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Explaining diverging views on social structure in ex-Czechoslovakia: Does unemployment experience make subjective perceptions more pessimistic?

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Abstract: *Perceptions of social structure typically only change gradually and their connection to economic development seems to be indirect at best. Times of rapid socio-economic transformations such as the transition of state-socialist economies to market economy or the disintegration of a common state might witness more notable changes. Using data from four rounds of the ISSP Social Inequality module, we model how people see their position and the structure of their society on the example of the two ex-Czechoslovak countries. Both post-communist societies share the beginning of the transition to a free market economy in 1989 but are divided by starkly contrasting impacts of the transition on their labor market. We show that views on social structure in the ex-Czechoslovak countries diverge over time with Slovaks more frequently describing their society as highly unequal and seeing their position as lower in the social structure. We find support for the assumption that experiences with unemployment lower subjective social position and can be used to explain lower positioning of respondents in the Slovak sample. With regard to views on social structure, we find no clear connection to unemployment experiences. The chronically high unemployment levels in*

Slovakia therefore do not explain the higher tendency of Slovaks to see their society as highly polarized. Contrary to subjective social position, views on the overall social structure are most likely shaped by factors beyond immediate personal experience with economic insecurity.

Key words: *unemployment experience, subjective perception, social structure, Czechoslovakia, Slovakia, Czech Republic*

Introduction

Subjective perception of social structure and social class is mostly expected to experience only gradual changes and to be rather loosely connected to economic development (compare Irwin, 2015; Lindemann and Saar, 2014). There are few cases when these changes could be expected to happen more quickly. One of them would be a rapid socio-economic transformation such as in the transition of the state-socialist economies of the former Eastern Bloc to a market economy. Another process could be the split of a common state which could be accompanied by a shift in reference groups. Comparing the two ex-Czechoslovak countries, which will be the focus of our paper, offers the opportunity to study both those processes.

It is clear, at least since Thomas's theorem was formulated, that the way a situation is perceived can be more important than reality. Social stratification researchers recognized quite early that a person's position within the society has an important subjective dimension (Centers, 1949) with subjective social class reflecting an individual perception of one's position within the hierarchy of the society (Jackman and Jackman, 1973). Recent research shows connections not only between subjective social status and other subjective variables, such as well-being (Schneider, 2019), but

even towards objective outcomes beyond the social realm. D’Hooge et al. demonstrate that the way people define their subjective social status is connected to their objective health outcomes (D’Hooge et al., 2018b). Similar findings come from research on political preferences – here objective class is only important if it aligns with subjective class (D’Hooge et al., 2018a; see also Sosnaud et al., 2013). Matějů and Večerník (1999) find that for political behavior in the Czech Republic subjective position matters more than objective characteristics such as education, occupation, or income.

The subjective perception of one’s position within a society and the subjective perceptions of social structure are two closely-related phenomena, even though their connection is somewhat weakened by mechanisms encouraging “most people to think they are in the middle of the social hierarchy” (Evans and Kelley, 2004: 6). When people base their subjective social positions on comparisons with their reference groups, they usually compare themselves with people in their social surroundings (Evans et al., 1992; Evans and Kelley, 2004; Huang, 2021). Nevertheless, in their analysis of German-speaking countries of Europe, Haller et al. (2015) find a significant link between a subjectively low social position and describing the structure of a society as an elite-mass society with most people at the bottom of the social hierarchy. Haller et al. (2015) also find a link between one’s subjective high position and describing the society as a middle-class society. A similar link is found with employment position and education. People in objectively higher positions described their society more frequently as a middle-class society, while people in lower positions were more likely to describe their society as the mass-elite model.

Research suggests that processes like globalization and the rise of the mass media tend to widen the reference group people compare themselves with. Particularly for the European example they study, Lindemann and Saar (2014a) suggest that people in Europe tend to compare themselves with the

wider European context. Therefore, the political separation of the two ex-Czechoslovak republics might not have led to an abandonment of Czechoslovakia as the common reference group.

While the overall social structure of both societies remained similar in terms of class structure (Bunčák et al., 2013) or levels of inequality (Guzi et al., 2013) in the post-1989 period, a major difference was the level of unemployment. Already early on in the transformation to market economy, Slovakia suffered from very high unemployment rates while unemployment was never a major concern for the Czech labor market. Research by Saar et al. (2017) suggests that the unemployed in general, and the unemployed in post-communist countries in particular, have a low evaluation of their social positions. Moreover, this effect is more pronounced in countries with low levels of inequality, such as the two post-Czechoslovak countries. This leads us to the following research questions which will guide our analysis: Are subjective perceptions of social structure and social class diverging in the ex-Czechoslovak countries? If this is the case, can the divergence be explained by objective divergence in terms of individual experiences connected to the labor market?

Convergence and divergence in (ex)Czechoslovakia

Part of the story of the common Czecho-Slovak state which was established in Central Europe in 1918 and connected two small Slavic nations – each originally belonging to different parts of the Austro-Hungarian Monarchy – was a (rather extraordinary) story of convergence (Musil, 1993). While at the time of the establishment of the common state the Czech part of the country already experienced the transition to an industrial society, the Slovak part of the country was still a society with most people working in the primary sector. However, the two parts were much more alike at the time of the breakup. According to Musil (1993) “Czechoslovakia was established at a time when

the macro-structural differences, differences in demographic behavior and other parameters were the largest. Czechoslovakia split up at a time when these differences were the lowest” (Musil, 1993: 21) Therefore, the overall economic structure and living standards of the society in both parts of Czechoslovakia were remarkably similar at the beginning of the transformation in 1989.

