pressure (French & McKillop, 2016; Williams & Oumlil, 2015). Accordingly Fabris & Luburic (2016), González-Sánchez & De Los Ríos Sastre (2014), the level of FL of youth is insufficient what could give rise to personal financial distresses and exacerbated financial stability with adverse implications on public welfare and economic prosperity of the country. As a consequence financial literacy is considered to be one of the important factor affecting economic growth when higher financial education or financial literacy positively influence on economic growth in given

country (Dragoescu, 2015; Barro, 2013; Afonso & Aubyn, 2005).

Generally, education belongs to important and crucial services provided by governments. Structure of education programs and FL standards vary in many countries in Europe which may lead to different student's knowledge regardless of field of study or university at a comparable level. Seeing that provision of education programs is paid for at least in part from the public purse, for many countries is essential provide education as efficiently as possible (Johnes, Portela & Thanassoulis, 2016). Aristovnik (2013), Mikušová (2015), Vitek & Martinková (2015) found relatively high efficiency in tertiary education within new Europe member states, however, technical efficiency in secondary education differ across the great majority of Europe countries (Aristovnik & Obadic, 2014). In consideration of education efficiency policy activity plays a significant role in like manner. Afonso & Aubyn (2005) investigated strong relation between inefficiency of adult educational attainment with economic growth measured by gross domestic product (GDP) per capita. This connection is significantly correlated which means that wealthier environment is important conditions for a higher student performance within positive and significant implication (Hanushek & Luque, 2003).

Financial Literacy and education support

The total public expenditure on education in most of European countries are allocated to secondary level of education representing a substantial proportion of GDP per capita in comparison to other educational level. Aristovnik & Obadic (2014) shed light on different level of public expenditure on education from country to country in consequence of varied length of compulsory education and suggest rationalizing public secondary education spending redirect of excessive resources to the tertiary education sector. Many institutions (as public as private) increase support in the field of financial literacy education whereby the ensuring efficiency of those programs features one of the key factor to sustainability development of financial knowledge and skills of students in every age group (González-

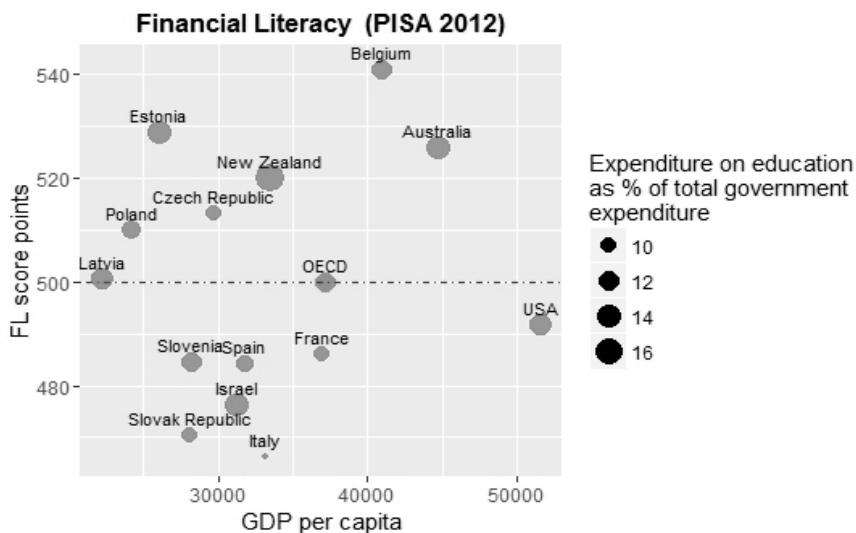
Sánchez & De Los Ríos Sastre, 2014). As abovementioned importance of parental attainment to student's outcomes, Afonso & Aubyn (2005) emphasize that as the children of today are the parents of tomorrow, policy makers should tend to reduce school dropout rates and to increase youth education length, which can lead to positive effects on education system of given country in the future. According to Kirjavainen & Loikkanen (1998) and Afonso & Aubyn (2005) efficiency in the education sector particularly depend to family economic backgrounds and education attainment of parents most demonstrative in richer countries – variables beyond the control of governments in short and medium period. Another authors (Barro & Lee, 2001; Aristovnik & Obadic, 2014; Atkinson & Messy, 2012; Jorgensen & Savla, 2010) confirmed the higher level of parental education, the better efficiency of secondary education provision in a country.

Personal savings rates are alarmingly low and shift of substantial policy responsibility in funding of retirement to individuals have amplified the calls for personal financial education (Starček & Trunk, 2013; Peng et al., 2007). On the present, there are evident activities in a support of financial education especially from the European Commission (EC) side. The EC issued "The Communication on Financial Education" report. This report explicitly states economic and social advantages of a higher level of FL as well as fundamental principles of financial education control according to the chosen procedures (European Commission, 2007). The EC support led to implementation of various tools in a more complex financial world in order to increase FL of students. The FL standards represent one of those tools that are implemented in institutions of all levels of educational system, thus students may obtain higher financial skills (as for instance in the Czech Republic, where the National Strategy for Financial Literacy was issued in 2010). The primary platform is formed by economical categories, such as money and transactions, financial planning and management, risks and rewards, economic terms, consumer rights and responsibilities, etc. in spite of the differences in a content of educational standards in the individual countries (OECD, 2016a).

In Slovakia, the National Standard of FL (Version 1.0) was formed by the Ministry of Education, Science, Research and Sport of the Slovak Republic (MESRS) and actualized in 2013. Bank of financial literacy, Open-book of Financial Literacy, etc. were active in obtaining other resources (MESRS, 2014). The financial standards had a dual role – they determined necessary knowledge, skills and experiences for educational staff and students, as well. Research studies from abroad focus on process and result trajectories in the FL regulation within particular countries in recent years (Klapper et al., 2015; Rasoaisi & Kalebe, 2015; Kozina & Ponikvar, 2015; Nano & Cani, 2016).

Level of FL around the world can be affected by many factors, which are not equally important in all participating countries and economies. Differences in FL can be associated with gender, parental background, educated system or economic status in country.

Figure 1. Relation of financial literacy, GDP per capita and expenditure on education in given country.



Source: own processing according to PISA and OECD data

By using available data from PISA and OECD statistics we put to the relation scores of FL of the year 2012 which were officially released on July in 2014, because findings about data of PISA 2015 will be available later in May 2017, GDP per capita as the main factor of economic growth in US Dollar since year 2015 or latest and expenditure on education as % of total government expenditure since year 2013. Indicator expenditure on education is represented by different size of points. The bigger point is, the more financial recourses given country spend on education. Figure 1 shows relationship between student's score on FL assessment, GDP per capita and expenditure on education. Living in a rich country does not seem as a strong implication on the FL scores of 15 years old students. We cannot say that higher expenditure on education will cause higher level of FL of students as well ($p > 0.05$). While higher GDP per capita is associated with higher level of FL, the plot in Figure 1 indicate that lot of countries with lower value of GDP per capita (Latvia, Poland, Czech, Estonia) perform better level of FL than countries with higher economic growth as Italy, France or United States. This implies that students and youth in countries with advanced economy do not achieve higher score of FL than students in poorer countries. This is determined by a number of socio-economic, political and cultural aspects. A detailed examination of them requires access to more structured data. Those conditions also create a platform for a subsequent research.

In this context Lusardi (2015), OECD (2014) indicates that following independency simultaneously underscores the importance and relevance of having a well-functioning educational system or its efficiency. Results of research study of Dragoescu (2015) show positive relation between GDP per capita and the number of students with higher education and no connection between GDP per capita, size of students respondents and public education expenditure. In one of the OECD study (French, French & Li, 2015) was found out negative impact of gender on public expenditure on education and positive effect of individualism and long-term orientation.

Hence, authors emphasize relevance of cultural dimensions on education expenditure and country differences of FL. Examination of regional, national and international disparities and discrepancies in the financial literacy of special populations is in the recent years the subject of interest to many research teams, as well as polemic and debate. It is related to process of globalization and related changes in the financial markets, the increasing internationalization of economic and business processes, etc. In Slovakia, there absents complex research and expert studies within given issue in spite of their importance in strategic concepts' formation, planning of educational processes, and also creating of relevant policies. The above mentioned facts have made us more interested in a close and deep examination of the level of FL and disparities at selected universities, and in the confrontation with the partial results of international research. The principal aim of this research was a comparison of levels of financial literacy at both input and output, i.e. between the first year undergraduates and those graduates who are in the final year of their studies and a research of causal links, which provide a list of differences in horizontal (researched universities) and vertical (other categories) FL dimensions. The next chapters provide a detailed description of methodology and research results.

Methods

The survey of FL level was realized during the following period, December 2015 until March 2016. There participated 496 students from three selected universities in Slovakia: Faculty of Economics, Technical University of Košice (EKF TUKE), Faculty of Management of University of Prešov in Prešov (FM PU) and Faculty of National Economy of the University of Economics in Bratislava (NHF EUBA). These Slovak universities have been active for many years and they provide various economically oriented study programs. They also realize research activities besides those educational ones. Table 1 shows a structure of research sample.

Table 1. Research sample according to sex and university level of respondents.

Faculty/ University	Frequency of survey respondents						Overall Frequency
	1 st year of Bachelor study			2 nd year of Master study			
	Men	Women	Total	Men	Women	Total	
EKF TUKE	46	89	135	33	60	93	228
FM PU	18	39	57	11	25	36	93
NHF EUBA	47	81	128	21	26	47	175
Total	111	209	320	65	111	176	496

Source: authors processing

The written form of survey by means of structured questionnaire that consisted of 54 questions was used in order to collect the necessary data. Questionnaire structure was divided into three types of questions so it also considered key categories of a given issue. The first type of questions focused on demographic data of respondents, the second type of questions was related to practical tasks which focused on verifying the level of FL and confirming, and/or rejecting the hypothesis that emerges from prospect theory. The last type of questions consisted of those that concentrated on financial situation and financial behaviour of a respondent. The survey questionnaire included closed questions that had either a character of multiple choice questions or questions with rating scales (7-10), when respondents could convey their attitudes. Rating questions were related to financial behaviour of respondents, while focusing on their self-perception.

The targets as well as character of a survey were determined by a form of questionnaire and questions' concept. The students' FL was evaluated by 7 specific and practical (mathematical) tasks with multiple choices and one correct answer on the basis of content point of view. In the research, there was applied a verified and internationally respected procedure, which has also been used by the Global Financial Literacy Excellence Center (GFLEC) at the Washington

university in the U.S. (e.g. Lusardi & Tufano, 2009). We analyze correlative data dependence of selected variables and their intensity by using Logit model. The research line is defined by a few hypotheses, and a goal is to explain the level of respondents' financial literacy in terms of their sex, high school background, university study program and self-perception in terms of math and financial skills.

H₁: Level of respondents' FL connected to respondents' sex.

The primary source of this hypothesis was a research made by an international study, PISA (2012, in cooperation with GFLEC). This research made a conclusion that male respondents are more frequently ranked at higher, but also lower levels of FL evaluation (wide variance of achieved FL level). Female respondents reached average results in this research. Our research primarily focused on a possibility of such differentiation between sexes in terms of FL in students of specific economic faculties in Slovakia.

H₂: Level of respondents' FL defined as an input of students, which is connected to high school type.

Many high school study programs offer different knowledge of FL. On the other hand, FL is inevitable in daily life of each individual who becomes a client, customer, debtor, creditor, etc. In this context, each individual should have a certain level of FL. The differences presumed by this hypothesis are of main interest of this research, while accepting a fact that only a part of population continues in the university studies.

H₃: Level of FL is increased by completing economic study programs at the university.

The individuals achieve the highest level of education by completing the university study programs also in economic field. It is estimated that those individuals who did not complete any economic study programs, or are at the beginning of such studies have significantly lower level of FL than those respondents who are about to complete their economic studies.

H4: Level of FL connected to respondent's self-perception of math skills.

Math is a basis of as various disciplines as financial literacy concept. Financial skills are not identical with skills in math and vary by individuals. In terms of PISA skills of FL relate with math skills, but on the other hand high mathematical knowledge do not have to indicate higher level of FL as well. Individuals should to absorb as knowledge and skills of finance and economy as math knowledge which contribute to understand of common financial issues. We consider variety of respondent's self-perception in math skills comparing with their financial skills.

H5: Level of FL connected to respondent's self-perception of financial skills.

As in the previous case we focus on respondent's self-perception in relation to financial knowledge. We analyze whether the respondent's internal opinion of his financial skills differ from the math one. We examine relation between respondent's financial knowledge and level of FL achieved in survey.

We run binary logistic regression which is a special case of the generalized linear model. In binary logistic regression the dependent variable is binary, thus has a dichotomous nature. In binary logistic regression, dependent variable does not need to be normally distributed.

Further, this method does not require a linear relationship between the dependent variable and the repressors. Moreover, this method overcomes many of the restrictive assumptions of linear regression. Binary logistic regression measures the odds of occurrence of studied phenomenon with probability π , against nonoccurrence of given phenomenon with probability $1 - \pi$. The part of these two values represents the ratio of the chances that explained variable reaches one out of mentioned category (occurrence vs. nonoccurrence).

The odds of occurrence of the phenomenon is given as following:

$= \frac{\pi}{1-\pi}$. Then, the probability is expressed as $\pi = \frac{odds}{1+odds}$. As

mentioned above, logistic regression is based on the general linear model, in which the asymmetry of values is removed by transformation of the model by natural logarithm. Logit is then

defined as $\ln(odds) = \ln\left(\frac{\pi}{1-\pi}\right)$ with the domain $(-\infty; \infty)$. Logit model is then can be expressed in its basic shape as:

$$\ln \frac{\pi}{1-\pi} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k \quad (1)$$

where $\beta_0, \beta_1, \dots, \beta_k$ are the parameters of the model and π is the conditional mean value of the response variable (Řezanková, 2011). Logistic regression estimates the probability that the phenomenon occurs. We assume that the phenomenon occurs when the probability is higher than the chosen threshold called cut point. Cut point is usually set to 0.5. When this value is lower, we assume that the phenomenon does not occur (Kráľ, 2009).

Results

Practical tasks used in survey questionnaire which enabled to evaluate the level of students' FL in selected economical faculties were thematically-oriented to financial skills and abilities of respondents in simple and complex interest rate, inflation, influence of interest rates on particular types of investments. In our analysis, the dependent variable is financial literacy, or financial illiteracy of students. Dependant variable takes value 1 in case when subject is financially literate and value 0 in case, when subject is financially illiterate. The level of students' FL was evaluated by 7 specific and practical (mathematical) tasks with multiple choices and one correct answer intent on basic financial skills. Financial literate person is that kind of respondent who answered correctly at least 4 practical queries, i.e. an absolute majority of these tasks aimed at FL. Our dataset consists of

496 observation, where 320 were females and 176 were males. Basic descriptive statistics on our dataset is presented in Table 2.

Table 2. Descriptive statistics, distribution of financial literacy.

	Financial illiterate	Financial literate
Gender		
Men	81	95
Women	111	209
Year of study		
First year of Bachelor study	144	176
Last year of Master study	48	128
Highest level of education attained		
Grammar School	86	119
Business Secondary School	43	48
Hotel academy	6	4
Secondary vocational school	9	5
Self-perception		
Good in math skills	77	127
Good in financial skills	67	114

Source: authors processing

Independent, explanatory variables are:

Gender nominal variable reaching two categories: males and females

Education categorical variable acquiring six categories: high school, business academy, hotel academy, secondary technical school, conservatory, bachelor degree

Year of study categorical variable acquiring two values: first year of study and fifth (final) year on study at the university

University categorical variable indicating in which institution one

is studying. Here we consider three faculties: The Faculty of Economics at the Technical University of Kosice, The Faculty of National Economy at the University of Economics in Bratislava and The Faculty of Management of University of Prešov in Prešov

Self-perception binary variable with two possible outputs, taking into account math and financial skills and indicating respondent's self-perception. Variable takes value 1 in case that subject find himself mathematically well skilled or well skilled in terms of financial literacy. Otherwise variable takes value 0.

Results of logistic regression are presented in Table 3. Model as a whole is statistically significant and overall percentage of cases that are correctly predicted by the model is 64.3 %. Eyeballing Table 3 indicate, that expect variable Gender, no other variable has a statistically significant impact on financial literacy of our sample. Concerning Gender we can conclude that being a male diminish the odds of being financially literate by 35.2 % compared to females, and while controlling for other variables in the regression.

Table 3. Logistic regression

	B	S.E.	Wald	df	Sig.	Exp(B)
Gender (male)	-.433	.194	4.967	1	.026	.648
Education			2.659	4	.616	
business academy	.444	.284	2.455	1	.117	1.559
hotel academy	.317	.737	.185	1	.667	1.373
secondary technical school	-.061	.578	.011	1	.916	.941
Year of study (first)	-21.706	40214.866	.000	1	1.000	.000
University			.721	2	.697	
NHF EUBA	-.077	.273	.078	1	.780	.926
FM PU	-.184	.217	.720	1	.396	.832
Self perception						
math skills	0.076	.215	.125	1	.724	1.079
financial skills	0.206	.223	.850	1	.356	1.229
Constant	22.398	40214.866	.000	1	1.000	5.335E9

Source: authors processing

Studied model as a whole defined gender as a statistically significant

variable. Concerning compound interest and risk diversification, men of all respondents in our survey are less likely to respond correctly to the question compared to women. Generally, fewer men at all three Slovak economic faculties can answer all questions correctly compared to women. But, for instance, if we look deeper on students at EKF TUKE, male students of this faculty achieve higher level of FL than female students. For instance, where only 10.13 % of male respondents are financially illiterate, while this number is in female respondents much higher, 30.87 %. Interestingly, the analysis does not prove statistically significant dependence ($p > 0.05$) of year of study between the first year undergraduates and those graduates who are in the final year of their studies. Comparison of levels of financial literacy as a whole at both input and output achieved comparable worth.

Although the results of binary logistic regression showed no significance of this variable throughout the study sample, among the faculties themselves included in the questionnaire we can find certain differences. A frequency rate of financially illiterate students from EKF TUKE was lower at the end of their studies (9.68 %) as at the beginning of their studies (33.33 %). Similar connection was found out at NHF EUBA, where a rate of financially literate students of the first year (53.13 %) was lower than in students of the last year at particular faculty (72.34 %). Logical connection was found in two universities, in Košice and Bratislava, while analyzing the relation between FL level of respondents and level of their studies at the university. In both cases, the statistically significant dependency was confirmed ($p < 0.05$), which means that financial knowledge depends on completed level of study at particular university. However, this validity was not confirmed at FM PU ($p > 0.05$), where the rate of financially literate first-year students at FM PU forms 31.58 %, while only 27.78 % of the last year students are financially literate. Business Secondary School in comparison to Grammar School, or other types of high schools teach many subjects of economy and they provide primary or broadened knowledge of finances and economy for their students.

Therefore, it was supposed that respondents who attended Business Secondary School would reach a higher level of FL. The second one of interesting findings was rejection this hypothesis, we do not recognize any statistically significant dependency. Based on results of our empirical research we cannot unambiguously express validity of the assumptions H4 and H5. In both case of student's self-perception of math and financial skills prevail findings that not confirm their interdependency ($p > 0.05$). Slovak students thinking their mathematical or financial knowledge are good in fact did not reached any proper level of FL (13.6 % and 22.3 %) in survey and these students may overestimate their skills.

On the other hand there was evidence of many cases when students underestimated their knowledge in contrary to their higher level of FL (35.7 % concerning math skills and 38.3 % financial skills). We take a look at the relation of university students to work activities. Each conducted job in many forms set differentiated demands that help shape and develop individuals with relevant work habits. Work habits such as an effort to meet deadlines, work attendance, employment relationships or communication skills may lead to exercise the influence of financial decisions in the light of financial or banking operations. We found that 54.23 % of students work in a full-time or part-time job. Between students prevail part-time job regardless of gender. In accordance to results of testing we did not recognize any dependency between level of FL and work status of students ($p > 0.05$). The share of financially skilled students without work activity and financially skilled students working while studying is comparable.

Discussion

Nowadays, FL represent a global issue of today with significant consequences as on individuals and his family budget as on balanced economic growth in given country (Fabris & Luburic, 2016) and it is necessary to make sense of the funding policies on education programs to increase of their efficiency and equity (Johnes, Portela & Thanassoulis, 2016). This study deals with financial behaviour of

respondents and their skills in terms of financial literacy concept of the selected economic faculties in Slovakia. The research line is defined by a few hypotheses linked to level of students' FL, and a goal is to explain the level of respondents' FL in terms of their sex, high school background, university study program and relevance of self-perception concerning math and actual financial knowledge.

The results of presented research show gender differences in level of FL, with male students diminishing the odds of being financially literate by 35.2 % compared to female students. In deeper analyze in light of EKF TUKE university we found out contrary results where men achieved higher score points in FL than women. These findings where women are more financial literate compared to men are consistent with study of Gary (2013). More the contrary majority of studies (Bottazzi & Lusardi, 2016; Lusardi & Mitchell 2011; Lusardi & Mitchell, 2005; Prast & Soest, 2016) show significantly higher male success concerning financial knowledge than female one. In study of OECD (2016b) 19 of the 30 participating countries show substantial difference between the proportion of men and women reaching the minimum target score on the questions aimed at FL. Results of this study indicate lower level FL of women then man after controlling for age, country level differences or education. Dependence of year of study between input and output is, surprisingly, not significant. We do not detect important impact of university attendance on level of FL between Slovak students.

Comparison of levels of FL as a whole by the first year undergraduates and those graduates who are in the final year of their studies achieved comparable worth. Student's self-perception of math and financial knowledge is relatively realistic. Major proportion of financial literate students (60.62 %) considered themselves to have good math skills. Concerning financial knowledge more than 60.32 % of financial literate students suitable evaluated their skills in terms of inflation, compounding rate or diversification. These findings are consistent with results of study OECD (2016b).

