DOI: 10.19041/APSTRACT/2016/2-3/13

TRANSITION ECONOMY AND HAPPINESS THE CZECH REPUBLIC COMPARED WITH THE NETHERLANDS IN THE 1990- 2004 PERIOD

JAC van Ophem, V. Kohout and W.J.M. Heijman.

Wageningen University The Netherlands. Email: Johan.vanOphem@wur.nl

Abstract: The paper deals with the subject Transition economy and happiness – a case study of the Czech Republic in a comparison with The Netherlands in the 1990-2004 period. The paper addresses the following two questions: 1. How has the level of happiness changed since 1990 in the Czech Republic and in The Netherlands? 2. Are there differences with respect to variables that explain differences in happiness between both countries. It appears that, at the beginning of the 1990s of the last century, the Czechs were less happy than the Dutch and, that, people in the Czech Republic were less happy in 1999 than they were in 2004. Furthermore, Happiness in the Czech Republic is approaching the level of happiness in The Netherlands. In both countries happiness is positively affected by subjective health status, perceived freedom of choice over life, being married or living together and satisfaction with one's financial situation and having trust in social institutions. But there are differences with respect to the impact of age, education and religion.

Keywords: happiness, transition economy, CZ, NL

1. Introduction

Nowadays, The Netherlands(NL) and The Czech Republic (CZ)are part of the European Union. The Netherlands was a founder of the EU in 1958 ,whereas the Czech Republic joined in 2004. After the second world war Czechoslovakia became part of the communist world dominated by the Russian communist party with a centrally planned economy. This lasted until 1989. Thereafter t CZ became a transition economy, whereas the accession to the EU can as the completion of the transition. Since, the end of the 1950s, The Netherlands is a welfare state somewhere between a continental and a Nordic one with a stable liberal democracy.

Happiness and economy are related. In this paper we examine the idea that a transition economy will bring more happiness to the people in CZ. On the other hand there factors that are universally affecting the happiness of people such as individual's social life (family relationships, friendship, community), economic circumstances of the individual, individual's health, having work, personal values and freedom, see section two.

This paper deals with two research questions

How has the level of happiness changed in the Czech Republic and in The Netherlands in the 1990-2004 period?

Are there differences with respect to variables that explain differences in happiness between both countries

Because CZ became part of the EU at a later stage after a period of transition, CZ can be seen as treatment group and

NL as a control group. Both countries are smaller in terms of population whereas NL is richer. The structure of the paper is as follows; Section two contains the theoretical orientation. Data and method are discussed in Section three. Section four contains the results and the paper ends with the conclusion and discussion.

2. Theoretical orientation

Happiness is considered to be the ultimate goal of life, or at least desirable (Veenhoven, 2004; Frey and Stutzer, 2002). Happiness can be defined as the degree to which people positively evaluate their overall life situation (Veenhoven, 1997). The most commonly used concept of happiness in economic surveys is happiness (Easterlin, 2001a and b; Frey and Stutzer, 2002).

Previous researches in happiness discovered a number of aspects strongly correlated to happiness. The following six dimensions are to be discerned: (1) family relationships, (2) socio-economic situation, e.g. financial issues and work, (3) community, (4) individual characteristics, (5) personal values and (6) personal freedom, see e.g. Layard (2005)

(1) To start up an own family is one of the ultimate goals of human's life. It all starts with love and everything what comes out of love has a great (either positive or negative) impact on people's lives. For this reason, survey participants are grouped according to following characteristics: those who are married or cohabitating (living with wife/husband or partner), divorced or widowed, and people who have had a child or children. The last variable determining the family relationships is the number of people living in the household.

- (2) The socio-economic dimension is further divided into the financial issues and work. The financial issues deal with household's income, how much money people though they earned and how satisfied they were with their income. The other sub-dimensions indicate whether the participants were employed or not and if so how much their work fulfilled them and how satisfied they were when dealing with various duties at work.
- (3) The community dimension deals mainly with the trust in the society in general. The level of social trust is further narrowed down in two aspects: trust other people and trust in various social institutions (e.g. countries parliament, police, political parties, justice system and similar).
- (4) Individual characteristics cluster people into various groups according to gender, age, attained level of education, and also to examine the impact of subjective health status and education on happiness.
- (5) Personal values determine few aspects of respondents' attitudes toward life (role of religion in people's life, materialistic or post-materialistic values, importance of financial means and material ownership) society, and further personal preconditions determine other characteristics such as gender, age, subjective health status, and
- (6) The last aspect of people's life is the level of freedom they perceive. This might have a higher importance especially in the context, where people live or lived under various kinds of oppression.

The literature doesn't indicate a clear relationship of happiness and age. Gerdtham and Johannesson (2001) say the relationship between age and happiness is U-shaped. Although, elderly are most of the time worse off (poorer health, lower income, etc.) they are more satisfied than younger. This may be a result of a longitudinal perspective as the elderly have passed a longer life path and they may be satisfied with their achievements. Another explanation can be religion. There are more religious people among the elderly and it has been proved believers are in general happier than atheists. However, the relationship of religion and happiness is not still clear (Cohen, 2002). For this reasons, positive and negative effects of age on happiness can be expected.

Similar unclear relationship has education with happiness. Lower educated people have in general lower income and score lower on the level of happiness. It is believed among people that higher education opens the door to higher income. On the other hand, the level of income of higher educated people doesn't have to match always their imagines and the consequent disappointment can damage their happiness.

Regarding the family relationships, marriage and cohabitations (living with husband/wife or a partner as an equivalent of the ESS datasets) and having children have a strong positive impact on happiness according to Layard (2005) while separation and divorce harm people's happiness (Helliwell, 2003). Number of people living in the household as regular members of the household is expected to have a positive effect as the more people in the household, the more emotionally rich lives the household's members have assuming that the cohabitation is based on positive utility either in the form of emotions such as friendships and love or in the form of more

materialistic functioning. (Van Ophem and Heijman, 2008)

Subjective health status shows a positive correlation with happiness, see e.g. Cornelisse et al. (2007). Money is one of the strongest determinants influencing people's happiness (Easterlin, 2001b). People with lower income think they would be better off if they had more money. For this reason, the expected effect of financial situation of respondents is positive, although the literature says there is a certain upper limit when the level of happiness doesn't rise anymore (Cummins, 2000). There is a positive relationship between income and happiness in the national cross-sectional data, but this same relationship is not evident in the life cycle analysis (Heijman & VanOphem, 2010).

