

QUALITY OF LIFE IN THE ENLARGED EUROPEAN UNION: A COMPARISON AND CONVERGENCE

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ABSTRACT

The aim of this paper is to offer readers an overview of situation and tendencies in the field of quality of life development in enlarged EU based on comparison and convergence. The paper comes out of definitions of its goals in theory and practice followed by literature resources and research methodology. The core of the paper comprises findings in level of quality of life in European countries in the indicators like: Cost of Living, Culture and Literature, Economy, Environment, Freedom, Health, Infrastructure, Risk and Safety and Climate. What field are new suggestions needed in? The paper has a nature of a presentation on results achieved within a research carried out in literary resources and on facts generalized and it is for everybody who is involved in life quality enhancement in European countries. Especially professionals in the field of quality of life employed in research, educational and other institutions can appreciate it. The paper is written as a part of work on the research project KEGA 3/6411/08 Transformation of an existing study programme Production Quality Management into a university bilingual study program.

Key words: quality, life, indicator, index of quality of life, statistical characteristics, dendogram.

INTRODUCTION

Every period of time has its own rhetoric comprising communicating goals or directing human beings. Nowadays we are proclaiming that all our effort should be directed towards better living, towards living of a higher quality. To achieve this goal, science and new types of technology (information, biotechnology and others) should be developed, new technique of self-control, and self-development as well as community development shall be expected. It is interesting to point out, that exactly the “rhetoric of development”, that has been set up as the main goal for mankind, is starting to be supervised by the “rhetoric of quality of life” (Bačová, 2004).

The quality of life represents a notion resonating world-wide and there are many attempts to define it as an international term. The attempts should result in finding a way of improving quality of life and being aware of the feeling of being.

One of the goals the European Union has set up is convergence of countries and regions that have been developed less if compared to the economic level of the countries with developed economy. The process of approximation in the field of economy does not have to comprise approximation in the field of quality of life. A positive trend in the economic development may be affiliated with negative trends in some partial indicators of the index of quality of life (e.g. change in clean environment, increased risk and safety etc.).

The goals of the paper are divided into two main parts – theory and practice.

a) Theoretical level

At this level the goals of our paper are to clarify perspectives of examining quality of life, attitudes towards quality of life assessment.

b) Practical level

At the practical level there are three relatively independent but closely affiliated goals:

- 1) To examine the situation and tendency of changes in statistic characteristics of the index of quality of life and their partial indicators in EU-27 and to define critical situations that need to be dealt with.
- 2) To analyze similarities in partial indicators in twenty-seven countries especially focusing on Slovakia.
- 3) To assess the position of Slovakia in EU-27 in partial indicators of the index of quality of life, that shall result in possible correction made in the National Policy of Quality in Slovakia in the years 2008 – 2012.

LITERATURE REVIEW

Debate on Quality of Life (QoL) is millennia-old. At the beginning the interest of people was directed towards spiritual, religious world dealing with good and wise ways of living. The other direction the interest took was philosophy distinguishing a good and bad life, with Aristotle giving it much thought in his *Nicomachean Ethics* and eventually settling on the notion of “eudaimonia”³, a Greek term often translated as a contented state of being happy and healthy and prosperous. Eudaimonia was considered to be Aristotle’s personal and political goodness. The antic philosopher would always stress the ethic dimension of characteristics in a happy man (Křivohlavy, 2007).

Plato and Aristotle developed theories of virtue by analogy with theories of the healthy body in which terms such as harmony and integration are key. “Eudaimonia” is the “telos” of human acting as – by analogy – health is the “telos” of medicine. Health can be regarded as an intrinsic value, because and in so far as it is part of “eudaimonia”. However, health is not a final value as “eudaimonia” is.

As a basis for developing the “big pictures“ of QoL and the definitions already established by researchers we have used a literature survey according to which discussion about of Quality of Life dates back to Plato and Aristotle (Hagerty et al., 2001).

Discussion of Quality of Life and Well-Being (QoLaWB) within the academic literature centres on the health care field refers to a literature review that identified thousands and thousands articles published about QoL related to health and well-being that were published, including nursing, medicine and health promotion, and also in economics, particularly in the related field of happiness studies, a research area shared with psychologists and sociologists.

QoLaWB are also a concern of the social indicators movement, which developed in both Scandinavia and the US in the 1960s and 1970s out of a feeling that economic indicators alone could not reflect the QoL of populations. Especially it is very important in Nordic countries where medical philosophy heavily relies on the analytical tradition. Per-Anders Tengland’s paper focuses on the meaning of the concepts of quality of life, health and welfare, and the logical relationship between these concepts (Dekkers, Gordijn, 2006). The basic assumption is that health related quality of life is the ultimate general goal for medicine, health care and public health including health promotion and health education (Tengland, 2006).

Over past almost 50 years research of Quality of Life and Well-being has become a fast growing discipline now fully embraced by governments and public sector agencies worldwide,

seeking to measure and compare changes in QoL within and between communities, cities, regions and nation states. Major studies of QoL, for example, have been sponsored by organisations such as UNESCO¹, the OECD², and the WHO³ (Parmenter & Donnelly, 1997) (Delhey, 2002).

We have examined literary resources within the project Leonardo da Vinci SK/03/B/F/PP – 177 014 Improvement of the Quality, Effectiveness and Efficiency of Healthcare Services through Vocational Education and Training “Improhealth” (Zgodavova, Klimova, Džupka, 2006) and SK/B/F/PP – 177443 Vocational Education and Training for Quality of Life through e-Healthcare & Well/Being “Improhealth Collaborative” Zgodavova et al, 2008) outlined in the chart No.1.

Our findings have been divided according to the perspective, assessment and partial indicators of QoL.

Tab. 1 Quality of life definitions, perspective of researching, manner of evaluating and the indicators

Description and perspective of exploring Quality of Life	Evaluation/assessment and indicators
Quality of life refers to “eudaimonia” a contented state of being happy and healthy and prosperous (Parkinson, Shanker, 1999). View of Aristotle: Moral quality	Aristotle pays explicit attention to the problem of an objective or subjective assessment of the quality of life.
Quality of Life as a measure of conformity of objective life conditions and of their subjective perceiving, and evaluations by large size groups (Džuka, 2004). Perspective of prosperity	Evaluation by large size groups of population. Quality of Life economic and social indicators such as: the income and material security, political freedom and independence, social justice, legal certainties and healthcare (Diener, Suh, 1997).