Interestingly, we do not recognize any statistically significant dependency of types of high schools on student's FL. University students from Business Secondary School that provide broadened knowledge of economy and finance do not prove higher financial knowledge compared to other types of high school in Slovakia. In relation to work habits and FL there is no dependency. The proportion of financial literate students without work activity compared to students working while studying is comparable. The findings of presented research indicate comparable level of FL between university students at first year of Bachelor study with students at the end of their Master study. Many students struggle with basic concepts of financial issue such as inflation, diversification or compound interest and point up the problem of applying numeracy skills in a financial context. FL is crucial element of financial decisions on daily basis not only for students but also children, adults or elderly and help them to manage their household budget as well as react to events leading up to influencing their financial well-being in the future.

It is also very important to present limitations of the survey besides the given comparable limitations of the research. One of research limits was uneven representation of respondents at researched faculties. Three selected faculties of economy were examined due to procedural and technical difficulties of a given survey. This focus limits the outputs' generalization of the whole Slovak population.

Conclusion

Enhancing financial skills of as youth as adults is increasingly brought to common people's attention and there are evident activities of policy makers aimed at the support of financial education in many countries of the world. The main goals of this study is to compare levels of financial literacy at both input and output of the selected economic faculties in Slovakia, i.e. between the first year undergraduates and those graduates who are in the final year of their studies in terms of their sex, high school background, university study program and self-perception of math and financial knowledge. The written form of

questionnaire was chosen due to given research targets and form of data collection. Results confirmed a significant gender differences in level of FL where women achieved higher scores of financial skills compared to men. Interestingly, here exist no dependence of year of study between input and output. Level of FL among first year students of Bachelor study was comparable with students of Master study and do not prove any significant enhancing of financial skills acquired through the graduation from university study program at economic faculties.

Further, this study does not recognize any statistically significant dependency of types of high schools on student's FL. As is clear from international studies, this research indicate that while personal skills in mathematics affecting the real level of FL and which students perceive as important, on the contrary the assumption have not to be valid. The results of presented research provide important information for policy makers who should reflect on present status of this issue in Slovakia, reveal research potential in adjusting FL monitoring system within Slovakia and develop a platform for efficient concepts of financial education in Slovakia. Such support of financial education may lead to improving financial decisions of individuals. Last but not least, research initiation in FL area and its support from state will also support formation of international comparison platform and development of international standards in financial education field.

References

1. Afonso, A., & Aubyn, M. (2005). Cross-country efficiency of secondary education provision a semi-parametric analysis with nondiscretionary inputs. ECB, Working Paper Series No. 494. Retrieved January 12, 2017 from http://ssrn.com/abstract_id=726688.
2. Aristovnik, A., & Obadic, A. (2014). Measuring relative efficiency of secondary education in selected EU and OECD countries: the case of Slovenia and Croatia. MPRA Paper No. 63936. Retrieved January 6, 2017, from <http://mpra.ub.uni-muenchen.de/63936/>.

3. Aristovnik, A. (2013). Relative Efficiency of Education Expenditures in Eastern Europe: A Non-parametric Approach. *Journal of Knowledge Management, Economics and Information Technology*, 3(3). Retrieved from <http://EconPapers.repec.org/RePEc:spp:jkm:1379>.
4. Atkinson, A., & Messy, F. (2012). Measuring Financial Literacy: Results of the OECD / International Network on Financial Education (INFE) Pilot Study. *OECD Working Papers on Finance, Insurance and Private Pensions*, No. 15. OECD Publishing. <http://dx.doi.org/10.1787/5k9csfs90fr4-en>.
5. Barro, Robert J., (2013). Education and Economic Growth. *Annals of Economics and Finance*, Society for AEF, 14(2), 3301-328. Retrieved from <http://down.aefweb.net/WorkingPapers/w571.pdf>.
6. Barro, R., J., & Lee, J. (2011). International Data on Educational Attainment Updates and Implications. (NBER Working Paper 7911). Cambridge, MA: National Bureau of Economic Research. Retrieved October 3 , 2016 from doi: 10.3386/w7911. pp 541-563.
7. Belás, J., Nguyen, A., Smrčka, L., Kolembus, J., & Cipovová, E. (2016). Financial literacy of secondary school students. Case study from the Czech Republic. *Economics & Sociology*, 9(4), 191–206. doi: 10.14254/2071-789X.2016/9-4/12.
8. Bottazzi, L., & Lusardi, A. (2016). Gender Differences in Financial Literacy: Evidence from PISA Data in Italy. Retrieved January 11, 2017, from <http://www.gltfoundation.com/en/differenze-di-genere-nelleducazione-finanziaria-i-dati-di-pisa-program-for-international-student-assessment-english-paper/>
9. Dragoescu, R., M. (2015). Education as a Determinant of the Economic Growth. The Case of Romania. *Procedia - Social and Behavioral Sciences*, 197, 404 – 412. <http://dx.doi.org/10.1016/j.sbspro.2015.07.156>
10. European Commission. (2007). Communication on Financial Education. Brussels: European Commission. Retrieved November 10, 2016, from http://ec.europa.eu/finance/finservices-retail/capability/index_en.htm.
11. Fabris, N., & Luburic, R. (2016). Financial education of children and youth. *Journal of Central Banking Theory and Practice*, 5(2), 65-79.

- Retrieved from
<http://EconPapers.repec.org/RePEc:cbk:journlv:5:y:2016:i:2:p:65-79>.
12. French, D., & McKillop, D. (2016). Financial literacy and over-indebtedness in low-income households. *International Review of Financial Analysis*, 48, 1–11.
<http://dx.doi.org/10.1016/j.irfa.2016.08.004>.
 13. French, J., J., French, A., & Li, W. (2015). Erratum to “The relationship among cultural dimensions, education expenditure, and PISA performance”. *International Journal of Educational Development*, 45, 25–34. <http://dx.doi.org/10.1016/j.ijedudev.2015.10.005>.
 14. Gary, R., M. (2013). In Our Best Interest: Women, Financial Literacy, and Credit Card Behavior. *Numeracy* 6(2). doi:
<http://dx.doi.org/10.5038/1936-4660.6.2.4>.
 15. González-Sánchez, V. M., & De Los Ríos Sastre, S. (2014). Financial education and economic growth: An overview of public and private policies around the world. *Economic growth in the 21st century: Perspectives, role of governmental policies, potential and constraints*, 191–211.
 16. Jorgensen, B., L., & Savla, J. (2010). Financial Literacy of Young Adults: The Importance of Parental Socialization. *Family Relations*, 56(4), 465–478. Retrieved from
<http://www.jstor.org/stable/40864565>.
 17. Hanushek, E., & Luque, J. (2003). Efficiency and equity in schools around the world. *Economics of Education Review* 22(5), 481–502. doi: 10.3386/w8949.
 18. Johnes, J., Portela, M., Thanassoulis, E. (2016). Efficiency in Education. *Journal of the Operational Research Society*.
<http://eprints.hud.ac.uk/29272/>.
 19. Kirjavainen, T., & Loikkanen, H., A. (1998). Efficiency Differences of Finnish Senior Secondary Schools: An Application of DEA and Tobit Analysis. *Economics of Education Review*, 17(4), 377–394. doi: 10.1016/S0272-7757(97)00048-4.
 20. Klapper, L., Lusardi, A., & Oudheusden, P. (2015). Financial Literacy Around the World: Insights from the Standard & Poor’s ratings services global financial literacy survey. Retrieved December 11, 2015, from <https://www.mhfi.com/corporate-responsibility/global->

financial-literacy-survey.

21. Kozina, F., L., & Ponikvar, N. (2015). Financial Literacy of First-Year University Students: The Role of Education. *International Journal of Management, Knowledge and Learning*, 4(2), 241–255.
http://www.issbs.si/press/ISSN/2232-5697/4_241-255.pdf.
22. Král, P a kol. (2009). *Viacrozmerné štatistické metódy so zameraním na riešenie problémov ekonomickej praxe*. Banská Bystrica: Faculty of Economics Matej Bel University.
23. Lusardi, A. (2015). Financial Literacy Skills for the 21st Century: Evidence from PISA. *The Journal of Consumer Affairs*, 49(3), 639–659. doi: 10.1111/joca.12099.
24. Lusardi, A., & Tufano, P. (2009). *Debt Literacy, Financial Experiences, and Overindebtedness* (NBER Working Paper 14808). Cambridge, MA: National Bureau of Economic Research. Retrieved October 20, 2016 from <http://www.nber.org/papers/w14808>.
25. Lusardi, A., & Mitchell, O.,S. (2005). Implications for Retirement Wellbeing of Financial Literacy and Planning. Pension Research Council WP 2010-26. Retrieved January 18, 2017, from <https://ssrn.com/abstract=1695146> or <http://dx.doi.org/10.2139/ssrn.1695146>.
26. Lusardi, A., & Mitchell, O.,S. (2011). *Financial Literacy and Planning: Implications for Retirement Wellbeing*. (NBER Working Paper 17078). Cambridge, MA: National Bureau of Economic Research. Retrieved February 5, 2017 from doi: 10.3386/w17078.
27. Mikušová, P. (2015). An Application of DEA Methodology in Efficiency Measurement of the Czech Public Universities. *Procedia Economics and Finance*, 25, 569–578. doi: 10.1016/S2212-5671(15)00771-6.
28. Ministry of Education, Science, Research and Sport of the Slovak Republic. (2014). *Národný štandard finančnej gramotnosti verzia 1.1*. Retrieved August 8, 2015, from: <https://www.minedu.sk/narodny-standard-financnej-gramotnosti-verzia-11/>.
29. Nano, D., & Cani, S. (2016). The Differences in Students' Financial Literacy based on Financial Education. *Academicus - International Scientific Journal*, 2013(8), 149-160. doi:10.7910/DVN/4WU8KP.

30. OECD. (2014). PISA 2012 Results: Students and Money: Financial Literacy Skills for the 21st Century (Volume VI). OECD Publishing. Retrieved September 9, 2015, from http://www.oecd-ilibrary.org/education/pisa-2012-results-students-and-money-volume-vi_9789264208094-en.
31. OECD. (2016a). Financial Education in Europe: Trends and Recent Developments. Paris: OECD Publishing. doi: <http://dx.doi.org/10.1787/9789264254855-en>.
32. OECD. (2016b). OECD/INFE International Survey of Adult Financial Literacy Competencies. OECD Publishing. doi: <http://www.oecd.org/finance/oecd-infe-survey-adult-financial-literacy-competencies.htm>.
33. Rasoaisi, L., & Kalebe, K., M. (2015). Determinants of financial literacy among The National University of Lesotho students. *Asian Economic and Financial Review*, 5(9), 1050-1060. doi: 10.18488/journal.aefr/2015.5.9/102.9.1050.1060.
34. Starček, S., & Trunk, A. (2013). The meaning and concept of financial education in the society of economic changes. Paper presented at international conference „Active Citizenship by Knowledge Management & Innovation“, held in Zadar, Croatia in 2013. On-line at: <http://www.toknowpress.net/proceedings/978-961-6914-02-4/>.
35. Szovics, P. (2012). Quo vadis finančné vzdelávanie?. *Biatec*, 20(1). Retrieved September 2, 2016, from <http://www.nbs.sk/sk/publikacie/biatec-odborny-bankovy-casopis/rocnik-2012/biatec-c-1-2012>.
36. Trunk, A., & Dermol, V. (2015). EU integration through financial literacy and entrepreneurship. Paper presented at international conference „Managing Intellectual Capital and Innovation for Sustainable and Inclusive Society“, held in Bari, Italy in 2015. On-line at: <http://www.toknowpress.net/proceedings/978-961-6914-13-0/>.
37. Peng, T., M., Bartholomae, S., Fox, J., J., & Cravener, G. (2007). The Impact of Personal Finance Education Delivered in High School and College Courses. *Journal of Family and Economic Issues*, 28(2), 265–284. doi: 10.1007/s10834-007-9058-7.

38. Prast, H., M., & Soest, A. (2016). Financial Literacy and Preparation for Retirement. *Intereconomics*, 51(3), 113–118. doi:10.1007/s10272-016-0588-9.
39. Řezanková, H. (2011). *Analýza dat z dotazníkových šetření*. 3rd ed. Praha: Professional Publishing.
40. Totenhagen, C., J., Casper, D., M., Faber, K., M., Bosch, L., A., Bracamonte Wiggs, C., & Borden, L., M. (2015). Youth Financial Literacy: A Review of Key Considerations and Promising Delivery Methods. *Journal of Family and Economic Issues*, 36(2), 167–191. doi: 10.1007/s10834-014-9397-0.
41. Vítek, L., Martínková, L. (2015). Assessment of Efficiency of Expenditure Programmes in Education: Primary Education in the Czech Republic. *Procedia Economics and Finance*, 25, 607–614. doi: 10.1016/S2212-5671(15)00775-3.
42. Williams, A. J., & Oumlil, B. (2015). College student financial capability: A framework for public policy, research and managerial action for financial exclusion prevention. *Marketing Intelligence and Planning*, 33(5), 637-653. doi:10.1108/IJBM-06-2014-0081.

ISOCHIMICA FACTORY AS A “PARADIGMATIC CASE STUDY” OF INDUSTRIAL RELATIONS IN THE SOUTH OF ITALY.

Anna D'ascenzio⁶

*Facoltà di Scienze Della Formazione, Università Suor Orsola Benincasa
di Napoli, Via Suor Orsola Benincasa n. 10, 80121 Naples, Italy
annadascenzio@libero.it*

Introduction

Isochimica is a disused factory situated in the periphery of the town of Avellino (Campania, Italy), which, from 1982 to 1988, was commissioned by the Italian State Railway Company Ferrovie dello Stato (FS) to remove asbestos panels from train carriages. In spite of its very short period of activity, the factory caused massive environmental damages in terms of pollution as well as a variety of asbestos-related pathologies affecting the local population. At present time, most of the workers previously employed in the factory have contracted asbestos-related pathologies and are still struggling to claim basic rights such as early retirement and the recognition of work-related illness. Twelve of them have already died⁷. Borgo Ferrovia, the site of

⁶ Anna D'Ascenzio graduated her doctoral studies from the Facoltà di Scienze Della Formazione, Università Suor Orsola Benincasa di Napoli in 2017. Currently she works as sociologist at the URiT (Unità di Ricerca sulle Topografie sociali). She defended her thesis on Shopping Malls as Heterotopic space. In her research she focuses on Shopping malls have become a ubiquitous marker of urban living, becoming centres of human activity. She published several articles on the topic of governance and disaster South Question.

⁷ Designated institutions have not provided official data about the number of asbestos-related deaths and pathologies in the city of Avellino. Hence, only partial information about the number of deceased or ill workers is available, as the researchers have lost traces of many of the 330 workers employed in the Isochimica factory, who came from different cities of the Campania Region. Most of the former workers have been diagnosed with between 8.000 and 10.000 asbestos fibers in lungs while 9 of them have already died, according to official estimates. In addition, cancer rates in the neighborhood that hosted the factory have significantly increased. In the last 30 years,

the closed factory, has not yet been decontaminated and hundreds of cubic meters of asbestos dust are still abandoned in the open air in the proximity of schools, sports courts and houses. The bare structure of the asbestos plant is located in an interstitial zone the Industrial Development Area (Asi) of Pianodardine, a series of recently built settlements residential units and an almost deserted rail station. The particular spatial configuration of the neighborhood suggests the idea of a failed urbanization, which could be read more generally as the symbol of the clumsy attempt at economic restructuring that took place in the town after the 1980 earthquake. Likewise, the ruins of the industrial structure financed by State funds for reconstruction can be seen to reflect the image of a development without foundations (Di Meglio 1997). However, notwithstanding the absence of an urban project, the management of a catastrophe – in this case the earthquake in Irpinia - has been a way to experiment a specific form of disaster capitalism (Klein 2007). With Klein's thesis, i think free market ideas rely on crises. In a time of a "natural disaster, war, or military coup, people are disoriented and confused and fight for their own immediate survival or wellbeing, setting the stage for corporations, politicians, and economists to push through trade liberalization, privatization, and lower public spending without facing any opposition. According to Klein, "neoliberal" economists welcomed Hurricane Katrina and Indonesian tsunami as opportunities to erase past policies and introduce new free market models.

Hence, post-earthquake Irpinia could be interpreted as a "paradigmatic case study" to shed light on the strategies of capital extraction from the people and the environment in crisis circumstances. As a matter of fact, the process of management of the population at risk has set the basis for a process: "by which the uncertainties that are typical of potentially hazardous situations can be minimized and public safety maximized. The goal is to limit the costs of emergencies or disasters through the implementation of a

only 200 workers (and none of the inhabitants of the neighborhood) have been subjected to health checks and medical examinations. Just a handful of those workers have been certified partial medical disability (up to 8 %).

series of strategies and tactics reflecting the full life cycle of a disaster, i.e., preparedness, response, recovery, and mitigation” (Drabek, 2004, p. 1).

In Irpinia, the management of the state of calamity after the earthquake became a practice of government patronage. Patronage can be defined as an informal contractual relationship between persons of unequal status and power (Silverman, 1965, p. 296). She with described the spread of patronage practices in the Italian South in relation to familism (Banfield, 1958), defined as the tendency of Southerners to favour the family group.

A short genealogic Irpinia earthquake⁸

In the context, Isochimica is a “paradigmatic case study” of patronage in South of Italy; it was used as a disciplinary technique, which aimed at disenfranchising labour unions. More specifically, the establishment of a patron-client relationship allowed the experimentation of new labor practices (Piattoni, 1988), such as the introduction of subcontracting and the outsourcing of a part of southern Italian industry. Starting from these assumptions, the article investigates the construction of consensus practices achieved by institutional actors throughout the different stages of the establishment of the factory. It also examines anomalies in the FS’s contractual employment and their effects on the recruitment of the ex-workers. Several anomalies can also be found in the management of the judicial proceedings and the implementation of sanitary measures. In 1983, a few months after the opening of the factory, a group of fifteen workers sent a complaint to the attention of the local Prosecutor in which they denounced the lack of enforcement of safety measures. It was deliberately ignored, while the sanitary experts appointed by the local Healthcare agency (ASL) attested that the factory’s safety systems were regular and did not

⁸ The Irpinia earthquake took place on 23rd November 1980 (MS=6.9) at 18 h 34 m UT. This earthquake was one of the strongest events in 20th century Italy. It caused the death of about 3000 people, total destruction of 15 towns and severe damage within a radius near 50 km.

authorize controls on the state of health of the population of Borgo Ferrovia. "The health of Borgo Ferrovia" was at risk already in 1984⁹. A study of the Sacro Cuore University of Rome showed that workers and local residents were facing high risks as they were exposed to visible asbestos dust. Moreover, a municipal ordinance of September 15, 1988 prescribed the temporary closure of the factory, but asbestos removal activities continued for a further three months until December 15 1988 (Osservatorio Nazionale sull'amianto. Comitato provinciale di Avellino, 2011, p.4). It was only in 1989, after a new complaint filed by the workers of Officine Grandi Riparazioni (ORG) of Foligno, that a magistrate from Florence Beniamino Deidda¹⁰, permanently put an end to all clean up asbestos in the city of Avellino. Among those under investigation is current mayor of Avellino for not having ensured the safety of the factory site since 17 June 2014. Other people under investigation. initiated by prosecutor Cantelmo, about 237 people including the ex- workers and their families have been identified as the injured party. Moreover, five of the former managers of the factory and several members of the local administration will be prosecuted for producing fraudulent sanitary certificates for the disposal of asbestos¹¹.

On closer inspection Isochimica appears to be a space of exception (Agamben, 2005), in which a differential management of the populations has been carried out. As victims of a disaster and South space, those populations became object of a double social exploitation. In this process, economic exploitation turned into symbolic exploitation and the fact of "being southerners and victims of an earthquake" (Giuseppe, ex Isochimica worker and ex

⁹ Those under investigation is current mayor of Avellino for not having ensured the safety of the factory site since 17 June 2014.

¹⁰ The interview conducted by Beniamino Deidda contain a detailed description of the different techniques of asbestos disposal that were used in the factory: most of the toxic material was buried in 4 to 5 meters deep holes in the ground of the factory, the remaining part was either mixed with concrete before being buried or placed in plastic bags and transported to external dumps on trucks.

¹¹ This investigation has marked a clear shift in the history of the Isochimica case, because before 2011, the only person who had been held responsible for the environmental disaster was the CEO of the factory, Elio Graziano. He died in 2017.

representative Labor Union, 5 July 2015) became synonym of a "subaltern people", which led to the acceptance of a condition of subaltern workers¹². It became even more powerful as a result of the process of victimization of the factory workers themselves. The facts exposed in this article emerged during the phases of genealogical reconstruction of the factory. Moreover, it is worth notice noting that the activity of historical and political reconstruction, combined with the biographical impressions of the ex-workers, has subverted the portrayal of an inherently backward South.

Method

This study was conducted between 2011 and 2015 by the researchers of URiT (Research Unit in Social Topography) at the Suor Orsola Benincasa University of Naples. At an early stage of the research, we reviewed the national and international scholarly literature¹³ on this subject and, at a later stage, collected and analyzed primary sources. Our aim was to identify the main mechanisms of the production of a discourse "concerning what we term asbestos biocide". More specifically, we examined editorial narratives, portrayals, and descriptions in the national and local mass media production, political speeches, on-line blogs, and readers' letters to newspapers. In the subsequent stage of participant observation, we examined editorial

¹² See Spivak, 1988. A subaltern is a person holding a subordinate position, she draws on the term's nuances. It has particularly rich connotations for the Indian subcontinent that viewed imperialism from the ambivalent position of the subaltern functionary in the complex colonial hierarchy, caught between detested superiors and feared "natives. The Italian theorist Antonio Gramsci applied this term to the unorganized masses that must be politicized for the workers' revolution to succeed. In the 1980s the Subaltern Studies Group (a collective of radical historians in India with whom Spivak maintains ties) appropriated the term, focusing their attention on the disenfranchised peoples of India. The "subaltern" stands in an ambiguous relation to power-subordinate to it but never fully consenting to its rule, never adopting the dominant point of view or vocabulary as expressive of its own identity.