Regarding work, unemployment damages people's self-respect and decreases their income; therefore it is perceived as a big disaster (Layard, 2005). On the other hand, those who are employed and on the top of it even satisfied with their current job, they generally score higher on happiness.

The level of social trust determines how safe people feel in the society. When they feel secure and safe happiness is expected to be higher than in the community where people face various forms of crimes, bribery and injustice.

Personal freedom is very important for people too. Especially for those who experienced various repressions of the communist regime, the level of personal freedom is expected to have a positive effect on happiness (Layard, 2005).

Overview 1 gives the list of variables with their expected effect on happiness. In general we expect a convergence with respect to happiness and its determinants across the two countries. The impact of personal freedom and community is different. The Dutch are used to personal freedom and see it as something normal and are more positive on community values, whereas the Czech see personal freedom is not taken for granted and suspicion prevails with respect to community: 40 years of communism led to a decline of social trust. We will test the following hypotheses:

At the beginning of the 1990s of the last century, the Czechs were less happy than the Dutch

People in the Czech Republic were less happy in 1999 than they were in 2004

Happiness in the Czech Republic is approaching the level of happiness in The Netherlands.

The impact of the variables age, family relations, financial situation, health, work and education and personal values on happiness is the same in the Czech Republic and the Netherlands . However, there are difference with respect to the impact of community, and personal freedom.

3. Data and method

Two kinds of datasets are used for the empirical part of the paper: the World Value Survey dataset (WVS) available on http://www.worldvaluessurvey.org/, and the European Social Survey datasets (ESS)available on http://www.europeansocialsurvey.org/.

The WVS dataset includes data for many countries starting in 1981. Unlike the ESS, the WVS data are not collected for

Overview 1: List of variables with their expected effects on happiness

Dimensions	Variables	Index	Dataset	Expected effect
Happiness	Happiness:4 scale answer	Ya1	WVS	
	Happiness: 11 scale answer	Yb1	ESS	
Life	Life satisfaction: 10 scale answer	Ya2	WVS	
satisfaction	Life satisfaction: 11 scale answer	Yb2	ESS	
Gender	Sex	X1	WVS,ESS	+/-
	Aged 15-24	X2	WVS,ESS	+/-
	Aged 25-34	X3	WVS,ESS	+/-
Age	Aged 35-44	X4	WVS,ESS	+/-
₹	Aged 45-54	Reference group	WVS,ESS	
	Aged 55-64	X5	WVS,ESS	+/-
	Aged 65 and more	X6	WVS,ESS	+/-
Health	Subjective health status	X7	WVS,ESS	+
S	Married or cohabitating	Xa1	WVS	+
<u>ş</u>	Living with husband/wife or partner	Xb1	ESS	+
Family relations	Divorced	X8	WVS,ESS	-
>	Widowed	X9	WVS,ESS	-
Ē	Have ever had kid(s)	X10	WVS,ESS	+
Fa	Number of people living in the household	Xb2	ESS	+
	Income scale	Xa2	WVS	+
on ää	Household net total income €	Xb3	ESS	+
Financial situation	Satisfaction with the financial situation of the household	Xa3	WVS	+
ш	Feelings about household's income	Xb4	ESS	+
Work	Unemployed	X11	WVS,ESS	-
VVOIK	Job satisfaction	Xa4	WVS	+
	Trust other people in the country: yes/no	X12	WVS	+
Com- munity	Trust other people in the country: scale one to ten	X	ESS	+
S <u>E</u>	Confidence in social institutions	Xa5	WVS	+
	Trust in social institutions	Xb6	ESS	+
Personal freedom	Freedom of choice over life	Xa6	WVS	+
	Religious person	Xa7	WVS	+
	How religious person are you	Xb8	ESS	+
Personal	Post materialist index	Xa8	WVS	+/-
values	Important to be rich, have money and expensive things	Xb9 Xb7	ESS	+/-
	Important to make own decisions and to be free		ESS	+
	Lower educated	X13	WVS,ESS	+/-
Education	Middle educated	Reference group	WVS,ESS	
	Higher educated	X14	WVS,ESS	+/-

⁺ Positive effect, - negative effect, +/- either positive or negative effect expected

every country in every wave or year. WVS data for the Czech Republic and The Netherlands are available for the years 1990 and 1999. ESS data are available for both countries for the years 2002 and 2004. The World Value Survey is a project conducted mainly to investigate the trends and changes in personal values, believes and the mood of the people. The data are collected in face-to-face interviews. Questions relate to happiness: perceptions of life, environment, work, family, politics and society, religion and morale, national identity, and socio-demographics. However, troublesome was the coding of the data and the unsystematic approach of the data collection, when some data on relevant issues were not collected in some years (e.g. education not investigated in 1990, subjective health

status, satisfaction with the financial situation of household in 1999).

