Determinants of Subjective Wellbeing in Lithuania

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The article analyses relation between subjective wellbeing (SWB) expressed as general satisfaction with life and its possible micro level determinants. Many studies have been published that relate macro level determinants (such as GDP or unemployment level) with aggregated national level of SWB. There is a vast amount of economic literature which analyses few or even single demographic, socio-economic, social and attitudinal/cultural variables that influence life satisfaction at an individual level. But it is a rare case that study is done on a rich data set that includes all the aforementioned variables in a single analysis and is nationally representative. Moreover, there is no thorough analysis of micro level determinants of life satisfaction in Lithuania. The present study analyses Lithuanian data of Eurobarometer study on social capital that includes many variables that are considered by theoretical literature as likely determinants of SWB. Micro level analysis shows that most important determinants of general life satisfaction in Lithuania are satisfaction with health and financial situation. Employment status, educational level, marital status, community involvement, presence of children also tend to be significantly related to subjective wellbeing. The study also revealed that age in contrary to many previous studies should not be considered as an important determinant of SWB as its effect is explained by differences of health and financial satisfaction levels. Nevertheless, further studies are needed to reveal the nature of relations and interdependency of different variables and SWB more deeply. Further analysis of rich data sets that include many countries would also allow better understanding the influence of such variables as country development level or culture.

Keywords: subjective wellbeing, determinants of SWB, life satisfaction, happiness studies, Lithuania.

Introduction

The last two decades show an increasing interest of scientists to subjective wellbeing (SWB) studies. Scientists as well as policy makers tend to recognize the importance of subjective wellbeing as one of the targets and indicators of general wellbeing of society (Hayo & Seifert, 2003; Diener & Seligman, 2004). It is considered not only a measure of success that could be used in any policy making domain, but also a determinant of general public support to democratic regime and market economy. SWB is being more increasingly perceived as a supplement or even an alternative to such “objective” indicators as GDP or UNDP’s Human Development Index. Therefore, understanding the nature of SWB, its consequences as well as its determinants became a major topic for happiness studies. In order to influence wellbeing it is necessary to understand its determinants.

The concept of SWB is the broadest concept in a group of concepts that are used to describe the subjective indications of personal wellbeing (Diener, 2006). Usually it is used as a synonym to happiness or life satisfaction concepts which are the most common empirical indicators of SWB in large worldwide or regional data sets (Dolan et al., 2008). Studies show that happiness and life satisfaction indicators are highly correlated (Di Tella et al., 2003). It means that whatever indicator is taken to represent subjective wellbeing their trends in longer time period remain the same.

SWB phenomenon is addressed by different scientists: economists, psychologists, sociologists, and others. As noted by Dolan et al., (2008) more than 150 articles analyzing SWB problems were published only in economic literature during the period from 1990 to 2006. When looking into determinants of SWB there are two main streams of research: macro level analysis and micro level analysis. The first one concentrates on understanding what macro level variables (national income, inflation, unemployment level, etc.) influence subjective wellbeing, in most cases paying attention to GDP relation to SWB and the so-called “Easterlin paradox” (Degutis et al., 2010). While the second approach is concentrating on micro level variables that influence personal subjective wellbeing (Bjornskov et al., 2008; Dolan et al., 2008; Peiro, 2006; Baird et al., 2010; Helliwell, 2003; Hudson, 2006; Busseri et al., 2009).

Nevertheless, majority of those studies concentrate on one or two variables that influence SWB or use a specific or unrepresentative sample of respondents to measure the effect. Moreover, there are very few studies that focus on determinants of SWB in Central and Eastern Europe. They either use quite old data including a limited number of countries and variables (Hayo & Seifert, 2003; Hayo, 2007), or focus on macroeconomic indicators (Degutis et al., 2010; Malesevic & Perovic, 2008), or focus on a single country (Verbic & Stanovnik, 2006; Malesevic & Perovic, 2010). Although there are studies (Akranavicute & Ruzevicius, 2007) that measure quality of life in Lithuania,
only few of them analyze subjective wellbeing and its determinants particularly in the country. Silińska & Zukauskienė (2004) analyzed demographic and personality variables that influence life satisfaction in middle aged men’s sample. Daukantaitė & Zukauskienė (2011) studied relation of optimism and SWB in Swedish and Lithuanian middle aged women sample. Susniene and Jurkaskaus (2009) analyzed the importance of inclusion of SWB measurement into the assessment of quality of life. From time to time there is even a public debate in popular media on what makes people happy. Some of the participants argue that elder people are more satisfied, others, that vice versa (Alfa, 2011a). There are also arguments in public media given by scientists that income is not important determinant of subjective wellbeing (Alfa, 2011b). But all this debate either lack scientific rigidity or are based on studies carried out in other countries. Therefore, hopefully the present study will contribute to the ongoing debate in an academic manner and will provide evidence based scientific knowledge on the issue. The problem which is addressed in this article could be summarized by the following question: what are the main micro-level determinants of subjective wellbeing in Lithuania.