¹³ For short international reviewed, you can see: Drabek, 1986; Baker, 1991; Miletì & Fitzpatrick, 1993; Hoffman & Oliver-Smith, 2002; Elliott & Pais, 2006; Giroux 2006; Fassin & Pandolfi, 2010; Benadusi, 2012, 2013. For earthquake irpinian case studies, you can see: Bevilacqua, 1981; Chubb, 2002; Dickie *et al.*, 2002; Simonetti & Ventura, 2011; D'Ascenzio 2015; Ferraro, 2015; Saitta 2013; Petrillo 2015; 2017.

narratives, portrayals, and descriptions in the national and local mass media production, political speeches, on-line blogs, and readers' letters to newspapers. In the subsequent stage of participant observation, we attended meetings, assemblies, and protests set up by the population. Furthermore, we have traced the biographies of direct witnesses with more than a 20 in-depth interviews and provided documentation of key events through pictures, audio, and video files. The series of events analyzed in this article are spatially and numerically limited, from a quantitative point of view. However, this has never been seen as a methodological pitfall by the researchers. Contrarily, the use of a qualitative methodology has allowed a meticulous observation and analysis of the use of discursive techniques in the construction of racial differentiation of the plebs and the Southern Question (Gramsci, 2011). Moreover, in-depth interviews have helped retrace the historical background of the events. In the same way, the biographies collected in the course of the research have been a precious tool for the reconstruction of the political and cultural post-earthquake discourse. Following the ex-workers' biographical paths helped us understand their shared culture (Bertaux, 1996), the slow and complex formation of a common conscience, the hesitant development of their individual and collective claim strategies and the problematic relationship with the inhabitants of the neighborhood, who proved to be mostly indifferent, if not openly hostile to the protests of the workers.

Results

The Isochimica case could be interpreted as an industrial experiment that has been conducted in the era of late liberalism in the economically peripheral region of Irpinia, which saw the dramatic shift in the 1980s from a rural economy to an "emergency-driven" economy. One of the main characteristics of the development of the asbestos industry was its use of experimental forms of flexible labor. For a long time our Chief Executive Officer said that FS: "would give different tasks other than asbestos removal, such as mechanical and electromechanical repair. He repeated that we had to bet on coach

fabrication if we wanted to keep on working" (Giovanni, ex former Isochimica ex-worker Naples, July 5 2015). In this context, flexibility – understood as the production of new processes of labor management – was inscribed in the wider strategy of privatization of FS (Nationalthe State Railway Company). The outsourcing of some of the maintenance activities exacerbated the crisis of the Fordism union system, leading to the weakening of more politicized areas in the North of Italy and the establishment of new industrial relations in the South. In this scenario, the installation of the Isochimica plant after the earthquake of 1980 was a favorable opportunity for the local establishment – which was particularly active in the production of discourses and knowledge on the crisis of the local economy – to introduce "modern" plans of industrial transformation concealing the high risks connected with the treatment of asbestos. As a matter of fact, the Municipality of Avellino granted permission for the sole activity of iron waste treatment (Art 48 del D.P.R. 303/56), while the USL 4 presided over the regularity of the disposal processes. The State and alibis to relieve itself from any responsibility in Irpinia's environmental disaster.

The Earthquake was immediately represented by the media as a tragic but occasion to intervene in this part of "South Italy". For instance, in 1987, the Italian Centre of Study on Social Investments (Censis,1988) highlighted that seven years after the earthquake, Avellino was still characterized by one of the lowest per capita incomes in the country (less than three million Lire), a significant number of inhabitants dependent on state pensions (106 thousand, of which 71 thousand disabled), an incredibly high rates of unemployment (34 thousand) and numerous homeless people. The earthquake created a state of crisis that fostered claims for a new territorial development¹⁴. On the

¹⁴ They were achieved through extraordinary legal measures: Legge n. 219 del 14 Maggio 1981 - Ulteriori interventi in favore delle popolazioni colpite dagli eventi sismici del Novembre 1980 e del Febbraio 1981; Legge n. 140 del 16 Aprile 1981 – Misure eccezionali per la tutela e lo sviluppo dell'occupazione nelle zone terremotate della Campania e della Basilicata. The rule of law becomes very profitable both for the political powers and for the development of business. This generates a new local ruling class that manages to conquer a significant position, even on a national level, through friendship circles that include politicians, businessmen and even police officers,

one hand, this emergency legislation had the effect of multiplying the request and distribution of public money and, on the other it reshaped the territory (Di Costanzo & Ferraro, 2013). The subsequent descriptions of Irpinia as a case of heterotopic Italian space (Petrillo, 2015) inhabited by a population that struggled between unemployment and chronic underemployment and lived in spatially isolated areas represented a strong rhetorical resource, which helped articulate the discourse about the crisis and allowed the naturalization of speculative interventions at the same time. In fact, the process of "venture urban" was managed by the powerful of "localist lobby" (Becchi Collidà *et al.*, 1986) composed of prominent members of the national political establishment. It included: Christian Democrat party (DC); Italian Socialist Party (PSI) and Italian Communist Party (PCI). In about twenty years of reconstruction, this region endured numerous cases of deception and fraud, which led to the decline of several areas (such as Calabritto e Conza) and businesses. It is worth noting that after almost 1,000 billion lire of public investment in new enterprises, only 2.687 of the anticipated 4.135 jobs were created. Borgo Ferrovia was the result of a deal between the bank system, the Ministry of Industry, and a private firm protected by the DC party and PSI.

Interview about organization of "new" Italian State Railways and "new" form of industrial relations

Pietro, an ex-stationmaster of the FF.SS company, who was employed in the train station of Avellino at the time those events occurred, exposed his colleagues by publicly stating that: "They allowed contaminated vehicles to circulate on the station rails" and explaining that, in the Isochimica affair, "people's lives were exchanged for profit". Pietro is currently volunteering for a labor union. In the course of our interview, he took an old piece of paper out of his pocket and said: "this is a copy of my first interview, it was published on a local newspaper". Then, he started reading:

members of the armed forces and the intelligence services as well as the national bureaucracy.

Before the opening of Isochimica, the carriages of the FF.SS company were sanitized directly in the station, just a few dozens of meters away from the post-earthquake houses, where many employees were working and a lot of travelers and residents were stopping by. At first, we thought the opening of factory could be a sort of redemption from the earthquake situation, a way to find a job and make some money. Those carriages were sent to us in light of the fact that we were the earthquake victims and we needed new jobs. I remember our lunch breaks, when the employees of the factory shook off their suits covered with dust before drinking their coffee. It was the only "preventive measure" at their disposal, but, at the same time, those asbestos particles were dispersed in the air (Avellino, November 15 2014) ¹⁵.

Antonio was one of the first employees to be hired by CEO "asbestos farm". He was one of the eleven workers who took part in the trial removal activities. Those trial activities were performed directly on the railroad and served as a test to prepare a agree between Isochimica and FS. He described the process as follows:

The Surveillance Office of FS controlled the processing of the vehicles. In early 1982, we started trial operations on the vehicles under supervision of FS' technicians. FS sent us the vehicles and we tried to disassemble them, remove the asbestos insulation panels and reassemble them. The job was done directly on the station rails, in an open-air space (Avellino, November 30 2015).

The "factory" did not exist, insisted Giuseppe "and worker market was characterized by patronage recruitment":

I was twenty years old when I was approached by Graziano CEO's son. I found myself among other young boys. We all

¹⁵ The article was actually a scrap of newspaper. The headline and author could not be identified, while the date, November 5th 1986, was handwritten.

thought we had been luckier than the other, none of us could have imagined what the real motivations were. We were very strong and we did not know our rights. In other words, we didn't know anything about trade unions and the regulation of safety on the work place. Now we know that there is just one word to describe what our recruitment was about: political patronage (Salerno, April 30 2015).

Discussion

The agreement between Isochimica and FF.SS. could be seen as a tool in the hands of the entrepreneurial power that was used at the expenses of trade unions, especially in light of its function in the wider process of privatization of FS, a process that brought about the loss of about 104.292 jobs (Manente, 2007, p. 7)¹⁶. As a matter of fact, the outsourcing of asbestos removal activities was not successfully achieved, as OGR was not able to provide the necessary professional skills. However, this first attempt of outsourcing marked the introduction of an early form of labor market flexibility in the public system, which anticipated the process of privatization that would have interested FS in subsequent years. The outsourcing strategy was undertaken by FS' managers in a crucial moment in which the labor movement was about to question the political establishment, producing new forms of conflict (Hobsbawm, 1994). In this context, the introduction of the subcontracting agreement was used as a sort of concession to conciliate the labor movement. As explained by Supiot "The sub-contracting of former in-house activities entails obvious consequences for the workers concerned, who will no longer benefit from the working conditions deriving from collective agreements with the company in question and will be subject to different working conditions under their new employer, which are usually less advantageous than the ones to which they were initially entitled" (1998, p. 91).

¹⁶ Between 1980 and 2000, the rail sector lost about 46% of its workers in Europe. FS attempted to reproduce the European model of public transport privatization.

Conclusion

With its brutal exploitation of the environment and people, Isochimica anticipated the dangerous nature of the late liberal governmentality in the South. Patronage hiring became a tool for the incorporation of workers into the city government and produced a system of relations aimed at preventing and reducing the conflict generated by the rising social cost of labor. The establishment of factory in Avellino took place 10 years before the crisis of labor unions. The use of patronage relations as a form southern welfare anticipates more modern forms of negotiation. In fact, the southern experience said Marco: "Will be used as an example in the process of deregulation of unions' rights" (Salerno, April 30 2011). This case anticipated some practices of employment that have become "typical" in southern Italy in the following decades, especially for what concerns the role of unions. In this context, flexibility undermined labor unions and produced subordinate union relations, making access to unions nearly impossible for the workers. Moreover, unions' action exclusively focused on the safeguard of occupational levels, but did not take into account labor rights protection. Unions gave up their old role of negotiators to become a sort of job development agencies. In this regard, the following statement Bruno and Carlo - who were suspended and laid off several times for protesting in the factory - is particularly explanatory: "Conflicts in farm not existed. They accepted everything: overtime job and night shifts" (public speech by Bruno and Carlo during a meeting of former Isochimica workers, Avellino, December 10 2012). In this case new industrial relations was experimented in Irpinia through the new form employment for subaltern (Castel, 2002). Consequently, the "clientelization" of social space that characterized the history of Isochimica should not be interpreted as a catastrophe that compromised development in the region. It represented, in fact, an effective process of management of both manpower and territory. In this sense, "scratching asbestos", intended as a technique to discipline the bodies of young worker, pushed the workers to comply with new forms of labor such as subcontracting and industrial outsourcing. In a few words, the

practices of outsourcing experienced by the workers, in and outside the farm plant, are not to be read as an exception in the transformation of the local economy (Ferrari Bravo, 2007)¹⁷, but the sign of a new organizational hegemony, in which a natural catastrophe allowed the shift of consensus to a new ruling class. In this view, the patronage became an organizational model in the experimentation of new industrial relations, which were marked by a strong connection between institutional interests and industrial powers.

References

1. Agamben, G. (2005). *State of Exception*. Chicago: University of Chicago Press
2. Alberelli, A. (1999). Bonifiche dell'amianto presente sul materiale rotabile. Cronistoria di una costante crescita della consapevolezza del rischio attraverso il concreto contributo dei lavoratori. From Dossier Amianto O.G.R. Bologna 1950-1996, International Conference on Asbestos, Rome: 1-5 March 1999.
3. Baker, E. J. (1991). Hurricane evacuation behavior. *International Journal of Mass Emergencies and Disasters* 9: pp. 287–310.
4. Banfield, E. (1958). *Moral Basis of a Backward Society*. New York: Free Press.
5. Becchi Collidà, A. & Consiglio, P. & Ferraro, G. & Reho, M. (1986). *Passano gli anni e il nuovo non viene. Mezzogiorno, terremoto, industrializzazione*. Milano: Franco Angeli.
6. Benadusi, M. (2012). Culture, politics The Politics of Catastrophe. Coping with 'Humanitarianism' in Post-Tsunami Sri Lanka. Attinà, F. (ed.), *The Politics and Policies of Relief, Aid and Reconstruction. Contrasting Approaches to Disasters and Emergencies*, Houndmills. Basingstoke, Hampshire: Palgrave Macmillan.

¹⁷ I agree with Ferrari Bravo (2007). He said that underdevelopment is not only "not-yet" development. It is a function of capitalist development: a material and political function. Development is in fact that of capitalist power on the society as a whole, of his "Government" of the company, of his State.

7. Benadusi, M. (2013). The Two - faced Janus of Disaster Management: Still Vulnerable Yet Already Resilient. «South East Asia Research», n. 21, vol. 3: 419-438.
8. Bertaux, D. (1996). Les récits de vie: perspective ethnosociologique. Paris : Nathan Université.
9. Bevilacqua, P. (1981). Catastrofi, continuità, rotture nella storia del Mezzogiorno. Laboratorio Politico, n. 5-6: 177-219.
10. Castel, R. (2002). From Manual Workers to Wage Laborers: Transformation of the Social Question. Piscataway: Transaction Publishers.
11. Censis. (1988). 24° Rapporto sulla situazione sociale del Paese/1988. Roma: Cnel.
12. Chubb, J. (2002). Three earthquakes: political response, reconstruction and the institutions: Belice (1968), Friuli e Campania (1980). Dickie, J. & Foot, J. & Snowden, F. M. (eds.), Disastro! Disasters in Italy since 1860, society. New York: Palgrave.
13. D'Ascenzio, A. (2015). Isochimica come paradigma delle relazioni industriali nel Mezzogiorno: tra arretratezza e modernità. Petrillo, A. (ed.). Il silenzio Della polvere. Capitale, verità e morte in una storia meridionale di amianto. Milano-Udine: Mimesis.
14. Di Costanzo, G. & Ferraro, S. (2013). The Landfill in the Countryside: Waste Management and Government of the Population in Campania. Capitalism Nature Socialism, 24, 4, London: Routledge: 17-28.
15. Dickie, J. & Foot, J. & Snowden, F. M. (eds.). Disastro! Disasters in Italy since 1860, New York: Palgrave.
16. Di Meglio, M. (1997). Lo Sviluppo Senza Fondamento. Trieste: Asterios.
17. Drabek, T. E. (1986). Human system responses to disaster: An inventory of sociological findings, New York: Springer-Verlag.
18. Drabek, T. E. (2004), Social Dimensions of Disaster 2nd ed. Instructor Guide. Maryland: Emergency Management Institute. Federal Emergency Management Agency.
19. Elliott, J. R. & Pais, J. (2006). Race, class, and Hurricane Katrina: Social differences in human responses to disaster. Social Science Research, n. 35: 295-321

20. Fassin, D. & Pandolfi, M. (eds.). (2010). Contemporary states of emergency. The politics of military and humanitarian interventions. New York: Zone Books.
21. Ferrari Bravo, L. (2007). *Forme dello Stato e sottosviluppo*. Ferrari Bravo, L. & Serafini, A. *Stato e sottosviluppo. Il caso del Mezzogiorno italiano*. Verona: Ombre Corte
22. Ferraro, S. (2015). *Una medicina sociale dell'amianto. Per un visibile segreto e un'invisibile verità su Isochimica*. Petrillo, A. (ed.). *Il silenzio Della polvere. Capitale, verità e morte in una storia meridionale di amianto*. Milano-Udine: Mimesis.
23. Giroux, H. A. (2006), Reading Hurricane Katrina: Race, Class, and the Biopolitics of Disposability. *College Literature*. 33/3: 171-196.
24. Gramsci, A. (2011). *Prison Notebooks*. Volumes 1. New York: Columbia University Press.
25. Hobsbawm, E. J. (1994). *The Age of Extremes: The Short Twentieth Century, 1914-1991*. London: Michael Joseph.
26. Hoffman, S. M. & Oliver-Smith, A. (2002). *Catastrophe and Culture: The Anthropology of Disaster*. Oxford: School of American Research Press
27. Klein, N. (2007). *The Shock Doctrine: The Rise of Disaster Capitalism*. New York: Metropolitan Books
28. Manente, D. (2007) *Il lungo treno della privatizzazione: da Ferrovie di Stato a ferrovie di libero mercato. Trent'anni di trasformazioni raccontate dai ferrovieri*. «Storia e Futuro. Rivista di storia e storiografia». N. 15: 1-20. www.storiaefuturo.com (visited: 05/09/2014).
29. Mileti, D. S. & Fitzpatrick, C. (1993). *The Great Earthquake Experiment*. Boulder, CO: Westview Press.
30. Oliver-Smith, A. (2013). Malinowski award lecture. Disaster risk reduction and climate change adaptation: The view from applied anthropology. *Human Organization*. 72, 4: 272-285.
31. Osservatorio Nazionale sull'amianto. (2011). *Comitato provinciale di Avellino. Lettera diffida al Sindaco di Avellino*. Avellino, pp.1-28.
32. Petrillo, A. (2015). *Il silenzio Della polvere. Capitale, verità e morte in una storia meridionale di amianto*. Milano-Udine: Mimesis.

33. Petrillo, A. (2017). The Use of natural disaster to turn the rule of Law into corrupt governance, favouring private companies. Palidda, S. Governance of Security and Ignored Insecurities in Contemporary Europe. Londono: Routledge
34. Piattoni, S. (1998). Virtuous Clientelism: The Southern Question Resolved. Schneider, J. (ed.). (1998). Italy's "Souther Question". Orientalism in One Country, Oxford- NewYork: Berg.
35. Quarantelli, E. L. (1988). Disaster studies: An analysis of the social historical factors affecting the development of research in the area. International Journal of Mass Emergencies and Disasters. N. 5: 285-310.
36. Saitta, P. (2013). Quota zero. Messina dopo il terremoto: la ricostruzione infinita. Roma: Donzelli.
37. Schneider, J. (ed.). (1998). Italy's "Souther Question". Orientalism in One Country, Oxford- NewYork: Berg.
38. Silverman, S. (1977). Patronage and Community- National Relationship in Central Italy. Schmidt, S. et al (eds). Friend, Followers and Factions. A Reader in Political Clientelism. Barkeley: University of California Press.
39. Simonetti, P. & Ventura, S. (2011). Passarono gli anni e il nuovo non venne. Le industrie del dopo terremoto in Campania e Basilicata, in La fabbrica del Terremoto. Come i soldi affamano il Sud, Rapporto 2011.
40. Spivak 1988
41. Supiot, A. (1998). Transformation of labour and future of labour law in Europe, Final report. June: 1-213.

THE IMPACT OF RESEARCH INVESTMENTS AND OTHER INDICATORS ON THE REGIONAL ECONOMIC DEVELOPMENT

Petra Szlafkaiová¹⁸, Erika Liptáková¹⁹

Technical university of Košice, Faculty of Economics, Němcovej 32, 040 01, Košice, Slovakia

petra.szlafkaiova@tuke.sk; erika.liptakova@tuke.sk

Introduction

Regional policy, also called cohesion policy is the most important investment policy of the European Union. Based on the Strategic Framework, which are developed for a 7 years period, regional policy seeks to enhance the economic performance of the EU regions while at the same time trying to reduce regional disparities through its basic financial instruments - the Structural Funds and the Cohesion Fund of the European Union. (European Commission, 2002)

As a result of the EU's enlargement by new states was an increase of inter-regional disparities within the Member States either in their

¹⁸ Ing. Petra Szlafkaiová graduated at the faculty of Economics of Technical University in Košice, Department of Economics and management of public administration. Since 2016 she is a PhD student at the same faculty. Her main field of interest are Smart cities and the methodology of their evaluation. Creating an appropriate model for economic and financial evaluation of Smart city strategies will be devoted deeper in her dissertation work. For the years 2017 and 2018 she is also a member of a research team of the project VEGA: 1/0886/16 Hedonic models of evaluation in the real estate market. Beside that, she dedicated herself also to the university research and measuring their regional impact.

¹⁹ RNDr. Erika Liptáková, PhD., graduated from the Department of Teaching general education subjects: Mathematics - Chemistry at the Faculty of Natural Sciences of Pavel Jozef Šafárik University in Košice (PF UPJŠ). In 2010, she successfully defended her PhD in the field of Mathematics Teaching. Since 2013, she has been teaching at the Faculty of Economics at TUKE as a lecturer of the following subjects: Statistics and Probability, Statistical Methods in Economics, Statistics in SAS and Mathematics I.

different economic development, different jobs or income of the population. As mentioned above, regional policy is a cohesion policy, and therefore, through solidarity, it seeks to uniform economic integration of all its Member States, including their regions. Its aim is therefore to prevent the less developed regions lagged behind prosperous regions. These goals are ensured through necessary investments in all of the problem areas. (Svitana, 2006)

The regional policy of the European Union predominantly invests in energy efficiency, research and innovation, transport, training, support for SMEs, renewable energy and interregional cooperation. The guiding principle of EU regional policy is considered to be the financial solidarity in favour of those less developed regions and social groups. However, regional policy is not only focused on the less developed regions, although it may seem from the perspective of reducing regional disparities. Cohesion policy is not only a selective support of struggling regions, but it also takes into account the developed regions, which may experience different needs, such as the growth of competitiveness and employment. (European Commission, 2002)

In terms of recent theories, cohesion policy should focus mainly on supporting the creation and development of small and medium-sized enterprises, to promote innovation in enterprises, encourage cooperation between companies or firms and universities, while increasing educational level and creative workforce. Promoting progressive industries in the region is also what the cohesion policy should be keen on through cluster initiatives. (Buček, et al., 2010)

Despite all of EU's constant efforts to reduce the disparities among regions, they still exists, and therefore the regional policy budget for the programming period 2014-2020 has increased to 351 billion EU. At this point it is appropriate to ask: Are these disparities among regions getting smaller or do they still remain the same?

Theoretical framework

According to (Gorzelak, et al., 2015), there are both similarities and wide disparities among the regions of the Visegrad group. As a result of the socialist economy forming the economic and social system in these 4 countries for several decades, some similarities appear between these regions. These similarities could be for instance disparities in the level of income, investment and employment or higher development rate of the capital city regions. On the other hand, differences can be a result of different culture, system of law or spatial structures. The regional development and the transformation closely relates to each other.