¹ EU-27: Belgium, Bulgaria, Czech Republic, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Italy, Cyprus, Latvia, Luxemburg, Hungary, Malta, Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovak Republic, Finland, Sweden, [United Kingdom](#), [Lithuania](#)

² Indicator – a) one that indicates; b) any of a group of statistical values (as level of employment etc.) that taken together give an indication of the health of the economy (Merriam-Webster on line dictionary). In the paper it is used as a term describing partial QoL indicators.

³ Eudaimonia is a Greek term often translated as a contented state of being happy and healthy and prosperous (Parkinson, G. H. R., Shanker, (1999)

⁴ OECD – Organisation for Economic Co-operation and Development

⁵ WHO – World Health Organization

<p>The way an individual perceives its subjective wellness and how satisfied he/she is with their life (Diener, Suh 1997).</p> <p>Perspective of perceiving Quality of Life and the sense of being by an individual.</p>	<p>Evaluation by individuals.</p> <p>3B Indicators: Being (physical being, psychological being, spiritual being) – Belonging (physical belonging, social belonging, community belonging) – Becoming (practical becoming, leisure becoming, growth becoming).</p>
<p>Quality of Life related health status studies of that would relate to health of an individual (HRQOL – Health related-Quality of Life) (International Quality of Life Assessment)</p> <p>Perspective of perceiving their health status by individuals and groups of individuals.</p>	<p>Multipurpose evaluation by large sized groups of individuals and individual case studies.</p> <p>SF-37 partial indicators are arranged into following groups:</p> <p>Physical Functioning, Role Physical, Bodily Pain, General Health, Vitality, Social Functioning, Role Emotional, Metal Health.</p>
<p>Quality of Life investigation effected through subjective life-satisfaction surveys to the objective determinants of Quality of Life across countries.</p> <p>From the attitude survey: How people satisfied with their lives in general? (The Economist Intelligence Unit, 2004).</p>	<p>Large size questionnaire survey results used as a starting point, and a means for deriving weights for the various determinants of quality of life across countries, in order to calculate an objective index. These scores are then related in a multivariate regression to various factors that have been shown to be associated with life satisfaction in many studies.</p> <p>The Economist Intelligence Unit partial indicators: Material wellbeing, Health, Political stability and security, Family life, Community life, Climate and geography, Job security, Political freedom, Gender equality.</p>
<p>Quality of Life investigation effected through subjective life-satisfaction surveys to the objective determinants of Quality of Life across countries.</p> <p>From the point of view: The Where to Find the World's Best Quality of Life perspective? (Alpro Soya, 2008).</p>	<p>Large size e-questionnaire survey and index is independently researched and all of the information provided is based on scientific studies and facts.</p> <p>Year of well-being partial indicators: Cost of Living, Health, Economy, Environment, Freedom, Climate, Infrastructure, Risk and Safety, Culture and Literature.</p>

WHO defines Quality of Life as an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept affected in a complex way by the person's **physical health, psychological state, personal beliefs, social relationships** and their relationship to salient features of their environment (<<http://www.who.int/msa/mnh/mhp/ql.htm>> on line: February 15, 2009).

According to Murgas, 2007, there is a close connection between the concept of Quality of Life and permanently successful development. The common feature of these concepts is refusal of consumption as the purpose of human life and refusal of interchanging quality of life for well-being. Another common feature is complex interest in non material values

(emotional, social, cultural, spiritual) and prioritizing of these values on all levels from the global level to local.

Our evaluation of the quality of life and perception of human existence is based on the complex and proportional assessment of quality of work, quality of production and quality of life includes:

- physical, material, and well-being evaluation,
- mental, spiritual, psychological evaluation as well as,
- material and physical evaluation of the mode of living the life and evaluation of behaviour in specific environment and time.

Our conceptual framework is as follows:

The quality of anything- of any entity is understood as a total number of its properties, attributes, specific features and characteristic functions which are exhibited in specific environment and time (Slimak, 1987) (Zgodavova, et all, 2005).

Then, the quality of the life of a person can be understood as the sum of properties, tributes, specific features and characteristic functions of the person-human being which are exhibited by him/her in specific environment and time.

Specific features and characteristic functions make the person unique, different from others, different from other human beings in specific environment and time, it means:

- in personal life- in activities oriented at himself/herself: health, education, pleasure activities, development of culture;
- at home- functioning within family or community;
- at work- fulfilment of duties in processes of production;
- in public life- taking part in public organizations and community life.

RESEARCH METHODOLOGY

In theoretical level, our research is based on available literature (The Scottish Government Publication, 2006) and on our own research initiated by two international pilot projects of Leonardo da Vinci (Improhealth, 2002-2004 and Improhealth Collaborative, 2006 - 2008).

In practice, our research is based on evaluation of partial indicators of QoL from 2006 through 2008 presented on public official pages of International Living (on line: July 15, 2008) <www.international Living.com>).

Data were obtained from the total values of partial indicators of the index of quality of life. In practice, for description of the state and changes of the quality of life we used descriptive statistics including following statistical characteristics: arithmetic means, weighed arithmetic means, variation ranges, decisive deviations, maximal and minimal values of the evaluated quantities. The analysis of the state was presented graphically in the form of dot graphs, box graphs, and dendograms.

In practical level of the research, goals 1-3 of were formulated on the basis of evaluation of the values of statistical characteristics of partial indicators of the index of quality of life in years 2006 through 2008.

Values of statistical characteristics: arithmetic mean, minimal and maximal values of partial indicators of the index of quality of life in years 2006 through 2008 are presented in graphs n.1 and n.2.

The difference in values of statistical characteristics in years 2006 through 2008 indicates and numerically illustrates converging of partial and total indicators, which is demonstrated in graphs n. 3 and n.4.