Therefore, having in mind the lack of systematic and comprehensive analysis of SWB determinants using representative national data sets that include as many variables as possible, the aim of this article is to analyze micro level determinants of life satisfaction in Lithuania based on Eurobarometer survey data and to find out which of them are the most important ones making a major impact on subjective wellbeing indicators. As the majority of previous studies concentrated on very few or even single micro level determinant of SWB and used not nationally representative samples, the current article provides an analysis of high quality comprehensive data set and aims at an analysis of as many determinants as possible. The article uses the newest available representative data from 2004 Eurobarometer survey. 2004 data is used as all later surveys do not have that comprehensive set of measures of different determinants of life satisfaction. They include one or several measures but not all necessary variables in one set in the same sample of respondents. The study employs a secondary analysis of survey data using non-parametrical statistical testing procedures, namely Chi-square tests, to determine the relation between variables. The first section of the article is devoted to literature analysis and construction of research hypotheses. Then, results of data analysis are presented and discussed, and, finally, conclusions of the study are drawn.

**Determinants of subjective wellbeing**

Micro level determinants of SWB indicated in previous studies can be grouped into several broad groups: 1) demographic characteristics, such as age, gender, presence of children, health; 2) socio-economic characteristics, such as income, education, marital status, (un)employment, type of work; 3) social relations, such as caring for others, community involvement, seeing friends and relatives; 4) attitudes such as trust in other people, religiousness. As already mentioned, this article will focus on micro level determinants and will not analyze macro level variables such as GDP, inflation, unemployment, climate, income inequality, safety, urbanization, welfare system, political regime and other variables that are commonly analyzed in SWB studies (Dolan et al., 2008).

Income, financial situation of the household is one of the most often used variables, which influence on SWB is measured. Most of the studies find that there is a direct positive (although gradually diminishing with higher income) relation between individual/household income and life satisfaction (Clark et al., 2007; Verbič & Stanovnik, 2006; Jagodzinski, 2010; Malesevic & Perovic, 2010): the higher the income, the higher the level of subjective wellbeing. Some authors find that relative income is as much or even more important than absolute income (Dorn et al., 2007; Luttmer, 2005). While others conclude that perception of financial status (or valuation of financial situation) has more predictive power than actual income per se even if it is highly related to the latter (Haller & Hadler, 2006; Wildman & Jones, 2002). Nevertheless, there is a common agreement that income is an important variable and even if it is not used in analysis directly, it is used as a control variable when measuring effects of other determinants.

There is no wide consensus on the effect of education on SWB. Some studies show positive effect with increasing life satisfaction in higher education groups (Blanchflower & Oswald, 2004; Ferrante, 2009), others argue that education effect is correlated to income and health and therefore the latter should be controlled in order to measure the sole power of education (Bukenya et al., 2003). The positive effect of education is confirmed on Lithuanian data as well (Silińska & Zukauskienė, 2004). Marriage or close relations usually are associated with more life satisfaction. Many studies find positive relation between being in close relation and higher life satisfaction scores (Helliwell, 2003). Separation with a partner due to divorce or death according to studies causes the lowest level of subjective wellbeing.

Also there is no clear answer whether type of work is significant in determining happiness. Some studies suggest that self – employed respondents tend to be happier (Blanchflower & Oswald, 1998), but this relation obviously needs more investigation. But there is a consistent agreement that unemployment negatively affects subjective wellbeing. The effect is apparent controlling for other variables (education, income, health) as well (Winkelmann, 2004; Meier & Stutzer, 2006). Unemployment causes both non-financial and financial losses, therefore its effect on wellbeing is considered as one of the strongest effects. Some authors argue that unemployment effects also depend on the gender: males are affected more (Brereton et al., 2008).