Economic growth is considered to be one of the main drivers of regional development. For the purpose of this paper it is necessary to define the various economic development indicators monitored by Eurostat, respectively, each national statistical institute of the V4 countries.

The European Union defines the basic European economic indicators based on a statistical wizard called Principal European Economic Indicators (PEEI). These indicators are the primary source of information for analysis and monitoring of short-term, cyclical economic developments within individual EU countries. These PEEIs provide an overview of the economic situation of the country - includes variables most commonly used by analysts and policy makers. PEEIs illustrate the main dimensions of the short-term economic development on both sides (the supply and the demand side), or provide information about the labour market, external balance and price and cost developments. (European Commission, 2009)

In 2002, the European Commission established a list of 19 basic European economic indicators in the following areas:

- national accounts,
- foreign trade,

- balance of payments,
- prices,
- labour market,
- business Statistics,
- monetary and financial statistics.

These indicators were later in 2007 filled with 7 more other indicators to improve and increase the efficiency of economic analysis. Today, therefore, we can talk about 25 indicators of economic development:

- Gross domestic product (GDP)
- Private final consumption
- Investments
- External trade balance
- Balance of payments — current account
- Inflation (Harmonised Indices of Consumer Prices — HICP)
- Unemployment rate (total, 15-24 years and above 24 years)
- Employment
- Labour cost index
- Industrial producer prices
- Industrial import prices (for euro area)
- Industrial production
- Industrial new orders
- Production in construction
- Retail trade turnover
- Government deficit/surplus
- General government gross debt
- Economic sentiment indicator monthly
- Three-month interest rate
- Long term government bond yields
- Euro exchange rates
- Sector accounts
- Turnover index for other services
- Service producer prices

- Job vacancy rate

Choosing the appropriate indicators

Given the fact that this paper does not deal with the examination of the economic development of the whole country but focuses on its different regions, it is crucial to take into account only those indicators, which are relevant when considering the economic regional development. Samson in his contribution about the evaluation indicators of regions is describing the indicators of the socio-economic level of regions, in which he includes regional GDP, the regional rate of unemployment or the average household income in the region. (Samson, 2008)

The Statistical Office in assessing the economic level of regions is considering the gross fixed capital formation as a fundamental macroeconomic indicator of the economy.

Other sources, such as the Statistical Office of the United Kingdom reported that the main regional economic indicators include not only regional output, respectively gross value added, which several authors considered to be the second most important indicator of the economic development after GDP but also the productivity, or innovation (expenditure on science and research). (Office for National Statistics, 2014)

Based on the above, we consider the following selected Indicators of Economic Development of the Regions:

1. regional gross domestic product per capita,
2. average net household income in the region,
3. regional investments - spending on research and development,
4. gross value added of the region,
5. gross fixed capital formation.

All of these indicators are expressed in Euros per inhabitant of the

region for one year. The data for the years 2004 to 2014 were collected from the Statistical Office of the European Union, while the missing data were either collected by the national statistical offices of individual countries or calculated by function prediction.

Methods

Factor analysis

Factor analysis is a multivariate statistical method which aims to find new variables (factors) through reducing the size of data while seeking to preserve as much information as possible. This analysis is used in case where there is a high correlation between the data or (and) in a situation where the number of variables in the investigated phenomenon is high and is complicated for interpretation.

Steps for factor analysis:

1. determination of the number of Factors using the method of principal components (PCA),
2. determination of factor loading among the factors and the original variables,
3. rotations of the matrix of factor loadings,
4. The estimation of factor scores.

To assess the appropriateness of using factor analysis the Kaiser-Meyer-Olkin Statistics (KMO) is used.

KMO statistics acquires values from 0 to 1, while:

- if $a_{ij} = 0$, then $KMO = 1$,
- if $a_{ij} = 1$, then $KMO = 0$.

The following table shows the appropriateness of using factor analysis based on the results of KMO statistics.

Table 1: KMO statistics

KMO statistics	Using factor analysis
0,90-1,00	very appropriate
0,80-0,89	appropriate
0,70-0,79	moderately appropriate
0,60-0,69	average
0,50-0,59	poorly appropriate
0,00-0,49	inappropriate

Source: (Stankovičová, et al., 2007)

Cluster analysis

Due to the large amount of data it is necessary to categorize these regional data and create similar groups of individual regions with similar values of indicators. As the most appropriate method for the distribution of individual data we chose cluster analysis. This analysis deals with the distribution of data to similar clusters.

Results

In this part of paper we will deal with the actual analysis of data we have gathered from Eurostat and the statistical offices of individual countries for individual NUTS II regions for the years 2004 to 2014. The group of analysed regions consist of 16 Polish, 8 Czech, 7 Hungarian and 4 Slovak regions. Due to the high volume of data and the three-dimensionality a standardization is needed before the data analysis itself. Standardization of data is returning the normalized values of distribution by the mean and standard deviation:

$$x_{ij} \text{ (norm.)} = \frac{x_{ij} - \bar{x}_j}{s_j} \quad (1)$$

where:

i = 1, 2, 3, ..., 32 (region rank)

j = 1, 2, 3, 4, 5 (variable rank)

x_{ij} – value of „j” variable for „i” region

\bar{x}_j – mean of „j” variable

s_j – standard deviation of „j” variable

Correlation analysis

In previous chapters, we reported that while developing clusters there is an assumption, that no correlation between individual indicators is present, so that the degree of dependence between them is poor, respectively. zero. For establishing of the correlation between the selected indicators, we used Pearson correlation test in SPSS statistical program.

The results are shown in the Figure 1 below. One can see, that there is a relevant correlation between indicators, thus they cannot be used in the cluster analysis in that form.

Figure 1. Correlation results

Correlations						
		GDP_pc	Disp_income	investment_rd	GVA_pc	GFC
GDP_pc	Pearson Correlation	1	,933**	,910**	,999**	,626**
	Sig. (2-tailed)		,000	,000	,000	,000
	N	35	35	35	35	35
Disp_income	Pearson Correlation	,933**	1	,851**	,928**	,689**
	Sig. (2-tailed)	,000		,000	,000	,000
	N	35	35	35	35	35
investment_rd	Pearson Correlation	,910**	,851**	1	,915**	,656**
	Sig. (2-tailed)	,000	,000		,000	,000
	N	35	35	35	35	35
GVA_pc	Pearson Correlation	,999**	,928**	,915**	1	,617**
	Sig. (2-tailed)	,000	,000	,000		,000
	N	35	35	35	35	35
GFC	Pearson Correlation	,626**	,689**	,656**	,617**	1
	Sig. (2-tailed)	,000	,000	,000	,000	
	N	35	35	35	35	35

** . Correlation is significant at the 0.01 level (2-tailed).

Factor analysis

Since our data were highly correlated, it was necessary to perform a factor analysis as the first step of analysis in order to adjust the data for the cluster analysis. First, the outliers were eliminated from the analysis. The outliers were the regions with extreme values – the

regions that significantly differ from the others. For instance, Bratislava in Slovakia was the region, where the contrast between that region and the rest of the country was extremely huge. The smallest predominance is in case of the polish capital region Mazowieckie, which can be caused by the lower development in the country as a whole. These outliers were: CZ01 - Prague, HU10 - Central Hungary, SK01 - Bratislava region and PL12 - Mazowieckie. Then, the factor analysis was run for the rest 31 regions.

It was necessary to assess the suitability of data for the analysis itself still before running the factor analysis. To do so, the KMO statistics was used. To estimate parameters of the factor model, the principal component analysis (PCA) was run. After selecting the appropriate number of factors and after an initial estimation of the factor loadings matrix, the orthogonal rotation of factors was done. Two factors seemed to be an appropriate number of factors for each years.

The results of factor analysis has shown that the first four indicators, namely GDP_pc, Disp_income, investment_rd and GVA_pc saturated the Factor_1 and the last indicator (gross fixed capital formation) , saturated the Factor_2. KMO statistics reached a higher value than 7, so the new two factors were suitable for use. Subsequently, the factor scores of new factors were calculated. These two new variables were used in the next step - the cluster analysis.

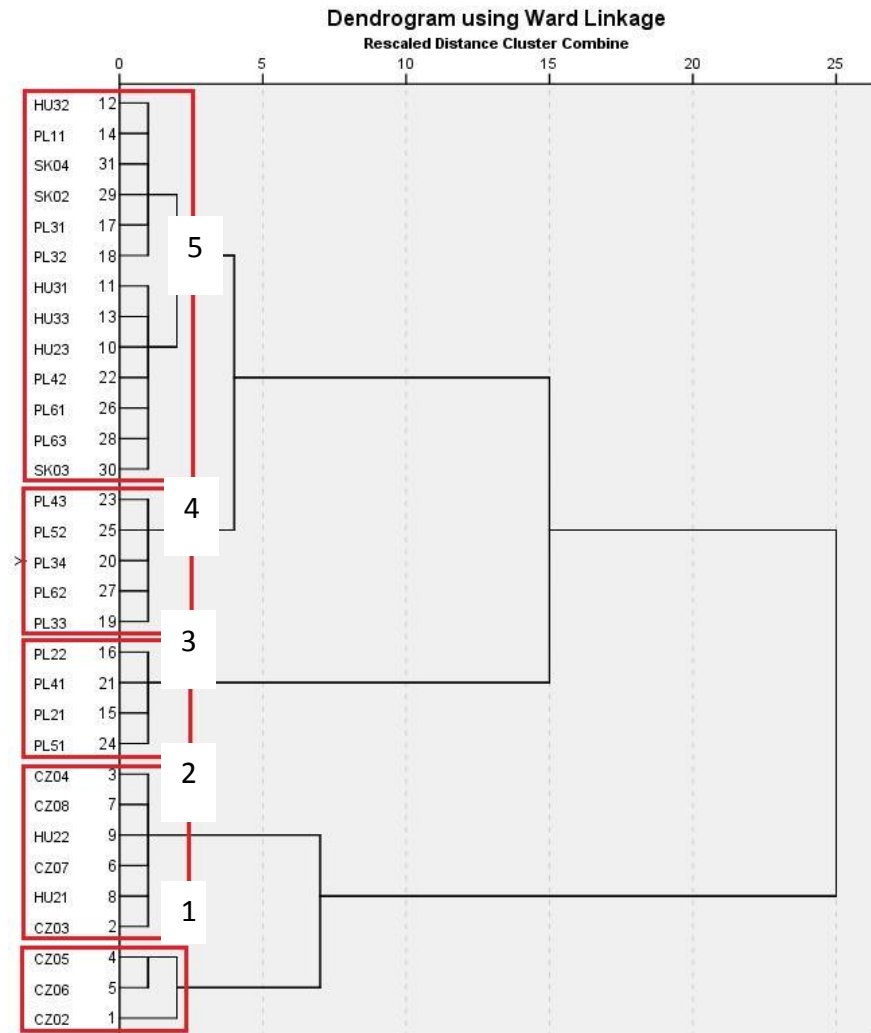
Cluster analysis

The regions were divided into similar clusters for each year through cluster analysis in SPSS and a dendrogram helped to find out, which regions have been the most alike and which, conversely, have differed the most. The input data were the new two variables - factors from the factor analysis, 2 for each year. In analysis, the Euclidean distance was used for calculating the degree of distance and Ward's method of clustering, which is the most common and used method, and the creation of small and relatively same sized cluster is one of its main

advantages. The outliers are excluded from the analysis, thus the four capital regions, since their values are significantly different from other regions.

The following picture shows the dendrogram for 2004, based on which the regions were divided into 5 clusters.

Figure 2: Dendrogram for 2004



Source: Author's processing

The results of clustering are in the table in *Appendices:* . For each region in every year a cluster number was assigned, which the particular region is located at. For a better overview a colour differentiated table of clusters is presented. The table shows how different regions were moving into another cluster over time, however it does not tell anything about the economic development, hence it is necessary to define those clusters based on the variables. Therefore, the next step is the characteristics of individual clusters using the mean and standard deviation of the variables.

Given the different characteristics of clusters from period to period, a table ranking individual regions has been created, which was calculated using a composite indicator. The following color differentiated table shows the different clusters, while each region at each year has its rank - 1 = maximum value of variables; the most developed regions, 5 = lowest values of variables; economically backward regions. The same shade of brown indicates that specific regions are in one common cluster.

Table 2: Regional cluster ranking

Región	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
CZ02	1	1	1	1	1	1	1	1	1	1	1
CZ03	2	2	1	1	1	2	1	1	1	1	1
CZ04	2	2	3	4	1	2	1	4	3	3	4
CZ05	1	2	1	1	1	2	1	1	1	4	1
CZ06	1	1	1	1	1	1	1	1	1	1	1
CZ07	2	2	1	1	1	2	1	1	1	4	1
CZ08	2	2	1	1	1	2	1	1	1	4	1
HU21	2	2	3	4	4	5	5	5	5	4	4
HU22	2	2	3	4	4	5	5	4	4	4	4
HU23	4	5	5	5	5	5	5	5	5	5	5
HU31	4	5	5	5	5	5	5	5	5	5	5
HU32	4	4	4	5	5	5	5	5	5	5	5
HU33	4	4	5	5	5	5	5	5	5	5	5
PL11	4	4	4	3	3	4	4	3	2	3	3
PL21	3	3	2	3	3	4	3	3	2	3	3
PL22	3	3	2	2	2	3	2	2	2	2	2
PL31	4	5	5	5	5	5	4	5	4	5	5
PL32	4	5	5	5	5	5	4	5	4	5	5
PL33	5	5	5	5	5	5	5	5	5	5	5
PL34	5	5	5	5	5	5	5	5	5	5	5
PL41	3	3	2	3	3	4	3	3	2	3	3
PL42	4	5	5	5	4	5	5	5	4	5	5
PL43	5	5	5	5	5	5	5	5	5	5	5
PL51	3	4	2	3	3	4	3	3	2	3	3
PL52	5	5	5	5	5	5	5	5	5	5	5
PL61	4	5	5	5	4	4	4	5	4	5	5
PL62	5	5	5	5	5	5	5	5	5	5	5
PL63	4	4	4	3	3	4	3	3	4	4	4
SK02	4	4	2	4	3	2	1	4	1	3	4
SK03	4	5	5	4	4	2	5	4	3	4	4
SK04	4	5	4	5	4	5	5	4	3	4	4

Source: Author's processing

Currently, according the latest available data from 2014, the order of the clusters is the following: the regions of cluster 1, were having the best situation, while on the contrary, cluster 3 includes regions with the worst values. Regions with relatively high values of the variables were located in a cluster 5. Average regions are those in cluster 2 and cluster 4, which were at the 3rd and 4th place among all clusters.

Table 3: Cluster ranking according the composite indicator

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
C_1	1	1	1	1	1	1	1	1	1	1	1
C_2	2	2	3	4	4	2	5	4	3	3	4
C_3	4	5	5	5	5	5	4	5	5	4	5
C_4	3	4	4	3	3	4	3	3	4	5	3
C_5	5	3	2	2	2	3	2	2	2	2	2

Source: Author's processing

For a better overview, the results are presented in the following table which shows the cluster structure and its rank in 2004 and 2014. According to these results, Cluster 1 has not changed its position comparing the first and the last year of analysis, however while in 2004 there were only 3 Czech regions, in 2014 it includes 3 more regions of Czech republic, so the Czech regions are doing better off. The situation is different when comparing the position of the Cluster 2, since there has been a rapid change from the second to the fourth place. The structure of the cluster has changed a lot as well. In 2004 the second best regions were those in Cluster 2, while in 2014, the number of regions in the second best cluster, which at that time was the Cluster 5, included only one Polish region. The third position was occupied both years by the Cluster 4 which size remained the same. Cluster 3 and Cluster 2 were in the fourth place, while the number of regions the group at the 4th place included decreased from 13 regions to 7 regions. The three Slovak regions have not changed their position – in both years they remained in the 4th position. In 2004, there were 5 regions at the last position, however in 2014 this cluster gets bigger, and contains 13 regions. Since the results according to last available data from 2014 shows, that the cluster 5 contains only one region, that could mean, that in further analysis this region would belong to the cluster 1 or cluster 4, and therefore, in the following years, there would be only 4 clusters instead of 5 in the beginning of 2004.

Table 4: Comparing the first and the last year of analysis

	2004	2014
1st	Cluster 1	Cluster 1
	CZ02 CZ06 CZ5	CZ02 CZ05 CZ07 CZ03 CZ06 CZ08
2nd	Cluster 2	Cluster 5
	CZ03 CZ07 HU21 CZ04 CZ08 HU22	PL22
3rd	Cluster 4	Cluster 4
	PL21 PL41 PL22 PL51	PL11 PL41 PL21 PL51
4th	Cluster 3	Cluster 2
	HU23 PL11 SK02 HU31 PL31 SK03 HU32 PL32 SK04 HU33 PL42 PL61 PL63	CZ04 HU21 SK02 PL63 HU22 SK03 SK04
5th	Cluster 5	Cluster 3
	PL33 PL43 PL34 PL52 PL62	HU23 PL31 PL43 HU31 PL32 PL52 HU32 PL33 PL61 HU33 PL34 PL62 PL42

Source: Author's processing

Graphical display of the rank of individual clusters

The figure 3 in Appendices graphically shows the locations of the various clusters and also what regions belong to common cluster. The 4 regions, which were due to their extreme values with respect to other regions excluded from the analysis were marked with yellow. Clusters are separated by their ranking from the darkest color to the lightest. The darkest green indicates that in that year, the particular

cluster was at the first place, among all of the clusters, reaching the highest values of the variables. Conversely, the lighter the color, the cluster is ranked to the lower position, respectively, with lower values of GDP, disposable income, expenditure on research and development, gross value added and gross fixed capital formation. There are 3 years shown in the following figure - the year of joining the European Union- 2004, the year after the economic crisis - 2009 and last year, 2014.

The most advanced region in EU is the region CZ02. The number of regions in the best- the first, cluster was constantly changing. While in 2004, there were only 3 regions in this above mentioned cluster, in 2014 this cluster is made up of all Czech regions except region CZ04, which is at the 4th place. The next cluster includes in 2014 only one polish region – PL22. Cluster at 3rd place consists 4 polish regions. Regions such as CZ04, SK02, SK03, SK04, PL63, HU21 and HU22 are a part of the second last cluster. All other regions shown in white, form a cluster that is in a given year characterized by the least developed regions. The most "white" regions are in 2009, which can be attributed to the impact of the economic crisis.

Discussion

As it was mentioned in the first part of the paper, there have been both similarities and disparities between the regions of the Visegrad group. The similarities were reflected in the fact, that the regions were divided into 5 relatively similar clusters based on their similarities. However, the disparities were visible after the analysis and characterizing the individual clusters. These differences could be caused by many aspects such as cultural factors, different law system or different spatial structures.

For the purpose of the analysis, factor and cluster analysis were used. The factor analysis was run because of the high correlation among the economic regional indicators, while the cluster analysis was used in order to get relatively homogenous groups of regions out of all of

them. However, it was necessary to exclude 4 regions from the analysis, which were characterized by highly extreme values comparing to the other regions. These regions were the regions where the capital city is located.

As an example of a similar empirical study the paper of Anna Golejewska could be mentioned, called *Competitiveness, innovation and regional development. The case of the Visegrad Group countries* (Golejewska, 2012) where the author focused on the regional development in terms of competitiveness and innovation and tried to find out, whether these two indicators depend on each other. Moreover, the author focused on testing the impact of nationality on clustering. The analysis comprises two groups of indicators. First of all, it is the competitiveness indicators, which consist of GDP pre capita (PPS), employment and unemployment rate. The second group includes indicators of innovativeness such as patent applications, R&D expenditure as percentage of GDP, R&D personnel as percentage of total employment and core Human Resources in Science and Technology as percentage of active population. Even though different indicators were used in these two papers, the final results are similar. Five groups were created in the cluster analysis, while the capital regions were excluded and formed another, sixth group. The group of Czech regions was doing better off in both cases. On the other hand, mainly Polish regions were those, which formed the group (cluster) with the least developed regions based on specific indicators. On the contrary, in terms of innovations and competitiveness, Hungary has more developed regions than in terms of indicators selected by us.

By means of cluster analysis, which has divided the regions into 5 clusters, and defining the ranking of the clusters through creating a composite indicator, we have estimated, which regions were doing the best, and which, in contrary, the worst. However, the structure of the cluster itself says nothing about the economic development of its regions, until it is not characterized. The mean and the standard deviation of each indicator of each year was used in order to characterize the clusters. Obviously, the compound of the clusters has

changed over years, however even their position was changing over the time of 11 years. For instance, while during entering the EU the cluster 5 was typical for least developed regions, since 2006 this cluster is characterized by developed regions and is ranked in the 2nd place. The most developed cluster during the whole period seems to be the Cluster 1, containing only Czech regions, which was on the 1st place during the whole analysed period and the number of regions in this cluster even doubled during this time. On the contrary, the least developed cluster seems to be the Cluster 3, containing Polish regions, which was fluctuating between the 4th and the last place for the whole period. Moreover, the number of the regions from the cluster at the last place increased, but so did the number of regions in the first place. That means that the most developed clusters got bigger and so did the least developed clusters however, the clusters in between got smaller or remained the same size. Because of this, a cluster with only 1 region in it was created. Despite the fact, that even though the values of every region are higher, there are more regions in the least developed cluster, these regions are closer to each other.

Conclusion

Regions and their development are nowadays one of the main areas of focusing of the European Union. Countries need competitive and dynamic regions, in order to achieve their economic, social or environmental goals. The process of regional development is conducted through the implementation of regional operation programs in the area of regional development of the EU.

The first part of the paper consist of the theoretical background and the motivation for this research in terms of the European Cohesion Policy. The authors in the second part focused on selecting the right indicators of regional economic development based on the Principal European Economic Indicators. Furthermore, the methodology is described in the following part, thus Factor and Cluster analysis. The results of all the analysis are presented in the next part of the paper. Last but not least, a the results are discussed in the last part of the

paper, Discussion.

