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Empowerment Rights and Happiness Gap in Post-socialist Countries²

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Abstract: In this paper, we contribute to the debate on life-satisfaction gap between the citizens of post-socialist countries of Europe and Asia and their highly developed OECD counterparts, by examining the influence of de jure and de facto respect for empowerment rights. We mainly focus on the measure of rights protection called de jure - de facto rights protection gap. The empowerment rights included in the analysis are: the freedom of association, the freedom of expression, the freedom of religion, the freedom of foreign movement. Our results imply that government's respect for these rights plays the role in diminishing happiness gap. We base the conclusions on an empirical study conducted on the sample of more than 59,000 observations. The data used for the study consist of World Values Survey database (waves 3–6) and a number of socio-economic indicators for 44 countries.

Keywords: empowerment rights, economic analysis of human rights, happiness gap, de jure and de facto rights protection.

JEL Classification: K38, P37, D60

1 Introduction

'What is happiness?'-this question through ages captured the attention of many scholars representing various branches of science such as theology, psychology and sociology. The notion of happiness was recognised in antiquity by Aristoteles, who defined it as the eudemonic state that could be achieved through fulfilment of human potentialities (Fischer, 2009). These include both the potentialities that are shared by all humans and those unique ones that distinguish each individual from others (Waterman, 1993). This concept is the basis of the utilitarian (hedonic) view on happiness stating that it may be defined as absence of pain and presence of pleasure (Bentham, 1789). Nowadays, the concept of happiness and its possible determinants gain more and more of interest of economists. Empirical studies concerning happiness' distribution among persons and countries over time offer a new dimension to the policy analysis. Its economic and institutional determinants, once identified, may serve as goals in the political process.

In economics, scientists follow the concept of subjective well-being -a social indicator measured with the use of surveys in which individuals respond to one or multiple questions related to their evaluation of their happiness or, in other words, their quality of life (Frey, Stutzer, 2002). The major components of subjective well-being are life satisfaction (global judgements of one's quality of life) satisfaction with important domains (e.g., work satisfaction), positive effect (i.e., experiencing pleasant emotions and moods) and negative effect (experiencing unpleasant emotions and moods) (Diener, 2000). In general, factors determining person's well-being may be divided into two groups: personal features and external factors (Helliwell, Layard, Sachs, 2012). Among personal features, the key determinants include mental and physical health, family experience, education, gender and health. Major external factors are income, work, values, religion, community and governance. For policy makers, the later are of greater importance as they may be influenced by the governmental actions. In this paper, we focus on a particular possible determinants of subjective well-being associated with community and governance, that is, on empowerment rights.

The influence of empowerment rights on happiness may be described by different mechanisms depending on the way the rights are defined. It is possible to distinguish the influence of *de facto, de jure* and *de jure – de facto* gap in rights protection. *De facto* rights protection means the actual level of rights protection performed by the government, while *de jure* rights are the ones established in a constitution or ordinary law of a country (Melton, 2013). The difference between the actual (*de facto*) and formal (*de jure*) rights protection is called a *de jure – de facto* gap. This paper offers an analysis of the influence of all the aforementioned aspects of empowerment rights on subjective well-being.

The question of happiness level and its determinants remains particularly important in case of post-socialist countries. These countries are characterised by peculiar levels and trends in subjective well-being (Bartollini, Mikucka, Sarracino, 2017). Their most striking feature is that the inhabitants of post-socialist economies are systematically unhappier than their advanced and developing counterparts in the rest of the world (a 'happiness gap'). The happiness gap is so pronounced that in the literature it is called 'the iron curtain' of happiness (Lelkes, 2006). The existence of the gap may be attributed to the negative consequences of the transition process, such as falling national income, declining state redistribution, rising unemployment, inequality and poverty. The economic, cultural, social and institutional transformation was so dramatic that it exerted a deep influence on the subjective well-being (Bartollini, Mikucka, Sarracino, 2017). Subjective well-being is linked with productivity, creativity and longevity, and may be relevant to political process (Nikolova, 2016). Therefore, it affects the development of a country. Studying macroeconomic and institutional determinants of subjective well-being may give policy recommendations for governments of transition countries willing to achieve the same citizens' quality of life as their counterparts in developed market economies.

This paper inscribes into the literature trying to explain the possible institutional determinants of the existence of the aforementioned gap. Its main aim is to examine the impact of de jure - de facto empowerment rights' protection gap on the scope of the happiness gap and the level of life satisfaction of inhabitants of post-socialist countries. To our best knowledge, it is the first research dealing with interrelationship between empowerment rights' protection gap and life satisfaction in post-socialist countries. The analysis has both theoretical and empirical dimensions. We propose an econometric model checking the significance of the aforementioned empowerment rights' measures in explaining happiness gap and the level of subjective well-being of inhabitants of post-socialist countries. The methodology consists of an ordered probit model.

The paper is structured as follows. In Section 2, we present the link between empowerment rights and subjective well-being and the mechanisms associated with interactions between them. We cover *de facto*, *de jure* and *de jure – de facto* perspectives on empowerment rights. Section 3 discusses the degree of life-satisfaction in post-socialist countries and possible determinants of the existence of the happiness gap. We compare the subjective well-being and *de jure* and *de facto* empowerment rights' protection in post-socialist countries and their western counterparts. Section 4 includes the description of the data and variables used in an empirical study, while Section 5 consists of the obtained model results. The paper finishes with conclusions and policy implications.

2 Empowerment rights and subjective well-being

In the literature, one may find various well-established determinants of subjective well-being. Each individual has his or her own genetic make-up, but the person he or she becomes is dependent on the interaction of those genes with the environment in which he or she operates (Helliwell, Layard, Sachs, 2012). Fig. 1 presents a classification of features that influence a person's well-being.

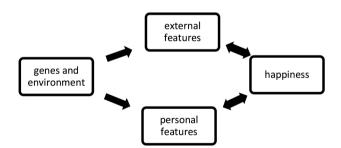


Fig. 1. Features determining a person's well-being. Own work on the basis of: Helliwell, John, Richard Layard, and Jeffrey Sachs. 'World happiness report' (2012).

Together, genes and environment determine the features of an individual's life –both personal and external. These features are the determinants of a person's subjective well-being. They are related to the personality, demographic, micro- and macroeconomic and institutional factors (Frey, Stutzer, 2000). Subjective well-being (SWB) tends to be negatively influenced by *inter alia* the unemployment (Winkelmann, 2009), divorce (Zimmermann and Easterlin, 2006) and economic volatility (Wolfers, 2003), while the positive impact is attributed to good health condition (Shields and Wheatley Price, 2005), marriage (Zimmermann and Easterlin, 2006), and education (Dolan, Peasgood, and White, 2008). One of the external features determining an individual's well-being is the quality of institutional environment in which he or she lives.

Why institutions may affect people's subjective well-being perceptions? Firstly, it may be attributed to the so called 'procedural utility', that is, the satisfaction derived from procedure by which the given political outcomes have been achieved (Nikolova, 2016). Secondly, good quality institutions may raise the utility of citizens in many different ways. Well-functioning legal system provides and enforces property rights and as a result protects citizens from violence, theft and economic exploitation (Bjørnskov, Dreher, Fischer, 2010). Democratic institutions and political decentralisation allow citizens to make decisions according to their own preferences (Frey, Stutzer, 2002). Institutions assuring economic freedom give citizens the possibility to freely exchange goods, services and labour, and thus, exert a strong positive influence on subjective well-being (Gropper, Lawson, Thorne, 2011). Another kind of institutions that may affect ones subjective well-being are those concerning personal freedom. One of the most prominent examples of such institutions are empowerment rights. They include inter alia the right to electoral self-determination, the right to domestic movement, the right to foreign movement, the right to religious freedom, the right to freedom of speech, the right to freedom of assembly and association. They may influence the subjective well-being of citizens through several mechanisms.

First of all, the right to electoral self-determination, the freedom of speech and the freedom of assembly and association empower individuals to take part in the civil and political life of the state, for example, by allowing citizens to unionize or to form political parties (Chilton, Versteeg, 2016). The emergence of such organisations may enforce government's commitment to rights protecting citizens. The theory of organisational rights states that these rights establish independent organisations capable of protecting the substantive rights commitments and thus making these rights self-enforcing (Chilton, Versteeg, 2016). The possibility of individuals to influence government through the use of empowerment rights contributes to the higher SWB, as it gives them tools to affect government's decisions in order to maximise their utility.

What is more, the aforementioned rights and freedoms shape citizens' relationship with their government by encompassing a variety of obligations that governments must respect and pose limits on its power. These kind of rights influence citizen's fundamental relationship with his or her government as they enable citizens to criticise the government (for example, through demonstrations and press), to live their lives according to their own belief systems, and to seek refuge from repressive governmental actions (Crabtree, Nelson, 2017). Therefore, empowerment rights increase the sphere of citizens' freedom within their relationship with government and strengthen the degree of their self-determination, and thus, increase the level of citizens' subjective well-being.