However, while both post-communist societies share the beginning of the transition to a free market economy in 1989, they are divided by very different socioeconomic impacts of the transition process with regard to the labor market. Early on in the transition process, Slovakia became a country with comparatively high unemployment rates – standing in stark contrast to the Czech Republic which was and still is a country with the lowest unemployment rates in Europe. Figure 1 shows how – starting from zero unemployment in 1990 – both countries followed a very different path already early on in the transition. At the same time, the ratio between GDP per capita in Slovakia and in the Czech Republic remained at the same level throughout the transformation process oscillating without a clear trend. The GDP in Slovakia is ten to fifteen percent lower than the Czech GDP (Figure 1). With regard to income distribution, both countries continue to belong to societies with very low Gini levels, experiencing a modest increase in the 1990s from even lower pre-1989 levels (Guzi et al., 2013).

----- *Figure 1 about here* -----

While experiencing diverging unemployment levels, welfare policies in the two countries after the split remained the same and started to diverge only gradually. With regard to support for the unemployed, its basic framework has been established early on in the transformation while still in Czechoslovakia. The major shortening of the period covered by unemployment insurance from 12

to 6 months occurred before the split in 1992. Almost two decades later in 2010, the two ex-Czechoslovak countries continued to provide very similar levels of unemployment insurance net replacement rates for the same duration of 26 weeks (Esser et al., 2013).

Should perceptions of social structure and social class be diverging in the ex-Czechoslovak countries, unemployment seems to be a good starting point in the search for an objective driver of such divergence. In the next section, we will therefore look into the question if experiencing unemployment can have an impact on how society is subjectively perceived.

Unemployment, perception of social structure, and social position

There seems to be a good reason for the expectation that extended unemployment experiences can have a detrimental impact on the subjective perception of the social structure. Bahna (2021) reports that people with unemployment experience in 2020 describe the structure of the state-socialist society in Slovakia thirty years ago as being more equal than people without a history of unemployment in their households. This is most likely due to the high levels of job security in this period. Several authors explore the relationship between employment position and subjective well-being, confirming that unemployment can negatively affect subjective well-being (see for example (Clark and Oswald, 1994; Dockery, 2005; Frey and Stutzer, 2002; Nordenmark and Strandh, 1999; Shields and Price, 2005; Winkelmann and Winkelmann, 1998). Being unemployed undermines the positive self-image by losing one of the most important meanings of life which leads to a disruption of the subjective well-being of individuals (Ezzy, 1993). More recent work on the relationship between subjective well-being and unemployment by Ervasti and Venetoklis (2010), however, suggests a more straightforward mechanism: it is primarily the loss of income that is behind the lower subjective well-being of the unemployed.

The link has also been explored directly. Saar's et al. (2017) analysis of the extended welfare regime concept, originally proposed by Gallie and Paugam (2000), shows that the unemployed in post-communist countries tend to have the lowest evaluation of their social position. In addition, the differences between the mean subjective social position of the unemployed and the whole population are largest in Norway, Slovakia, Bulgaria, and the Czech Republic. The analysis of the macro-economic context by Saar et al. (2017) also points towards an unemployment-related explanation "the long-term unemployment rate somewhat lowers people's estimation of their social position. It might be that the higher long-term unemployment rate indicates higher social risks and lower living conditions for all people in European countries" (Saar et al., 2017: 126).

With regard to the impact of unemployment experience, already Mishler and Rose (2001) or Schoon and Cheng (2011) show, that unemployment experiences also tend to reduce political trust. Gangl and Giustozzi come to similar conclusions. They find that „both adverse macroeconomic conditions and personal experiences of unemployment generate negative effects on political trust.” (Gangl and Giustozzi, 2018: 3). However, they find that while declines in political trust that originate in macroeconomic changes reverse quickly, “declines in political trust that originate from personal experiences of unemployment seem to result in much more persistent political alienation.” (Gangl and Giustozzi, 2018: 3) They argue that unemployment experiences lead to economic deprivation and personal dissatisfaction which results in political alienation, which is lasting beyond the period of unemployment (Gangl and Giustozzi, 2018: 33). This is very much in line with our expectation about the differences in the perceptions of society structures in ex-Czechoslovakia. Slovak respondents are not only expected to be skeptical (i.e. seeing their social position as low and describing their society as highly polarized) because they experience unemployment right now, but because more frequently they have had the experience of becoming victims of unemployment in the

past. This experience, we believe, can have a lasting impact on how people perceive their position in the structure of the society in Slovakia as well as their views on the social structure. In line with this expectation, Mau et al. (2012) find that current unemployment, as well as past unemployment experiences, increases feelings of economic insecurity. Qualitative research also suggests that answers to these questions typically combine moral positioning towards social inequalities with personal experiences (Irwin, 2018).