The European Social Survey is a social survey aiming at the explanation and charting the attitudes, believes and behavioural patterns of the European population. The organization of the ESS has partly overtaken the role of the WVS. Every two years data are collected. The questionnaires of the ESS consist of two parts: a core and rotating module. The core module repeats each round and covers twelve broad topics such as trust in institutions, national, ethnic and religious identity; political engagement; well-being, health and social security; demographic composition; moral and social values; education and occupation, social capital; financial circumstances; social

Overview 2: Questions asked to the respondents of the WVS and ESS

- All things considered, how satisfied are you with your life as a whole these days?" (WVS. ESS)
- 2. Taking all things together, how happy would you say you are? (WVS, ESS)
- 3. What is your gender? (WVS, ESS)
- 4. What age group do you belong to? (WVS, ESS)
- 5. All in all, how would you describe your state of health these days? (WVS, ESS)
- 6. Are you living with your spouse or partner in one household? (WVS, ESS)
- 7. Are you divorced? (WVS, ESS)
- 8. Are you widowed? (WVS, ESS)
- 9. Do you have a child (children)? (WVS, ESS)
- 10. Can you indicate the number of people living in your household as a regular member? (ESS)
- 11. What level of education have you attained? (WVS, ESS)
- 12. Do you have a paid job currently? (WVS, ESS)
- 13. On the scale one to ten, where would you place your income? (WVS)
- 14. If you add up all sources during one month, in what interval would you put the total sum? (ESS)
- 15. How satisfied are you with the financial situation of your household? If 1 means you're completely dissatisfied and ten means you are completely satisfied, where would you put your satisfaction with the financial situation of your household? (WVS)
- 16. Which of the descriptions comes closest to how you feel about your household's income nowadays? (ESS)
- 17. Overall, how satisfied or dissatisfied are you with your job? (WVS)
- 18. Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people? (WVS, ESS)
- 19. How much confidence would you say, you have in following institutions: Press, labour unions, police, parliament, civil cervices, and justice system? (WVS), legal system, police, political parties(politicians), parliament (ESS)
- 20. Would you say you are a religious person? (WVS)
- 21. How religious would you say you are? (ESS)
- 22. Some people feel they have completely free choice over their lives, while other feel that what they do has no effect on what happens to them. Please, use this scale to indicate how much freedom of choice and control you feel you have over the way your life turns out. (WVS)
- 23. How much does the following statement express your opinions? It is important to make own decisions and to be free (ESS)
- 24. How much does the following statement express your opinions? It is important to be rich, have money and expensive things (ESS)
- 25. Would you say you have rather materialist, post-materialist or mixed opinions? (WVS)

exclusion and household circumstances. The rotating module changes from round to round.

Overview 2 presents the questions in both data sets that are used to operationalise the variables mentioned in Overview 1.

Table 1 gives an overview of the characteristics of the WVS and ESS sample. Both WVS and ESS survey data are characterised by more female respondents. The number of respondents is higher in the Czech Republic in both data sets.

To study the effects of the above listed variables on the level of happiness an OLS regression analysis is conducted when self-reported happiness will be taken as the dependent variables

4. Results

Tables 2 and 3 give information on the Czechs and the Dutch on happiness in the 1990-2004 period.

Happiness in the Czech Republic is approaching the level of happiness in The Netherlands over the observed period 1990 and 2004.

Comparing the average scores on happiness and life satisfaction between the countries in the four years (1990, 1999, 2002, and 2004), The Netherlands comes out as the winner. The Dutch population was happier and more satisfied than the Czech population over the whole period of the interest. The differences in the level of happiness between the countries were statistically significant in every year the comparison was conducted. As can be seen in both tables, the perceived level of happiness in the Czech Republic was lower than in The Netherlands. However, the Czech population got happier as the last decade of the twentieth century was passing by. T-tests confirmed the average scores on happiness in these two years were statistically different in the Czech Republic (Happiness: $M_{1990} = 2.75$, $SE_{1990} = 0.02$ and $M_{1999} = 2.93$, $SE_{1999} = 0.013$, t=-7.538 with p val=0.000;). Whereas in The Netherlands, happiness remained more or less on the same level

(Happiness: M_{1990} =3.38, SE_{1990} =0.021 and M_{1999} =3.40, SE_{1999} =0.019, t=-0.749 with p val=0.454;. Comparing the situation in the beginning of the new century (years 2002 and 2004) the level of happiness-being did not change significantly in the Czech Republic (Happiness: M_{2002} =6.75, SE_{2002} =0.057 and M_{2002} =6.81, SE_{2002} =0.037, t=-0.896 with p val=0.370)).

In The Netherlands, the situation had an unexpected change. Surprisingly, there was a slight but statistically significant decrease of happiness (Happiness: M_{2002} =7.79, SE_{2002} =0.029 and M_{2004} =7.68, SE_{2004} =0.033, t=-2.508 with p val=0.012)

With respect to the hypotheses 1 to 3 we may conclude

Table 1: Characteristics of WVS and ESS samples

Year	1990				1999				
Dataset		W۱	/S			WVS			
Nationality	Cz	ech	Dυ	itch	Cz	ech	Dutch		
Measure	Count	%	Count	%	Count	%	Count	%	
Males	444	48.2	441	43.4	913	47.9	491	49	
Females	480	51.8	576	56.6	995	52.1	510	50.8	
Total	924	100	1017	100	1908	100	1003	99.8*	
Year		2002				2004			
Dataset	ESS					E:	SS		
Nationality	Cz	ech	Dutch		Czech Dutch		utch		
Measure	Count	%	Count	%	Count	%	Count	%	
Males	644	47.4	1042	44.1	1414	46.7	786	41.6	
Females	707	52	1322	55.9	1612	53.3	1098	58.4	
Total	1360	99.4*	2364	100	3026	100	1884	100	

^{*}In some cases, the respondents' gender was not indicated

the following: The first hypothesis: In the beginning of the nineties of the last century, the Czechs were less happy than the Dutch is confirmed. In the beginning of the nineties of the last century, the Czechs were less happy than the Dutch. The second hypothesis The second hypothesis: Shortly after the Velvet Revolution (1990) people in the Czech Republic were less happy than they were in 2004 is confirmed too. The average score on happiness has been increasing since 1990. However the change between years 2002 and 2004 was not proved to be statistically significant. The third hypothesis: Happiness in the Czech Republic is approaching the level of happiness in The Netherlands can be confirmed.