For evaluation of the properties, attributes, specific features, and characteristic functions of the quality of life we used cluster analysis which enables to compare similarities of analysed partial indicators in Slovak Republic with values of analysed partial indicators in the states of EU-27. The similarities were evaluated by Euclidean distance, the lowest value of the Euclidean distance representing the greatest similarity.

In the first phase of the cluster analysis we performed the standardization of the data, it means all data were adjusted in the way that they had decisive deviation one and arithmetic mean zero. In the second phase we demonstrated similarities among various states by evaluating values of partial indicators of the index of quality of life by means of Euclidean distance. Similarities of the partial indicators of the quality of life in the states of EU-27 in years 2006 through 2008 was illustrated graphically by means of dendograms (graph n. 5 and n. 6).

The state of the partial indicators of the index of quality of life in Slovak Republic was demonstrated and compared with other states of EU-27 in graph n.7.

FINDINGS

In theoretical level we came to conclusion that quality of life can be understood as understood by Aristotle, it means as a summary of properties, attributes, and distinctive features of the life demonstrated by specific behaviour and specific way of acting in given environment and time.

Therefore, we can conclude that the partial indicators of the index of quality of life used in e.g. International Living's annual survey and Economist.com survey are not properties and distinctive functions of the life of people, but they are mostly complicated and complex characteristics of the environment in which the life takes place.

Level of quality of life of every individual depends on his/her **capability to perceive, evaluate and utilize** partial indicators of the index of quality of life.

This is the main factor which should be examined when searching for the ways how to improve the quality of life of population.

Another very important finding in theoretical plane is, although not analysed in details, that it is necessary to perceive the quality of life not as the result of evaluation but as a an object of examination of specific behaviour of a man in specific environment and time.

"Index of Quality of Life" is the term used for different indicators of conditions which determine the quality of life, and which are as well the main factors examined in our study.

One of the practical solutions of this attitude is a project the results of which are published on <<http://www.yearofwellbeing.com>>. The capability to live a quality life is examined using questionnaire in the form of email. After evaluation of e-mails, and after comparing results with the latest findings, practical recommendations for everyday life follow and are emailed to the respondents of the questionnaire.

The main theoretical and practical problem can be considered the one affiliated with the answer to the question: What thing is better or worse for whom or for which culture? Races, system of culture, education, position of people etc. All these issues can be covered by one chain of words:

“Quality Culture in the Complex: quality of work – quality of production – quality of life.”

Findings in the **practical level** are based on (International Living’s annual survey, 2006 and 2008) and concern the European Union and Slovakia.

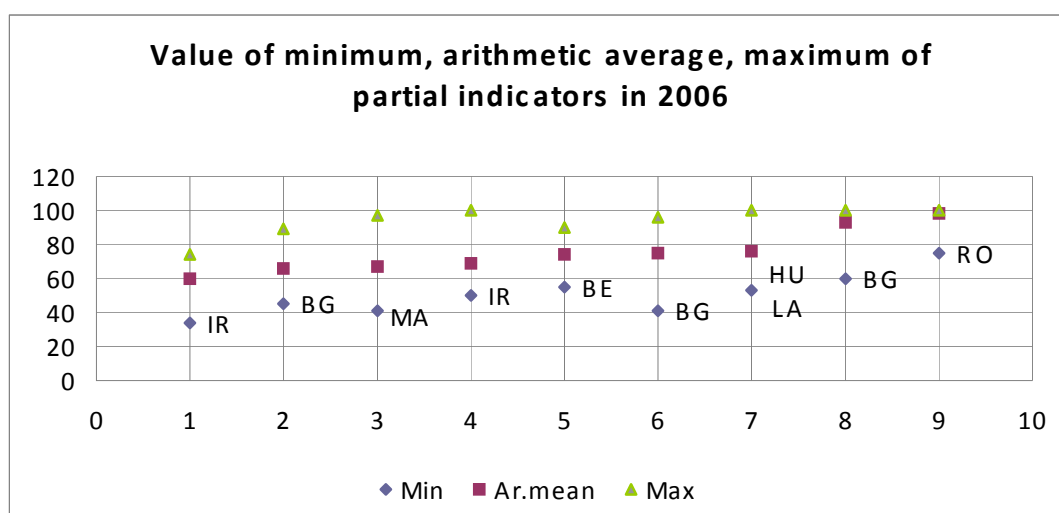
Our main findings are described within the EU-27 and are organized as it follows:

What indicators represent the highest level of variability, diversity and it is necessary to focus on diversity diminishing in EU-27 countries.

- What countries have critical (minimum) values of partial indicators?
- What new things are needed to be implemented?
- What partial indicators are present when EU-27 countries converged and what partial indicators of the index of quality of life are there when the convergence did not happen.

Main findings are described within the Slovak Republic evaluation and are divided into:

- What countries have values of partial indicators of the index of quality of life and are most similar to the Slovak ones?
- What partial indicators reached the values above the average in Slovakia and within EU-27?
- What partial indicators reached under-average values within the EU-27 and which of them are needed to be improved?



Graph No.1 Minimum values, arithmetic mean and maximum values of partial indicators in the EU-25 (including Bulgaria and Romania) in the year 2006

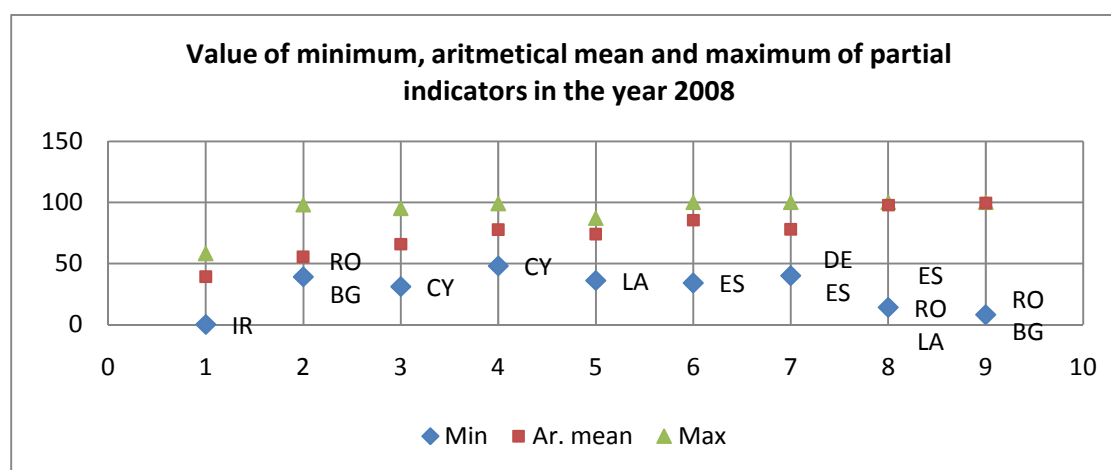
Notes: 1 – Cost of Living, 2 – Economy, 3 – Infrastructure, 4 – Climate, 5 – Environment, 6 – Health, 7 – Culture and Literature, 8 – Risk and Safety, 9 – Freedom.