Lindemann and Saar make an explicit connection between the threat of unemployment and subjective social position as they expect that it makes people feel vulnerable and increases uncertainty in society (Lindemann and Saar, 2014). A similar expectation regarding the subjective social position is formulated by Evans and Kelley (2004: 26) who expect that national-level unemployment will have a “significant, but not large effect” on the subjective location in social hierarchy due to an increased feeling of job and income insecurity by the respondents. In this regard, Saar et al. (2017: 128) find, that unemployment has a stronger impact in countries where inequality is lower as the relative deprivation and stigmatization – which are seemingly avoidable in low inequality countries – exacerbate its impact. This is particularly relevant for Slovakia and Czechia as income inequalities as measured by the Gini coefficient remain low in both countries (e.g. 24.3 in Slovakia and 23.8 in the Czech Republic in 2000, see also Guzi et al., 2013).

Based on the reviewed literature we formulate two hypotheses that will guide our empirical analysis:

Hypothesis 1: Slovakia and Czechia will experience divergence in the way respondents experience their societies and their position within them. These will be more similar while still in the common state and will diverge afterwards.

Hypothesis 2: Unemployment has an impact on the subjective evaluation of the social structure. People with unemployment experience will see their position within society as lower when compared to people without this experience (H2a) and will describe their society as more polarized (H2b).

Data and methods

Our analysis is based on four rounds of the Social Inequality module of the International Social Survey Programme (ISSP). Both ex-Czechoslovak countries participated in all rounds of the social inequality module either as a separate country sample (1999, 2009 and 2019) or within a common Czechoslovak sample (1992).

We used information on the region of the respondent to create a separate sample for Slovakia (N=423) and Czechia (N=678) from the ISSP 1992 Czechoslovak sample. The later ISSP Social inequality data files include a full sample for both countries. If weights were provided in the ISSP data files (i.e. in 2009 and 2019), they are used in the presented descriptive figures. To avoid bias in estimating standard errors, the regression analyses are calculated without design or post-stratification weights. The fact that variables on which post-stratification weighting is based are used as independent variables in the models also avoids potential sampling-related biases (Solon et al., 2015).

After presenting descriptive results, our analytical strategy is to first analyze the full sample of the ISSP data file including all countries and to present separate analyses for the two ex-Czechoslovak

countries. The analyses explain two outcomes – the subjective social position and the subjective perception of social structure. Multi-level OLS and logistic regressions are used for the analyses of all countries with GDP and Gini as country-level variables. The individual models for the Czech Republic and Slovakia employ single-level OLS and logistic regressions. We present four sets of regression results, one for each ISSP Social Inequality round.

The analyses of all countries available in the respective ISSP data files serve solely as a background for the focus on the case of ex-Czechoslovakia. We include these to explore if the expected impact of personal unemployment experiences in the case of Czechoslovakia is a more universal one. As our focus is solely on the effect of the unemployment experience, we treat the employed country-level predictors as control variables. Overall, the countries in the analyses of the whole data set differ between individual ISSP rounds. At the same time, as there is a strong continuity in ISSP participation, the analyzed groups are quite similar over the four rounds of the ISSP Social Inequality module.

Variables

Our analyses use two dependent variables. First is the subjective social position represented by subjective placement on a scale ranging from TOP – 10 to BOTTOM – 1. This variable was part of all ISSP Social inequalities modules. However, the ISSP changed the way how the variable is coded between 1999 and 2009. Until ISSP 1999 the vertical question layout was labeled TOP – 1 to BOTTOM – 10 while from 2009 the vertical layout was TOP – 10 to BOTTOM – 1. This has consequences primarily for the comparability of the distributions of answers between 1992 and 1999 on the one hand and of 2009 and 2019 on the other (see also note in Table 1).

Our second dependent variable is a series of five diagrams representing a visual depiction of the stratification of the respondent's society (see Evans et al., 1992). The diagrams and their accompanying description can be seen in Table 2. The analysis uses the preference for describing society as being of type A as a dichotomous independent variable. It also aggregates preferences for the most pessimistic/unequal societies (types A and B as Type AB) and the most optimistic/equal societies (types D and E as Type DE) as alternative binary independent variables in the analyses (a similar aggregation is used by Riedl and Haller, 2014).

Our independent variables include individual-level variables which were found to be related to measures of subjective social position in previous analyses such as education, labor market position measured via the standard international socioeconomic index of occupational status¹ (see Ganzeboom et al., 1992), and household income. Gender and age are included as control variables.

We include unemployment as our main explanatory variable in two alternatives. Firstly, on all occasions, we include current unemployment status as a dummy variable in the models. Secondly, in the 2019 data from Slovakia, we use a question about having experience with extended long-term unemployment of a household member in the last 30 years and its impact on the household's financial situation. This variable was included only in the Slovak 2019 data in an attempt to capture the potential lasting impacts of unemployment experience observed in the literature.

Besides individual-level variables, in the analyses of all countries available in the full ISSP data file we also include two country-level variables: a) Gross Domestic Product (GDP) which has been observed to be positively connected to subjective social status (Evans and Kelley, 2004; Lindemann and Saar, 2014) and b) Gini figures on country-level income distribution which were used as explanatory variables also by Lindemann and Saar (2014). The Gini figures for the 1992 and 1999

models are, however, problematic as many of the eastern European countries have only Gini figures available for 2004 and later.