One of the channels through which empowerment rights may affect subjective well-being is GDP growth. According to the Nobel prize winner Amartya Sen, development needs to be perceived as a process of expanding the real freedoms that people enjoy (Sen, 2000). A country aspiring to achieve economic and social development should aim to remove the major sources of lack of freedom. Violations of empowerment rights occurring in a non-systematic and hazardous way may be perceived as an indicator of the absence of certainty. Such abuses constitute a discouraging factor for foreign investors, and as a result, may lead to lower investment which in turn will contribute to lower rates of economic growth and finally to lower per capita income (Blume, Voigt, 2007). Richard Easterlin formulated the happiness-income paradox stating that over the long term (10 years or more) citizens SWB does not increase as a country's income rises (Easterlin, 2010). Positive correlation between income and SWB may be the result of inter alia well-functioning democratic system, rule of law or gender equality (Frey, Stutzer, 2002), which usually go in pair with the economic development. Therefore, one may conclude that empowerment rights affect subjective well-being through the institutional channel as well.

One of the empowerment rights lying within the scope of the analysis of this paper is the freedom of foreign and domestic movement, the extent to which enable citizens to travel freely within the country and to emigrate without being subject to restrictions by public authorities. The positive effect of the freedom of movement on the level of subjective well-being may be explained using Tiebout model (Tiebout 1956). According to this model, people move to places where public goods' provisions and taxation are in congruence with their preferences. The freedom of movement guaranteed by law enable individuals to maximise their utility, and therefore, to increase their subjective well-being.

Furthermore, empowerment rights (in particular, freedom of religion, freedom of speech and freedom of assembly and association) assure equality before the law and prohibit government to discriminate against specific individuals or groups (Mukand, Rodrik, 2015). They mainly benefit those, who are not privileged in the society, that is, ethnic, geographic, religious or ideological minorities (Mukand, Rodrik, 2015). Although not only well-being of minorities may be positively affected by secure empowerment rights. Those being currently in majority, could derive utility from the assurance that their rights will be protected as well, in case they (for example, due to some political processes) shift form majority to minority.

Empowerment rights are inseparably interconnected with a sphere of freedom of an individual. The freedom of choice (regarding one's opportunities in life, different ways of living one's life, choice of profession, education, etc.) is one of the best predictors of a person's life satisfaction, better than such factors as health, employment, income, marriage or religion (Verme, 2009). According to the monotonic/heterogenous view on how people appreciate the freedom of choice, individuals have different preferences and an increase in choice has a different impact on individuals, but this impact is always positive (Verme, 2009). One of the examples of such a view is Sen's capability approach where freedom of choice contributes to define utility in a world of heterogenous individuals (Sen, 1987). According to this approach, expanding the range of economic and political freedoms should be valuable to all individuals, even those, who do not profit from economic or political possibilities offered.

The positive influence of freedom of choice expansion on subjective well-being is also confirmed by empirical studies. Inglehart *et al.* –on the basis of the human development model – state that since 1981, economic development, democratisation, and increasing social tolerance have increased the extent to which people experience the free choice, which has led to higher levels of subjective well-being around the world (Inglehart *et al.*, 2008). The human development model emphasises the existence of the following sequence: (1) responding to widening opportunities of life caused by the economic development of the country, people attach more importance on emancipative values, (2) in response to

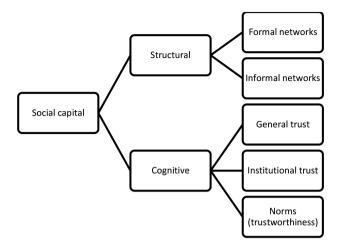


Fig. 2. Dimensions of social capital. Own work on the basis of Kaasa, Anneli and Eve Parts. 'Individual-level determinants of social capital in Europe: Differences between country groups.' Acta sociologica 51.2 (2008).

a greater emphasis on emancipative values, feelings of agency play a more important role in shaping people's life satisfaction, (3) in response to a higher impact of agency feelings on life satisfaction, the level of life satisfaction itself rises (Welzel, Inglehart, 2010). The conclusions arising out of the human development model support the significance of the impact of empowerment rights' protection on the level of subjective well-being. The empowerment rights protect emancipative values and support citizens' need for agency. Therefore, they may strengthen the life satisfaction increase effect described by that model.

Another mechanism through which empowerment rights may affect subjective well-being level is through strengthening social capital. Social capital understood as the quantity and quality of social relations in a community constitutes one of the sources of individual happiness. One may distinguish the relations between individuals or groups that are similar to each other (bonding capital) and relations between entities that are different (bridging capital) (Helliwell, Layard, Sachs, 2012). Empowerment rights strengthen both bonding and bridging capital by securing the legal position end ensuring equal treatment of all individuals in the community and thus increasing the overall level of trust in the society. As a result, they contribute to the increase of the subjective well-being of the inhabitants of the county.

Another argumentation in favour of the positive impact of empowerment rights on subjective well-being may be derived from the alternative definition of social capital. Fig. 2 summarises different dimensions of social capital.

Structural aspect of social capital facilitates social interaction and includes participation in formal and informal networks. On the other hand, cognitive aspect predisposes people to act in a socially beneficial way and comprises of general trust, institutional trust and civic norms. Well respected and protected empowerment rights should influence each of the above dimensions of social capital. By ensuring *inter alia* the freedom of association, freedom of expression and freedom of religion, they facilitate the formation of formal and informal networks. They also have an influence on the cognitive aspect of social capital, by increasing the overall level of trust in the society. Citizens knowing that their freedoms are protected feel more confident in their relationships with other people and state administration.

What is more, not only *de facto* rights¹ protection may influence the well-being of citizens. De jure rights protection should exert a positive impact as well. Inclusion of empowerment rights in a constitution or a statute provides a signal to individuals that their rights and freedoms are formally recognised by the government and secures their observance and judicial protection. However, it is essential to note that *de jure* rights should not be analysed separately from *de facto* rights. *De jure* – *de facto* gap is a more relevant measure in this respect. It expresses the difference between the actual (*de facto*) and formal (*de jure*) rights protection in a given country. The impact of the gap on subjective well-being may be twofold depending on its nature. Tab. 1 presents the different types of interdependence between de jure and de facto rights protection.

From the Tab. 1, it appears that it is possible to distinguish four types of *de jure* and *de facto* rights interrelationships. The gap may be observed in case II and III, while in cases I and IV the activities of the government are compatible with the legal status. Gap envisaged in case II should have a negative impact on the level of subjective well-being, as it constitutes a signal of uncertainty about government's action and may contribute to a decrease of trust that citizens put in public institutions. Uncertainty about one's legal standing and the scope of *de facto* respected rights and freedoms results in decrease of subjective well-being of individuals living in a given society. On the other hand, the gap described in case III should exert a positive influence on the level of subjec-

¹ *De jure* rights are envisaged in law of a particular country, while *de facto* rights refer to the real level of rights' protection (Melton, 2013).

Tab. 1. The interdependence between *de jure* and *de facto* rights protection

	Lack of <i>de jure</i> rights protection	<i>De jure</i> rights protection exists
Lack of <i>de facto</i> rights protection	I	II
<i>De facto</i> rights protection exists	III	IV

tive well-being. In this situation, the government not having a legal duty to observe citizens' rights does so. Therefore, the level of citizens' trust in the government increases contributing to a higher level of their subjective well-being.

3 (Un)happiness in post-socialist countries

The common trait of all the post-socialist countries of Central and Eastern Europe is the fact that in the late 80's they started the transition process -form communist or socialist system to democracy, and from centrally planned economy to the free-market economy. In this period, the countries adopted a new constitution, based on the rule of law and having broad catalogues of rights and freedoms. However, nowadays, the post-socialist states differ with respect to both de jure and de facto rights' protection. This group of countries is characterised by huge diversity -seen in such aspects as inter alia the level of the economic growth, the size and structure of the market, international relationships (Matkowski, 2004). One of the societal effects of transition is the drop of life satisfaction, especially of the elderly citizens of post-socialist countries (Guriev, Zhuravskaya, 2009). The possible explanations of these phenomenon include deterioration of public goods, depreciation of human capital gathered under socialist rule and income inequality (Guriev, Zhuravskaya, 2009), the 'culture of distrust' and low levels of social capital (Bartolini, Mikucka, Sarracino, 2017) and the temporary collapse of output and employment (Easterlin, 2009). In a majority of post-socialist countries (mainly Central and Eastern European), the economy recovered since early 90's and embarked on a path of rapid convergence towards the Western European countries (although it is not universal for all post-socialist countries). What is more, the effect of the rising inequality on the SWB of citizens of post-socialist countries has a changing pattern. Grosfeld and Senik using the example of Poland provide evidence that in the first stage of transition process, it was interpreted by the population as a signal of wider opportunities, and later on, it became a source of dissatisfaction with the country's economic situation (Grosfeld, Senik, 2010).