The main contribution of this paper was finding a set of 5 Indicators of Economic Development of the Regions based on several empirical studies and the analysis of the regions of the Visegrad group with regard to these economic indicators, which were the regional GDP per capita, the regional average net household income, the regional investments in research, regional gross value added and finally the regional gross fixed capital formation.

Another contribution was the analysis of 31 regions and their economic development values in terms of correlation, factor and finally cluster analysis, which grouped the regions into 5 clusters based on their similarities. All of these clusters were further analysed and characterized by the mean and the standard deviation of its variables. Finally, the results were compared and presented in the last part of the paper. While analysing the results, we should not forget, that they are based on 5 selected indicators and that adding or excluding one of the variables could lead to slightly different results.

References

1. Buček, M., Rehák, Š. and Tvrdon, J. 2010. Regionálna ekonómia a politika. Bratislava : IURA Edition, 2010. ISBN 978-80-8078-362-4.
2. European Commission. 2009. Principal European economic indicators. A statistical guide. [Online] 2009. [Cited: 02 02 2015.] <http://ec.europa.eu/eurostat/documents/3217494/5713943/KS-81-08-398-EN.PDF/b7c1a8d5-2ea1-4e1c-b585-4582e92f5e2d?version=1.0>. ISBN 978-92-79-09695-2.
3. European Commission. 2002. Regional policy of European Union. 2002. ISBN 80-89102-01-8.
4. Golejewska, Anna. 2012. Competitiveness, innovation and regional development. The case of the Visegrad Group countries. s.l. : KEIE UG, 2012. ISSN 2080-09-40.
5. Gorzelak, Grzegorz, Bachtler, John and Smetkowski, Maciej. 2015. Regional Development in Central and Eastern Europe Development

processes and policy challenges. s.l. : Routledge, 2015. ISBN 978-1-13-881693-0.

6. Office for National Statistics. 2014. Regional economic indicators. [Online] 2014. [Cited: 15 03 2016.] http://www.ons.gov.uk/ons/dcp171776_369754.pdf.
7. Samson, Š. 2008. Ukazovatele hodnotiace úroveň regiónov. Košice : TUKE. Ekonomická fakulta, 2008.
8. Stankovičová, I. and Vojtková, M. 2007. Viacrozmerné štatistické metódy. s.l. : Iura Edition, 2007. ISBN 978-80-8078-152-1.
9. Svitana, R. 2006. Vybrané pojmy európskej integrácie. CPEP. [Online] 2006. [Cited: 10 12 2015.] http://www.cpep.sk/fileadmin/Dokumenty/publikacie/Vybrane-pojmy-europskej-integracie__2_.pdf. 80-7165-575-9.

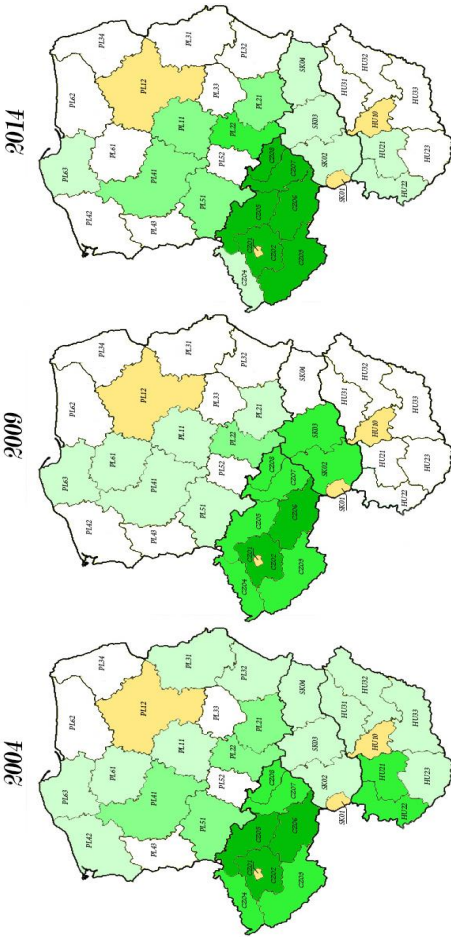
Appendices:

Table 5: Clustering results

Region	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
CZ02	1	1	1	1	1	1	1	1	1	1	1
CZ03	2	2	1	1	1	2	1	1	1	1	1
CZ04	2	2	2	2	1	2	1	2	2	2	2
CZ05	1	2	1	1	1	2	1	1	1	3	1
CZ06	1	1	1	1	1	1	1	1	1	1	1
CZ07	2	2	1	1	1	2	1	1	1	3	1
CZ08	2	2	1	1	1	2	1	1	1	3	1
HU21	2	2	2	2	2	3	2	3	3	3	2
HU22	2	2	2	2	2	3	2	2	4	3	2
HU23	3	3	3	3	3	3	2	3	3	4	3
HU31	3	3	3	3	3	3	2	3	3	4	3
HU32	3	4	4	3	3	3	2	3	3	4	3
HU33	3	4	3	3	3	3	2	3	3	4	3
PL11	3	4	4	4	4	4	3	4	5	2	4
PL21	4	5	5	4	4	4	4	4	5	2	4
PL22	4	5	5	5	5	5	5	5	5	5	5
PL31	3	3	3	3	3	3	3	3	4	4	3
PL32	3	3	3	3	3	3	3	3	4	4	3
PL33	5	3	3	3	3	3	2	3	3	4	3
PL34	5	3	3	3	3	3	2	3	3	4	3
PL41	4	5	5	4	4	4	4	4	5	2	4
PL42	3	3	3	3	2	3	2	3	4	4	3
PL43	5	3	3	3	3	3	2	3	3	4	3
PL51	4	4	5	4	4	4	4	4	5	2	4
PL52	5	3	3	3	3	3	2	3	3	4	3
PL61	3	3	3	3	2	4	3	3	4	4	3
PL62	5	3	3	3	3	3	2	3	3	4	3
PL63	3	4	4	4	4	4	3	4	4	3	2
SK02	3	4	5	2	4	2	1	2	1	2	2
SK03	3	3	3	2	2	2	2	2	2	3	2
SK04	3	3	4	3	2	3	2	2	2	3	2

Source: Authors processing

Figure 3. Graphical design of clustering in 2004,2009 and 2014



REGIONAL DEVELOPMENT IN SLOVENIA^{20, 21} INSIST OR CHANGE?

Dr. Franci Žohar²²

*Ministry of Public Administration, Service for Local Government,
Tržaška cesta 21, 1000 Ljubljana, Slovenia
franci.zohar@siol.net*

Introduction

Over a longer period, Slovenia present development policy the less developed areas, initially focusing on demographic issues that have also been regional component, and later on the policy of encouraging the development of regional development. The system of promoting balanced regional development by the end of 80 years of the last century by gave some positive results, but less than expected. In certain less developed areas has improved features with the economic and social infrastructure, structure of the economy has not changed much and was based on large enterprises, which are at the beginning of this century largely collapsed. As he maintained a fairly stable structure of the economy and that investments were mainly labor intensive, a large part of the educated youth did not get suitable employment in the local and wider environments, the continued exodus of mostly younger age population in urban environments. In

²⁰ All statements and views in this article is the opinion of the author and do not necessarily reflect the views of the organization in which he is employed or organizations with which it cooperates.

²¹ Some of the content is taken from the author's doctoral dissertation entitled The autonomy of municipalities and intermunicipal integration with a view to promoting regional development.

²² Franc Žohar, PhD. works at the Government Office for Local Self-Government and Regional Policy, Division of Local Government, which belongs to the Ministry of Public Administration. additionally he is lecturer at different Slovenian Colleges and is expert at the National Agency for Quality in Higher Education. In his career he published over 240 publications in various scientific and professional journals in the field of local self-government, public finance, law and logistics in Slovenian, Croatian and English languages.

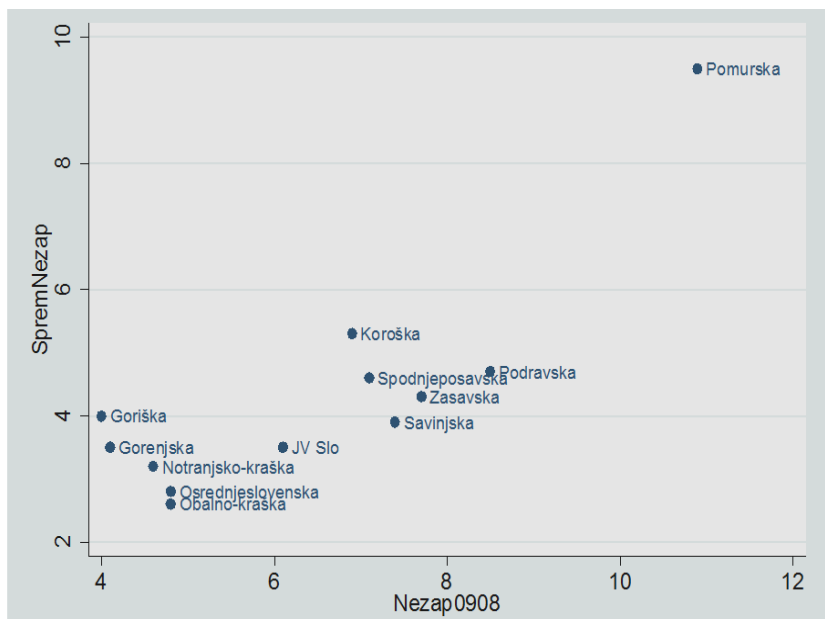
some less developed geographical, mountainous and border areas, but continued depopulation.

In 90 years we have witnessed a reduction in funds for regional policy, focusing only on demographic indicators and participation of sectoral policies. Country Slovenia in this period, activities to be included in the EU cohesion policy approach to change in regional policy and establish renewed systemic conditions for its implementation. In the period until 2004 is competent ministry with direct regional incentives mainly financed broader regional projects, however, they are already in the 2000-2004 period have had an important role infrastructure projects of local communities. High economic growth, the increase in resources devoted to the promotion of balanced regional development, in particular EU funds and optimistic forecasts have prompted significant investments, particularly in local projects, which raised the level of infrastructure facilities. Favourable economic trends and expectations have resulted in the reduction of unemployment and a fairly successful business is not restructured economy.

With the onset of the financial and then economic crisis has highlighted weaknesses in Slovenian model of economic development both at national and regional level. Due to the large decrease in orders to companies with up to 50% of the credit crunch, bad investments, halting investments in infrastructure and reduced private consumption decreased GDP in the second half of 2009, a significant increase in the number of unemployed and, consequently, registered unemployment rate (SVLR, 2010 3).

The largest decrease in the number of employees was in manufacturing, agriculture, mining, while there was a reduction in the number of employees in the service and in the public sector is much smaller. The economic crisis has revealed particularly in regions that have historically lagged behind in development and which have failed some important companies and the latter encountered difficulties, for example in the Pomurje and Koroška.

Figure 1: Regional effects of the crisis. The registered unemployment rate in September 2008 and its absolute change in percentage points in the period to the end of 2009



SpremNezap - change in unemployment in percentage points

Nezap0908 - absolute change in percentage points in the period to the end of 2009

Source: SURS, display and conversion SVLR.

Especially great was the impact on the Pomurje region, where the registered unemployment rate increased sharply. Approval of the emergency law on development support to the Pomurje region in the period 2010-2015 to improve this part. Situation in the area of regional development calls for serious reflection on the existing model of promoting regional development, as the region has failed to provide a sufficient number of "competing" jobs with added value per employee over 30,000 euros, which would enable the EU comparable wage, adequate social protection and business development and consequently the country, regions and local communities. The current modes of individual sectoral development policies in the regions that were poorly interlinked, were not effective enough and especially not

successful. Regional policy, which has in recent years almost all regions leaves the development initiative, it is also proven weaknesses. Regional institutions, particularly regional development agencies have not been able to connect the different regional interests and drastic state centralism, at which were strengthened regional centralism and respond to them even localities. The financial and economic crisis has helped to clearly show what was previously hidden and what is not given its true meaning. Based on the above it is obvious that it is necessary to approach the transformation model of regional development and operation of Regional Development Agencies as providers in this field, taking into account other actors who have in the meantime developed at regional or inter-municipal area.

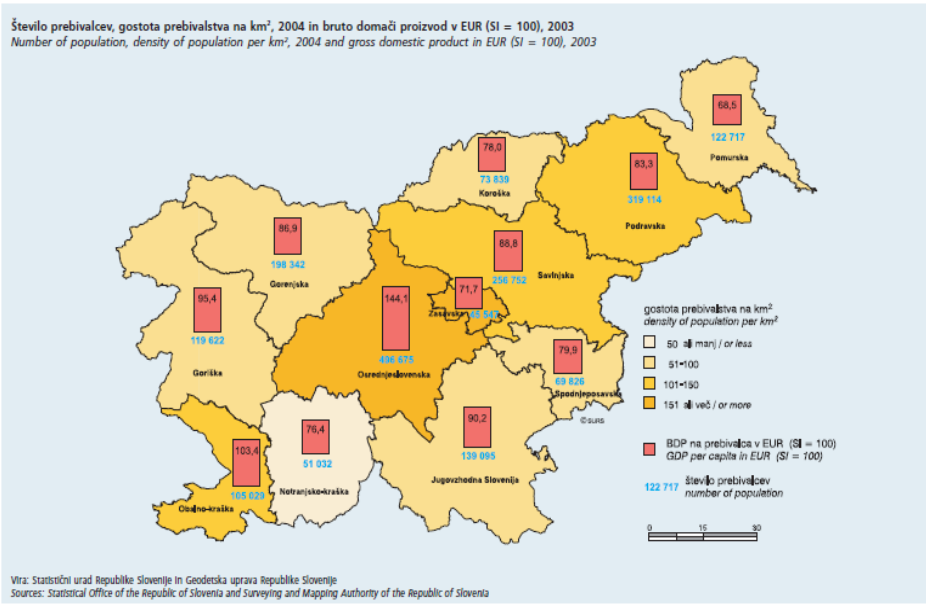
Situation In Regional Development At The Level Of Statistical Regions

In Slovenia, regional differences are still fairly large. In doing so, it draws attention to the many developmental diversity of Slovenian municipalities and regions, which for several decades indicates the concentration of certain regions in which there is a larger part of the population, jobs and economic operators, on the other hand, regions which show the lower level of development, rarely settlement and bad development potential. Thus, despite the efforts of the presented detectable increase in regional differences. On this we are stating the relationship between the most and least developed regions on the basis of gross domestic product - GDP (2.14: 1 in 2010 to 2.1: 1 in 2003 and 1.98: 1 in 2000) and the situation on the in other indicators of regional growth, as capital educated workforce, research and development. It notes the creation of some major development centers, including within the Central Slovenian region, water Ljubljana. The following two figures show a clear decrease in GDP in the Pomurska, Koroška, Zasavska, Gorenjska, Central, Inner-Kras and Gorica statistical region. Reduction of GDP, except in the case of Gorenjska, Central and Inner-Karst region, followed by reduction of the population (SVLR, 2010). Although the GDP in recent years increased in all regions, the highest growth rate reached more

developed regions, what the situation in the field of regional development are exacerbated, as shown in the following bullet points (based on publicly collected data and (SVLR, 2010) edited by author):

- Gross domestic product shows a wide variation between regions depending on the size of GDP, as, for example, has only Central region of the year accounted for more than a third (36.1% in 2007 and 36.58% in 2011) of total Slovenian GDP, it is slightly less than the 9 regions (39.1% in 2007 and 38.67% in 2011) and significantly more than the 8 regions (30.7% in 2007 and 30.42% in 2011) with a minimum GDP together - together with the Drava region and half of Slovenian GDP (49.6% in 2007 and 49.72% in 2011). It follows that the differences increase.
- Jobs are mainly concentrated in the Central region. The lack of jobs in each region resulting in greater and constant commuting employees and higher unemployment. The largest shortage of jobs in relation to employment in Zasavska region.
- In the area of unemployment are large regional differences, which are the most exposed to the region, which has long-term excess of the national average (Pomurska, Podravska, Koroška and Zasavska region).
- In recent years we have witnessed the growth of population, concentration continues in the Central region, where he has lived for more than a quarter of the total population of Slovenia. Demographic projections predict a decline in the number of inhabitants in the Slovenian regions and their aging, which represents the state, regions and municipalities additional challenges, both in terms of social-health point of view, as well as possible the potential for economic development.

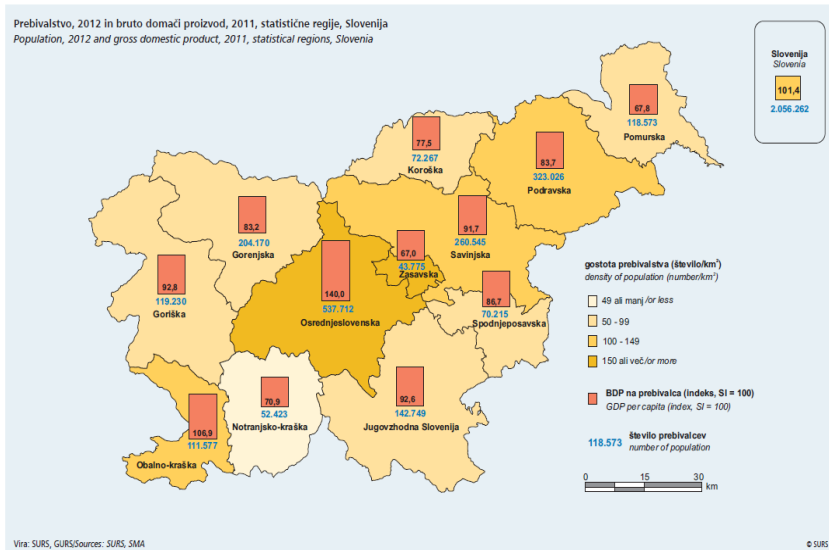
Figure 2: Number of population and gross domestic product by statistical regions in 2003



Source: Statistical Office of the Republic of Slovenia and the Surveying and Mapping Authority of the Republic of Slovenia. (2003)

- Development of the region with strong economic potential are those where the population is above average educated, and where the employees above-average percentage of employees with a high level of education. These regions have the greatest number of students per capita population is more healthy.
- Among regions there is a difference in the presence of higher education institutions, which are concentrated in the Central, Podravska-Karst region and Gorizia region, although individual faculties and higher education institutions located in other regions. With improved transport accessibility and the development of ICT available to study greatly improved.

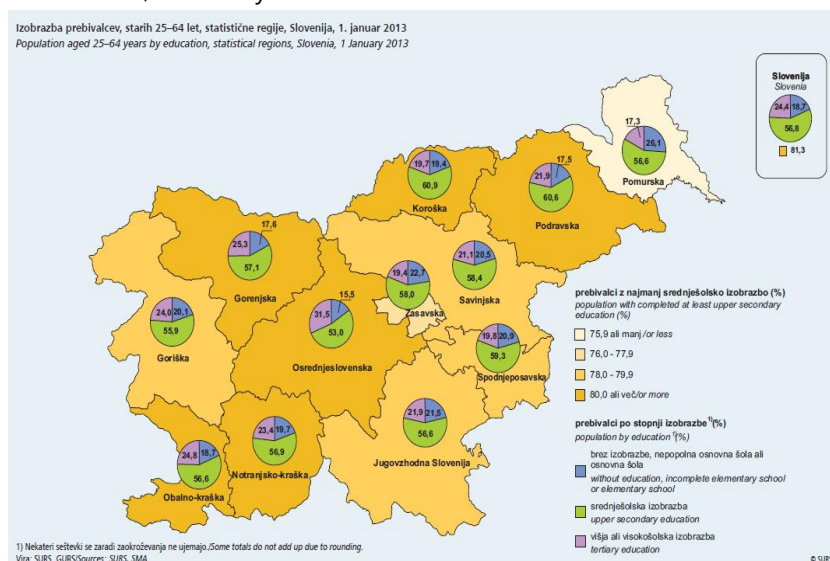
Figure 3: The number of inhabitants in 2012 and gross domestic product by statistical regions in 2011



Source: Statistical Office of the Republic of Slovenia (2014).

- There are also differences in the presence of scientific research institutions, which are mostly found in the Central region and in Ljubljana.
- There are differences in the equipment of the physical infrastructure, especially the poor regional traffic connection, where a less extensive road network. Traffic information municipal centers within regions is better.

Figure 4: Education of the population aged 25-64, statistical regions, Slovenia, 1 January 2013



Source: Statistical Office of the Republic of Slovenia (2014).

Border Regions

Slovenia has almost 1,400 km of state border. In Slovenia, as the border is defined as 50% of the municipalities where the frontier zone limited to 10 km. Corresponding to this is also our cross-border traffic. Slovenian citizens out annually about 50 million crossings. Across the border go on average once every 14 days. Differences in levels of development of countries and regions NUTS-2 levels in a radius of 500 km around the geometric center of Slovenia, measured in GDP per capita are very obvious. North and west of Slovenian regions which are among the most advanced in the EU, such as certain northern regions, the Bavarian region as well as Salzburg and Vienna region. Somewhat less but still above-average development of the EU-25 achieved a neighboring Friuli - Venezia Giulia, Carinthia and Styria. On the other hand, Slovenia to the east and south of the border to the considerably less developed Hungarian and Croatian regions and countries of the Western Balkans. Similarly, the situation regarding the

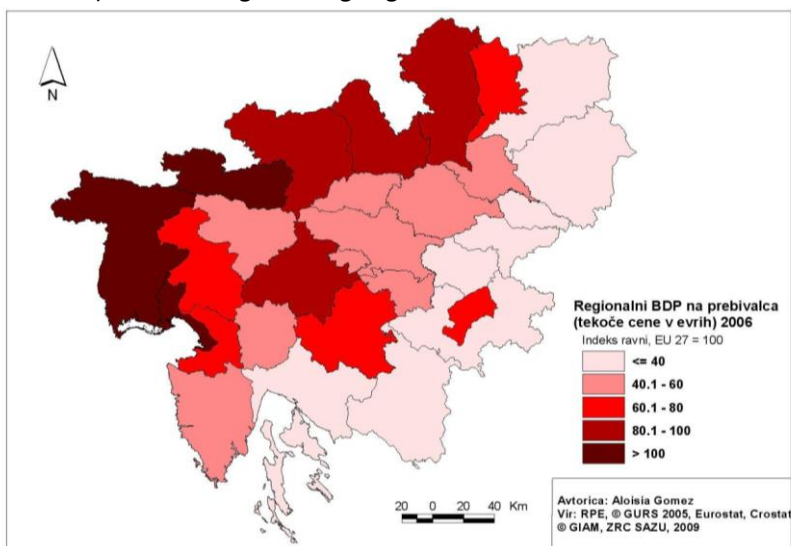
employment of the population and the competitiveness of regions within said space, wherein the position of the Slovenian mentioned indicators slightly more favorable.