Table 2: The Czechs on happiness (standard deviation in parentheses)

Happiness	Score	1990	1999	2002	2004
Taking all things together would you say you	1 to 4	2.76 (.60)	2.96 (.57)		
are: 4. very happy, 3. quite happy, 2. not very happy, 1. not at all happy	0 to 10	6.29	6.9		
Generally speaking, how happy do you feel? 0. extremely unhappy, 10. extremely happy	0 to 10			6.75 (.2.08)	6.81 (2.00)

Table 3 The Dutch population on happiness (standard error in parentheses)

Happiness	Scale	1990	1999	2002	2004
Taking all things together, would you say	1 to 4	3.38 (.60)	3.41 (.61)		
you are? 1. not at all happy, 4. very happy	0 to 10	7.95	7.98		
Generally speaking, how happy do you feel? 0. extremely unhappy, 10. extremely happy	0 to 10			7.79 (.1.42)	7.68 (1.43)

Tables 4 and 5 give an overview of the regression analyses. This analysis showed that very similar determinants affect happiness (health, satisfaction, with financial situation, marriage, divorce, widowhood, the level of social trust, etc.). Health is one of the most important issues in people's life, regardless the

country of origin, especially in the recent past. The relative importance of other variables varied between the
 countries especially in the 1990's. For instance, freedom of choice over life
 was highly important for happiness of the Czechs, The same trend could
 be observed for satisfaction with the
 financial situation of households. In general, most of the factors determining happiness are common for the two countries.

The regression analyses establish influential factors of happiness. Health, freedom, financial issues, and marriage and cohabitation are the four common factors going throughout the whole examined period disregarding whether the population went through a socio-economic transition or not. However, there were some differences. There were few significant factors explaining variance of happiness only in The Netherlands in the 1990's (the post-materialist index, religious devotion). Few factors were significant only in the Czech Republic during the last decade of the twentieth century (confidence in social institutions, and trust other people in the country). For these reasons, hypothesis 4 cannot be fully confirmed. For the explanation of the variance in happiness , feelings about income and satisfaction with the financial situation were more important than the total net income. This holds both for The Netherlands as well as for the Czech Republic. Further, older people in the age of retirement were generally more satisfied, and younger generations and later also middle aged people have become happier also regardless the experience of the socio-economic transition. Other factors played different roles in the countries. Czech women have become in general happier and more satisfied than Czech men. Unemployment had a harming effect in The Netherlands over the whole period . In the case of the Czech Republic, unemployment gained on importance in 1999 when it became a threat as the unemployment rate was rising. The insignificance of unemployment in the Czech Republic shortly after the Velvet Revolution was caused by an extremely low unemployment rate (0.2%) in 1990.

The post-materialist index revealed a clear difference between the countries. While the index had a significant negative influence on happiness in The Netherlands, it didn't show any significant effect in the Czech Republic in the 1990's . Also religion revealed some difference in people's happiness between the countries. Being religious had a positive impact on life satisfaction of the Dutch population and no influence at all on the Czech population in 1990. The results also show, religion in the Czech Republic gained on significance over time. Surprisingly, religious devotion lost its significance in The Netherlands in 2002 and 2004. Finally, the negative impact of divorce and widowhood can be observed in some years over the scrutinized period in both the countries as it was expected. The effect of education was proved only in The Netherlands in 2002, when the lower educated Dutch perceived in general lower subjective wellbeing and higher educated people were happier.

The impact of the variables age, family relations, financial situation, health, work and education and personal values on happiness is the same in the Czech Republic and the Netherlands. However, there are difference with respect to the impact of community, personal 1 freedom. Hypothesis four is partly corroborated, see Scheme 3.

5. Conclusion and discussion

This paper dealt with two research questions

How has the level of happiness changed in the Czech Republic and in The Netherlands in the 1990-2004 period?

Are there differences i with respect to variables that explain differences in happiness between both countries

Over the period of 15 years, four different samples of people in the two countries were interviewed and their answers analyzed with respect to their perception of happiness. The World Value Survey data were used to cover the last decade of the twentieth century (computation conducted for the years 1990 and 1999). The aim of the WVS was to investigate the trends and changes in personal values, believes and mood of the people. But it was also possible to gain data relevant

to happiness. However, troublesome was the coding of the data and the unsystematic approach of the data collection, when some data on relevant issues were not collected in some years (e.g. education not investigated in 1990, subjective health status, satisfaction with the financial situation of household in 1999). The European Social Survey data from years 2002 and 2004 were analyzed to get a picture of the situation in the beginning of the 21th century.

The Dutch population was happier than the Czech population over the whole period. The differences in the level of happiness between the countries are statistically significant in every year the comparison was conducted.

Hypotheses 1 to 3 are confirmed.: 1. At the beginning of the 1990s of the last century, the Czechs were less happy than the Dutch 2. People in the Czech Republic were less happy in 1999 than they were in 20043. Happiness in the Czech Republic is approaching the level of happiness in The Netherlands. The fourth hypothesis cannot be fully confirmed. There were few significant factors explaining the variance of happiness in The Netherlands in the 1990's (the post-materialist