IR – Ireland, BE – Belgium, BG – Bulgaria, MA – Malta, HU – Hungary, RO – Romania, LA – Latvia.

Based on calculation for describing, statistic characteristics and on graph No.1 describing values of minimum, arithmetic mean and maximum of all nine partial indicators in 2006 together with abbreviations for names of the countries that reached minimum, we can conclude:

Arithmetic mean of the index of quality of life reached the value 74.4 in the year 2006.

Maximum value of the arithmetic mean was 97.6 and concerned the partial indicator called “Freedom”. The lowest value was 60.1 and concerned the partial indicator “Cost of Living”. The highest diversity (indicating deviation) was in partial indicators “Health” (16.7), “Infrastructure” (14.9) “Economy” (14.6).



Graph No. 2 – Minimum values, arithmetic means and maximum values of partial indicators in EU-27 in 2008.

Notes: 1 – Cost of Living, 2 – Economy, 3 – Infrastructure, 4 – Climate, 5 – Environment, 6 – Health, 7 – Culture and Literature, 8 – Risk and Safety, 9 – Freedom.

IR – Ireland, BE – Belgium, BG – Bulgaria, MA – Malta, HU – Hungary, RO – Romania, LA – Latvia, ES – Estonia, CY – Cyprus, DE – Denmark.

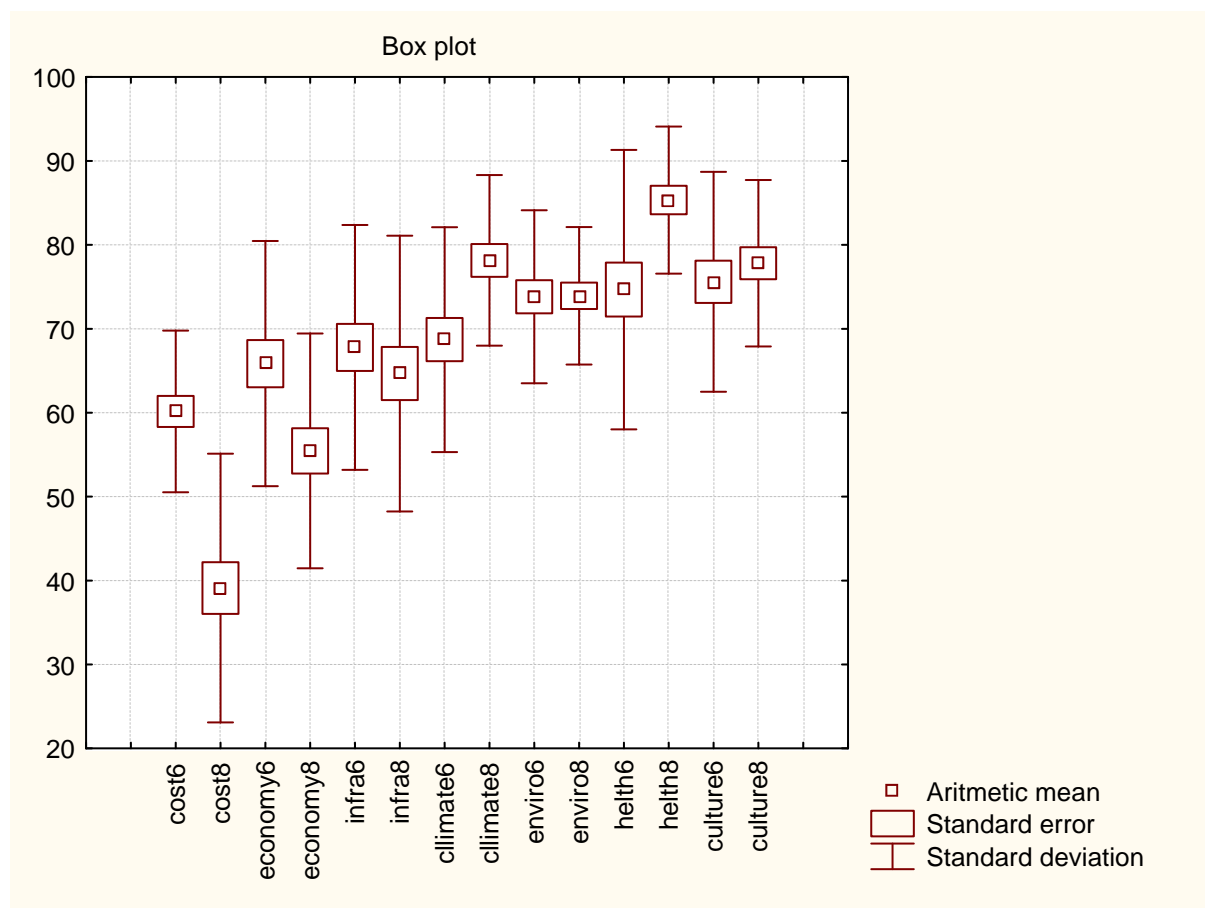
Based on calculation for describing, statistic characteristics and on graph No.2 describing values of minimum, arithmetic mean and maximum of all nine partial indicators in 2006 together with abbreviations for names of the countries that reached minimum, we can conclude:

Arithmetic mean of the index of quality of life reached in the value of 72.2 in 2008. Maximum value of the arithmetic mean reached 99.4 and concerned the partial indicator called “Freedom”. The lowest value amounted 39.1 and represented the partial indicator “Costs of Living”. The highest variability/standard deviation represents the partial indicators “Infrastructure” 16.4, “Costs of Living” 16.0 and “Economy” 14.0. **The above mentioned three indicators are needed to be developed within the EU-27 so that differences between countries, that have been analysed, can be lowered slowly.**

In 2008 Ireland had the highest costs of living. Romania and Bulgaria reached minimum values in the indicators “Economy” and “freedom”, Romania had the least value also within the partial indicator “Risk and Safety”, and Cyprus reached minimum values within the partial indicator “Infrastructure and Climate”. Estonia had minimum values in three partial indicators “Health”, “Culture and Literature” and “Risk and Safety”. Denmark reached its minimum in the indicators “Culture and Literature”. Latvia had minimum values in the indicators “Risk and Safety” and “Environment”.

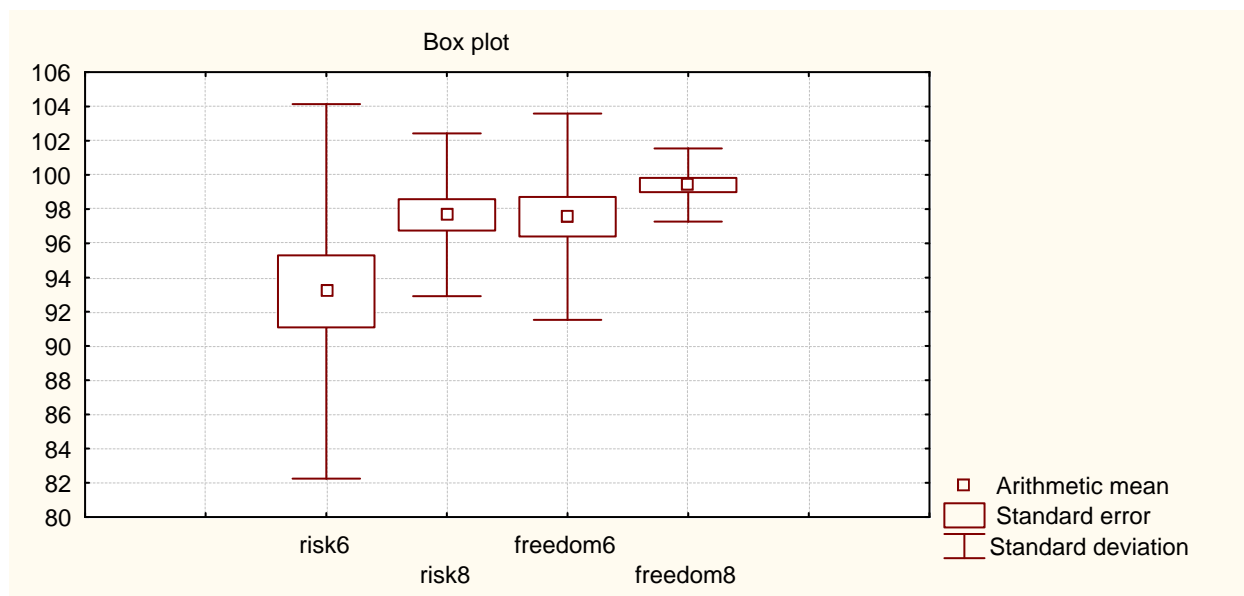
The partial indicator “Health” can be considered the one that needs some modification. **Something new should be implemented** into it, we advise to focus on e-Health and utilizing modern technology. Within the partial indicator “Environment”, creating a mutual European policy in environment is recommended. For the partial indicator “Climate” it is necessary to support mutual policy in the field of protection against climate changes.

Based on the values of partial indicators of the index of quality of life in the years 2006 and 2008 in twenty-seven European countries the convergence in development of the index of quality of life has been assessed and evaluated. Aiming at it, statistic characteristics of partial indicators and index of quality of life in both years analysed have been calculated.



Graph No.3 Tendencies towards changes in partial indicators of index of quality of life in EU-27 countries (years 2006 and 2008).

Note: culture6 – Culture and Literature in 2006, culture8 – Culture and Literature in 2008, economy6 – Economy in 2006, economy8 – Economy in 2008, enviro6 – Environment in 2006, enviro8 – Environment in 2008, infra6 – Infrastructure in 2006, infra8 – Infrastructure in 2008, cost6 – Costs of Living in 2006, cost8 – Costs of Living in 2008, health6 – Health in 2006, health8 – Health in 2008.



Graph No.4 – Tendencies towards changes in partial indicators of index of quality of life in EU-27 countries (years 2006 and 2008).

Note: risk6 – Risk and Safety 2006, risk8 – Risk and Safety in 2008, freedom6 – Freedom in 2006, freedom8 – Freedom in 2008.