Slovenian border region in the last few years improved its absolute position relative to the border regions in Austria and Italy, however, the level of development of most neighboring regions in Italy and Austria still much higher than the development of Slovenian regions (Figure 5). "Step by them, fished Central Region, other regions have, as the Austrian Burgenland and all Hungarian and Croatian regions, index levels compared with the average of the EU-27 under 80 issue of further catching up of Slovenian border areas of Austria and Italy, therefore, continue to be relevant and requires further strengthening regional innovation systems and their cross-border integration and euro regional cooperation "(GOSP 2010, 10-11).

Promoting Balanced Regional Development

Country Slovenia is the transformation of regional policy in the second half of the 90s set of system conditions for the further implementation of regional policy. The National Assembly in 1999 adopted a law on balanced regional development in 2000 have been adopted by laws that define the objectives, principles, organization, promoting balanced regional development, the allocation of development incentives and criteria for the identification of areas with specific development problems. In 2001, the Government adopted the Strategy of Regional Development of Slovenia (hereinafter: SRRS), which is a fundamental strategic document of Slovenian regional policy. SRRS provides detailed guidance for the further implementation of regional policy and its adjustment to changing circumstances.

Figure 5: Regional GDP per capita at current prices for 2006 (EU-27 = 100) compared to neighboring regions at NUTS 3 level.



Source: 2009 Annual Report on the implementation of the National Development Program of the Republic of Slovenia in the period 2007-2013, Government Office, Ljubljana.

It also established an appropriate institutional framework, the ministry responsible for the Regional Development Agency for Regional Development, Regional Development Agencies, etc. An important role should entail programming committees, and later regional development councils.

Since 2001, the Republic of Slovenia started to promote regional development by directing budget funds to priority areas of Slovenian regional policy. These were mostly areas with special development problems, set at the level of municipalities and regions A and B²³. On the other hand, the regional policy is too weak (financially, institutionally) to significantly shifted unfavorable development guidelines and ensure harmonious development of the entire national

²³ Navodilo o prednostnih območjih dodeljevanja spodbud, pomembnih za skladni regionalni razvoj (Ur. l. RS, št. 44/01).

territory. The main problems of regional policy accession to the EU were as follows:

- the shortage of good projects,
- lack of focus (too similar to projects on a small territory)
- funding was not an orderly system, despite the progress made,
- major difficulties in cross-sectoral coordination,
- lacked the knowledge and experience,
- monitoring of projects and programs have been underdeveloped,
- evaluation of projects, programs and policies were not adequate (deficiency of knowledge, methodologies and experience).

Thanks to EU funds, the year 2007 the amount of funds dedicated to regional development, increased sharply. By setting a quota of funds by region, taking into account the development risk index has been achieved the desired asset allocation in favor of the less developed regions and regional policy is an opportunity to make the complementary regional projects to support the development efforts of sectoral policies.

Evaluation of these calls was identified some risk factors, the success of the program in achieving the objectives of the program:

1. The Regional Council is actually a political body composed of mayors, they were in decision-making at the forefront of political and local interests, rather than the priorities of the comprehensive development of each region.

2. The regions have established a clear definition of the regional project. Connecting a large number of municipalities in the execution of operations is not a common practice since the regional distribution of the available quotas to individual municipalities, requires the realization of priority projects in each local community.

3. Regional development agencies are not sufficiently involved in the preparation of projects of regional importance, as well as municipalities generally do not have sufficient financial and human capacity to prepare projects on the stock, which could be adequately

reacted to tender, for which the deadline for submission of applications relatively short.

4. In border and cross-border area's regional policy met with a completely new facts. Opened up new opportunities and expected that the intensity of cross-border relations greatly increased. Analysis show²⁴ that this depends not only on the general international conditions, but also from a number of local factors:

- vision and strategy and state of development programs in border areas,
- adequate territorial organization and decentralization of public functions, which promotes cross-border cooperation. The question regarding the establishment of provinces, is an extremely important,
- functional organization of the border area for work and life of the population (question Euroregion?)
degree of social and cultural integration of the border population.

Positive And Negative Experiences With Regional Policy

Among the positive experience of previous regional policy is a shift in the status and organization of certain institutions, regional development agencies, regional development councils and regional councils in all development regions, the principles of operation and the design and scale of investment in the development of regions, especially the integration of EU cohesion policy funds).

Experience and results also show that the changes made were not optimal in all respects; it is also less effective implementation. The current regional policy is not sufficiently transparent institutional organization at all levels does not guarantee implementation of the principles of partnership and effective implementation of the

²⁴ Bufon, Milan. (2008) Slovenska obmejna območja po vstopu Slovenije v schengenski prostor; v monografiji: Na obrobju ali v osredju?, Milan Bufon s soavtorji, Založba Annales, Koper.

legislation. An inter-ministerial co-ordination is insufficient, the operation of individual departmental policies in the regions, incoherent and many times without any possible synergies. The institutions at the national and regional levels are unstable, the composition of regional councils (mayors) allows the predominance of local interests. Thus, it is necessary to focus on key regional problems and few real regional projects. Due to the large number of fragmented projects experiencing difficulties in absorbing EU cohesion funding, inadequate but also monitoring and evaluation of programs. The poor socio-economic status and limited financial incentives in times of financial and economic crises call for a focus on key development projects in the region, and fully exploiting the internal potential of regions. Strengthen the necessary actions to ensure greater coordination and partnership in the planning and implementation of regional development programs. It is necessary to more effective coordination of national sectoral development policies and improve the efficiency of regional policy. The necessary changes in policies, status and the institutional organization of regional policy. Among the positive experience of previous regional policy is a shift in the status and organization of certain institutions, regional development agencies, regional development councils and regional councils in all development regions, the principles of operation and the design and scale of investment in the development of regions, especially the integration of EU cohesion policy funds).

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and few real regional projects. Due to the large number of fragmented projects experiencing difficulties in absorbing EU cohesion funding, inadequate but also monitoring and evaluation of programs. The poor socio-economic status and limited financial incentives in times of financial and economic crises call for a focus on key development projects in the region, and fully exploiting the internal potential of regions. Strengthen the necessary actions to ensure greater coordination and partnership in the planning and implementation of regional development programs. It is necessary to more effective coordination of national sectoral development policies and improve the efficiency of regional policy. The necessary changes in policies, status and the institutional organization of regional policy.

Regional Development Agency (hereinafter: RDA) is the basic form of organization for the operational implementation of regional policy at the level of development of the region. Each development region has only one RDA, development tasks can be adopted by the Council in the region to engage in regional development agencies (hereinafter referred to as the ORA). Among these development institutions are significant differences in staffing levels in the services and the legal form. In addition to these 137 full-time employees in the development of these institutions perform public works and works for a certain time and work on a contractual basis (SVLR 2010, 28).

With those institutions SVLR²⁵ conclusion of the contract on co-financing of development tasks at the regional level, in the public interest. The total amount of co-financing on an annual basis amounts to 1 million euros. Among the regions, these resources are divided according to a key which takes into account the 60 percent weighting fixed part, which is the same for all development regions, and 40 per cent weighting variable part. The variable part depends on the number of municipalities in the area of development of the region and the development risk index in the region. SVLR (MGRT) funded development activities at the regional level, provided that the municipalities provide their share of funding at least 40%.

²⁵ Now the Ministry of Economic Development and Technology (MGRT).

Table 1: Positive and negative experiences with regional policy

POSITIVE EXPERIENCE	NEGATIVE EXPERIENCES
<ul style="list-style-type: none"> • Establishment of institutional framework: the responsible ministry • Adopted legislation. • Increased funding. • Strategic basis: at the national level and across departments. • Successful planning phase of cohesion policy. • Experience with the preparation of regional development programs. • Managing Authorities for cohesion policy. • Development sweep in the regions. • Increased public attention to regional problems 	<ul style="list-style-type: none"> • Regional policy is not further defined and positioned. • Insufficient inter-ministerial coordination - a low level of interconnection between instruments seemingly parallel aspects of planning. • The changing role of institutions for the implementation of regional policy. • Absence of other levels of local government. • There is a lack of comprehensive ready-regional projects (lacking financial support, personnel deficit, lacking professional support to countries). • The dominance of local interests (partial interests prevail, the dominant role of municipalities in decision-making in the exploitation of regional initiatives, the fragmentation of regional quotas funds to the municipal quotas). • Insufficient focus on key issues (too many similar projects (too) small territory). • Defective sense of responsibility for strategic decisions. • Difficulties in absorbing EU funds (complicated procedures, personnel, own participation, liquidity, ...). • Inadequate monitoring and evaluation of projects, programs and institutions at the regional level.

Source: Expert basis for a new law on the promotion of balanced regional development. Government Office: (2010, p. 28).

From the foregoing, it can be estimated that the state and municipalities, on average, jointly financed by more than 5 employees in the development region. This represents less than 50% of the labor costs incurred in development institutions. taking into account other

costs, the possible conclusion that the regional development institutions vast majority of funds for their operations to obtain on the market.

Table 2: Advantages and disadvantages of RDA

ADVANTAGES	DISADVANTAGES
<ol style="list-style-type: none"> 1. The multifunctionality and flexibility 2. The available infrastructure 3. The network of contacts and visibility in the region 4. Access to a wide range of information the state, municipalities, etc. 5. A broad network of contacts in the EU and SE Europe 6. Knowledge development, application and management, project management soft 7. Knowledge of financial management schemes and programs 8. Some of the regional development agencies is working well 	<ol style="list-style-type: none"> 1. Obsolete skills and self-sufficiency of personnel. 2. Non-uniform statuses (sometimes dominant private capital, sometimes dominant role of municipalities) structure .. 3. Lack of initiative RDA those who depend on the municipalities. 4. The majority does not have a long-term strategic plan and vision. 5. They do not have their own resources to invest in studies, project development, etc. 6. Too weak control over the operations of RDA - no measurement results and the quality of service, not standards. 7. There is no coordination at the state entering or co-finance the various activities of RDA (GOSP - MEDT, JAPTI - I know, Human Resources Development Fund - scholarships, etc.). 8. Ignorance of spatial planning. 9. The transfer of knowledge within the region and between regions (no meetings, conferences, etc.). 10. In some regions focus on regional centers and economic dimensions of development.

Source: Expert basis for a new law on the promotion of balanced regional development. SVLR. (2010, 30)

In carrying out development tasks in the regions contractors involved, in addition to those which are registered with the GOSP-MEDT, and their activity SVLR also co-finances some other development institutions (SVLR, 2010). These institutions have a total of 62 additional full-time employees to full-time. In total, therefore, the development institutions in the region around 200 full-time

employees.

The Vision Of Regional Development And Transformation Of The Functioning Of The Regional Development Agency

In regional policy should not only going to invest in physical capital regions and activities only in economic terms but also to invest in social capital in the region, which includes human capital, social capital, cultural capital and the environment. Also, the competitiveness of the regions can not be based only on economic competitiveness in the global market, but also on the efficiency and performance in terms of overall quality of life, environmental protection and sustainable use of natural resources.

Role models RDA's (shown in Figure 6):

- Model A is very rare. The case was Shanon Development in Ireland.
- Model B is a top-down approach. The existence of national regional agency, which has its offices in the regions. An example is Sweden (NUTEK).
- Model C is an example of the Netherlands, where the RDA is largely bound to a local government (province).
- Model D: RDA's are the result of initiatives of local government. They have different shapes and are formed from a variety of causes. They are not the result of a systematic approach, therefore, is not present on the entire territory of the country. Such cases have throughout the EU and in the candidate countries (such as Poland in the 90s).
- Today is considered to be mainly in the Anglo-Saxon countries important link between the State (Ministries) and RDA's, while other members considered that the RDA her increasingly at the service of regions and less in the service of the central government. While they were in the past, development agencies established in the problem areas are today present in the entire country (SVLR 2010, 72-73).

The vision of regional development in Slovenia provides dynamic and creative regions have expressed their own identity and effective management, which are able to detect and engage in global development opportunities. They do not mean only branch of law and the interests of local communities, but rather an autonomous entity and facilitator in the wider regional or inter-municipal area and field operations, as well as the creator equivalent and synergistic partnerships with other actors in regional and inter-municipal networking. Their development should be based on economic performance and efficiency, social justice and environmental responsibility.

The overall development objectives of regional policy are:

- Enhance economic, environmental and social capital in the region and increase its effectiveness in terms of economic competitiveness, quality of life and sustainable use of natural resources.
- Tackling structural problems of target problem areas and reduce their development gap.
- Implementation and strengthening the development potential of Slovenian regions through cooperation with other actors in regional and inter-municipal networking.
- Further substantive, targeted and strategic alliances through joint municipal authorities, in particular where there quantitative and qualitative functioning of the joint municipal administrations that already allows SOU (joint municipal administration) Lower Drava, Maribor SOU, SOU Sasha, Carinthia SOU, SOU Posavje, Zasavje SOU.
- Implementation and strengthening the development potential of Slovenian regions through cooperation with similar institutions in the regions and internationally.

Depending on the current operating model of regional development, which was not very successful, since it had the relevant ministry for regional development over the responsibilities and roles, even

patronage oversight of individual development agencies. Among other things, it is tolerated and allows mixing of private interests with public funds. It is unacceptable that extends the disordered state ownership.²⁶

Slovenia should follow the model C and D in the further development and the role of regional agencies. With that in Slovenia at the moment we do not have the regions, it would be closer to a model of D. However, given the fact that the regional or inter-municipal level in operation already in operation for some operators, it is necessary to include forms of intervention model C and strategically developed in CD combination model.

²⁶ What has happened again with the Law on balanced regional development ZSRR-2 (Official Gazette of RS, Nos. 20/11 and 57/12), which was amended in 2012 and the obligation of changing the status of the RDA in a public institution deleted from the 20th Article. Transitional provision (article 34, which says (2) of the RDA, providing general development activities in the region under this Act, it shall be in accordance with Article 20 of this Act, be established as a public institution until 31 December 2013), adopted in 2011 has thus become irrelevant. Current situation with regard to the required legal status RDA is as follows:
20. Article ZSRR-2 (after the change ZSRR-2A)

(3) "RDA must meet the following conditions:

- is majority publicly owned and with a majority of municipalities within the public share, while none of the municipalities may not have more than a one third share of the sponsoring,
- the professionally qualified personnel to perform the tasks of general development in the region,
- turns out to be part of a regional development network and covers the entire region,
- submit an implementation strategy for the general development tasks in the region,
- turns out to have a contractual relationship with the regional development partnership on the distribution of general development tasks in the region if the region formed local development partnership, turns out to have a relationship with other legal entities in majority public ownership of the distribution of general development tasks in the region, if based on the decision of the world total performed overall development activities in the region. "Article 15 ZSRR-2A

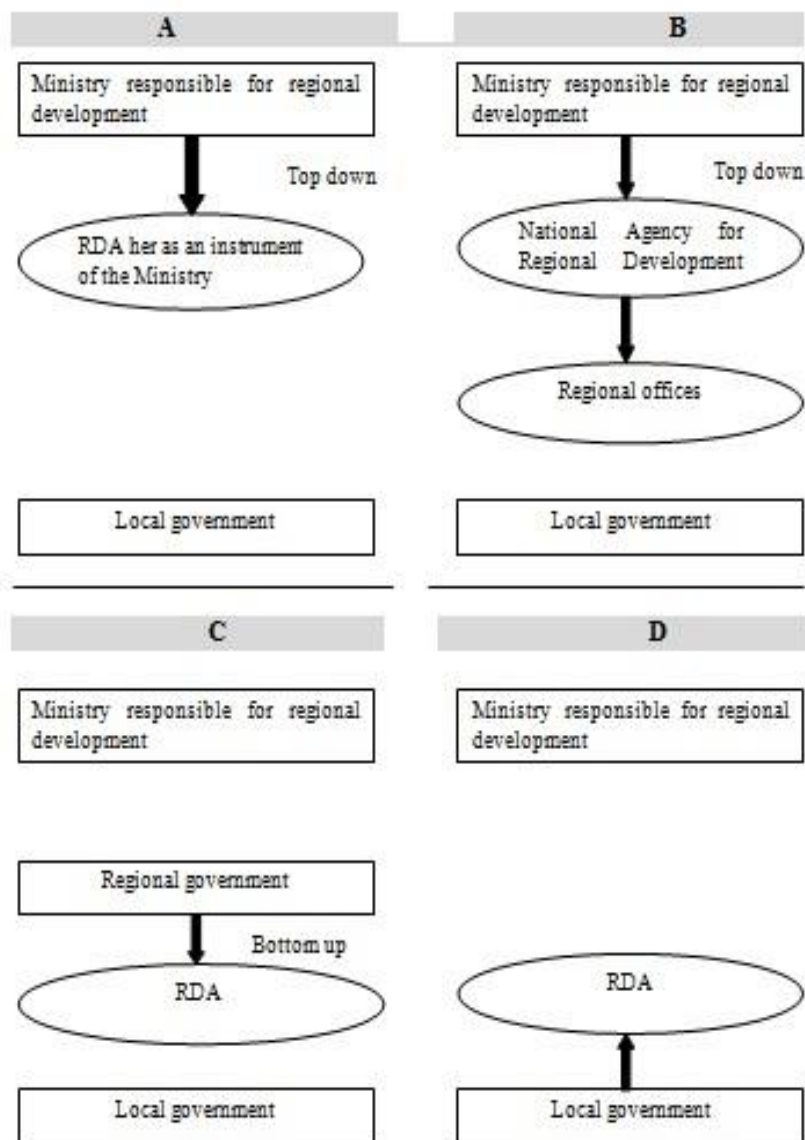
(3) RDA, which is the date of enactment of this Act registered as regional development agencies of the Ministry of Economic Development and Technology, proceed with the general development tasks in the region until the end of the program period. Conditions of the first indent of the third paragraph of Article 20 of the Act must be completed no later than four years after the entry into force of this Act. So in 2016, until then, depending on the dynamics of current changes can we expect a series of innovative solutions.

Conclusion

Over a longer period, Slovenia present development policy the less developed areas, initially focusing on demographic issues which had also been the regional component, but later on policy to encourage the development of regional development.

With the onset of the financial and then economic crisis has exposed weaknesses Slovenian model of economic development at both national and regional levels.

Figure 6: The role of the RDA's in EU Member States



Source: Adapted from *Absorption capacity for Structural Funds and the regions of Slovenia*. (2001, p. 21).

In Slovenia, regional differences are still fairly large. In doing so, it draws attention to the many developmental diversity of Slovenian municipalities and regions, which for several decades indicates the concentration of certain regions in which there is a larger part of the population, jobs and economic operators, on the other hand, regions which show the lower level of development, rarely settlement and bad development potential. Thus, despite the efforts it presented detectable increase in regional disparities. The current regional policy is not sufficiently transparent institutional organization at all levels does not guarantee implementation of the principles of partnership and effective implementation of the legislation. Strengthen the necessary actions to ensure greater coordination and partnership in the planning and implementation of regional development programs. It is necessary to more effective coordination of national sectoral development policies and improve the efficiency of regional policy. The necessary changes in policies, status and the institutional organization of regional policy.

In addition, we offset the creation of regions and other levels of organization of local government in Slovenia, which is a constitutional category in vague and politically uncertain time. Based on the foregoing, we believe that it does not appear to insist on regional development model, which does not give the expected results and strengthens the internal tensions and wait for regionalization in Slovenia, as the answer to all problems.

We suggest that Slovenia could follow the model C or D in the further development and the role of regional agencies. The fact that Slovenia currently has no provinces, it would be closer to a model of D. However, given the fact that the regional or inter-municipal level in operation already in operation for some operators, it is necessary to include forms of intervention model C and strategically developed in CD combination model.

References

1. Bufon, Milan. (2008) Slovenska obmejna območja po vstopu Slovenije v schengenski prostor; v monografiji: Na obrobju ali v osredju?, Milan Bufon s soavtorji, Založba Annales, Koper.
2. Burns, Nancy. (1994). The Formation of American Local Governments. Private Values in public institutions. Published by Oxford University Press, Inc. New York.
3. Della Porta, Donatela. (2003). Temelji politične znanosti. Prevedel Marjan Sedmak. Ljubljana: Založba Sophia.
4. Kržičnik, E.. (1991). Vloga in pomen regionalizma kot filozofije in gibanja za teritorialno utemeljen in skladen regionalni razvoj. Regionalni razvoj in regionalizacija Slovenije – 1. Faza, UIRA in IER, Ljubljana.
5. OECD Territorial Reviews Slovenia. (2011). OECD Publishing.
6. Navodilo o prednostnih območjih dodeljevanja spodbud, pomembnih za skladni regionalni razvoj (Ur. l. RS, št. 44/01).
7. Služba za lokalno samoupravo. Pokrajine v Sloveniji. (1999). Ljubljana.
8. Statistični urad Slovenije. (2003) Slovenske regije v številkah. Ljubljana.
9. Statistični urad Slovenije. (2014) Slovenske regije v številkah. Ljubljana.
10. Statistični urad RS. (2014). Splošno upravne karte. Ljubljana.
11. http://www.stat.si/tema_splosno_upravno_karte.asp, 11. 4. 2014.
12. Strokovne podlage za pripravo novega zakona o spodbujanju skladnega regionalnega razvoja. SVLR.2010.
13. Uredba o standardni klasifikaciji teritorialnih enot (Uradni list RS, št. 28/00).
14. Zakon o spodbujanju skladnega regionalnega razvoja (Uradni list RS, št. 20/11 in 57/12)

REFUGEES IN EUROPE: FROM MEDIA ACCOUNTS TO PSYCHIATRIC TRAUMA

Anca-Olga Andronic, Răzvan-Lucian Andronic

Faculty of Psychology and Educational Sciences, Spiru Haret University,

500152, Turnului 7, Braşov, România,

pp.bv.anca.andronic@spiruharet.ro;

pp.bv.razvan.andronic@spiruharet.ro

The media and the issue of refugees

The "refugee crisis" facing the European Union is widely reported by the European media in ways that sometimes contributes directly to the assertion of the anti-immigration politicians (Boomgaarden, H. G., and Vliegthart, 2007) and that is also because the European media (especially the written one) is commonly associated with some political positions (Bleich, Bleich, Bloemraad and De Graauw, 2015, p. 862).