Germany was treated as one country in our analyses with the exception of the analysis of the 1992 data, when Eastern and Western samples were treated as separate cases. The Eastern Germany GDP was based on 1990 figures relating to the ratio of GDP in the West and the East of the Country. Gini coefficients for East and West Germany were based on Spéder and Habich (1999). The low number of countries (N = 8 including East and West Germany as separate countries) included in the analyses of subjective perception of social structure in 1992 (Table 5) is due to the fact that almost half of the participating countries did not include the question on subjective views on the shape of one's society.

Descriptive results

Subjective social position of Slovak and Czech respondents between 1992 and 2019 are compared in Table 1. We can see that in all years the average social position in the less affluent part of the ex-Czechoslovakia is lower than in the Czech Republic. The difference is always statistically significant and remains similar between 1992 and 2009 and increases to 0.62 in 2019. While this is in line with Hypothesis 1, the expectation was that the divergence will start earlier on after the split.

----- *Table 1 about here* -----

Descriptive results for subjective perceptions of social structure in the Czech Republic and in

Slovakia are presented in Tables 2 and 3. We can observe that: a) people in both societies share the view about an ideal society between 1992 and 2019, b) the views on how their current society looks like were the most similar in 1992 and diverged afterwards. Despite the already existing gap in unemployment (high unemployment appeared in Slovakia in 1991, see Figure 1), Table 2 shows that views of Slovak and Czech respondents were most similar in 1992 while still in Czechoslovakia and diverged afterwards. This was mostly due to a higher inclination of Slovak respondents to describe their society as Type A and a lower inclination to describe their society as type C and D. Inversely, after 1992, Czech respondents were more likely to see their society as a society of type C and D and less as type A. On the other hand, people in both countries have a very similar opinion on how their societies should look like. In 1992, 1999 and 2009 there is no significant difference between the average level of inequality expected of an ideal society. The views diverge only in 2019 due to a higher preference for types B and C in the Czech Republic and a higher preference for type E in Slovakia.

----- *Table 2 about here* -----

----- *Table 3 about here* -----

The descriptive results for subjective perceptions of social structure in the ex-Czechoslovak countries provide support for Hypothesis 1. As expected, the answers are most similar in 1992 and diverge afterwards. The differences between the two countries are, however, statistically significant on all four occasions, including in 1992. We will now focus on the potential role of unemployment experience in this divergence.

Analysis

Subjective social position

Table 4 presents our models explaining subjective social position. For every of the four ISSP Social Inequality waves a series of three (or four in 2019) models is calculated. The first model is a multilevel random intercept model including all countries in the respective ISSP wave. Two (or three in 2019) separate single-level linear regression models for Czech and Slovak data follow.

As expected, based on previous findings (see Evans and Kelley, 2004) there seems to be a clear connection between GDP and subjective social position. The estimate for 2019 is not statistically significant ($p=0.086$), but this might be due to the low number of countries in the 2019 sample. Generally, the lower the GDP, the lower the rating of one's position. The connection between subjective social position and the Gini coefficient is less clear. While the connection is evaluated as significant in 1992 (with only 14 countries in the analysis) and 2009 (41 countries in the sample), these two results report a contradicting relationship. While in 1992, the higher the level of inequality in a society the lower the subjective position, this is reversed in the 2009 data. This is in line with recent findings regarding the ambiguity of the link between perceived and objective inequality levels in a society (Fatke, 2018; Mijs, 2021).

----- *Table 4 about here* -----

Moving on to individual level variables in the models presented in Table 4. The observed connections of occupation (ISEI), education, gender, age and income with subjective social position confirm results reported in the literature. With regard to ISEI, there is an even more universal relationship than with GDP – the higher one's ISEI, the higher the subjective social position. The only exception to this pattern in our data is Slovakia in 1992, where the relationship is not significant (whereas in 1999 this relationship has a borderline p value of 0.05). The connection between subjective social position and years of education is also almost universal – those with more years of education placing themselves typically higher. An interesting exception are the Czech and Slovak results in 2019 where this relationship fades into non-significance.

In the whole dataset a tendency of men to see their position in the society as higher can be observed. However, this relationship is in many cases not significant in the single country models. Similarly, a tendency of older people to place themselves lower in the social hierarchy is observable in the data which is significant in all multilevel models in all four rounds. Also, with the exception of the 1992 data, people with incomes in the top quintile tend to see themselves higher and people in the bottom quintile see themselves lower in the social hierarchy. An interesting question is why is this relationship not observable or is notably weaker in the 1992 data. A tentative hypothesis would be that this is the result of the dynamic times of transition and the – still very low – income differences of the early 1990ties in Czechoslovakia (see also Lenski, 2005).

The results for our main explanatory variable – unemployment – provide clear support for the first part of our second hypothesis (H2a). The analysis of the whole data set is in line with the hypothesized negative connection of being unemployed and subjective position in society. This

relationship is confirmed in results for the ex-Czechoslovak countries in 1999 and 2009, while it is not significant in the 1992 and 2019 data. This could point to a stronger impact of personal unemployment in times of a rising or a relatively high unemployment rate (such as in 1999 and 2009) or could be simply due to the fact that the relationship is more likely to be statistically significant if the group of the unemployed is larger – typically in situations of high unemployment.