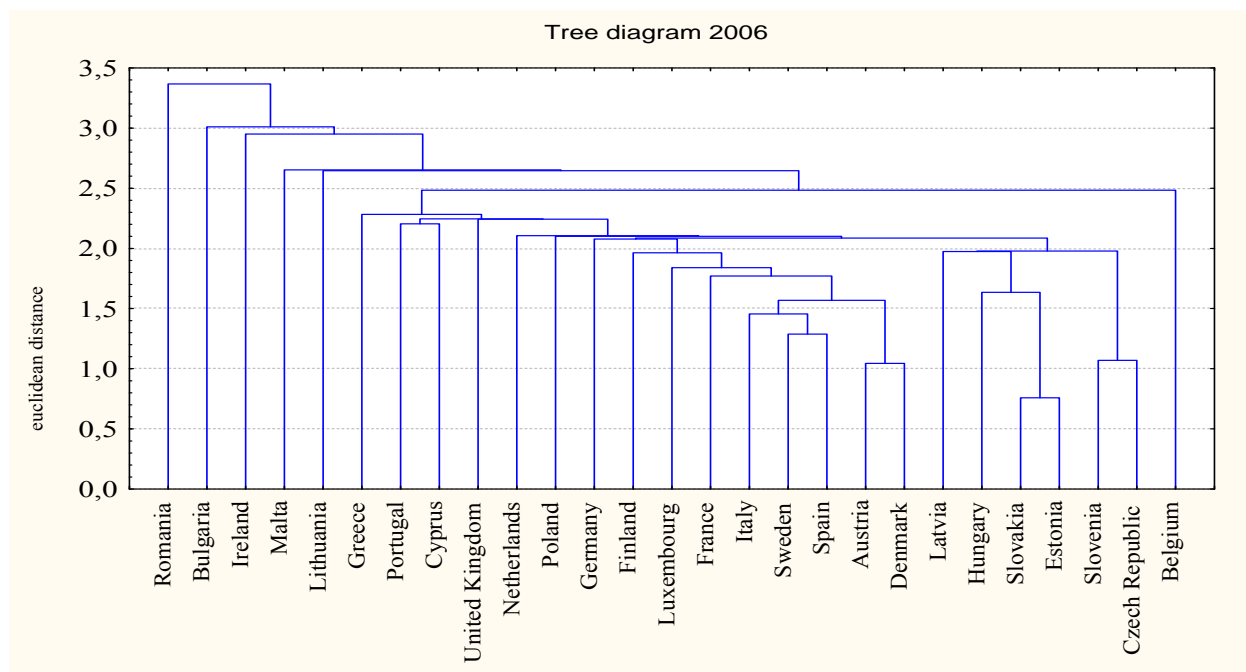
Based on graphs No.3 and 4 we can come to the following conclusions:

Based on values of standard deviation in partial indicators in 2006 and 2008 the change in variability has been compared. Variability level of partial indicators – “Culture and Literature”, “Economy”, “Environment”, “freedom”, “Health”, “Risk and Safety” and “Climate” has declined. The largest decline in variability can be observed in the partial indicator “Freedom”, when the amount of standard deviation has declined to 35.4% comparing the years 2006 and 2008. A large decline in variability can be observed also in the indicator “Risk and Safety”, when the standard deviation has declined to 43.4%. The partial indicator “Health” has declined in its variability to 52.6%.

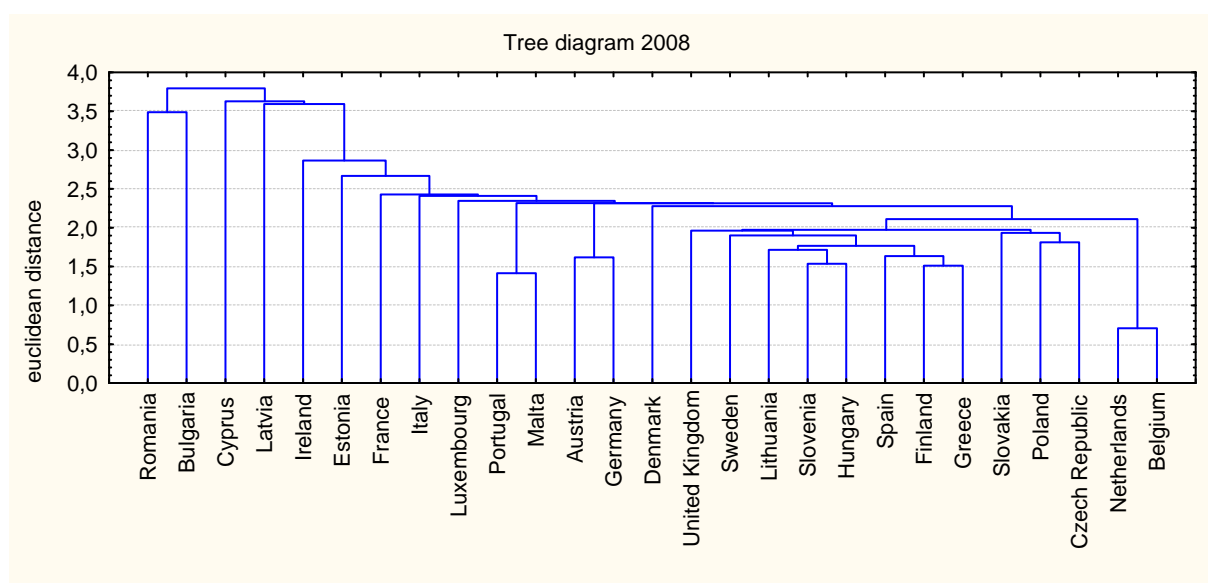
The given analysis proves that the largest amount of convergence in twenty-seven EU countries is in partial indicators “Freedom”, “Risk and Safety” and “Health”.

Only in two cases of partial indicators – “Costs of Living” and “Infrastructure” the standard deviation has increased. If we compare the above mentioned facts, it is clearly seen that in EU the level of variability has increased in “Costs of Living” and “Infrastructure”. **No convergence can be observed in the partial indicators “Costs of Living” and “Infrastructure” in the EU – 27 countries from the year 2006 and 2008.** Graphs No. 3 and 4 depict the change of arithmetic mean and the standard deviation in partial indicators.

Similarity of partial indicators of the index of quality of life in EU countries has been expressed in the graph No. 5 in dendogram of data in 2006 and in the graph No.6 in dendogram of data in 2008. Based on the results that have been gained we have selected countries and their partial indicators whose values are similar to the ones found in Slovakia.



Graph No.5 Dendrogram of partial indicators of the index of quality of life in EU countries in 2006 (Resource: own, it has been processed in the programme Statistica).