Studies suggest a U-shaped curve relation between age and subjective wellbeing. Younger and older age group respondents tend to be happier than middle aged respondents (Ferrer-i-Carbonell & Gowdy, 2007). Other studies find a different shape of relation (Baird et al., 2010), but nevertheless, agree, that age is an important determinant of happiness. There is no agreement among

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scientist whether gender is an important variable in happiness studies. Some scientists find a significant relation (Alesina et al., 2004), while others argue, that relation is not significant (Louis & Zhao, 2002). Studies find that impact of having children may vary depending on other factors. If other factors are negative (low income, no partner, poor health), children may further increase dissatisfaction with life (Alesina et al., 2004; Frey and Stutzer, 2000). Haller and Hadler (2006) find that children’s effect is insignificant. Still other authors find a positive relation between having children and life satisfaction (Angeles, 2010). Most of studies also consistently show a strong impact of health on SWB (Dolan et al., 2008). Both physical and mental health has a strong positive effect on life satisfaction.

Few studies done about impact of care giving to others suggest that in majority cases it is associated negatively with life satisfaction (Marks et al., 2002). The effect is especially strong when care is given to a close relative, family member. On the other hand, community involvement and volunteering has positive impact to life satisfaction according to many studies (Pichler, 2006; Helliwell, 2003; Helliwell & Putnam, 2004). Strong relations and socializing with family and friends also have positive impact on life satisfaction (Pichler, 2006).

Trust in other people is associated to higher satisfaction with life by majority of studies. Helliwell (2003), Helliwell and Putnam (2004) analyzing World Values Survey data show that happiness is positively related to trust level. Although the direction of relation is not always clear. Moreover, even trust in public institutions such as government, police, legal system is also positively associated with higher life satisfaction (Helliwell & Putnam, 2004; Hudson, 2006). In this case it is also not clear whether trust is a predictor of life satisfaction or vice versa. Evidence from several studies also supports the idea that greater life satisfaction is related to religiosity. This relation between SWB and religion is found irrespective of their confession (Helliwell, 2006; Helilwell & Putnam, 2004).

Hypotheses. Based on review of literature the following hypotheses are formulated for the analysis of Lithuanian data:

H1: People with higher income will show the higher level of subjective wellbeing.
H2: Younger people will be more satisfied with their lives in Lithuania.
H3: People with higher education level will be more satisfied with their lives.
H4: Unemployed respondents will show lower level of SWB.
H5: People living in marriage will be happier.
H6: People who have children will be more satisfied with their lives.
H7: People involved in communities will be more satisfied with their lives.
H8: Religious respondents will be more satisfied with their lives.
H9: People who are satisfied with their health will be happier.
H10: People who trust in others more will show higher level of SWB.

Analysis of determinants of subjective wellbeing in Lithuania

Data. Data of Special Eurobarometer study “Social capital” carried out in the whole EU and Lithuania as well is used in the analysis. It is the latest and most comprehensive empirical study that includes majority of indicators of determinants of subjective well being. The current study is not aimed at trend’s analysis nor is supposed to measure change. Moreover, it looks legitimate to claim, that importance and nature of relation between determinants and SWB does not change over time.

Lithuanian data is extracted from the file and analyzed separately. Lithuanian sample is 1004 respondents aged 15+. The survey was conducted in November – December, 2004 using a random probability sampling procedures. It is representative of total Lithuanian population aged 15 years and over with a marginal error of ± 3.1 percent.

Indicators. Eurobarometer survey provides a unified measure of life satisfaction in sense of questioning and methodology employed to sampling and interviewing respondents. The standard life satisfaction question asked in Eurobarometer is “On the whole how satisfied are you with the life you lead?” The answers are given on Likert scale of four possible answers where 4 means – very satisfied; 3 – fairly satisfied; 2 – not very satisfied; and 1 – not satisfied at all. Life satisfaction variable is measured on ordinal level. Values of general life satisfaction question were recoded into two categories: “satisfied” and “not satisfied”.

Eurobarometer study does not include a question about individual or household income. Therefore, to measure an effect of income, the question about satisfaction with financial situation was used. As already mentioned this indicator by some authors is considered even better determinant of SWB than income per se. Eurobarometer study also uses a standard question about education “How old were you when you stopped full – time education”? In this analysis responses are recoded into two groups: a) before 22 years old meaning less than university education and b) 22 years and over meaning university education.