Trends of subjective well-being in post-socialist countries are of a peculiar nature –variations over time are greater than in other developed countries and more correlated with the trends of GDP (Bartollini, Mikucka, Sarracino, 2017). According to the concept of 'post-materialisation of happiness' materialist concerns constitute a more prominent ingredient of well-being of citizens of transition countries compared to the one of citizens of Western states. However, after the period of worst economic crisis in the post-socialist countries, other determinants of subjective well-being, such as social capital, start to play more and more important roles (Bartollini, Mikucka, Sarracino, 2017).

What is more, post-socialist economies are systematically unhappier than their advanced and developing counterparts in the rest of the world (Djankov, Nikolova, Zilinsky, 2016;Guriev, Zhuravskaya, 2009). Guriev and Zhuravskaya (2009) predicted that the gap would disappear due to the economic growth of post-socialist countries and their economic convergence towards the Western countries. Djankov, Nikolova and Zilinsky (2016) stated that the aforementioned happiness gap remained even after controlling for such factors as income, life expectancy, Eastern Orthodox religion and so on.

The aforementioned happiness gap is accompanied by a social capital gap –Eastern Europe countries lag behind other European democracies in terms of state capacity and civil society (Sissenich, 2010). This gap is not the consequence of a communist period, but rather it reflects the lower level of economic development and institutional quality in comparison to the Western European countries (Fidrmuc, Gërxhani, 2008). As a result, it should gradually disappear, while post-socialist countries catch up with respect to economic development and institutional quality. Stronger empowerment rights contribute to higher institutional quality, and therefore, to the diminishment of the social capital gap.

In order to preliminarily test the presence of happiness gap, we conduct a Kruskall-Wallis H test. The data

	Number of observations	Mean	χ ² statistics	p-value	
Post-socialist countries	51642	5.68			
Non-post-socialist countries	65393	7.17	11908	0,0001	

Tab. 2. Mean values of the declared level of life-satisfaction by residents of post-socialist and non-post-socialist countries

Tab. 3. 'How much respect is there for individual human rights nowadays in this country?' Comparison of the answers of respondents from post-socialist and non-post-socialist countries (as a percentage of total answers). Own work on the basis of WVS (2014).

	Post-sociali	Post-socialist countries			Non-post-socialist countries			
	1994–1998	1999–2004	2005-2009	2010-2014	1994–1998	1999–2004	2005-2009	2010-2014
There is a lot of respect for individual human rights	0.02	0.05	0.02	0.07	0.01	0.11	0.16	0.14
There is some respect	0.15	0.26	0.26	0.39	0.06	0.47	0.49	0.55
There is not much respect	0.26	0.43	0.43	0.34	0.06	0.33	0.19	0.26
There is no respect at all	0.14	0.26	0.12	0.10	0.00	0.07	0.02	0.03
Missing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Not asked in survey	0.41	0.00	0.14	0.08	0.86	0.00	0.13	0.00
No answer	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Don't know	0.02	0.05	0.02	0.07	0.01	0.11	0.16	0.14

Tab. 4. Countries included in the analyses

	Post-socialist countries	Developed non-post-socialist countries
1994–1998	Albania, Azerbaijan, Armenia, Bulgaria, Belarus, Czech Rep., Estonia, Latvia, Lithuania, Moldova, Romania, Russia, Slovakia, Ukraine, Macedonia, Bosnia, Serbia, Montenegro	Australia, Finland, Germany, New Zealand, Norway, Spain, Sweden, Switzerland, United States
1999–2004	Albania, Kyrgyzstan, Moldova, Macedonia	Canada, Japan, South Korea, Spain, United States
2005–2009	Bulgaria, Georgia, Hungary, Moldova, Poland, Romania, Russia, Slovenia, Ukraine, Serbia and Montenegro	Australia, Canada, Cyprus, Finland, France, Germany, Italy, Japan, South Korea, Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, Great Britain, United States
2010–2014	Azerbaijan, Armenia, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Poland, Romania, Russia, Slovenia, Ukraine, Uzbekistan	Australia, Cyprus, Germany, Japan, South Korea, Netherlands, New Zealand, Spain, Sweden, United States

is taken from the World Values Survey for the period 1994–2014 and cover 27 post-socialist and 17 non-post-socialist countries (the detailed list of countries used in the analysis is included in Tab. 5 in the Appendix).² The aim of the test is to determine if the mean value of the life satisfaction of citizens is different for citizens of post-socialist (n = 51 630) and non-post-socialist

(n = 45 979) countries. The Kruskall-Wallis H (Tab. 2) test shows that there exists a statistically significant difference in life satisfaction between the two groups ($\chi_1^2 = 11908$, p-value = 0,0001), and therefore, confirms the existence of a happiness gap.

The question that arises in this context is whether *de jure* or *de facto* empowerment rights may be perceived as one of the explaining factors of the happiness gap between post-socialist countries and other advanced

² The comparison sample is constructed on the basis of Nikolova, 2016.

	Mean value of SWB of respondents living in a country where freedom is included in the constitution	Mean value of SWB of respondents living in a country where freedom is not included in the constitution	χ² statistics	p-value
Freedom of assembly	6.32	6.77	158.758	0.0001
Freedom of religion	6.47	6.45	2.812	0.0935
Freedom of expression	6.29	6.79	158.758	0.0001
Freedom of movement	6.15	6.92	158.758	0.0001

Tab. 5. The results of Kruskal-Wallis H test

and developing countries of rest of the world. Tab. 3 presents the answers to the question 'How much respect is there for individual human rights nowadays in this country?', gathered throughout four waves of the World Values Survey.

The answers are divided into two groups depending on whether the respondent was from a post-socialist country or a developed non-post-socialist one (the list of countries used in the research may be found in Tab. 4 below).

The data show that the majority of respondents from post-socialist countries perceive that human rights are not respected, while the case is opposite for respondents from developed economies. This characteristic of inhabitants from transition countries may constitute one of the determinants of happiness gap.

In order to investigate the impact of *de jure* dimension of the empowerment rights protection on the life satisfaction level of inhabitants of post-socialist countries, we conduct a Kruskall-Wallis H test. The data on the presence of a given right in the country's constitution come from the Comparative Constitutions Project database (Elkins *et al.*, 2014). Tab. 5 presents the results.

The obtained results indicate that the mean value of the life satisfaction of citizens of post-socialist countries significantly differs between a group of respondents living in a country where given freedom is included in the constitution and a group from a country without such constitutional provision. Therefore, *de jure* standards of empowerment rights' protection should be considered as one of the environmental factors explaining subjective well-being in post-socialist countries. What is more, the mean value of SWB for majority of rights is higher for the countries that do not have a given right inscribed in a constitution. It may be a sign of ineffective constitutional provisions and a sign that the empowerment gap should be analysed.

4 Data and variables

The main data source of the level of subjective well-being is the World Values Survey (WVS), 1994–2014. Such a time span has been chosen due to the fact that the majority of post-socialist countries gained their independence and transitioned from a socialist regime to a market economy and democracy in the early 90's, therefore, the data for the previous periods are unavailable. The WVS data have been merged with the V-Dem database (Coppedge *et al.*, 2016) containing a variety of institutional, social and economic indicators. Tab. 7 (Appendix) presents the definitions and sources of all the variables used in a study.

The dependent variable is respondent's life satisfaction measured on a scale from 1 (dissatisfied) to 10 (satisfied). Other individual's characteristics used in the study include gender, age, income, employment and marital status, education level, perceived state of health, children and religiosity. Apart from the aforementioned individual characteristics of the respondent, country level economic and institutional characteristics are taken into account as well. Economic characteristics include GDP *per capita*, inflation, GDP growth and unemployment. Institutional characteristics consist of democracy, government ideology, regulatory quality, government effectiveness and empowerment rights and gap indices.

The role of institutional variables used in a study is to examine the influence of empowerment rights on the subjective well-beinglevel itself and the happiness gap between the respondents from post-socialist countries and their counterparts from the rest of the world. There are two measures of empowerment rights taken into account – *de facto* rights and *de jure – de facto* gap.