Regarding the Romanian media, it presents (mainly in the news) many accounts related to the difficulties of managing a large number of people who are in transit or who want to reside in the European countries. Less present are the accounts about individual cases, about the refugees' fates and traumas. However, this subject was tackled by cinematography (Ponzanesi, 2011). In other words, it rather reflects what "we" (the Europeans) do in relation to an impersonal "they". Besides the well-known psycho-sociological explanation, "the out-group homogeneity effect" (the tendency to consider the members of the other group, the out-group members, more similar to one another in comparison with the members of their own group who are seen as different, being perceived as an individual), we may invoke another

one that keeps track of the fact that so far the “Balkan route” followed by the refugees from the Middle East has avoided Romania.

The main topic discussed in the Romanian media regarding the refugees is the controversy over the mandatory quota of refugees who will be resettled in all the EU countries, so that all its members to contribute jointly in order to improve their situation. In this case, also, the media discourse is impersonal, taking into consideration only the logistical and financial aspects, not the people who went into exile (who are perceived predominantly in a stereotypical manner – Andronic, 2016).

It is foreseeable that the refugees’ situation will not be in the near future only a topic for the media in Romania, but it will require intensely the public services, especially and primarily the mental health ones. Based on the results of some reference research (Steel, Chey, Silove et. al., 2009), based on the meta-analysis of the literature on the traumas suffered by refugees, which shows that about 30% of them suffer from mental health disorders (Steel, 2009) one can make a rough estimation: in the coming years it is possible to be necessary to provide specialized services to a significant number of people, possible 600 (30% of the 2,000 refugees allotted to Romania).

The refugees’ traumas and their diagnostic

The research on the psychological traumas suffered by the civilians who took refuge from the armed conflicts was initially carried out in the Southeast Asia, stating that they were suffering from posttraumatic stress disorder mainly, abbreviated PTSD, in proportions that varied between 10% and 86% (Thulesius and Hakanson, 1999, p. 167).

An important number of studies have focused on the trauma of the refugees from Bosnia-Herzegovina who arrived in other European countries, these revealing an incidence of PTSD which varied between 45% and 82% for a batch investigated in Norway and between 18%

and 33% in the research carried out in Sweden (Thulesius and Hakanson, 1999). Comparable results were obtained after studying the incidence of PTSD in Bosnian adolescents who fled to other parts of their own country (Hasanovic, 2012). Similar studies have been conducted on other continents; for example in the USA, a batch of Bosnian refugees was examined three and a half years after their settlement in the United States, and the results show that "44% of women and 8% of men meet the criteria for diagnosis with PTSD" (Vojvoda, Weine, McGlashan, Becker, and Southwick, 2008, p.421).

At present, the situation of the refugees concerns us primarily due to the scale of the phenomenon. The Office of the United Nations High Commissioner for Refugees estimated that in 2012 there were over 45 million refugees in another country, but also within the same country (Schnyder, Muller, Morina et.al., 2015, p. 267) while in Europe about 1 million refugees arrived only in 2015 (Musaro, 2016, p.13).

In addition, it is also worrying the very high proportion of migrants / refugees suffering from psychological traumas (terms that are used interchangeably in the media – Musaro, 2016): However, for the refugees affected by trauma, usually there isn't a unique event that leads to emotional distress, but rather prolonged and repeated trauma in their home countries, often exacerbated by more stressful events during and after their departure" (Sonne, Carlsson, Bech, Vindbjerg et.al., 2016, p.2).

Regarding the psychiatric diagnoses used to describe the medical condition of the approximately 30% of the refugees who have mental health disorders (Steel, Chey, Silove et. al., 2009), prevailing is the PTSD (defined by the World Health Organization in ICD 10 as a "non-psychotic anxiety disorder resulting from some exceptional threats or a catastrophic experience that could cause distress for almost all men", but there are also others, such as the major depression (Levecque și Van Rossem, 2015), somatic disorders etc.

Due to the fact that the refugees suffer from a series of severe traumas (being very frequently victims of torture, witnessing massacres and / or murder of family members, etc.), their diagnosis proved to be difficult. For example, there are notable differences in the results obtained by diagnosing them based on the criteria included in the DSM IV, compared with DSM V (Schnyder, Muller, Morina, Schick, Bryant, and Nickerson, 2015) and even while operating with the "brother" diagnosis of the PTSD, the complex PTSD (abbreviated CPTSD), which was introduced in ICD 11 just in order to capture "repeated, prolonged exposure to the traumas caused by the interpersonal relationships", being particularly relevant for the groups of refugees "given their typical exposure to repeated and prolonged interpersonal trauma" (Nickerson, Liddell, Maccallum, Steel, et.al., 2014).

The diagnostic difficulties (by default, the standard intervention) are explained by a variety of factors, starting with the fact that, due to resettlement, the refugees cannot access the different categories of resources (labor relations, ways of spending their leisure time, etc.) used to reduce distress, continuing with the type of traumas suffered as a result of the events they were exposed to, on the edge of the human condition (such as, for example, the case described by Rami Bou Khalil, 2013) or by claiming that refugees come quite often from countries with a low or medium level of development, where "over 90% of people with mental health disorders are not treated" and "only 13% of the traumatic stress studies are made in these countries". (Schnyder, Bryant, Ehlers, Anke, et.al., 2016, p.8). In other words, it is likely that PTSD was not diagnosed in their home countries and was not treated, and the refugees suffer other traumatic events on their way to Europe.

Also, a major difficulty in diagnosing refugees is the fact that PTSD / CPTSD is diagnosed based on some symptoms that are commonly reported verbally, while the refugees predominantly come from cultures where the ability to talk about their traumas is not the rule, but rather the exception. Therefore, there are frequent the cases with

“patients who are reluctant to talk with the therapist about their traumatic experiences, which is a sine qua non in virtually all evidence-based trauma treatments” (Schnyder, Bryant, Ehlers, Anke, et. al., 2016, p. 8). Hence, in making the diagnosis there are common situations where refugees prefer to draw, paint, dance or play an instrument to invoke the traumatic event, but not to talk about it, even if direct communication with the therapist is possible (i.e. without a translator).

To diagnose refugees specific tools tailored to their culture have been developed (such as The Posttraumatic Stress Disorder Interview for Vietnamese Refugees (PTSD-IVR) – Dao, Poritz, Moody and Szeto, 2012) or standardized instruments were used (such as Harvard Trauma Questionnaire (HTQ), designed to investigate the refugees affected by trauma, being validated in multiple languages and cultural contexts (Sonne, Carlsson, Bech, Vindbjerg et. al., 2016).

The assistance given to refugees in the European countries

While the studies on the incidence of PTSD have been numerous in recent years, those on the assistance given and their effects are rather rare, especially regarding the predictors of success of the intervention. During the last years, it was investigated the influence of several personal factors on the success of the intervention, among which some significant negative predictors of the intervention proved to be the sex: masculine and the villain status in the country of origin. Regarding the psychosocial factors, employment in their adopted country is a positive predictor, while dependence on the amounts received (without generating income) and even a high level of education (in the home country, usually without an impact in the country of adoption) can be considered negative predictors of successful intervention (Sonne, Carlsson, Bech, Vindbjerg et. al., 2016).

Regarding the assistance efforts, they start from the axiom that the treatment of refugees (especially of those diagnosed with PTSD) generates a very complex situation, both for the patient and the

therapist. The vast majority of refugees cannot be subjected to therapies focused on traumatic events, mainly due to cultural differences that make difficult to establish and maintain a therapeutic relationship. Therefore, their assistance refers specifically to "stabilization, psychosocial and community support... which are not always sufficient in helping patients effectively". Typically, the assistance given to the refugees from the European countries begins with a "psycho-educational stage", after which they can make the connection between the suffered trauma and the current symptoms. Afterwards, one can proceed to the therapy oriented towards the traumatic event, in which a genuine sensitivity to the cultural issues should be incorporated: "We treat people, not disorders. As such, culture-sensitive psychotraumatology means having a non-critical and empathetic attitude, trying to understand the cultural basis of each person" (Schnyder, Bryant, Ehlers, Anke, et. al., 2016, p.9).

References

1. Andronic, Răzvan-Lucian. (2016). Stereotypes and migration. International Conference "Redefining Community in Intercultural Context", Lisabona: 7-9 June 2016.
2. Bleich, E., Bloemraad, Irene și De Graauw, E. (2015). Migrants, Minorities and the Media: Information, Representations and Participation in the Public Sphere. *Journal of Ethnic and Migration Studies*, Vol. 41, No. 6, pp. 857–873.
3. Boomgaarden, H. G., and Vliegenthart, R. (2007). Explaining the Rise of Anti-immigrant Parties: The Role of News Media Content. *Electoral Studies* 26 (2): 404–417.
4. Bou Khalil, R. (2013). Where All and Nothing is About Mental Health: Beyond Posttraumatic Stress Disorder for Displaced Syrians. *American Journal of Psychiatry*, nr. 170, pp. 1356-1357.
5. Dao, T.K., Poritz, Julia M. P., Moody, Rachel P. and Szeto, Kim. (2012). Development, Reliability, and Validity of the Posttraumatic Stress Disorder Interview for Vietnamese Refugees: A Diagnostic Instrument for Vietnamese Refugees. *Journal of Traumatic Stress*, nr. 25, pp. 440–445.
6. Hasanovic, M. (2012). Neuroticism and posttraumatic stress disorder in Bosnian internally displaced and refugee adolescents from three different regions after the 1992-1995 Bosnia-Herzegovina war. *Paediatrics Today*. nr. 8(2), pp.100-113.
7. Levecque, Katia and Van Rossem, R. (2015). Depression in Europe: does migrant integration have mental health payoffs? A cross-national comparison of 20 European countries. *Ethnicity & Health*, vol. 20, No. 1, 49–65.
8. Musaro, P. (2016). Mare Nostrum: the visual politics of a military-humanitarian operation in the Mediterranean Sea. *Media, Culture & Society*, Vol. 39(1), pp. 11–28.
9. Nickerson, Angela, Liddell, Belinda J., Maccallum, Fiona, Steel, Z. Silove, D. and Bryant, R.A. (2014). Posttraumatic stress disorder and prolonged grief in refugees exposed to trauma and loss. *BMC Psychiatry*, 14:106.

10. Ponzanesi, Sandra. (2011). Europe in motion: migrant cinema and the politics of encounter. *Social Identities*. vol. 17, No. 1, January 2011, pp.73- 92.
11. Steel, Z., Chey, T., Silove, D., Marnane, C., Bryant, R.A., and Van Ommeren, M. (2009). Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and displacement: A systematic review and meta-analysis. *The Journal of the American Medical Association*, 302(5), 537549. doi: <http://dx.doi.org/10.1001/jama.2009.1132>
12. Schnyder, U., Bryant, R.A., Ehlers, Anke, Foa, Edna B., Hasan, A., Mwititi, Gladys, Kristensen, C. H., Neuner, F., Misari O, and Yule, W. (2016). Culture-sensitive psychotraumatology. *European Journal of Psychotraumatology*. Vol. 7, pp.1-10.
13. Schnyder, U., Muller, Julia, Morina, N., Schick, M., Bryant, R.A. and Nickerson, A. (2015). A Comparison of DSM-5 and DSM-IV Diagnostic Criteria for Posttraumatic Stress Disorder in Traumatized Refugees. *Journal of Traumatic Stress*, nr. 28, pp. 267-274.
- Thulesius, H., Hakansson, A. (1999). Screening for posttraumatic stress disorder symptoms among Bosnian Refugees. *Journal of Traumatic Stress*, vol.12, no.1, pp. 167-174.
14. Sonne, Charlotte, Carlsson, Jessica, Bech, P., Vindbjerg, E. Mortensen, E.L. and Elklit, A. (2016). Psychosocial predictors of treatment outcome for trauma-affected refugees. *European Journal of Psychotraumatology* 2016, 7: 30907.
15. Vojvoda, Dolores, Weine, S. M., McGlashan, T., Becker, D. F. and Southwick, S. M. (2008). Posttraumatic stress disorder symptoms in Bosnian refugees 3 1/2 years after resettlement. *Journal of Rehabilitation Research & Development*, Vol. 45, Number 3, pp. 421-426.

THEORETICAL APPROACHES TO SOCIAL IDENTITIES

Patrícia Kaplánová²⁷

Faculty of Organisation studies in Novo mesto, Slovenia

pata.kaplanova@gmail.com

Introduction

A perception of self in modern societies has been a topic of research of social and psychological science for many years. With the ongoing development of societies and technological progress, where an individual has become „globalised“ at least in the virtual world, the identity of self in society is also evolving. In new conditions of our lives virtually or physically, our identity and its development are never ending process. The image of self in society contrasts with a perception of society on us. Ones of our societal identities of which we are aware are our social identities like age, gender, socioeconomic status, ethnic/cultural identity, political identity, or/and national identity. The strongest identities valid for social and political research are civic, political and national identities. In following pages a reader can find many different theoretical approaches to social identities, especially civic, political and national one. The paper discusses the categorization of self in the society from a sociological, political and psychological understanding of identities offering a brief overview of social identity theory, civic, political and national identity research.

Social identity theory

²⁷ Patrícia Kaplanova is Ph.D. Candidate at the Faculty of Organisation Studies in Novo mesto, Slovenia, where she is analysing the Model of citizen's participation in the European governance based on social identity theories. Her broad research interest in theories of democracy and European studies lies on several published articles, or/and book chapters presented mainly at international conferences.

"[I]dentity is never a priori, nor a finished product; it is only ever the problematic process of access to an image of totality." (Bhabha 1994: 51)

The word "identity" is presented in contemporary social and psychological research as a keyword (Howard, 2000, p. 367). As an individual, we are sharing several types of identities present in our personal and social life. According to them, we identify ourselves and classify to the roles and models in the society. From the perspective of social interaction, our personal identities influence our behaviour towards other people and could even create the behaviour of the whole group where we belong to. The examples of identities which we can daily observe are based on age, gender, ethnicity, nation, political views, social status, occupation, etc.

In the past, when societies were rather stable, the term of identity in psychological science was connected to self-efficacy and self-verification (Stets, & Burke, 2000, p. 224) as a related issue of personal estimation and identification of self. This approach is known as an identity theory which seeks to explain multiple self/personal identities, their development through the time, how they interact with each other, and how they affect the human behaviour (for more see Stryker, & Burke, 2000, pp. 287-285). The identity theory and research were based on the ego psychoanalytic theory of E.H. Erikson (1950) and currently developed by Jane Kroger (2007) (for more see Kroger, & Macia, 2011, p. 32). Gradually, the "identity has become the watchword of the times" Shotter (1993, p. 188) in social and behavioural science and the self-reflection is seen in a broad social and political context. As Cooley (1902) pointed out the individual and society are two sides of the same coin, thus the identity refers to „the set of meanings that define who one is when one is an occupant of a particular role in society, a member of a particular group, or claims particular characteristics that identify him or her as a unique person." (Burke, & Stets, 2009, p. 3) The personal self-efficacy and self-verification were later in behavioural sciences supplemented by cognitive processes like categorization, class, group identity, depersonalization or self-esteem.

In comparison with the identity theory, the social identity theory (SIT) is based on a cognitive recognition of self in a wide societal structure. "Identifying ourselves, or others, is a matter of meaning, and meaning always involves interaction: agreement and disagreement, convention and innovation, communication and negotiation" (Jenkins, 2008, p. 17). In the contrast with the development from personal to social identity, there are still some scientists who claim that all human identities are social identities. Adding the word „social“ into this ambience is somewhat redundant (Ashton *et al.* 2004, p. 81). Nevertheless, the social identity has evolved into the popular and one of the most researchable topics in social sciences explaining the basic group/collective conflicts.

The social identity theory was first described by Tajfel (1978) as a social-psychological theory explaining group processes and behaviour (Trepte, 2013, p. 256). In comparison with other social and psychological theories, the social identity theory directly addresses social group behaviour and feelings of belonging to the group. Consequently, Tajfel (1979) structures "the definition of a group alongside a cognitive component (knowing about the group membership), an evaluative component (positive or negative evaluation of group membership) and an emotional component (positive or negative emotions associated with the group membership and its evaluation)" (Trepte, 2013, p. 256). Based on these understandings Tajfel underlined four principles of social identity theory: social categorization, social comparison, social identity and self-esteem.

The social categorization principle, firstly developed as the self-categorization theory (SCT) by Turner (1987), suggests that personal and social identity represent different levels of self-categorization (Trepte, 2013, p. 257). According to Hornsey (2008) „...it is almost impossible to think or write about group processes and intergroup relations today without reflecting on core constructs within the theory, such as categorization, identity, status, and legitimacy.“ (p. 217) Generally, it could be said that social categorization helps the

individual to categorise himself to the particular social group and "create and define the individual's place in society" (Tajfel and Turner in Trepte, 2013, p. 257). Based on social or group categorization, the social psychology research is dealing with stereotypes, class classification, and interclass differences. Additionally, social categorization helps to identify the social interactions embedded in group behaviour. Generally, the social identity theory and self-categorization theory "capture the socially embedded, situated, shared, social, group-located properties of human being (Turner, & Reynolds, 2011, p. 400). Because an individual shares several multiple group/collective identities, the social identity theory adds that "the group membership has to be salient to initiate behaviour" (Trepte, 2013, p. 258). Among one's multiple identities, there are some which are more salient than the others. With the respect of the social categorization, if the boundaries between social identities are significant enough, the salience occurs. The social categorization and saliency of each identity are influenced by current emotional or value significance to a person. Simple, how much importance is given to the group membership by a person, more salient will be that social categorization. Even there is a lack of research how the existing salience may affect a social interaction (McLeish, & Oxoby, 2011, p. 173), the past research has shown that the group identity can have an effect on cooperation (Goette, Huffman, & Meier, 2006), reciprocity (McLeish, & Oxoby, 2007, p. 1) and negotiations (Kramer, Pommerenke, & Newton, 1993, p. 633).

The second principle of social identity theory, a social comparison, is a type of behaviour triggered by the social categorization. The social comparison draws upon the assumption that members of particular group categorise themselves as members in comparison with other groups. This concept is based on Fastinger's (1954) theory of social comparison which assumes that "we have a need to compare our opinions and abilities with others, particularly if there are no objective standards that we can refer to" (Trepte, 2013, p. 258). There are three basic premises of social comparison theory based on the Fastingers social comparison theory. The first is that the individuals have to

adopt the group belonging as a part of their self-concept. "Comparisons might cause a change in one's opinion or ability, and most likely this change goes in the direction of uniformity (i.e., assimilation)" (Corcoran, Crusius, & Mussweiler, 2011, p. 121). The second premise is that the situation needs to be appropriate for a comparison. "The need to know the self combined with the impossibility to determine opinions or abilities by reference to the physical world in many situations motivates people to compare themselves to other people." (Corcoran, Crusius, & Mussweiler, 2011, p. 121) And the third, that the out-group must be relevant in terms of similarity. Fastinger argues that people will "seek out similar others for comparisons, or, in the case of abilities, others who are slightly better" (Corcoran, Crusius, & Mussweiler, 2011, p. 121). Based on what has mentioned above, the understanding of self as a part of group or community has also the impact on the behaviour of social comparison. The personal feeling of belonging to social group, therefore, triggers the awareness of being different than the members of other social groups.

Consequently, there is the third principle of SIT, a social identity, which derives from the understanding of self as a part of a social group "together with value and emotional significance attached to that membership" (Tajfel in Treppe, 2013, p. 259). The awareness of membership identity in a social group is described as „positive group distinctiveness" (Spears, p. 204-205). In theory, the positive identification with the social group is called as minimal group paradigm (Gaertner, & Insko, 2000, p. 77; Spears, 2011, p. 204; Otten, 2016, p. 85) which shows that „mere categorization of people into an ingroup ('us') and an outgroup ('them') is sufficient to elicit attempts to positively differentiate the in-group from the out-group along available dimensions" (Ford & Tonander, 1998, p. 373). Minimal group paradigm is considered to be the most influential paradigm to explore the positive and negative social identity on behalf of social categorization. Originally, the positive distinctiveness of intergroup behaviour can explain a likelihood in the intergroup formation and a hate towards the out-group formations. Relatedly, people

differentiate the others because of their self-identification within the group. Turner's social identity theory conducts the hypothesis that "to achieve positive social identity, ingroup-outgroup comparisons must yield perceived differences which favour the ingroup" (1978, p. 236). The social identity building thus begins with the group self-categorization and differentiation against the out-groups. This concept finds itself popular also among scholars of nationalism, ethnicity, political science or anthropology. The positive differentiation corresponds to understandings of collective identity, known as two modes of group identification in social anthropology. „We and Us“ paradigm developed by T.H. Eriksen (1995, 2010) relies on the ethnic distinctiveness of cultural identities. For the purpose of this thesis, the topic of "we and them" identification will be discussed later in autonomous sub-chapter about ethnic and national identities.