Also importance of religion is used as an indicator of religiosity (Question: How important is each of the following in your life? 4 point Likert scale). Satisfaction with health will be used as an indicator of respondent’s health shape. Full questionnaire used of the survey could be found in the end of the survey’s report.

Data analysis. Chi-square tests were applied to measure the equality of distribution of life satisfaction levels within different categories of determinant variables. Adjusted standardized residuals are used to determine which categories of variables are significantly different from the expected distribution of values.

Results of the analysis by each single determinant are summarized in table No. 1.

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1 Eurobarometer reports may be found at http://ec.europa.eu/public_opinion/index_en.htm. Eurobarometer data files may be downloaded from German Social Science Infrastructure Service http://www.gesis.org/redirect/alte-institute/.
Table 1

Analysis of SWB determinants

<table>
<thead>
<tr>
<th>Satisfied with financial situation*</th>
<th>Satisfied with life, %</th>
<th>Adjusted standardized residuals</th>
<th>N</th>
<th>p, Chi – square probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied</td>
<td>92.8</td>
<td>13</td>
<td>995</td>
<td>0.000</td>
</tr>
<tr>
<td>Not satisfied</td>
<td>48.9</td>
<td>-13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-24</td>
<td>81.8</td>
<td>5.8</td>
<td>998</td>
<td>0.000</td>
</tr>
<tr>
<td>25-39</td>
<td>67.3</td>
<td>1.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40-54</td>
<td>60</td>
<td>-0.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55+</td>
<td>51.8</td>
<td>-5.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Still studying</td>
<td>84.9</td>
<td>5.4</td>
<td>968</td>
<td>0.000</td>
</tr>
<tr>
<td>Non – university</td>
<td>56.3</td>
<td>-6.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University</td>
<td>71.8</td>
<td>2.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>68.6</td>
<td>3.5</td>
<td>482</td>
<td>0.000</td>
</tr>
<tr>
<td>Not employed</td>
<td>42.1</td>
<td>-4.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Married, living with partner</td>
<td>66</td>
<td>2.9</td>
<td>995</td>
<td>0.000</td>
</tr>
<tr>
<td>Never married</td>
<td>76.4</td>
<td>3.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unmarried***</td>
<td>47.9</td>
<td>-6.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presence of children</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>70.5</td>
<td>3.4</td>
<td>998</td>
<td>0.001</td>
</tr>
<tr>
<td>No</td>
<td>58.6</td>
<td>-3.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community involvement****</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>70.6</td>
<td>2.4</td>
<td>998</td>
<td>0.02</td>
</tr>
<tr>
<td>No</td>
<td>60.2</td>
<td>-2.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religiousness****</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Important</td>
<td>61.8</td>
<td>0</td>
<td>989</td>
<td>0.97</td>
</tr>
<tr>
<td>Not important</td>
<td>62</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health*****</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfied</td>
<td>75.2</td>
<td>9.8</td>
<td>996</td>
<td>0.000</td>
</tr>
<tr>
<td>Not satisfied</td>
<td>44.8</td>
<td>-9.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust in others</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>72.5</td>
<td>2.8</td>
<td>990</td>
<td>0.007</td>
</tr>
<tr>
<td>Don’t trust</td>
<td>60.3</td>
<td>-2.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
* Satisfaction with financial situation. Survey question: „For each of the following, please tell me if you are very satisfied, fairly satisfied, not very satisfied or not satisfied at all? Your financial situation.” Answers were recoded into two groups: „satisfied” and „not satisfied”.
** Employment. Retired, housekeepers and students are not included into analysis.
*** Unmarried. The category includes divorced, separated and widowed respondents.
**** Community involvement. Respondents were given a list of 14 organizations and activities and asked if they are active members of any of them. Answer “Yes” means a respondent is a member of at least one organization or activity from the list.
***** Religiousness Survey question: How important is each of the following in your life? Would you say it is very important, fairly important, not very important or not important at all in your life? Respondents were recoded into two groups: „Important” and „not important”.
****** Health. For each of the following, please tell me if you are very satisfied, fairly satisfied, not very satisfied or not satisfied at all? Your own health. Answers were recoded into two groups: „satisfied” and „not satisfied”.