The data concerning *de facto* empowerment rights come from V-Dem database (Coppedge *et al.,* 2016). The indices of *de facto* rights' protection are derived from the surveys and converted to interval by the authors

Tab. 6. Corresponding measures of de jure and de facto rights' protection

De jure right	De facto right
Freedom of assembly: 1 - constitution provides the freedom of assembly 0 - constitution does not provide the freedom of assembly	Civil society participation index: - the extent to which major civil society organisations are routinely consulted by policymaker, how large is the involvement of people in CSOs; the extent to which women are prevented from participating; and the extent to which legislative candidate nomination within party organization is highly decentralized or made through party primaries
Freedom of religion: 1 - constitution provides the freedom of religion 0 - constitution does not provide the freedom of religion	Freedom of religion index: - indicator specifying the extent to which individuals and groups have the right to choose a religion, change their religion and practice that religion in private or in public as well as to proselytize peacefully without being subject to restrictions by public authorities
Freedom of expression: 1 - constitution provides the freedom of expression or speech 0 - constitution does not provide the freedom of expression or speech	Freedom of expression index: - indicator specifying the extent to which the government respects the freedom of press and media, the freedom of ordinary people to discuss political matters at home and in the public sphere, as well as the freedom of academic and cultural expression
Freedom from forced labour: 1 - constitution prohibits slavery, servitude or forced labour 0 - constitution does not prohibit slavery, servitude or forced labour	Freedom from forced labour index: - the extent to which adult citizens are free from servitude and other kinds of forced labour
Freedom of movement: 1 - constitution provides the freedom of movement 0 - constitution does not provide the freedom of movement	Freedom of movement : - the extent to which citizens are able to travel freely to and from the country and to emigrate without being subject to restrictions by public authorities

of the V-Dem database with a use of Bayesian item response theory measurement model. The freedoms taken into account include:

- i. the freedom of association proxied by civil society participation,
- ii. the freedom of expression,
- iii. the freedom of religion,
- iv. the freedom of foreign movement.

The detailed description of the aforementioned indices is included in Tab. 6 (above).

The measure of *de jure – de facto* gap (*gap*) is constructed as follows:

gap = de jure right – de facto right

where *de jure right* is a binary variable indicating whether a given right is present in a country's constitution and *de facto right* being a continuous variable within the range from 0 to 1m reflects the actual level of right's protection. It is possible to distinguish two types of *de jure – de facto* gaps – a 'positive' and a 'negative' one.

A 'positive' *de jure – de facto* gap occurs when a right is included in a constitution, but the government does not respect it. In this case, the *gap* takes the values between 0 and 1. On the contrary a 'negative' *de jure – de facto* gap reflects the situation in which the right is not protected formally via the constitution, but nonetheless is respected by the government (the value of the *gap* is thus less than 0).

The data used to construct the *gap* come from: for *de facto* rights – the V-Dem database (Coppedge *et al.*, 2016) (indices are normalised to 1, where necessary) and for *de jure* rights – Comparative Constitutions Project database (Elkins *et al.*, 2014). Tab. 6 presents the corresponding measures of *de jure* and *de facto* rights' protection used for the construction of the *gap*.

Tab. 7. Description and sources of variables

Variable	Definition	Values	Source
life_satisfaction	respondent's life satisfaction ('All things considered, how satisfied are you with your life as a whole these days?')	from 1 (satisfied) to 10 (dissatisfied)	WVS (2015)
female	respondent's gender	0 – male, 1 – female	WVS (2015)
age	respondent's age		WVS (2015)
age2	respondent's age squared		WVS (2015)
income	monthly household income		WVS (2015)
income2	monthly household income squared		WVS (2015)
employment	respondent's employment status	1 – self-employed, full-time employed, part-time employed, student; 0 - otherwise	WVS (2015)
married	respondent's marital status	1 – married or living together with someone as married, 0 – otherwise	WVS (2015)
divorced	respondent's marital status	1- divorced, 0 - otherwise	WVS (2015)
widowed	respondent's marital status	1- widowed, 0 - otherwise	WVS (2015)
single	respondent's marital status	1 – single, 0 – otherwise	WVS (2015)
health	respondent's subjective assessment of the state of health	binary variables for the following categories of the state of health: very good, good, fair, poor, very poor	WVS (2015)
education	respondent's highest educational level attained	binary variables for the following categories of the level of education: tertiary education, secondary education, basic education	WVS (2015)
religiosity	respondent's religiosity	1 – a religious person, 0 – otherwise	WVS (2015)
Ingdppc	GDP <i>per capita</i> in logarithm		VDem (2016)
inflation	inflation		VDem (2016)
GDP growth	GDP growth		VDem (2016)
unemployment	unemployment (% of labour force)		World Bank (2018)
government ideology	ideology of the chief's executive party	binary variables for the following categories: leftist, right, centre	Database of Political Institutions (2012)
democracy	the extent to which an institutionalised democracy is present in a country	scale (1;2)	VDem (2016)
regulatory quality	an index including measures of the incidence of market unfriendly policies such as price controls or inadequate bank supervision, as well as perceptions of the burdens imposed by excessive regulation in areas such as foreign trade and business development	scale (-2; 2)	VDem (2016)
government effectiveness	the index envisaging the quality of public service provision, the quality of the bureaucracy, the competence of civil servants, the independence of the civil service from political pressures, and the credibility of the government's commitment to policies	scale (-2; 2)	VDem (2016)

the extent to which government respects press & media freedom, the freedom of ordered people to discuss political matters at home and in the public sphere, as well as the freedom of academic and cultural expression	scale (0;1)	VDem (2016)
are prevented from participating; and the extent to which		VDem (2016)
the extent to which citizens enjoy freedom of religion	scale (-3; 3)	VDem (2016)
the extent to which citizens are able to travel freely to and from the country and to emigrate without being subject to restrictions by public authorities	scale (-1; 3)	VDem (2016)
	 freedom, the freedom of ordered people to discuss political matters at home and in the public sphere, as well as the freedom of academic and cultural expression The extent to which major civil society organisations are routinely consulted by policymaker; how large is the involvement of people in CSOs; the extent to which women are prevented from participating; and the extent to which legislative candidate nomination within party organization highly decentralized or made through party primaries the extent to which citizens are able to travel freely to and from the country and to emigrate without being subject to 	freedom, the freedom of ordered people to discuss political matters at home and in the public sphere, as well as the freedom of academic and cultural expression The extent to which major civil society organisations scale (0;1) are routinely consulted by policymaker; how large is the involvement of people in CSOs; the extent to which women are prevented from participating; and the extent to which legislative candidate nomination within party organization is highly decentralized or made through party primaries the extent to which citizens enjoy freedom of religion scale (-3; 3) the extent to which citizens are able to travel freely to and scale (-1; 3) from the country and to emigrate without being subject to

Tab. 7. Description and sources of variables (continue)

5 The model

The empirical strategy used in a study is based on the step-by-step approach. Firstly, we preliminarily test the significance of *de facto* and *de jure* empowerment rights' protection as a factor contributing to the existence of the happiness gap and a factor explaining the level of life satisfaction of inhabitants of post-socialist economies. The preliminary models are estimated with the use of the ordered probit regression with standard errors clustered at a country level. Due to the fact that further on, we move to the main part of our research and address the same questions but concerning the impact of *de jure* – *de facto* gap. In the first step, we analyse the empowerment gap effect on SWB in two samples: post-socialist and comparison of non-post-socialist sample accounting for basic individual level respondent's characteristics. Further on, we include the transition country dummy in order to account for the happiness gap and develop the model by additional individual level, macroeconomic and institutional characteristics.

5.1 Results of preliminary regressions

This section presents the results of the model explaining the influence of the respect of *de facto* and *de jure* empowerment rights on the scope of the happiness gap between post socialist countries and other countries. Tab. 8 presents the obtained model results for *de facto* rights' protection. The results support the existence of the happiness gap between post-socialist countries and their developed counterparts (the coefficient of variable *transition*). It indicates that living in a post-socialist society goes in pair with lower life satisfaction compared with similar individuals from the western countries.

The results of models (2)–(5) indicate that accounting for *de facto* respect for different categories of empowerment rights contributes to the diminishment of the size of the gap. In case we account for all four categories of empowerment rights simultaneously, the negative happiness gap disappears (model (6)). The effect is the strongest in case of *de facto* freedom of expression. What is more, the model suggests the positive relationship between the increase of respect of freedom of assembly and freedom of movement and the life satisfaction in general and a negative relationship in case of freedom of religion and freedom of expression.

It may be argued that the effect implementation of institutional environment supporting higher respect for empowerment rights is associated with certain social costs for post-socialist countries. The changes of empowerment rights' protection involve a life satisfaction cost.