The fourth principle of social identity theory is based on a self-esteem hypothesis (Abrams, & Hogg, 1988, p. 317). Social identity theory refers to self-esteem as the motivation underlying inter-group behaviour to confirm their own self-identification or self-enhancement (Tajfel in Trepte, 2013, p. 259). The self-esteem hypothesis deals with the motivating force of individual for the positive value associated with one's group identity (Spears, 2011, p. 203). On the other hand, there is also a negative orientation towards the self-evaluation which models an attitude of approval or disapproval (Brown, 2014, p. 28). High level of self-esteem is characterised by positive attitudes and feelings of people towards themselves, while a low self-esteem regards to negative beliefs about self (Fennell, 2005, p. 236). Based on this theory, we can assume that the positive feeling about self-drives a person to the appreciation of self in the society or at least shape unambiguous attitudes. Consequently, the feeling of importance (high self-esteem) can even form its motivation to participate. If there is a high self-esteem, there is a chance that the person would self-evaluate itself to a positive belief that his/her voice could be heard. Reversely, there are two basic motivations which "drive people's attitudes, behaviour, and perception: a motivation to obtain a clear picture of one's position in the social structure; and a motivation to obtain or

maintain a positive sense of self-esteem” (Abrams & Hogg in Licata et al., 2011, p. 900). On the contrary, the low self-esteem has a negative impact on motivation and behaviour. The low self-esteem can discourage a person from the motivation to participate or generate unfavourable/ambivalent attitudes.

In this manner, the positive self-categorization as a cognitive characteristic and the self-esteem as a motivational characteristic shape the processes of creation a social identity. Based on this assumption, there are two analogies (Abrams, & Hogg, 1988, pp. 320-322). The first is that successful inter-group discrimination leads to increased self-esteem; second, that low or threatened self-esteem motivates increased out-group discrimination (Trepte, 2013, p. 259).

Besides the four main premises of social identity theory, there is a paradigm which draws upon the writings about the specific relationship between individuals and society called as a structural symbolic interactionism (for more see Stryker, 2002; Handberg et al., 2015, p. 1024; Carter, & Fuller, 2016, pp. 3-7). The symbolic interactionism theory²⁸ develops a positivist thesis of micro-level processes of social interactions which affect a function of the whole society. The symbolic interactionism, influenced by American pragmatism, was founded predominantly by a social psychologist G.H. Mead in early 60s. His scholar, H. Blumer pointed out three basic premises of symbolic interactionism. “Firstly, human beings act towards things on the basis of the meanings that the things have for them. Secondly, the meaning of such things is derived from or arises out of, the social interaction that one has with one’s fellows. Thirdly, these meanings are handled in and modified through, an interpretive process used by the person in dealing with the things he encounters” (1969, p. 2). The human behaviour is then influenced by meanings which we are prescribing to things or other people (creating

²⁸ Theory of symbolic interactionism was developed along three main areas of research and schools following the works of Herbert Blumer (the Chicago School), Manford Kuhn (the Iowa School), and Sheldon Stryker (the Indiana School) (Carter,& Fuller, 2016, p. 2-8).

stereotypes for example). These meanings are created by social interactions, for example, a role of a "mother" is perceived by the interactions with children, husband, her behaviour towards household, or etc. A character of those meanings (of a mother) is modified by a creative process in time and space.

Therefore, the human beings cannot be understood in a manner of "self" out of the whole society. Because "self" is created in the constant social interactions (mainly through language and communication) with others, the human being is constantly influenced by the ongoing process of change. Therefore, "...the 'self' is a product of social interaction, developed and refined through an on-going process of participation in society. (Jeon, 2004, p. 250). Consequently, the theory was influenced by Parson's structural functionalism (Carter, & Fuller, 2016, p. 2), but on contrary, the symbolic interactionism examines the bottom-up processes of creating an operation of society. Straightforwardly, symbolic interactionism analyses how personal interactions among individuals influence the function of society and not vice versa. Theory of symbolic interactionism was developed along three main areas of research and schools following the works of Herbert Blumer (the Chicago School), Manford Kuhn (the Iowa School), and Sheldon Stryker (the Indiana School) (Carter,& Fuller, 2016, p. 2-8). The theory of symbolic interactionism sees the changes of society not based on the impact of social structures and macro-level institutions, but as subjective meanings and viewpoints of individuals in the society. Therefore, patterns of behaviour of individuals and their identities at micro-level would have an effect on the whole social system.

Civic and Political identity

Civic identity is the heart of common notions of citizenship and civic participation (Hart, Richardson, & Wilkenfeld, 2011, p.771). Whereas the occupational identity defines the perception of socioeconomic status in the society, the civic identity figures one's place in the society as a civic/political actor. The basic understanding of civic identity lies

on the self-esteem in the development of a civic society which can empower political engagement and motivates for civic behaviour. The subjective dimension of citizenship (Carens, 2000, p. 166), a feeling of belonging, could also strengthen the political collective identity (Leydet, 2014). With this respect, the civic identity, as well as citizenship, constitutes three main elements: membership (belonging), participation and rights which are mutually reinforcing (Bellamy, 2008, p. 599). Membership explains a feeling of belonging to a community or nation. Citizens are entitled to civic, political and social rights based on which they participate in society. Referring to democratic order, a democracy is functioning based on how citizens feel their identification with society. The social interactions among citizens and with society itself strengthen the importance of involvement in shaping the social life.

Because of the identification of self as a participant in the civil society, the participation overlaps the characteristic of citizenship and civic identity tends to be connected to voting, political engagement, running for the public positions, or to mobilise self and others. The same as in the theory of citizenship, the feeling of belonging or duty to participate in the civic life is not burdened by territory, even the strongest link between citizen and society could be found at the local level in local communities (Leydet in Hart, Richardson, & Wilkenfeld, 2011, p.773). In comparison with the national identity, an individual does not need to possess both national and civic identity. For example, Slovenian living in Great Britain can still feel Slovenian (national identity) and he/she does not need to feel civic identity in a country where he/she is living.

Among subjective/psychological influences of civic identity is trust as a cornerstone of citizenship and interactions among people. Mutual trust according to some scientists lies even at the heart of all political processes (Dunn, 1993, p. 641) and mutuality, reciprocity and trust are associated with social participation and engagement in communities (Van Deth, Montero, & Westholm, 2007, p. 35). Further, the civic knowledge as awareness of democratic principles is also perceived as

a personal factor associated with participation and respect for rights (Galston in Hart, Richardson, & Wilkenfeld, 2011, p. 778).

Although the subjective factors are determining the civic identity, there are also demographic influences on civic identity (Hart, Richardson, & Wilkenfeld, 2011). The first is an economic performance of the government which creates the economic conditions for social development. Directly or indirectly, the economic development influences a level of citizenship and civic identity. It is assumed that especially in conditions like poverty, low quality of life, the level of the welfare state, or bad citizen's well-being make a creation of civic identity and citizenship more difficult. The second demographic characteristic is an ethnic heterogeneity which proclaims that ethnically heterogeneous countries have more problem to create social capital (Coffé, 2009, p. 155). Putnam (2007) examined the ethnic heterogeneity with social capital concluding that ethnic diversity tends to breakdown social capital like trust in local governments, active participation in local community projects, donating to charity, volunteering and having close friends (p. 150). On the other hand, the recent study of diversity in social capital has proved the Putnam hypothesis false accomplishing that "the economic inequality and national history of continuous democracy in European societies turn out to be more important for explaining cross-national differences in social capital in Europe" (Gesthuizen, Van der Meer, & Scheepers, 2009, p. 121). However, the ethnic diversity appeared to be negatively influential just in the link with political participation (Levels, Scheepers, Huijts, & Kraaykamp, 2015, p. 766).

National identity

With ethnic and cultural identity is mutually connected also a concept of national identity. The main trends in social behaviour based on cultural and ethnic identities are also observed in the case of national identity. The term national identity is close to the concept of nationalism, which is a process of forming and maintaining nations or nation-states (Beiner, 1999, p. 56; Smith, 1991, p. 71). This process

could be primordialism based on the traditions and culture inherited in the collective identity, or it can be perceived as a language of symbolism of the nation, a consciousness of belonging to the nation, an ideology, a social and political movement to achieve goals of the nation (Smith, 1991, p. 72). In modernity perspective, the image of a nation is a nationalism that creates national identity understood by words of Ernst Gellner that "Nationalism is not the awakening of nations to self-consciousness: it invents nations where they do not exist." (Eriksen, 2010, p. 117; Smith, 1991, p. 71). From this perspective, nationalism is connected to a modern understanding of state because helps to „make sense of common identity to conceive of shaping their world together within the multi-layered political and social mosaic of democracy" (Miller, 1989, p. 184, Keane, 1995, p. 187). As it could be noted, the national identity and nationalism (as a political force) can not be clearly separated. Respectively, some scholars differ nationalism to its cultural or political notions. The political nationalism refers to a narrative of a self-determination of national identity which brings also „the principle that citizens should govern themselves, with the principle that nations should determine their own destiny" (Keane, 1995, p. 185). The cultural nationalism, by contrast, refers to a doctrine that an important responsibility of the state is to „preserve and promote some national culture that is contained within its borders" (Patten, 1999, p. 1).

The political aspect of nationalism is thus also a force of identification of nation based on the ethnic and national identity. Benedict Anderson in his famous book „Imagined communities" proposed a definition of a nation as „an imagined political community – and imagined as both inherently limited and sovereign." (2006, p. 6) Unlike Gellner's understanding of nationalism as a political force, Anderson is concerned about cultural roots of nationalism such as identity. The link between ethnic/cultural identity and nationalism as a political ideology becomes clear when the political organisation represents the interests of a particular ethnic group (Eriksen, 2010, p. 121).

Even there could be an assumption that there is a mutual relationship

between democracy and nationalism, the principles on which both concepts are standing differ. While liberal democracy emphasises an inclusion of people incorporating them into the political and social system, at the same time „nationalism drew a boundary between us and them demanding the exclusion of others.“ (Machin, 2015, p. 127) Thus, nationalism can be based on the negative identity of exclusion (the others) while the culture of political liberalism in democracies is based on the inclusion of masses into the political system (an above-mentioned spread of citizens rights towards participation, etc.). At this moment, pops up a „clash“ of multiculturalism in modern societies already mentioned above. The modern societies can not be described culturally homogenous because of globalisation, migration and the „melting pot“ processes of the policy of multiculturalism are part of current debates over immigration crisis in Europe. In the broader understanding of cultures, ethnic identities and nationalism in geopolitics there is a tradition of Huntington's thesis of „a clash of civilisations“ based on conflicts of cultural identities (1993, p. 22).

Concerning the nationalism and national identity besides that political nationalism is forced by ethnic and cultural identities, how to tie the political participation and national identity? As was indicated in the case of multiculturalism, the national identities rise up in cultural or ethnic conflicts. The political ideology perspective of nationalism maintained by political discourse can be thus interpreted as one of the main social cleavages in modern societies. According to the cleavage theory of Stein Rokkan and Martin Lipset, the national revolution processes in Europe (understood as a rise of nationalism) has produced two main social conflicts: „the conflict between the central nation-building culture and the increasing resistance of the ethnically, linguistically, or religiously distinct subject populations in the provinces and the peripheries ; the conflict between the centralizing, standardizing, and mobilizing Nation-State and the historically established corporate privileges of the Church“ (Lipset, & Rokkan, 1967, p. 14). These cleavages built up since the rise of nationalism movements of the eighteenth and nineteenth century are present in contemporary societies with new socio-structural conditions and are strengthened by gradual and ongoing ethnical, cultural and national

conflicts. why we can see the strengthening process could be described by the thesis that nationalism is connected to modernity and supported by the industrial revolution. By work of Miroslav Hroch „Social Preconditions of National Revival in Europe“, there are socio-economic characteristics of modernity which reinforce nationalism like a growth of education, and powerful economic relations (1985, pp. 5-7). This type of nationalism reinforced by education and economic development is classified as a liberal nationalism which „emphasises rather civic engagement in democratic regime than the ethnicity“ (Hall, 1995, p. 156).

If the modernity, industrialisation also reinforced the nationalist feelings, we can assume that the human development in the twenty-first century could have the same impact. At least we can claim that the building of national identities is not necessarily disconnected from the modern understanding of democratic political regimes. In the case of supranational integration and globalisation, there is an assumption that the national identities either disappear or get weaker. Referring to the European integration, the logic could be assumed the same, that the Europeanization of identities would have a negative effect on national identities. However, the empirical findings suggest that the stronger feelings of national identity lead to lower level of support for the European integration (Carey, 2002, p. 387).

Conclusion and Discussion

For current research in sociological and political science, there is a wide range of studies dealing with identities. A place of individual in society and its understanding has triggered several approaches among which the most important are theories of social identity. Consequently, the categorization of self in socio-structural conditions is influenced by several processes of community building. Symbolic interactionism emphasized by a creation of stereotypes has determined individual identity especially in political communities. Civic and political identity is supported by processes of creation of

citizenship as forms of belonging and membership. These kinds of collective identities are enforced in current democratic regimes as well as in any forms of democracies in the past. Although, a national identity based on ethnic or cultural identity, could be perceived as a feeling of belonging to political unit. The difference between a feeling and being of belonging and membership has been and will be the main aim of social research since a new wave of extreme right-wing politics has appeared in Europe. The theoretical basis which was developed in this chapter is a first step in theoretical framework for further research in sociology or political science.

References

1. Abrams, D., & Hogg, M. A. (1988). Comments on the motivational status of self-esteem in social identity and intergroup discrimination. *European Journal of Social Psychology*, 18(4), 317-334.
2. Anderson, B. (2006). *Imagined Communities*, (Revised edition). London and New York: Verso.
3. Ashton, R. D., Deaux, K. and McLaughlin-Volpe, T. (2004). An Organizing Framework for Collective Identity: Articulation Significance of Multidimensionality. *Psychological Bulletin*, vol. 130, pp. 80–114.
4. Beiner, R. (Ed.). (1999). *Theorizing nationalism*. SUNY Press.
5. Bellamy, R. (2008). Evaluating Union citizenship: belonging, rights and participation within the EU. *Citizenship studies*, 12(6), 597-611.
6. Bhabha H. 1994. *The Location of Culture*. London, UK: Routledge
7. Blumer, H. (1969). *Symbolic Interactionism: Perspective and Method*. University of California Press.
8. Brown, J. D. (2014). Self-esteem and self-evaluation: Feeling is believing. Suls, J. (ed.) (2014) *Psychological perspectives on the self*, Vol. 4, Taylor & Francis: Psychology Press, pp. 27-58.
9. Burke, P. J., & Stets, J. E. (2009). *Identity theory*. Oxford University Press.

10. Carens, J.H. (2000). *Culture, Citizenship, and Community. A Contextual Exploration of Justice as Evenhandedness*, Oxford: Oxford University Press.
11. Carter, M. J., & Fuller, C. (2016). Symbols, meaning, and action: The past, present, and future of symbolic interactionism. *Current Sociology*. Vol. 64, No. 6, pp. 1- 31.
12. Carey, S. (2002). Undivided loyalties: is national identity an obstacle to European integration?. *European union politics*, 3(4), 387-413.
13. Coffé, H. (2009). Social capital and community heterogeneity. *Social Indicators Research*, 91(2), 155-170.
14. Corcoran, K., Crusius, J., & Mussweiler, T. (2011). Social comparison: Motives, standards, and mechanisms in Chadee, D. (Ed.). (2011). *Theories in social psychology*. John Wiley & Sons. Pp. 119-139.
15. Dunn, John. (1993). Trust In Robert E. Goodwin and Philip Pettit, eds. *A Companion to Contemporary Political Philosophy*. Oxford: Blackwell.
16. Eriksen, T. H. (2010). *Ethnic Classification: Us and Them in Ethnicity and nationalism: Anthropological perspectives*. London- New York Pluto Press, pp. 23-42.
17. Eriksen, T. H. (1995). We and us: Two modes of group identification. *Journal of peace research*, Vol. 32, No. 4, pp. 427-436.
18. Erikson, E. H. (1950). *Childhood and society*. New York: W. W. Norton & Co.
19. Fennell, M. J. (2005). Low self-esteem. In *Encyclopedia of Cognitive Behavior Therapy* (pp. 236-240). Springer US.
20. Ford, T. E., & Tonander, G. R. (1998). The role of differentiation between groups and social identity in stereotype formation. *Social Psychology Quarterly*, 61 (4), 372-384.
21. Gaertner, L., & Insko, C. A. (2000). Intergroup discrimination in the minimal group paradigm: Categorization, reciprocation or fear? *Journal of Personality and Social Psychology*, 79, 77-94.
22. Gesthuizen, M., Van der Meer, T., & Scheepers, P. (2009). Ethnic diversity and social capital in Europe: tests of Putnam's thesis in European countries. *Scandinavian Political Studies*, 32(2), 121-142.

23. Goette, L., Huffman, D., Meier, S. (2006). The impact of group membership on cooperation and norm enforcement: Evidence using random assignment to real social groups. Institute for Empirical Research in Economics
24. Handberg, C., Thorne, S., Midtgaard, J., Nielsen, C. V., & Lomborg, K. (2015). Revisiting Symbolic Interactionism as a Theoretical Framework Beyond the Grounded Theory Tradition. *Qualitative Health Research*. Vol. 25, No.8, pp. 1023 – 1032.
25. Hart, D., Richardson, C., & Wilkenfeld, B. (2011). Civic identity. In *Handbook of identity theory and research* (pp. 771-787). Springer New York.
26. Hornsey, M. J. (2008). Social identity theory and self-categorization theory: A historical review. *Social and Personality Psychology Compass*, 2(1), 204-222.
27. Hroch, M. (1985). Social preconditions of national revival in Europe: a comparative analysis of the social composition of patriotic groups among the smaller European nations. Columbia University Press.
28. Huntington, S. P. (1993). The clash of civilizations?. *Foreign affairs* 72(3), 22-49.
29. Jenkins, R. (2008). *Social Identity*. 3rd Ed. Routledge.
30. Jeon, Y. H. (2004). The application of grounded theory and symbolic interactionism. *Scandinavian journal of caring sciences*, 18(3), 249-256.
31. Keane, J. (1995). Nation, Nationalism and European Citizens. In Sukumar Periwai. (1995). *Notions of nationalism*. Central European University Press, pp. 182-207.
32. Kramer, R. M., Pommerenke, P., & Newton, E. (1993). The social context of negotiation: Effects of social identity and interpersonal accountability on negotiator decision making. *Journal of Conflict Resolution*, 37(4), 633–655.
33. Kroger, J. (2007). *Identity development: Adolescence through adulthood*. Sage publications.
34. Kroger, J., & Marcia, J. E. (2011). The identity statuses: Origins, meanings, and interpretations. In Schwartz, S. J., Luyckx, K., &

- Vignoles, V. L. (Eds.). Handbook of identity theory and research. Springer New York, pp. 31 – 53.
35. Leydet, D. (2014). Citizenship. *The Stanford Encyclopedia of Philosophy* Edward N. Zalta (ed.),
 36. Licata EET AL. (2011). Identity, Immigration, and Prejudice in Europe: A Recognition Approach in S.J. Schwartz et al. (eds.), Handbook of identity theory and research. Springer, pp.895-916.
 37. Lipset, S. M., & Rokkan, S. (Eds.). (1967) Cleavage structures, party systems, and voter alignments: an introduction. In Lipset, S. M., & Rokkan, S. (Eds.). (1967). Party systems and voter alignments: Cross-national perspectives (Vol. 7). Free press, pp. 1-64.
 38. Machin, A. (2015). Nations and Democracy: New Theoretical Perspectives (Vol. 1). Routledge.
 39. McLeish, K. N., & Oxoby, R. J. (2011). Social interactions and the salience of social identity. *Journal of Economic Psychology*, 32(1), 172-178.
 40. McLeish, K. N., Oxoby, R. J. (2007). Identity, cooperation, and punishment. IZA discussion paper 2572.
 41. Otten, S. (2016). The Minimal Group Paradigm and its maximal impact in research on social categorization. *Current Opinion in Psychology*, 11, 85-89.
 42. Patten, A. (1999). The autonomy argument for liberal nationalism. *Nations and Nationalism*, 5(1), 1-17.
 43. Putnam, R. (2007). E pluribus unum: Diversity and Community in the Twenty-first Century. The 2006 Johan Skytte Prize Lecture, *Scandinavian Political Studies* 30, 137–74.
 44. Shotter, J. (1993). The cultural politics of everyday life. Milton Keynes: Open University Press.
 45. Smith, A. D. (1991). National identity. University of Nevada Press.
 46. Spears, R. (2011). Group Identities: The Social Identity Perspective In Schwartz, S. J., Luyckx, K., & Vignoles, V. L. (Eds.). Handbook of identity theory and research. Springer: New York, pp. 201-224.
 47. Stets, J. E., & Burke, P. J. (2000). Identity theory and social identity theory. *Social psychology quarterly*, Vol.63, No.3, pp. 224-237.

48. Stryker, S., & Burke, P. J. (2000). The past, present, and future of an identity theory. *Social psychology quarterly*, Vol. 63, No.4, pp. 284-297.
49. Stryker, S. (2002). *Symbolic interactionism: A social structural version*. Caldwell, NJ: Blackburn Press.
50. Trepte, S. (2013). Social identity theory in Bryant, J., & Vorderer, P. (2013). *Psychology of entertainment*. London: Routledge, pp. 255-273.
51. Turner, J. C., & Reynolds, K. J. (2011). Self-categorization theory in Van Lange, P. A., Kruglanski, A. W., & Higgins, E. T. (2011). *Handbook of Theories of Social Psychology: Volume Two* (Vol. 2). Sage Publications, pp. 399-417.
52. Turner, J. C. (1978). Social comparison, similarity and ingroup favoritism. In H. Tajfel (Ed.), *Differentiation between social groups* (pp. 235-250). London: Academic Press.
53. Van Deth, J. W., Montero, J. R., & Westholm, A. (Eds.). (2007). *Citizenship and involvement in European democracies: A comparative analysis*. Routledge.

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