Scheme 3: An overview of the expected and established effects on happiness

Happiness Happiness: 4 scale answer Happiness: 11 scale answer ESS Life satisfaction: 10 scale answer ESS Gender Sex WVS_ESS +/* Aged 15-24 WVS_ESS +/- +** +** Aged 25-34 WVS_ESS +/** Aged 35-44 WVS_ESS +/** Aged 55-64 WVS_ESS +/** Aged 65 and more WVS_ESS +/** Health Subjective health status WVS_ESS +/** Widowed WVS_ESS +/** Widowed WVS_ESS** WVS_ESS** WVS_ESS** Income scale WVS -+ +-* +-* Household net total income € ESS + +-* +-* Satisfaction with the financial situation of the household Feelings about household's income ESS + +-* +-* Unemployed Job satisfaction WVS +-** Work Unemployed WVS_ESS** Unemployed Job satisfaction WVS + +-* +-* Trust other people in the country: yes/no WVS + +-* +-* Trust in social institutions WVS + +-* +-* Personal freedom Feedom of choice over life WVS + +-* +-* Freedom of choice over life WVS + +-* +-* Personal freedom Freedom of choice over life WVS + +-* +-* Freedom of choice over life WVS + +-* +-* Work WS_ESS +/- +-** Personal freedom in the country: yes/no WVS + +-* +-* WVS_ESS +/- +-** WVS + +-* +-* WVS_ESS +/- +-** WVS_ESS +/** WVS_ESS +/** WVS + +-* +-* WVS_ESS +/** WVS + +-* +-* WVS + +-* +-* WVS_ESS +/** WVS + +-* +-* WVS_ESS +/** WVS_ESS +/** WVS_ESS +/** WVS_ESS +/* WVS_ESS +/** WVS_ESS +/** WVS_ESS +/**	Variables	Label	Dataset	Expected effect	Found CZ	Found NL
Life Life satisfaction: 10 scale answer ESS	Hanningee		WVS			
Satisfaction Life satisfaction: 11 scale answer ESS	парріпезз	Happiness: 11 scale answer				
Aged 15-24 WVS,ESS +/** -* -*						
Aged 15-24 WVS,ESS +/- +* +* +*	satisfaction	Life satisfaction: 11 scale answer	ESS			
Aged 25-34 Aged 35-44 Aged 35-64 Aged 65 and more Wys.ESS H- Aged 55-64 Aged 65 and more Wys.ESS H- Aged 55-64 Aged 65 and more Wys.ESS H- Wys.ESS H- -** -** Health Subjective health status Wys.ESS Married or cohabitating Living with husband/wife or partner ESS Wys.ESS	Gender			+/-		
Aged 35-44 Aged 55-64 Aged 65 and more Health Subjective health status Married or cohabitating Uiving with husband/wife or partner ESS Midowed WVS,ESS WVS,ESS H*** WVS,ESS W		Aged 15-24	WVS,ESS	+/-		+*
Aged 55-64 Aged 65 and more WVS,ESS Health Subjective health status WVS,ESS Hoarried or cohabitating WVS Living with husband/wife or partner ESS WVS,ESS Widowed WVS,ESS WVS,ESS WVS,ESS WVS,ESS Widowed WVS,ESS WVS,E	4)	Aged 25-34	WVS,ESS	+/-	+**	+**
Aged 55-64 Aged 65 and more WVS,ESS Health Subjective health status WVS,ESS Hoarried or cohabitating WVS Living with husband/wife or partner ESS WVS,ESS Widowed WVS,ESS WVS,ESS WVS,ESS WVS,ESS Widowed WVS,ESS WVS,E	√ge	Aged 35-44	WVS,ESS	+/-	-*	+/-*
Health Subjective health status WVS,ESS + +** +** Personal freedom Freedom of choice over life Personal values	•	Aged 55-64	WVS,ESS	+/-	-	-**
### August		Aged 65 and more	WVS,ESS	+/-	-**	_*
Living with husband/wife or partner Divorced Divorced WVS,ESS WVS WVS WVS WVS WVS WVS WVS	Health	Subjective health status	WVS,ESS	+	+**	+**
Income scale Income scale Household net total income € Satisfaction with the financial situation of the household's income Feelings about household's income Unemployed Job satisfaction WVS Trust other people in the country: yes/no Trust other people in the country: scale one to ten Confidence in social institutions WVS Freedom Freedom Religious person How religious person are you Personal values Personal values Important to make own decisions and to be free Lower educated Middle educated WVS Freedom WVS How First Household net total income ESS How First How First Household net total income ESS How How First How First How First How First Freedom Freedom Freedom Religious person Freedom Freedom Religious person Freedom Religious person Freedom Freedom Religious person Freedom Freedom Religious person Freedom Freedom Religious person Freedom Religious person Freedom Freedom Religious person are you Freedom Freedom Freedom Freedom Freedom Freedom Religious person are you Freedom	SL	Married or cohabitating	WVS	+	+**	+**
Income scale Income scale Household net total income € Satisfaction with the financial situation of the household's income Feelings about household's income Unemployed Job satisfaction WVS Trust other people in the country: yes/no Trust other people in the country: scale one to ten Confidence in social institutions WVS Freedom Freedom Religious person How religious person are you Personal values Personal values Important to make own decisions and to be free Lower educated Middle educated WVS Freedom WVS How First Household net total income ESS How First How First Household net total income ESS How How First How First How First How First Freedom Freedom Freedom Religious person Freedom Freedom Religious person Freedom Religious person Freedom Freedom Religious person Freedom Freedom Religious person Freedom Freedom Religious person Freedom Religious person Freedom Freedom Religious person are you Freedom Freedom Freedom Freedom Freedom Freedom Religious person are you Freedom	ţį	Living with husband/wife or partner	ESS	+	+**	+**
Income scale Income scale Household net total income € Satisfaction with the financial situation of the household's income Feelings about household's income Unemployed Job satisfaction WVS Trust other people in the country: yes/no Trust other people in the country: scale one to ten Confidence in social institutions WVS Freedom Freedom Religious person How religious person are you Personal values Personal values Important to make own decisions and to be free Lower educated Middle educated WVS Freedom WVS How First Household net total income ESS How First How First Household net total income ESS How How First How First How First How First Freedom Freedom Freedom Religious person Freedom Freedom Religious person Freedom Religious person Freedom Freedom Religious person Freedom Freedom Religious person Freedom Freedom Religious person Freedom Religious person Freedom Freedom Religious person are you Freedom Freedom Freedom Freedom Freedom Freedom Religious person are you Freedom	<u>a</u>	Divorced	WVS,ESS	-	-**	_**