The results may be interpreted from the point of view of cost-benefit analysis. In case of countries characterised by underdeveloped institutional environment, forcing the government to increase the respect for empowerment rights, is costly for the society. It may involve protests and strikes, social unrest, change of the government preceded by repressions. The shortterm benefits from achieving the higher levels of respect Tab. 8. The influence of de facto empowerment rights on the size of the happiness gap (ordered probit model)

	(1)	(2)	(3)	(4)	(5)	(6)
transition	-0.300**	-0.290**	-0.273**	-0.164**	-0.236**	0.169**
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.05)
civil society_df		1.320**				1.346**
		(0.11)				(0.15)
religion_df			-0.134**			0.291**
			(0.02)			(0.03)
expression_df				-2.638**		-6.500**
				(0.17)		(0.30)
move_df					0.326**	0.327**
					(0.02)	(0.04)
Wave 4	0.279**	0.221**	0.382**	0.338**	0.316**	0.213**
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Wave 5	0.245**	0.217**	0.349**	0.290**	0.317**	0.201**
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Wave 6						
age	-0.042**	-0.042**	-0.042**	-0.042**	-0.040**	-0.039**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
age2	0.000**	0.000**	0.000**	0.000**	0.000**	0.000**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
emale	0.024	0.026	0.022	0.021	0.027*	0.026*
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
divorced	-0.289**	-0.294**	-0.298**	-0.314**	-0.273**	-0.318**
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
single	-0.198**	-0.194**	-0.184**	-0.185**	-0.241**	-0.243**
single		(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
	(0.02)					
widowed	-0.225**	-0.223**	-0.230**	-0.235**	-0.221**	-0.233**
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
children	0.052**	0.070**	0.075**	0.079**	-0.020	-0.001
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
good state of health	-0.392**	-0.384**	-0.394**	-0.389**	-0.401**	-0.383**
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
fair state of health	-0.769**	-0.756**	-0.766**	-0.761**	-0.778**	-0.751**
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
poor state of health	-1.231**	-1.216**	-1.232**	-1.219**	-1.237**	-1.190**
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
vorv poor state of boolth	-1.527**	-1.510**	-1.525**	-1.513**	-1.526**	-1.477**
very poor state of health						
1	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)
religiosity	0.159**	0.150**	0.153**	0.137**	0.172**	0.119**

	(1)	(2)	(3)	(4)	(5)	(6)
tertiary education	0.171**	0.178**	0.157**	0.116**	0.185**	0.087**
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
secondary education	0.107**	0.117**	0.096**	0.051**	0.148**	0.059**
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
income	0.159**	0.148**	0.154**	0.163**	0.159**	0.167**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
ncome2	-0.007**	-0.006**	-0.007**	-0.008**	-0.007**	-0.008**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
ngdppc	0.169**	0.104**	0.135**	0.507**	0.086*	0.903**
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.06)
nflation	-0.007**	-0.008**	-0.003**	0.004**	-0.007**	0.009**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
unemployment	0.002	-0.005**	0.007**	0.022**	0.005**	0.038**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
GDP growth	0.014**	0.019**	0.019**	0.013**	0.015**	0.007*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
eftist ideology of government	-0.335**	-0.303**	-0.394**	-0.252**	-0.252**	0.134**
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)
right ideology of government	-0.490**	-0.455**	-0.605**	-0.483**	-0.483**	-0.191**
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)
democracy	0.047*	0.095**	0.180**	0.086**	0.214**	0.065
	(0.02)	(0.02)	(0.03)	(0.02)	(0.03)	(0.05)
regulatory quality	0.231**	-0.042	0.318**	0.519**	0.133**	0.335**
	(0.03)	(0.04)	(0.04)	(0.04)	(0.03)	(0.05)
number of observations				9397		

Tab. 8. The influence of de facto empowerment rights on the size of the happiness gap (ordered probit model) (continue)

	(1)	(2)	(3)	(4)
transition	-0.306**	-0.302**	-0.149**	-0.321**
	(0.04)	(0.04)	(0.04)	(0.04)
civil society_df	1.494**			
	(0.13)			
assembly_di	0.074**			
	(0.03)			
religion_df		-0.122**		
		(0.02)		
religion_di		0.445**		
		(0.03)		
expression_df			-2.714**	
			(0.17)	
expression_di			-0.109**	
			(0.03)	
move_df				0.321**
				(0.02)
move_di				-0.118**
				(0.02)
Wave 4	0.182**	0.217**	0.327**	0.342**
	(0.03)	(0.03)	(0.03)	(0.03)
Wave 5	0.193**	0.289**	0.257**	0.318**
	(0.03)	(0.03)	(0.03)	(0.03)
Wave 6				
age	-0.042**	-0.042**	-0.041**	-0.040**
	(0.00)	(0.00)	(0.00)	(0.00)
age2	0.000**	0.000**	0.000**	0.000**
	(0.00)	(0.00)	(0.00)	(0.00)
female	0.026	0.018	0.022	0.029*
	(0.01)	(0.01)	(0.01)	(0.01)
divorced	-0.294**	-0.301**	-0.314**	-0.277**
	(0.03)	(0.03)	(0.03)	(0.03)
single	-0.191**	-0.208**	-0.190**	-0.234**
	(0.02)	(0.02)	(0.02)	(0.02)
widowed	-0.223**	-0.226**	-0.235**	-0.222**
	(0.03)	(0.03)	(0.03)	(0.03)
children	0.080**	0.058**	0.066**	-0.010
	(0.02)	(0.02)	(0.02)	(0.02)
good state of health	-0.386**	-0.393**	-0.387**	-0.400**
	(0.02)	(0.02)	(0.02)	(0.02)

Tab. 9. The influence of *de jure* and *de facto* empowerment rights on the size of the happiness gap (ordered probit model)

	(1)	(2)	(3)	(4)
air state of health	-0.759**	-0.760**	-0.759**	-0.776**
	(0.02)	(0.02)	(0.02)	(0.02)
poor state of health	-1.217**	-1.209**	-1.216**	-1.235**
	(0.03)	(0.03)	(0.03)	(0.03)
very poor state of health	-1.510**	-1.498**	-1.511**	-1.524**
	(0.09)	(0.09)	(0.09)	(0.09)
eligiosity	0.150**	0.158**	0.135**	0.164**
	(0.01)	(0.01)	(0.01)	(0.01)
ertiary education	0.187**	0.165**	0.104**	0.179**
	(0.02)	(0.02)	(0.02)	(0.02)
econdary education	0.120**	0.107**	0.049*	0.146**
	(0.02)	(0.02)	(0.02)	(0.02)
ncome	0.144**	0.145**	0.168**	0.159**
	(0.01)	(0.01)	(0.01)	(0.01)
income2	-0.006**	-0.006**	-0.008**	-0.007**
	(0.00)	(0.00)	(0.00)	(0.00)
ngdppc	0.099**	0.075*	0.538**	0.093*
	(0.04)	(0.04)	(0.04)	(0.04)
nflation	-0.009**	-0.009**	0.003**	-0.007**
	(0.00)	(0.00)	(0.00)	(0.00)
nemployment	-0.006**	-0.010**	0.022**	0.004**
	(0.00)	(0.00)	(0.00)	(0.00)
DP growth	0.021**	0.012**	0.013**	0.014**
	(0.00)	(0.00)	(0.00)	(0.00)
eftist ideology of government	-0.298**	-0.259**	-0.254**	-0.262**
	(0.03)	(0.03)	(0.03)	(0.03)
ight ideology of government	-0.448**	-0.471**	-0.502**	-0.496**
	(0.03)	(0.03)	(0.03)	(0.03)
emocracy	0.117**	0.034	0.057*	0.144**
	(0.02)	(0.03)	(0.02)	(0.03)
egulatory quality	-0.088*	0.190**	0.507**	0.127**
	(0.04)	(0.04)	(0.04)	(0.03)
number of observations			29397	

Tab. 9. The influence of *de jure* and *de facto* empowerment rights on the size of the happiness gap (ordered probit model) (continue)

for empowerment rights are not the same for all groups in the society. Taking into account the five rights listed above, majority of society benefits from freedom of association and freedom of foreign movement, as they are mostly related to everyday activity of the average person. Freedom of religion and freedom of expression concern and benefit mostly minorities, which hold views different from the rest of the society. Therefore, the cost of enforcing higher respect of these kind of rights perceived by the majority of society is greater than the noticeable benefits.

Tab. 9 presents the results for model accounting simultaneously for both *de jure* and *de facto* empowerment rights.

The obtained results suggest the existence of significant and mixed influences of *de jure* and rights protection on the level of subjective well-being. Citizens of countries with freedom of association and freedom of religion included in a constitution are on average happier than those living in countries where these freedoms are not guaranteed on a constitutional level. The effect is opposite for the freedom of expression and freedom of movement. On the basis of the model presented in Tabl. 8, one may conclude that the effect of *de jure* empowerment rights protection is ambiguous. Therefore, it is essential to use another measure, which in greater extent captures the interrelationship between *de jure* and *de facto* rights protection, that is, to the *de jure – de facto* empowerment rights' gap.