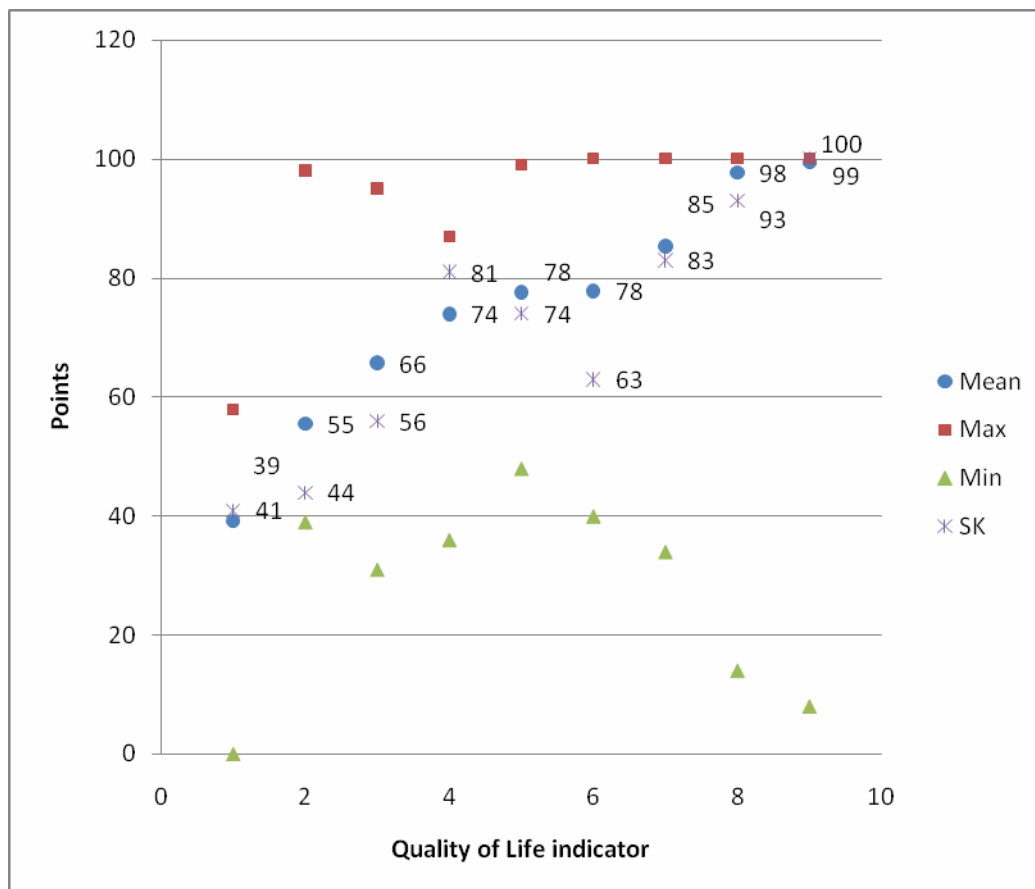


Graph No.6 Dendrogram of partial indicators of the index of quality of life in the EU countries in 2008 (Own resource, processed in the programme Statistica).

Based on graphs No.5 and 6 and noise analysis following conclusions can be made:

In 2006 values of partial indicators of the index of quality of life in Slovakia were similar to the ones of partial indicators of the index of quality of life in Estonia. This similarity of partial indicators in Slovakia and Estonia decreased substantially in 2008. The largest difference can be found in the partial indicator “Health” in which the difference between Slovakia and Estonia reached 6 points (Estonia – 73 pts, SR – 67 pts). In 2008 the value of the partial indicator “Health” in Slovakia went up to 83 points and in Estonia the value of the partial

indicator “Health” decreased to 66 points, the difference was 17 points. In 2008 values of partial indicators in Slovakia were most similar to the ones reached in Poland and Czechs.



Graph No.7 Statistic characteristics of partial indicators of the index of quality of life in Slovakia compared to the ones in EU countries in 2008

Note: 1 – Costs of Living, 2 – Economy, 3 – Intrastructure, 4 – Climate, 5 – Environment, 6 – Health, 7 – Culture and Literature, 8 – Risk and Safety , 9 – Freedom.

Calculating describing statistic characteristics and based on the graph No.7 that describes values of minimum, arithmetic mean and maximum of all nine partial indicators and values of partial indicators in Slovakia, we can conclude that:

In 2006 the value 67 ranked Slovakia to 48th position in the world according to the index of quality of life. In 2008 it took 40th position in the world accordint to the value 68. If compared this value to the mean value of the index of quality of life within the EU, we must admit that the value of the index of quality of life reached under-average values in both years. In 2008 the difference between the index of quality of life in Slovakia and its arithmetic mean in the EU decreased due to a slight increase in the index of quality of life in Slovakia and decrease in arithmetic mean of the index of quality of life in the EU.

Comparing partial indicators we can conclude that above-average values in Slovakia in both years are in the indicator “Costs of Living”. Costs of Living in Slovakia are smaller than the arithmetic mean in the EU-27. In 2008 the costs of living in Slovakia increased significantly if

compared to the year 2006. Higher Costs of Living resulted in a significant decrease of the partial indicator – “Costs of Living” (from the value of 65 to 41). Above-average values in Slovakia can be observed also in “Environment” and “Freedom”. The higher value than the mean value of the partial indicator “Environment” indicates that conditions for living in Slovakia are better than the EU-27 average. The increasing value of the Slovak partial indicator “Environment” in 2008 indicates that the environment in Slovakia was improved in 2008 if compared to the year 2006. The above-average value in Slovakia was reached also in the indicator “Freedom”. Values of other partial indicators in Slovakia in both years that have been analysed reach under-average values.

Having compared the changes of values of partial indicators in 2006 and 2008 in Slovakia we can assess that the biggest changes can be observed in the case of “Costs of Living” (decreased by 23 points), “Climate” (increased by 18 points) and another fact that pleases us is the increase by 16 points in “Health”.

Observing and analysing the position of Slovakia in EU-27 (Graph No.7) it can be concluded that:

Partial indicators “Environment” and “Freedom” and “Costs of Living” in which Slovakia reaches higher values than the EU-27 average is, should be developed and improved.

- Factors influencing the partial indicators: “Health”, “Climate”, “Infrastructure”, “Risk and Safety”, Slovakia does not reach the EU-27 average, should be developed in a more intensive way.
- New attitudes should be implemented within the partial indicators: “Culture and Literature” and “Economy” that differ from the arithmetic mean of the EU-27 most significantly.

CONCLUSIONS

In theoretical plane of our paper we have outlined historical development and attitudes towards research and assessment carried out in the field of quality of life and we have outlined the concept of a complex and proportional view of quality of life, production, labour. Referring to the study “International Living” we have selected and defined the index of quality of life, that helped us reach the goals in the practical part.