Income scale Income scale Household net total income € Satisfaction with the financial situation of the household's income Feelings about household's income Unemployed Job satisfaction WVS Trust other people in the country: yes/no Trust other people in the country: scale one to ten Confidence in social institutions WVS Freedom Freedom Religious person How religious person are you Personal values Personal values Important to make own decisions and to be free Lower educated Middle educated WVS Freedom WVS How First Household net total income ESS How First How First Household net total income ESS How How First How First How First How First Freedom Freedom Freedom Religious person Freedom Freedom Religious person Freedom Religious person Freedom Freedom Religious person Freedom Freedom Religious person Freedom Freedom Religious person Freedom Religious person Freedom Freedom Religious person are you Freedom Freedom Freedom Freedom Freedom Freedom Religious person are you Freedom	>	Widowed	WVS,ESS	-	-**	_**
Income scale Income scale Household net total income € Satisfaction with the financial situation of the household's income Feelings about household's income Unemployed Job satisfaction WVS Trust other people in the country: yes/no Trust other people in the country: scale one to ten Confidence in social institutions WVS Freedom Freedom Religious person How religious person are you Personal values Personal values Important to make own decisions and to be free Lower educated Middle educated WVS Freedom WVS How First Household net total income ESS How First How First Household net total income ESS How How First How First How First How First Freedom Freedom Freedom Religious person Freedom Freedom Religious person Freedom Religious person Freedom Freedom Religious person Freedom Freedom Religious person Freedom Freedom Religious person Freedom Religious person Freedom Freedom Religious person are you Freedom Freedom Freedom Freedom Freedom Freedom Religious person are you Freedom	Ē	Have ever had kid(s)	WVS.ESS	+	+/-**	+**
Income scale Household net total income € Satisfaction with the financial situation of the household Feelings about household's income Work Unemployed Job satisfaction Trust other people in the country: yes/no Trust other people in the country: scale one to ten Confidence in social institutions Personal freedom Religious person How religious person are you Post materialist index Personal values Personal Important to make own decisions and to be free Lower educated Lower educated MWS, ESS How H** H** H** H** H** H** H** H**	Fа			+	+**	+**
Feelings about household's income ESS			WVS	+	+**	+**
Feelings about household's income ESS	lia C	Household net total income €	ESS	+	+**	+**
Feelings about household's income ESS	inanc situati		WVS	+	+**	+**
Work Unemployed Job satisfaction WVS,ESS WVS - -** +** -** +** Image: Personal values Trust other people in the country: yes/no Trust other people in the country: scale one to ten ESS + +** +** +** +** Important to be free WVS + +** +** +** +** Personal freedom Freedom of choice over life WVS + +** +** Religious person WVS + +** +** +** +** +** Personal values Religious person are you ESS + +/- +** +** Personal values Post materialist index WVS +/- +** +/- +** Important to be rich, have money and expensive things Important to make own decisions and to be free ESS +/- +** -* Lower educated WVS,ESS +/** -** Education Middle educated	ш 0	Feelings about household's income	ESS	+	+**	+**
Work Job satisfaction WVS + +** +** Trust other people in the country: yes/no Trust other people in the country: scale one to ten Confidence in social institutions WVS + +** Fresonal freedom Religious person How religious person are you Post materialist index Important to be rich, have money and expensive things Important to make own decisions and to be free Lower educated WVS,ESS +/- WVS + +** +** H** H** H** H** H** H*				-	_**	_**
Trust other people in the country: yes/no Trust other people in the country: scale one to ten Confidence in social institutions WVS + +** +* Trust in social institutions ESS + +** Personal freedom Religious person How religious person are you Post materialist index VVS + +/- +* Himportant to be rich, have money and expensive things Important to make own decisions and to be free Lower educated WVS,ESS +/** Education Trust other people in the country: yes/no WVS + +** +** +** +** +** +** +** +	Work		,	+	+**	+**
Trust other people in the country: scale one to ten Confidence in social institutions Trust in social institutions Personal freedom Religious person How religious person are you Post materialist index Important to be rich, have money and expensive things Important to make own decisions and to be free Lower educated Middle educated WVS,ESS H +** +** +** +** +** +** +** +				+	+**	+**
Personal freedom Freedom of choice over life WVS	munit	Trust other people in the country: scale	ESS	+	+**	+**
Personal freedom Freedom of choice over life WVS	E	Confidence in social institutions	WVS	+	+**	+*
Personal values Preedom of choice over life WVS		Trust in social institutions	ESS	+	+**	+**
Personal values How religious person are you Post materialist index		Freedom of choice over life	WVS	+	+**	+**
Personal values Post materialist index WVS +/- +** +/- Important to be rich, have money and expensive things Important to make own decisions and to be free Lower educated WVS,ESS +/** -** Education Middle educated WVS,ESS +/** -**	•	Religious person	WVS	+	+/-	+*
Personal values Post materialist index Important to be rich, have money and expensive things Important to make own decisions and to be free Lower educated Education Post materialist index WVS +/- +** +/- ESS +/- +** ESS + +** WVS,ESS +/** WVS,ESS +/** -**		How religious person are you	ESS	+	+/-	+**
values Important to be rich, have money and expensive things Important to make own decisions and to be free Education Middle educated ESS +/- ** -** -** Important to be rich, have money and expensive things ESS +/- ** -** -** ESS +/- ** -** -** -** Education ESS +/- ** -** -**		Post materialist index	WVS	+/-	+**	+/-
be free ESS + + + + + - ** - Education Middle educated WVS,ESS +/- -** -** -**			ESS	+/-	+**	_*
Education Middle educated WVS,ESS +/** -**			ESS	+	+**	+*
Education Wildle Educated WVVO,EGG		Lower educated	WVS,ESS	+/-	_**	
Higher educated WVS,ESS +/- +** +/-	Education	Middle educated	WVS,ESS	+/-	-**	-**
		Higher educated	WVS,ESS	+/-	+**	+/-