5.2 Results for *de jure – de facto* empowerment rights' gap

This section presents the step-by-step analysis of the influence of *de jure – de facto* empowerment rights' gap on the level of subjective well-being of inhabitants of post-socialist countries and on the existence of the happiness gap. The results of the model explaining the influence of the respect of *de jure – de facto* empowerment rights' gap on the scope of SWB of inhabitants of post-socialist countries and those living in countries included in the comparison sample are included in Tab. 10.

The obtained outcomes suggest that in the case of both samples, the existence of *de jure – de facto* empowerment rights' gap (for all categories of rights) influences the citizens' subjective well-being negatively. The aforementioned model accounts solely for the basic individual characteristics of SWB, that is, for the age, gender, marital status and the number of children of the respondent. In the next step, we check whether there is a happiness gap visible in a present stage of the model. Therefore, we account for transition country dummy (Tab. 11).

Model results support the existence of the happiness gap (a significant and negative coefficient of *transition* variable). Therefore, we proceed with the analysis by enriching the model with additional individual level, macroeconomic and institutional variables and time effects (Tab. 12).

After the inclusion of additional individual and macroeconomic determinants of SWB, the significance and the direction of the effect of empowerment gap remained unchanged. Although, inclusion of institutional variables related to the characteristics and quality of the government weakened the influence of civil society and freedom of expression gap. It may be concluded that institutional factors constitute transmission channels of the sample-specific freedom of expression and freedom of movement gaps effects.

The final specification of the model is presented in Tab. 13. It includes interaction terms between the empowerment gap indices and the transition country dummy.

In the case of all types of empowerment rights' gap, the interaction term coefficients are significant. What is more, for civil society gap, freedom of religion gap and freedom of expression gap, the transition country dummy becomes insignificant. On the basis of the final specification of the model, it is possible to conclude that the values of three out of four empowerment gap indices used in the study differ between post-socialist countries and comparison sample and that they explain the happiness gap.

The results from the aforementioned empirical models support the theoretical considerations described in section 2 - de facto empowerment rights and de jure de facto empowerment rights appear to be a significant explanation of the happiness gap and the level of life satisfaction of the inhabitants of post-socialist countries. Fig. 3 summarises the obtained results. De facto empowerment rights' protection influences subjective well-being by shaping the citizens' relationship with the government, by ensuring protection of minorities, by building social capital and increasing the overall level of trust in the society. De jure - de facto empowerment rights' gap ('positive' as defined in Section 4) diminishes the level of social capital and trust in the society, and thus, contributes to the lowering of the level of life satisfaction in post-socialist countries.

	Post-socialist	Non-post- socialist	Post-socialist	Non-post- socialist	Post-socialist	Non-post- socialist	Post-socialist	Non-post- socialist
civil society_gap	-0.120**	-0.224**						
	(0.01)	(0.01)						
religion_gap			-0.075**	-0.221**				
			(0.01)	(0.01)				
expression_gap					-0.019*	-0.191**		
					(0.01)	(0.01)		
move_gap							-0.012*	-0.160**
							(0.01)	(0.01)
age	-0.033**	-0.030**	-0.032**	-0.031**	-0.033**	-0.031**	-0.033**	-0.030**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
age2	0.000**	0.000**	0.000**	0.000**	0.000**	0.000**	0.000**	0.000**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
female	0.028**	0.073**	0.027**	0.073**	0.028**	0.072**	0.028**	0.073**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
divorced	-0.303**	-0.470**	-0.303**	-0.466**	-0.302**	-0.465**	-0.303**	-0.468**
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
single	-0.085**	-0.378**	-0.080**	-0.382**	-0.081**	-0.385**	-0.082**	-0.383**
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
widowed	-0.306**	-0.371**	-0.310**	-0.365**	-0.308**	-0.366**	-0.308**	-0.369**
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
children	-0.005	-0.005	-0.007	-0.004	-0.006	-0.003	-0.006	-0.001
	(0.02)	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)
number of observations	49472	41585	49472	41585	49472	41585	49472	41585

Tab. 10. The influence of empowerment rights gap on the level of life satisfaction of inhabitants of post-socialist and non-post-socialist countries (ordered probit model)

	(1)	(2)	(3)	(4)	(5)
transition	-0.795**	-0.728**	-0.785**	-0.758**	-0.748**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
civil society_gap		-0.156**			
		(0.01)			
religion_gap			-0.031**		
			(0.01)		
expression_gap				-0.083**	
				(0.01)	
move_gap					-0.043**
					(0.00)
age	-0.037**	-0.037**	-0.037**	-0.037**	-0.037**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
age2	0.000**	0.000**	0.000**	0.000**	0.000**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
female	0.043**	0.045**	0.044**	0.044**	0.044**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
divorced	-0.342**	-0.364**	-0.359**	-0.361**	-0.361**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
single	-0.233**	-0.226**	-0.224**	-0.226**	-0.227**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
widowed	-0.364**	-0.365**	-0.365**	-0.364**	-0.364**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
children	-0.013	-0.006	-0.005	-0.005	-0.004
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
number of observations			91057		

Tab. 11. The influence of empowerment rights gap on the level of happiness gap between post-socialist and non-post-socialist countries (ordered probit model)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
transition	-0.309**	-0.331**	-0.324**	-0.336**	-0.343**	-0.012*	-0.004*	-0.002*	-0.008*	-0.063*
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
civil society_gap		-0.102**					0.035			
		(0.01)					(0.02)			
religion_gap			-0.069**					-0.408**		
			(0.01)					(0.02)		
expression_gap				-0.088**					0.027	
				(0.01)					(0.02)	
move_gap					-0.123**					-0.158**
					(0.01)					(0.02)
age	-0.036**	-0.036**	-0.037**	-0.036**	-0.036**	-0.033**	-0.033**	-0.032**	-0.033**	-0.032**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
age2	0.000**	0.000**	0.000**	0.000**	0.000**	0.000**	0.000**	0.000**	0.000**	0.000**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
emale	0.056**	0.057**	0.057**	0.056**	0.057**	0.046**	0.046**	0.040**	0.046**	0.050**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
divorced	-0.280**	-0.284**	-0.282**	-0.282**	-0.283**	-0.294**	-0.294**	-0.304**	-0.294**	-0.290**
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
ingle	-0.164**	-0.166**	-0.165**	-0.166**	-0.169**	-0.180**	-0.180**	-0.196**	-0.179**	-0.190**
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
widowed	-0.225**	-0.225**	-0.224**	-0.224**	-0.224**	-0.186**	-0.186**	-0.188**	-0.186**	-0.185**
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
children	0.017	0.011	0.014	0.012	0.008	0.040*	0.042*	0.034	0.043*	0.019
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
good state of health	-0.405**	-0.398**	-0.402**	-0.401**	-0.399**	-0.383**	-0.384**	-0.381**	-0.384**	-0.383**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
fair state of health	-0.793**	-0.784**	-0.790**	-0.788**	-0.779**	-0.766**	-0.768**	-0.757**	-0.767**	-0.760**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
poor state of health	-1.259**	-1.250**	-1.258**	-1.253**	-1.245**	-1.229**	-1.232**	-1.209**	-1.231**	-1.224**
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
very poor state of health	-1.658**	-1.654**	-1.655**	-1.655**	-1.639**	-1.563**	-1.565**	-1.541**	-1.566**	-1.560**
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)
religiosity	0.168**	0.172**	0.172**	0.173**	0.170**	0.169**	0.169**	0.166**	0.169**	0.168**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)

Tab. 12. The influence of empowerment rights' gap on the level of happiness gap between post-socialist and non-post-socialist countries (ordered probit model) - with additional individual, macroeconomic and institutional characteristics added

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
tertiary education	0.100**	0.090**	0.098**	0.093**	0.091**	0.084**	0.086**	0.076**	0.085**	0.087**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
secondary education	0.063**	0.058**	0.061**	0.059**	0.065**	0.051**	0.050**	0.048*	0.050**	0.072**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
income	0.111**	0.117**	0.113**	0.117**	0.115**	0.129**	0.129**	0.120**	0.128**	0.129**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
income2	-0.005**	-0.005**	-0.005**	-0.005**	-0.005**	-0.006**	-0.006**	-0.005**	-0.006**	-0.006**
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Ingdppc	0.333**	0.289**	0.321**	0.295**	0.235**	0.196**	0.197**	0.130**	0.198**	0.175**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Inflation	-0.000**	-0.000**	-0.000**	-0.000**	-0.000**	-0.011**	-0.010**	-0.013**	-0.010**	-0.012*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
unemployment	-0.005**	-0.005**	-0.005**	-0.005**	-0.007**	-0.012**	-0.012**	-0.024**	-0.012**	-0.012*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
GDP growth	0.011**	0.014**	0.013**	0.014**	0.016**	0.004	0.004	-0.004	0.004	0.003
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
leftist ideology						-0.339**	-0.332**	-0.238**	-0.336**	-0.334*
of government						(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
right ideology						-0.359**	-0.351**	-0.296**	-0.352**	-0.398*
of government						(0.04)	(0.0.4)	(0.04)	(0.04)	(0.04)
						(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
democracy						-0.066**	-0.057**	-0.104**	-0.061**	-0.088*
						(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
regulatory quality						-0.084	-0.090*	-0.145**	-0.083	-0.123*
						(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
government effectivenes	S					0.221**	0.238**	0.263**	0.225**	0.171**
						(0.03)	(0.04)	(0.03)	(0.04)	(0.04)
								with time ef	tects	