The second “unemployment variable” – the question on past extended experience with unemployment in one’s household – is only available in the 2019 data from Slovakia. As can be seen in Table 4, the results seem to once again confirm our second hypothesis. While being unemployed is not a statistically significant predictor of lower subjective social position, the unemployment experience in one’s household is. Comparing models 1 and 2 in Table 4 for the 2019 Slovak data, the effect seems to be more pronounced in cases of prolonged unemployment experiences which were perceived as having a very negative influence on the living standard of the household. This is an important finding given that 31.8 % of respondents in the Slovak sample had experience with unemployment of a household member which lasted for at least 6 months. If we exclude these people from the descriptive analysis (last column in Table 1) we arrive at significantly more optimistic social positions in Slovakia with the exact same average position (5.3) as in the Czech Republic. Obviously, such a comparison is not ideal, since we are unable to exclude (the less numerous) respondents with unemployment experience from the Czech sample. Regarding the explanatory power of the experience with unemployment in one’s household and current unemployment, based on the ISSP 2019 Slovak data, the former seems to be a more robust predictor.

----- *Figure 2 about here* -----

The relative importance of the observed connection between subjective social position and having unemployment experience can be seen in Figure 2 which presents average marginal effects for unemployment experience in one's household for various ISEI levels. As can be seen, controlling for all other variables, having unemployment experience reduces subjective social position on the 1 to 10 scale by almost half a point. This compares to a difference of roughly 1.5 point for those with lowest and highest ISEI values. This means that while ISEI is a stronger predictor of the subjective social status overall, the effect of unemployment experience supports hypothesis H2a and its magnitude is sufficient to explain the observed difference between Czechia and Slovakia in the 2019 data.

Subjective perception of social structure

Tables 5 and 6 present regression models explaining perceptions of social structure in the form of diagrams depicted in Table 2. Three dependent variables are used – Type A models explain the preference to describe one's current society as the highly polarized mass – elite model. Models described as Type AB contrast the preference to describe one's current society as either models A or B with a preference for all other models. And models Type DE explain the tendency to describe the current society using the most “optimistic” diagrams – the middle class (Type D in Table 2) and the “all are winners” society (Type E in Table 2). In all three cases, three separate models are estimated – a multilevel random intercept model for all countries in the respective ISSP wave and two simple binary logistic regression models for both ex-Czechoslovak countries.

----- *Table 5 about here* -----

As can be seen in Tables 5 and 6, a higher GDP means a lower preference for Type A and AB and higher odds of describing one's society as a society of the D or E type in all analyzed waves. On the other hand, there is no relationship between the income distribution in one's society as measured by the Gini coefficient and one's view of social structure.

----- *Table 6 about here* -----

Compared with the results for subjective self-placement (Table 4), there are far fewer stable and significant relationships between personal characteristics and subjective perceptions of social structure. Perhaps with the exception of age in the multilevel models (not in the single country models except for data from the Czech Republic in 2009) – older persons seem to universally describe their societies more often as A or B and less frequently as societies D and E.

Together with the relationship with GDP, the second almost universal relationship in Tables 5 and 6 is the one between subjective social position and perception of social structure. People who perceive their social position as low are also more likely to see their society as Types A and B and are less likely to identify their society as a structure described by Types D and E. This relationship is always significant in the multilevel models and on most occasions also in the single country models. This confirms previous results (Evans and Kelley, 2004; Lindemann and Saar, 2014; Oddsson, 2018).

Regarding our main explanatory variables related to unemployment, we find some support for our hypotheses. There are four models in Tables 5 and 6, where there is a significant relationship between being unemployed and a tendency to describe one's society as Type A or Type AB as expected in the second part of our second hypothesis (H2b). However, this is only the case in the 2009 and 2019 multilevel models. Except for these occasions, the relationship between personal unemployment and views on the social structure is insignificant in all single country models. The only exception is the counter-intuitive higher preference of the unemployed for models D and E in Slovakia in 1992. This is a surprising result which could be perhaps attributed to the extremely fresh experience with unemployment (the first unemployment surge in Slovakia occurred in summer of 1991).

The finding that a subjectively low social position is connected to identifying one's society as highly polarized might suggest that people with experiences of unemployment in their families will tend to see their society more frequently as highly polarized (Type A) as they also place themselves low on the top-bottom scale. However, there is also a direct connection between having unemployment experience in the family and views of the social structure which goes in an opposite direction. As can be seen in the 2019 models for Slovakia, respondents with this experience tend to see their society less frequently as Type A or A and B. So, more experiences with unemployment therefore most likely do not explain the rather skeptical views of Slovaks regarding the social structure of their society. This finding does not support the second part of the second hypothesis (H2b). This is an important contrast to our results above, supporting a connection between unemployment and subjective social position. We will discuss possible explanations of this difference in the conclusion.

As could be seen in Table 4 there is a clear connection between unemployment and the subjective social position. This could potentially hide the relationships between unemployment and the perception of the social structure explored in Tables 5 and 6. Therefore, in an attempt to exclude the possibility of “over controlling” our models, we ran a separate series of models which excluded the subjective social position variable². These models are, however, in line with the above mentioned conclusions based on results from Tables 5 and 6.