^{+/-} positive/negative relationship of a variable with happiness and life satisfaction

index, religious devotion). Some factors were significant only in the Czech Republic during the last decade of the twentieth century (confidence in social institutions, and trust other people in the country). However, as stated before, some of the factors were common for both countries (subjective health status, perceived freedom of choice over life, marriage and cohabitation, satisfaction with financial situation).

Firstly, the Czech population has become happier since 1990 when the country started a democratic evolution. The level of happiness ion has increased and approached the level of happinessg in The Netherlands. However, the Dutch population is still better off. Secondly, most factors determining happiness were common for both countries in 2002 and 2004 similarly as it was already at the end of the last century. Only (post) materialist values became significant in the Czech Republic only in 2004, while in The Netherlands, the post-materialist index and having money was significant with the negative effect throughout the whole period. Remarkably, social trust, which was not significant in The Netherlands during the 1990's, became significant in the new century. In addition, the

^{*} Level of significance = 0.05

^{*} Level of significance = 0.01

Table 4: Results of the linear regression analysis, WVS 1990 and 1999

Czech Republic	1990	1999	The Netherlands	1990	1999
	Happiness	Happiness		Happiness	Happiness
Sex	-0.036	0.032	Sex	0.003	0.030
Age	-0.063	-0.138 **	Age	-0.099 **	-0.134 **
Aged 15-24	0.071 *	0.049 *	Aged 15-24	-0.012	0.067 *
Aged 25-34	0.054	0.110 **	Aged 25-34	0.118 **	0.063 *
Aged 35-44	-0.068 *	-0.013	Aged 35-44	0.018	0.072 *
Aged 55-64	-0.037	-0.004	Aged 55-64	-0.090 **	-0.063 *
Aged 65 and more	0.001	-0.104 **	Aged 65 and more	-0.038	-0.067 *
Subjective health status	0.231 **		Subjective health status	0.326 **	
Married or cohabitating	0.165 **	0.147 **	Married or cohabitating	0.261 **	0.235 **
Divorced	-0.104 **	-0.090 **	Divorced	-0.119 **	-0.189 **
Widowed	-0.134 **	-0.148 **	Widowed	-0.192 **	-0.130 **
Have ever had kid	-0.006	-0.011	Have ever had kid	-0.003	0.004
Lower educated	1	-0.076 **	Lower educated		-0.029
Middle educated	1	0.027	Middle educated	1	0.040
Higher educated	1	0.083 **	Higher educated	1	-0.012
Unemployed	-0.047	-0.083 **	Unemployed	-0.058	-0.081 *
Income scale	0.132 **	0.164 **	Income scale	0.145 **	0.226 **
Satisfaction with the	1				
financial situation of			Satisfaction with the financial		
household	0.293 **	0.170 **	situation of household	0.209 **	
Job satisfaction	0.118 **		Job satisfaction	0.097 **	0.171 **
Most people can be					
trusted	0.127 **	0.000	Most people can be trusted	0.073 *	0.021
Confidence in social	1		1 ' '	1	
institutions	0.128 **	0.098 **	Confidence in social institutions	0.061	0.066 *
Religious person	-0.002	0.008	Religious person	0.065 *	0.012
Freedom of choice over	1		1 .	1	
the life	0.220 **	0.236 **	Freedom of choice over the life	0.126 **	0.125 **
Post-materialist index 4					
items	0.100 **	0.073 **	Post-materialist index 4 items	-0.037	0.005
N	924	1908	N	1017	1003
R square	.20	14	R square	.20	.17
R quare adjustedS	.18	.13	R square adjusted	.19	.15

^{*} Level of significance = 0.05

analysis of the ESS datasets showed that four relatively most important factors were common for both countries (health, living with husband/wife or a partner, feelings about income, and trust in social institutions). Only in 2004, age category 65 and higher replaced trust in institutions in The Netherlands.

To summarize the results of the research, the post-communist transition of the Czech society has had a positive influence on people's happiness. People were less happy after the Velvet Revolution than they are nowadays.

The Dutch were better off in many indicators GDP per capita in PPS was more than twice higher in The Netherlands at the beginning of the 1990's. The Dutch earned more money, their marriages were more successful (more marriages in the Czech Republic ended with divorce), and they trusted each other more than the Czechs. The only exception was unemployment. The unemployment rate was lower in the Czech Republic in the period 1990-1997. It is important to stress that the former communist governments supported the full employment policy in Czechoslovakia. The new democratic government installed after the Velvet Revolution stopped supporting this policy. Thus, a new situation -, unemployment, occurred. Losing a job was a threat the Czechs had not experienced before. While being without a job was proved to have a negative effect on happiness in The Netherlands already in 1990, it gained significance in the Czech Republic.

Consistently with findings (higher income, lower divorce rate), the Dutch felt more satisfied with the financial situation, they were happier with their family lives, more satisfied with their jobs, they trusted more in institutions than the Czechs did. Logically, they were happier than the Czechs. As time was passing by, the differences levelled out and the level of

happiness increased in the Czech Republic. A remarkable fact is that the Czechs born before 1926 did not indicate any significant change in happiness between the 1990 and 1999. Further, the Czechs born between 1956 and 1965 didn't become happier in the 1990's, although the overall level of happiness did increase in the country. Worth mentioning is also a higher level of happiness of younger generations (people in the 15-35 ag bracket and lower happiness of people in the age of 35-54 in the 1990's.

It should be noted that the Czech republic is a more secularised society than the Netherlands. The Netherlands has an Islam minority of about 5 per cent of its population.

The younger generations are more adaptive and susceptible to consumerism and internet. Therefore, it is no surprise that younger generations in the Czech Republic are more happier with the changes brought about by the collapse of the centrally planned economy than older generations.

Higher happiness has certainly to do with higher GDP per capita (see e.g. Heijman & van Ophem (2010)) but also with more personal freedom. Which one is the most important is subject to debate.

One of the greatest damages the communist regime has inflicted on Czech society is the low level of social trust. Although of Ohara at. el. stated (2007) that the level of social trust has been increasing in post communist countries since the fall of the regime, the reality in the Czech Republic istill is far behind the Netherlands. Furthermore, according to the WVS and ESS results for the Czech Republic, the situation regarding the confidence in certain institutions was strongly influenced by contemporary affairs (drop of confidence in the Czech parliament after the government resignation in 1998,