Tab. 12. The influence of empowerment rights' gap on the level of happiness gap between post-socialist and non-post-socialist countries (ordered probit model) – with additional individual, macroeconomic and institutional characteristics added (continue)

	(1)	(2)	(3)	(4)
transition	0.105	-0.110	0.041	-1.947**
	(0.04)	(0.05)	(0.04)	(0.11)
civil society_gap	-0.063*			
	(0.02)			
civil society_gap#transition	-1.371**			
	(0.13)			
eligion_gap		0.042		
		(0.05)		
eligion_gap#transition		0.728**		
		(0.06)		
expression_gap			0.038	
			(0.03)	
expression_gap#transition			2.001**	
			(0.16)	
move_gap				-0.011
				(0.02)
move_gap#transition				-1.030**
				(0.05)
age	-0.033**	-0.032**	-0.033**	-0.031**
5	(0.00)	(0.00)	(0.00)	(0.00)
age2	0.000**	0.000**	0.000**	0.000**
5	(0.00)	(0.00)	(0.00)	(0.00)
female	0.046**	0.038**	0.043**	0.046**
	(0.01)	(0.01)	(0.01)	(0.01)
divorced	-0.289**	-0.315**	-0.319**	-0.291**
	(0.03)	(0.03)	(0.03)	(0.03)
single	-0.204**	-0.208**	-0.164**	-0.229**
	(0.02)	(0.02)	(0.02)	(0.02)
widowed	-0.180**	-0.186**	-0.195**	-0.180**
	(0.03)	(0.03)	(0.03)	(0.03)
children	0.027	0.025	0.090**	-0.015
	(0.02)	(0.02)	(0.02)	(0.02)
good state of health	-0.383**	-0.371**	-0.384**	-0.391**
	(0.02)	(0.02)	(0.02)	(0.02)
air state of health	-0.763**	-0.737**	-0.755**	-0.774**
	(0.02)	(0.02)	(0.02)	(0.02)
poor state of health	-1.220**	-1.176**	-1.218**	-1.226**
oon state of nearth	(0.03)	(0.03)	(0.03)	(0.03)

Tab. 13. The influence of empowerment rights gap on the level of happiness gap between post-socialist and non-post-socialist countries (ordered probit model) - final result

Tab. 13. The influence of empowerment rights gap on the level of happiness gap between post-socialist and non-post-socialist countries (ordered probit model) - final result (continue)

	(1)	(2)	(3)	(4)			
very poor state of health	-1.512**	-1.462**	-1.512**	-1.502**			
	(0.09)	(0.09)	(0.09)	(0.09)			
religiosity	0.169**	0.164**	0.137**	0.175**			
	(0.01)	(0.01)	(0.01)	(0.01)			
tertiary education	0.109**	0.055*	0.053*	0.083**			
	(0.02)	(0.02)	(0.02)	(0.02)			
secondary education	0.073**	0.038*	0.014	0.071**			
	(0.02)	(0.02)	(0.02)	(0.02)			
ncome	0.117**	0.118**	0.117**	0.119**			
	(0.01)	(0.01)	(0.01)	(0.01)			
ncome2	-0.005**	-0.005**	-0.005**	-0.005**			
	(0.00)	(0.00)	(0.00)	(0.00)			
ngdppc	-0.049	-0.156**	0.433**	-0.419**			
	(0.04)	(0.04)	(0.04)	(0.04)			
nflation	-0.008**	-0.010**	0.000	-0.012**			
	(0.00)	(0.00)	(0.00)	(0.00)			
unemployment	-0.013**	-0.028**	0.008**	0.002			
	(0.00)	(0.00)	(0.00)	(0.00)			
GDP growth	0.016**	-0.000	0.002	0.017**			
	(0.00)	(0.00)	(0.00)	(0.00)			
eftist ideology of government	-0.285**	-0.048	-0.224**	-0.208**			
	(0.04)	(0.04)	(0.04)	(0.03)			
ight ideology of government	-0.349**	-0.277**	-0.348**	-0.477**			
	(0.04)	(0.04)	(0.04)	(0.04)			
democracy	0.014	0.021	0.073**	0.182**			
	(0.02)	(0.02)	(0.02)	(0.02)			
egulatory quality	-0.232**	-0.003	0.251**	-0.319**			
	(0.06)	(0.07)	(0.06)	(0.06)			
government effectiveness	0.309**	0.322**	0.167**	0.336**			
	(0.05)	(0.05)	(0.05)	(0.05)			
	with time effects						
number of observations			25095				

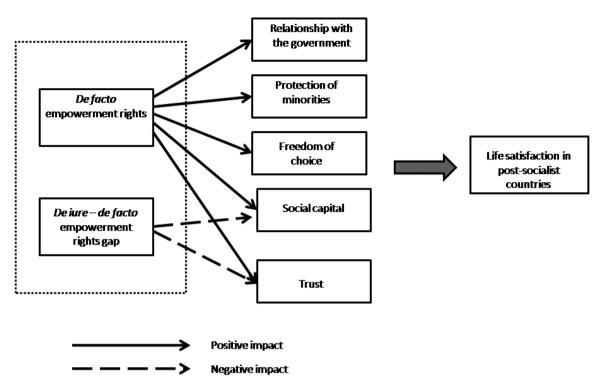


Fig. 3. The impact of the empowerment rights on the level of life satisfaction in post-socialist countries.

6 Conclusions

The focus of the paper is on examining the role of de jure de facto empowerment rights' gap in explaining the happiness gap between post-socialist and non-post-socialist economies. The results of the ordered probit model indicate that accounting for *de jure – de facto* empowerment rights' gap for different categories of empowerment rights contributes to diminishment of the size of the gap. What is more, we confirm that in general, higher levels of de jure - de facto empowerment rights' gap contribute to lower levels of life-satisfaction of citizens. In addition, on the basis of the outcomes of preliminary regressions, we can conclude that the rising de facto empowerment rights protection contributes to the diminishment of the happiness gap. What is more, the short-term effect of the increase of the respect for empowerment right for life-satisfaction is mixed and depends on the type of right. Rights that benefit the majority of the society (such as freedom of association or freedom of foreign movement) increase subjective well-being of the average citizen. Rights benefiting mainly minorities decrease SWB of the average citizen, as the costs of their implementation outweigh the expected benefits he or she will gain. The results of the analysis of the empowerment rights *de jure – de facto* gap suggest the existence of the significant and negative impact on the happiness gap. The model results indicate that civil society gap, freedom of religion gap and freedom of expression gap explain the happiness gap between post-socialist countries and the comparison sample of developed OECD countries.

The possible mechanisms standing behind the aforementioned results include the influence of the empowerment rights on shaping citizens' relationship with the government, assuring protection of minorities and freedom of choice, building social capital and trust. To conclude, the governments of post-socialist countries willing to increase the welfare of citizens should pay attention to the adherence to formal standards of empowerment rights' protection and to assure the highest possible level of their *de facto* protection.

References

- [1] Bentham, Jeremy. 1781. *An introduction to the principles of morals and legislation*. Kitchener, Ontario: Batoche.
- [2] Ashcraft, Richard. 1971. "An Introduction to the Principles of Morals and Legislation. By Jeremy Bentham. Eds. J.H. Bums

and H.L.A. Hart. (London: The Athlone Press, 1970. Pp. 343. \$19.50.)." American Political Science Review 65 (3). Cambridge University Press: 784–785. doi:10.2307/1955526.