As a robustness check of the country level data in our analyses presented in Tables 5 and 6, we calculated the 2009 and 2019 regression models also using the Human development index (HDI) instead of GDP. As GDP and HDI are strongly correlated, both variables were included in separate models. The results are almost identical except for a slightly stronger connection between the subjective perception of the social structure and the GDP.

Conclusion

Our paper uses the example of the two ex-Czechoslovak countries to study and explain changes in the subjective perception of social structure. We attempt to explain the differences in how people in the Czech Republic and Slovakia perceive the structure of their society and their position within their society. These two societies with similar languages, common history, similar levels of economic development, and very egalitarian income distributions serve as a comparative framework to assess the impact of unemployment on subjective perceptions of social structure.

We explore if the extremely different experiences with unemployment in the two countries – either in the form of experiencing unemployment personally or having a negative experience with

unemployment in one's household – could be a factor explaining divergent views of former Czechoslovak citizens on the structure and their position within their societies. We find that unemployment experience can explain the observed differences in the subjective social position of Czechs and Slovaks. It can not, however, explicate the more pessimistic perception of the social structure in the Slovak sample.

Descriptive results reveal a growing difference between how people in Slovakia and Czechia perceive the structure of their society with the most similar views observed in the 1992 sample fielded before the split. Perhaps disappointed by unfulfilled expectations, Slovak respondents were generally much more likely to describe their society as highly polarized and described their society notably less frequently as a middle-class society. With regard to subjective position in society, people in Slovakia tended to place themselves universally lower than respondents in the Czech sample.

With regard to unemployment, our analysis confirmed the tendency of the unemployed to see their position as lower in the cross-national analyses as well as in the 1999 and 2009 data for the ex-Czechoslovak countries. Perhaps the most interesting finding is, that while being unemployed was not a significant predictor of lower subjective social position in the ISSP 2019 data from Slovakia, having a prolonged unemployment experience in one's household was. Having such an experience reduces the subjective social position on the 10-point scale by almost half a point. If we exclude people with an experience of long-term unemployment in their households from the 2019 Slovak sample, the average subjective position in Slovakia is the same as in the Czech Republic. These findings support previous research about the lasting impact and limited recovery of unemployment-related adverse effects (Gangl and Giustozzi, 2018). It also supports the assertion that different

experiences with unemployment can be used to explain the Czecho-Slovak divergence in the perceptions of the subjective social position.

While personal experience with unemployment seems to be clearly related to the subjective perception of one's position, the overall view on the social structure does not seem to have a clear connection to unemployment. Our parallel analysis of all countries available in the ISSP Social Stratification data set found a significant relationship between being unemployed and a preference to describe a society as highly polarized only in 2009 and 2019. This relationship, however, was not significant in the single-country analyzes of Slovakia and Czechia. The only universally robust relationship was found between a higher subjective social position and a tendency to describe society as more equal (Type DE) and less unequal (Types A and AB). The experience with unemployment in the household, which explained the lower subjective social position, did not explain the tendency of the Slovak respondents to describe their society as highly unequal. On the contrary, respondents with unemployment experience tended to describe their society less frequently as highly unequal.

Overall, we can make a strong argument in support of the hypothesis that unemployment and even indirect exposure to unemployment in a household lowers the subjective social position. The same variables, however, fail to explain seeing one's society as highly polarized and cannot be directly attributed as being the cause of the Czecho-Slovak divergence in this regard. This leads to the conclusion that unemployment experience – either direct or indirect – has a clear and lasting impact on the subjectively perceived social position. It cannot, however, be clearly linked to overall views on the social structure, which are most likely influenced by macro-level factors and a complex moral positioning far beyond everyday experience with economic insecurity (see Irwin, 2018). Rather than a direct result of economic hardship, the more skeptical assessments of the social

structure in Slovakia are more likely the result of the discourse concerning the origins of wealth and income distributions built in part upon these experiences.

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Endnotes

- 1 In the 1992 ISSP data, many countries used ISCO-68 to code respondents' occupations. We re-coded this to ISCO-88 and converted to ISEI. Some countries only used a 3-digit ISCO coding in 1992.
- 2 These models are available upon request from the authors.