We have set up the goal in the practical plane to analyze the convergence of twenty-seven countries in the EU in the field of quality of life. We have assessed and compared the changes of the index of quality of life and its partial indicators in the European countries that were analysed in 2006 and 2008 and we can conclude that:

- 1) In EU-27 countries there has been convergence in the field of quality of life.
- 2) The largest amount of convergence in 27 European countries has occurred in partial indicators “Freedom”, “Risk and Safety” and “Health”.
- 3) In the indicators “Costs of Living” and “Infrastructure”, there was no convergence from the year 2006 to 2008 within the EU-countries.
- 4) New attitudes within the EU are needed to be implemented in the partial indicators: “Health”, and “Environment”.

In practical plane we have set up goals to compare the standard of living (level of quality of living) in Slovakia and the changes that have been made in the index of quality of life in Slovakia. Referring to the analysis we can conclude:

- The value of the partial indicator “Costs of Living” in Slovakia was higher than the arithmetic mean in “Costs of Living” in the EU. In 2008 Costs of Living in Slovakia have increased significantly if compared to 2006, (the value of the partial indicator “Costs of Living” has decreased).
- In Slovakia the partial indicator “Environment” reached higher value than the arithmetic mean in EU-27 is. Environment in Slovakia improved in 2008 if compared to 2006.
- In Slovakia the partial indicator “Freedom” was of higher value than the European - 27 arithmetic mean is.
- Values of other partial indicators in Slovakia were under the average in both years analysed.
- In Slovakia the biggest changes were observed in partial indicator “Costs of Living” (decline by 23 points), “Climate” (increase by 18 points) and the fact that pleases most is the indicator “Health” – (increase by 16 points).
- In 2008 values of partial indicators in Slovakia were similar to the ones in Poland and the Czech Republic.

REFERENCES

Alpro Soya: <<http://www.yearofwellbeing.com>> on line December 15, 2008

Bačová, V. (2004): Kvalita života, hodnotové systémy v spoločnosti a sociálny kapitál, v Džuka, J.: *Psychologické dimenzie kvality*, ISBN 80-8068-282-8.

Dekkers, W., Gordijn, G. (2006): *Medicine, Health Care and Philosophy*, Volume 9, Number 2 /July, 2006, pgs 139-140.

Delhey, J. et al (2002): ‘Quality of Life in a European Perspective: the EUROMODULE as a New Instrument in Comparative Welfare Research’, *Social Indicators Research*, Vol. 58, No. 1 – 3, pp161–175.

Diener, E., Suh, E. (1997): Measuring quality of life: Economic, social, and subjective indicators, *Annual Review of Gerontology and Geriatrics*, Volume 17, 1997, Springer Publishing Company . *Social Indicators Research*, 40, 189 – 216.

Džuka, J. (2004): Kvalita života a subjektívna pohoda – teórie a modely, podobnosť a rozdiely, In: *Psychologické dimenzie kvality*, Prešovská univerzita, IS80-8068-282-8, str. 44.

Economist.com (2004): The Economist Intelligence Unit’s quality-of-life index <http://www.economist.com/media>, published November 17, 2004

Hagerty, M. R., Cummins, R. A, Ferriss, A. L, Land, K., Michalos, A. C., Peterson, M., Sharpe, A., Sirgy, J., Vogel, J. (2001) ‘Quality of Life Indexes for National Policy: Review and Agenda for Research’, *Social Indicators Research*, Vol. 55, No. 1, p. 1;

IMPROHEALTH COLLABORATIVE[®], 2006 – 2008: Leonardo do Vinci pilot project SK/06/B/F/PP - 177443 ‘Vocational Education and Training for Quality of Life through e-Healthcare & Well-Being’.

IMPROHEALTH, 2002 – 2004: Leonardo da Vinci pilot project SK/03/B/F/PP - 177 014 'Improvement of the Quality, Effectiveness and Efficiency of Healthcare Services through Vocational Education and Training'.

International Living's annual survey (2008): <http://www.internationalliving.com>

Křivohlavý, J. (2007): Kdy je člověk šťastný, *Psychologie dnes*, 2007, roč. 14, č. 4, s. 46-49. ISSN 1212-9607.

Murgaš, F. (2007): Axiologické hľadanie zmyslu kvality života a návrh indikátorov ako jeho výsledok, *Inspirace - 2007/2, Envigogika*, ISSN 1802-3061 Copyright COŽP UK, 2006

Parkinson, G. H. R., Shanker, (1999): *Rutledge History of Philosophy, Part II, From Aristotle to Augustian* (Aristotle, NE, 1177a11) edited by Furley, D., mater e-book ISBN 0-203-02845-7.

Parmenter, T. R., Donnelly, M. (1997): An analysis of the dimensions of quality of life. In R. I. Brown (Ed.), *Quality of life for people with disabilities: Models research and practice* (pp. 91-115). Cheltenham, UK: Stanley Thornes.

Tengland, P.A. (2006): The goals of health work: Quality of life, health and welfare, *Health Care and Philosophy*, Volume 9, Number 2 / July, 2006, 155-167.

The Scottish Government Publication (2006): Quality of Life and Well-Being: Measuring the Benefits of Culture and Sport: Literature Review and Thinkpiece, <<http://www.scotland.gov.uk/Publications/2006/01/13110743/14>>, January 2006

WHO (2008): <<http://www.who.int/msa/mnh/mhp/ql.htm>>, on line: September 15, 2008

Mlčoch, L., Slimák, I. (1987): Řízení kvality a strojírenská metrologie, SNTL ALFA

Zgodavová, K., Klímová, E., Džupka, P. (2005): As to the Questions of Improvement of Healthcare Services within Five Countries of the European Union, *Sociológia* 6/2005, ISSN 0049-1225.

Zgodavová, K., Slimáková, M. Bourek, A. Golemanov, L. A. (2008): Quality of Life and Well-Being, Alexander Dubček Univeristy of Trenčín Press, ISBN 978-80-8075-379-5.

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