^{**} Level of significance = 0.01

Table 5: Results of the linear regression on happiness ESS 2002 and 2004

2002 2004

Satisfaction Happiness Happiness

	2002	2004	The Netherlands	2002	2004
Satisfaction	Happiness	Happiness		Happiness	Happiness
Sex	-0.016	-0.021	Sex	-0.005	-0.012
Age	-0.129 **	-0.156 **	Age	-0.041 *	-0.020
Aged 15-24	0.080 **	0.101 **	Aged 15-24	-0.003	0.047 *
Aged25-34	0.075 **	0.078 **	Aged25-34	0.048 *	0.012
Aged 35-44	0.025	0.027	Aged 35-44	-0.011 *	-0.005
Aged 55-64	-0.035	-0.030	Aged 55-64	-0.024	-0.029
Aged 65 and over	-0.079 **	-0.094 **	Aged 65 and over	-0.025	0.030
Subjective health status	0.349 **	0.305 **	Subjective health status	0.307 **	0.281 **
Living with husband/wife or partner	0.229 **	0.154 **	Living with husband/wife or partner	0.229 **	0.237 **
Divorced	-0.116 **	-0.162 **	Divorced	-0.134 **	-0.173 **
Widowed	-0.209 **	-0.135 **	Widowed	-0.094 **	-0.093 **
Have ever had kid living in the house	0.100 **	-0.062 **	Have ever had kid living in the house	0.073 **	0.010
Number of people in the household	0.215 **	0.179 **	Number of people in the household	0.118 **	0.156 **
Lower educated	-0.042	-0.009	Lower educated	-0.016	-0.030
Middle educated	-0.051	-0.078 **	Middle educated	0.023	-0.011
Higher educated	0.085 **	0.088 **	Higher educated	0.037	0.035
Unemployed	-0.033	-0.123 **	Unemployed	-0.016	-0.114 **
Total household net income in € (all			Total household net income in € (all		
sources)	0.198 **	0.166 **	sources)	0.137 **	0.198 **
Feelings about income	0.310 **	0.264 **	Feelings about income	0.251 **	0.232 **
Most people can be trusted	0.201 **	0.222 **	Most people can be trusted	0.161 **	0.166 **
Trust in soc. Institutions	0.276 **	0.233 **	Trust in soc. Institutions	0.151 **	0.181 **
How religious are you	0.018	-0.011	How religious are you	0.035	0.071 **
Important to bee free	0.087 **	0.170 **	Important to bee free	0.045 *	0.024
Important to be rich	0.063 *	0.070 **	Important to be rich	-0.051 *	0.013
N	1360	3026	N	2364	1881
R square	33	.23	R square	.20	.20
R square adjusted	.31	.22	R square adjusted	.19	.19

^{*} Level of significance = 0.05 ** Level of significance = 0.01

distrust of politicians and dissatisfaction with politics in general because of constantly emerging new affairs and corruption scandals coming up to surface, and the like).

To conclude, if the Czechs want to become more happy and satisfied with their lives, at least three aspects of life should be improved: an income comparable with incomes in the western part of the EU, more steady families, and an increase in social trust among the population.

References

Cohen, A. B. (2002). The Importance of Spirituality in Well-Being for Jews and Christians. Journal of Happiness Studies, 3(3), 287-310.

Cummins, R. A. (2000). Personal Income and Subjective Wellbeing: A Review. Journal of Happiness Studies, 1(2), 133-158.

Cornelisse-Vermaat, J.R., Antonides, G, Ophem, van J.A.C., Maassen van den Brink, H. (2006). Body mass index, perceived health, and happiness: their determinants and structural relationships. Social Indicators research, 79, 153-158, .

CZSO. (2002). Population and Housing Census 2001. Prague: Czech Statistical Office.

CZSO. (2007). Míra inflace - průměrný roční index. Retrieved 17.1. 2008, from http://www.czso.cz/csu/grafy.nsf/graf/mira_inflace

Diener, E. (1984). Subjective Well-Being. Psychological Bulletin, 95(3), 542-575.

Easterlin, R. A. (2001a). Income and happiness: Towards a unified theory. Economic Journal, 111(473), 465-484.

Easterlin, R. A. (2001b). Life Cycle Welfare: Trends and Differences. Journal of Happiness Studies, 2(1), 1-12.

Frey, B.S. & Stutzer, A. (2002). Happiness and economics. Princeton (NJ,USA): Princeton University Press.

Gerdtham, U. G., & Johannesson, M. (2001). The relationship between happiness, health, and socio-economic factors: results based on Swedish microdata. Journal of Socio-Economics, 30(6), 553-557.

Heijman, W., & Ophem, J. (2008). Income and happiness - Puzzles and paradoxes. Wageningen: Wageningen University, working paper.

Heijman, W. & van Ophem, J.(2010) Income, happiness and socio-economic bench marking across countrie In: H. van Trijp & P.Ingenbleek (eds.) Markets, marketing and developing countries. Where we stand and where we are heading. Wageningen: Wageningen Academic Publishers, 32-43.

Kekic, L. (2007). The Economist Intelligence Unit's index of democracy, The world in 2007. Retrieved 18.1. 2008, from http://www.economist.com/markets/rankings/displaystory.cfm?story_id=8908438

Layard, R. (2005). Happiness: lessons from a new science. New York [etc.]: Penguin.

Machonin, P., Tucek, M., & Nekola, M. (2006). The Czech economic elite after fifteen years of post-socialist transformation. Sociologicky Casopis-Czech Sociological Review, 42(3), 537-556.

O'Hara, P. (2007). Uneven development, global inequity and ecological sustainability: Recent trends and patterns.

STEM. (2007, 28.11. 2007). Co nám přinesla přinesla svoboda za osmnáct let Informace z výzkumu STEM Trendy 11/2007, from http://www.stem.cz/clanek/1401

Van Ophem and Heijman (2008) Health, happiness and household type , ROCZNIKI NAUKROLNICZYCH, SERIA G, T. 94, z. 2, 2008.. 178-186

Veenhoven, R. (1984) Conditions of happiness. Dordrecht(NL): Reidel.

Veenhoven, R. (1997). Advances in understanding happiness. Revue Quebecoise de psychologie, 18, 29-74.

Veenhoven, R. (2004). The greatest happiness principle. Happiness as an aim in public policy. In: A.Linely & S. Joseph (eds.) Positive psychology in practice. Hoboken(NJ, USA): Wiley & Sons

Veenhoven, R. (2007). World Database of Happiness Retrieved 18.1. 2008, from http://worlddatabaseofhappiness.eur.nl

Wilkinson, R., & Pickett, K. (2010). The spirit level: why equality is better for everyone. Penguin UK.