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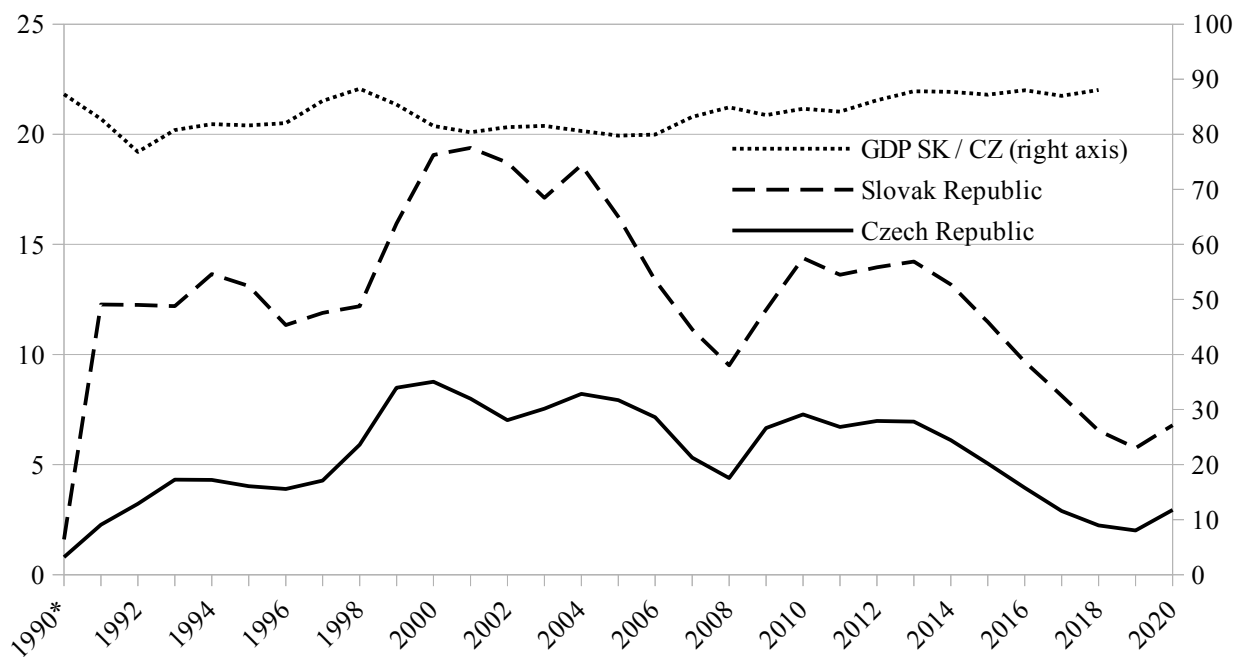
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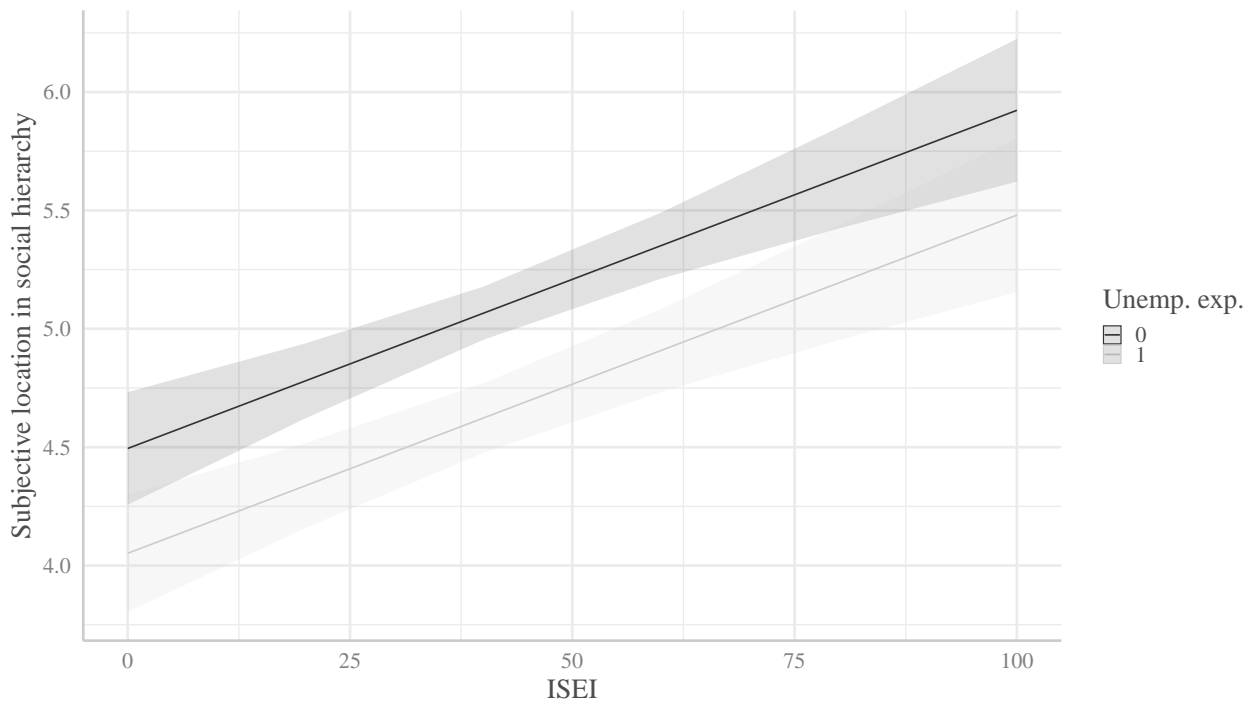
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Figure 1 Unemployment and the relative GDP level in the Czech and Slovak republic after 1989, in %



Sources: World Bank, World Development Indicators (years 1991-2000), Annual Report of the Slovak National Bank 1994 (year 1990) and Maddison Project Database, version 2020

Figure 2 Subjective position in the social hierarchy and unemployment experience, average marginal effects



Source: Bahna et al. (2022)