- [3] Association, World Values Survey. 2015. "World Values Survey 1981–2014 Longitudinal Aggregate v. 20150418." Madrid Spain: JDSystems.
- [4] Bartolini, Stefano, Małgorzata Mikucka, and Francesco Sarracino. 2017. "Money, Trust and Happiness in Transition Countries: Evidence from Time Series." *Social Indicators Research* 130 (1). Springer Netherlands: 87–106. doi:10.1007/ s11205-015-1130-3.
- [5] Bjørnskov, C, A Dreher, JAV Fischer European Journal of Political, and undefined 2010. 2019. "Formal Institutions and Subjective Well-Being: Revisiting the Cross-Country Evidence." *Elsevier*. Accessed July 12. https://www. sciencedirect.com/science/article/pii/S0176268010000078.
- [6] Bjørnskov, Christian, Axel Dreher, and Justina A V Fischer.
 2010. "Formal Institutions and Subjective Well-Being: Revisiting the Cross-Country Evidence." *European Journal of Political Economy* 26 (4). Elsevier: 419–430.
- Blume, Lorenz, and Stefan Voigt. 2007. "The Economic Effects of Human Rights." *Kyklos* 60 (4). John Wiley & Sons, Ltd (10.1111): 509–538. doi:10.1111/j.1467-6435.2007.00383.x.
- [8] Chilton, Adam S., and Mila Versteeg. 2016. "Do Constitutional Rights Make a Difference?" American Journal of Political Science 60 (3). John Wiley & Sons, Ltd (10.1111): 575–589. doi:10.1111/ajps.12239.
- [9] Coppedge, Michael, John Gerring, Staffan I Lindberg, Svend-Erik Skaaning, Jan Teorell, with David Altman, and F Miri. 2016. "V-Dem Codebook v6. Varieties of Democracy (VDem) Project." Gothenburg: VDem-Institute.
- [10] Crabtree, Charles, and Michael J. Nelson. 2017. "New Evidence for a Positive Relationship between De Facto Judicial Independence and State Respect for Empowerment Rights." *International Studies Quarterly* 61 (1). Narnia: 210–224. doi:10.1093/isq/sqw056.
- [11] Delhey, Jan. 2010. "From Materialist to Post-Materialist Happiness? National Affluence and Determinants of Life Satisfaction in Cross-National Perspective." Social Indicators Research 97 (1). Springer Netherlands: 65–84. doi:10.1007/ s11205-009-9558-y.
- [12] Diener, Ed. 2000. "Subjective Well-Being: The Science of Happiness and a Proposal for a National Index." American Psychologist 55 (1): 34–43. doi:10.1037/0003-066X.55.1.34.
- [13] Djankov, Simeon, Elena Nikolova, and Jan Zilinsky. 2016. "The Happiness Gap in Eastern Europe." *Journal of Comparative Economics* 44 (1). Elsevier: 108–124.
- [14] Dolan, Paul, Tessa Peasgood, and Mathew White. 2008. "Do We Really Know What Makes Us Happy? A Review of the Economic Literature on the Factors Associated with Subjective Well-Being." *Journal of Economic Psychology* 29 (1). Elsevier: 94–122.
- [15] Easterlin, Richard A. 2009. "Lost in Transition: Life Satisfaction on the Road to Capitalism." *Journal of Economic Behavior & Organization* 71 (2). Elsevier: 130–145.
- [16] Easterlin, Richard A, Laura Angelescu McVey, Malgorzata Switek, Onnicha Sawangfa, and Jacqueline Smith Zweig. 2010. "The Happiness-Income Paradox Revisited."

Proceedings of the National Academy of Sciences 107 (52). National Acad Sciences: 22463–22468.

- [17] Elkins, Zachary, Tom Ginsburg, and James Melton. 2014.
 "Characteristics of National Constitutions, Version 2.0.
 Comparative Constitutions Project. Last Modified: April 18, 2014."
- [18] Fidrmuc, Jan, and Klarita Gërxhani. 2008. "Mind the Gap! Social Capital, East and West." *Journal of Comparative Economics* 36 (2). Elsevier: 264–286.
- [19] Fischer, Justina A V. 2009. "Subjective Well-Being as Welfare Measure: Concepts and Methodology."
- [20] Frey, Bruno S, and Alois Stutzer. 2000. "Happiness, Economy and Institutions." *The Economic Journal* 110 (466). Wiley Online Library: 918–938.
- [21] Frey, Bruno S, and Alois Stutzer. 2010. Happiness and Economics: How the Economy and Institutions Affect Human Well-Being. Princeton University Press.
- [22] Gropper, Daniel M, Robert A Lawson, and Jere T Thorne Jr. 2011. "Economic Freedom and Happiness." *Cato J.* 31. HeinOnline: 237.
- [23] Grosfeld, Irena, and Claudia Senik. 2010. "The Emerging Aversion to Inequality: Evidence from Subjective Data 1." *Economics of Transition* 18 (1). Wiley Online Library: 1-26.
- [24] Guillerm, Marine. 2017. "Pseudo-Panel Methods and an Example of Application to Household Wealth Data." Insee.
- [25] Guriev, Sergei, and Ekaterina Zhuravskaya. 2009. "(Un) Happiness in Transition." *Journal of Economic Perspectives* 23 (2): 143–168.
- [26] Helliwell, John F, Richard Layard, and Jeffrey Sachs. 2012. "World Happiness Report [2012]."
- [27] Inglehart, Ronald, Roberto Foa, Christopher Peterson, and Christian Welzel. 2008. "Development, Freedom, and Rising Happiness: A Global Perspective (1981–2007)." *Perspectives* on Psychological Science 3 (4). SAGE Publications Sage CA: Los Angeles, CA: 264–285.
- [28] Jackman, Simon. 2009. Bayesian Analysis for the Social Sciences. Vol. 846. John Wiley & Sons.
- [29] Kaasa, Anneli, and Eve Parts. 2008. "Individual-Level Determinants of Social Capital in Europe: Differences between Country Groups." Acta Sociologica 51 (2). Sage Publications Sage UK: London, England: 145–168.
- [30] Matkowski, Zbigniew. 2004. "Postsocialist Countries: Macroeconomic Performance, Growth Prospects, and Social Welfare." *Eastern European Economics* 42 (3). Taylor & Francis: 44–80.
- [31] Melton, James. 2013. Do Constitutional Rights Matter? The Relationship between de Jure and de Facto Human Rights Protection. Working Paper.
- [32] Mukand, Sharun, and Dani Rodrik. 2015. *The Political Economy of Liberal Democracy*. National Bureau of Economic Research.
- [33] Nikolova, Milena. 2016. "Minding the Happiness Gap: Political Institutions and Perceived Quality of Life in Transition." *European Journal of Political Economy* 45. Elsevier: 129–148.
- [34] Rouder, Jeffrey N, Richard D Morey, Josine Verhagen, April R Swagman, and Eric-Jan Wagenmakers. 2017. "Bayesian Analysis of Factorial Designs." *Psychological Methods* 22 (2). American Psychological Association: 304.

- [35] Sen, A. 2001. "Development as Freedom". Oxford Paperbacks Clarendon Press: Oxford, UK.
- [36] Sen, Amartya Kumar. 1987. Cambridge and New Delhi: Oxford University Press, Oxford Indian Paperbacks.
- [37] Shields, Michael A, and Stephen Wheatley Price. 2005.
 "Exploring the Economic and Social Determinants of Psychological Well-being and Perceived Social Support in England." Journal of the Royal Statistical Society: Series A (Statistics in Society) 168 (3). Wiley Online Library: 513–537.
- [38] Sissenich, Beate. 2010. "Weak States, Weak Societies: Europe's East-West Gap." Acta Politica 45 (1–2). Springer: 11–40.
- [39] Tiebout, Charles M. 1956. "A Pure Theory of Local Expenditures." *Journal of Political Economy* 64 (5). The University Press of Chicago: 416–424.
- [40] Van Praag, Bernard M S, and Ada Ferrer-i-Carbonell. 2011. "Happiness Economics: A New Road to Measuring and Comparing Happiness." *Foundations and Trends® in Microeconomics* 6 (1). Now Publishers, Inc.: 1–97.
- [41] Verme, Paolo. 2009. "Happiness, Freedom and Control." *Journal of Economic Behavior & Organization* 71 (2). Elsevier: 146–161.

- [42] Waterman, Alan S. 1993. "Two Conceptions of Happiness: Contrasts of Personal Expressiveness (Eudaimonia) and Hedonic Enjoyment." *Journal of Personality and Social Psychology* 64 (4). American Psychological Association: 678.
- [43] Welzel, Christian, and Ronald Inglehart. 2010. "Agency, Values, and Well-Being: A Human Development Model." Social Indicators Research 97 (1). Springer: 43–63.
- [44] Winkelmann, Rainer. 2009. "Unemployment, Social Capital, and Subjective Well-Being." *Journal of Happiness Studies* 10 (4). Springer: 421–430.
- [45] Wolfers, Justin. 2003. "Is Business Cycle Volatility Costly? Evidence from Surveys of Subjective Well-being." International Finance 6 (1). Wiley Online Library: 1–26.
- [46] Zimmermann, Anke C, and Richard A Easterlin. 2006. "Happily Ever after? Cohabitation, Marriage, Divorce, and Happiness in Germany." *Population and Development Review* 32 (3). Wiley Online Library: 511–528.