Data analysis shows that only one hypothesis, i.e. that “religious respondents will be more satisfied with their lives” is rejected. In all other cases there is a significant relation between each of the variables and life satisfaction. The relation is particularly strong in case of satisfaction with income, age, and satisfaction with health: more satisfied with their income, more satisfied with their health and younger people tend to report significantly higher overall satisfaction levels.

Although the impact of trust in other people, marital status, employment, community involvement, presence of children, and education is not so obvious, it remains statistically significant. Those who have more social involvement and social networking (married, having children, involved in community activities, employed people) report general satisfaction more often. The same is with more educated respondents.

Nevertheless the evident question is whether those hypotheses would hold true if other variables were controlled for. For example, education is obviously related to income, age is related to health, employment is related to income, and so on. It could be, that true determinant of general life satisfaction is, for example, health condition but not age. Therefore, the next step is to test the same hypotheses controlling for variables that might be the true determinants of both life satisfaction and tested determinant. In order to decide which variables should be used for controlling, a correlation matrix of determinants was produced and all significant relations are taken as control variables. Therefore the following effects were tested2: • Impact of education, marital status, health condition, satisfaction with income, presence of children and employment status on general life satisfaction when controlling for age variable;

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2 The same test procedure (Chi-square test) was used to test the hypothesis
Subjective wellbeing in Lithuania is determined by many factors, satisfaction with health and satisfaction with financial situation being the most important ones. The most satisfied individuals tend to be employed, well educated, socially tied and active (married, having children, involved in community), but most importantly financially satisfied and healthy people. It sets clear guideposts for policy makers seeking to increase the overall happiness of the society. Primary focus of any policy set to increase subjective wellbeing has to be economic wellbeing and growth as well as effective health care system. But also social involvement and social/family ties are important in order to achieve the maximum level of subjective wellbeing.

Age which was considered by many studies as an important determinant of SWB does not have a significant impact when health and financial satisfaction is controlled. Neither younger nor elder population is more satisfied with their life in general provided that their financial situation and health condition are equal. Therefore, ageing of society should not have any effect on general level of SWB if social and healthcare systems are effective.

Further studies of rich data sets would allow to analyze more complex relations between subjective wellbeing and its determinants. Such studies might include several countries with different socio-economic development levels to investigate if relations found in Lithuanian case
would hold true in other Eastern European countries or developing societies in general. Further analysis could also reveal if there are any differences regarding determinants of SWB between rich and poor countries, different cultures. Also each of the variables – potential determinants of SWB – should be analyzed more thoroughly in order to understand the nature of its impact on subjective wellbeing as well as its possible effects in relation with other determinants.

References


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Subjektyvios gerovės veiksniai Lietuvoje

Santrauka


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Tačiau teisingas tikslas ir yra naudojant reprezentatyvius Eurobarometro tyrimo duomenis išanalizuoti, kurie iš teorinės literatūroje sutinkamų veiksnių dar įtaka subjektyvių gerovės suvokimui Lietuvoje. Tyrimui naudojami 2004 m. atliktos Eurobarometro aplausos duomenys dėl to, kad nė viename nausiuose tyrimo vienoje vietoje nebūvo įtraukti visi reikalingi subjektivios gerovės veiksnių rodikliai. Šiame straipsnyje naudotas antrinės veiksnų analizės metodas. Tačiau neparametinės statistinės analizės procedūros, Chi-kvadrato testas.


Remiantis literatūros ir anksčiau atliktais atvejais tyrimai analizė, buvo suformuluotos tokios tyrimo hipotezės: Žmonės yra labiau patenkinti savo gyvenimu negu nepatenkintieji; b) socialinių ryšių rodikliai kaip rūpinimasis kitais, tiesiogiai, bendruomeninis pasitikėjimas; c) socialinių ryšių rodikliai kaip rūpinimasis kitais, tiesiogiai, bendruomeninis pasitikėjimas. Remiantis literatūros ir anksčiau atliktais atvejais tyrimai analizė, buvo suformuluotos tokios tyrimo hipotezės: Žmonės yra labiau patenkinti savo gyvenimu negu nepatenkintieji; b) socialinių ryšių rodikliai kaip rūpinimasis kitais, tiesiogiai, bendruomeninis pasitikėjimas; c) socialinių ryšių rodikliai kaip rūpinimasis kitais, tiesiogiai, bendruomeninis pasitikėjimas.