Table 1 Subjective locations in the social hierarchy, in %

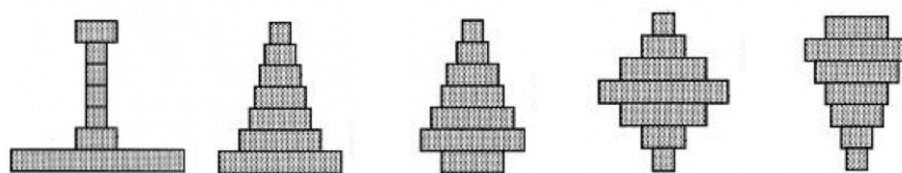
		1992		1999		2009		2019		2019
		CZ	SK	CZ	SK	CZ	SK	CZ	SK	SK*
Top	1	0.3	0.2	0.1	0.6	0.4	0.1	0.9	0.1	0.1
	2	0.2	0.0	0.3	1.0	0.3	0.7	2.7	0.2	0.2
	3	3.1	2.1	3.2	3.6	3.1	3.7	9.1	2.7	3.1
	4	8.2	6.7	7.6	8.9	10.8	8.0	22.1	9.7	10.5
	5	<i>27.7</i>	<i>26.1</i>	<i>26.0</i>	<i>20.2</i>	20.1	16.2	17.1	20.0	23.4
	6	19.1	20.0	17.4	14.7	<i>30.2</i>	<i>32.2</i>	<i>28.0</i>	<i>39.7</i>	<i>42.5</i>
	7	18.1	16.4	17.7	17.7	17.3	16.8	10.7	18.3	16.1
	8	13.7	15.7	15.5	16.3	10.8	12.5	6.4	6.4	3.5
	9	6.2	8.1	8.0	11.0	3.7	6.8	1.9	1.8	0.3
Bottom	10	3.4	4.8	4.2	6.2	3.2	2.9	1.2	1.1	0.3
Mean		6.2	6.4	6.4	6.5	6.1	6.3	5.3	5.9	5.3
Difference		0.22		0.15		0.19		0.62		-
N		678	423	1834	1082	1205	1159	1924	1003	634

* Only respondents in households which did not have an extended experience with unemployment.

Note: On all occasions the options were laid out vertically with the top option described as Top and the bottom option described as Bottom. In 1992 and 1999 the top category was labeled 1 and increased towards bottom which was labeled Bottom – 10. In 2009 and 2019 the top category was labeled as Top – 10 and the number decreased towards the bottom labeled as Bottom – 1. The averages calculations take this into account to produce comparable figures. However, the preference of the respondents to answer with category labeled as 5 (italic) make the temporal comparison between 1992 /1999 and 2009 / 2019 problematic. The seeming preference for answer 6 (italic) can be explained by the fact that this option was labeled with the number 5 in the 2009 and 2019 questionnaire. 2009 and 2019 figures use post-stratification weights.

Source: ISSP Research Group (1994, 2002, 2017, 2022), Bahna et al. (2022)

Table 2 Views on the shape of the current society in Czechia and Slovakia, in %



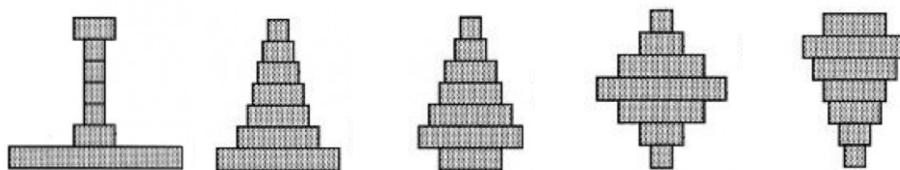
	TYPE A		TYPE B		TYPE C		TYPE D		TYPE E		Average equal.		
	SK	CZ	SK	CZ	SK	CZ	SK	CZ	SK	CZ	SK	CZ	Diff.
ISSP 2019	37.4	14.6	33.6	35.3	11.3	30.5	12.5	17.0	5.2	2.7	41.7	59.5	17.8
ISSP 2009	43.0	29.4	39.5	35.7	9.0	18.3	6.9	14.3	1.7	2.3	33.9	47.0	13.1
ISSP 1999	53.1	31.1	32.6	35.9	6.8	18.7	5.4	12.0	2.1	2.3	27.9	45.3	17.4
ISSP 1992	36.0	22.4	38.4	39.2	8.9	13.9	14.3	21.2	2.5	3.2	41.0	52.5	11.5

The following description was offered for diagrams A to E: (A) A small elite at the top, very few people in the middle and the great mass of people at the bottom. (B) A society like a pyramid with a small elite at the top, more people in the middle, and most at the bottom. (C) A pyramid except that just a few people are at the bottom. (D) A society with most people in the middle. (E) Many people near the top, and only a few near the bottom.

Notes: Average equality is calculated based on the degree of inequality assigned to each society type by Evans et al. (1992) where 0 refers to type A as the most unequal and 100 to type E as the most equal. Types B, C and D score 47, 80 and 93 in this classification. 2009 and 2019 figures use post-stratification weights.

Source: ISSP Research Group (1994, 2002, 2017, 2022), Bahna et al. (2022)

Table 3 Views on the shape of the ideal society in Czechia and Slovakia, in %



	TYPE A		TYPE B		TYPE C		TYPE D		TYPE E		Average equal.		
	SK	CZ	SK	CZ	SK	CZ	SK	CZ	SK	CZ	SK	CZ	Diff.
ISSP 2019	2.0	1.7	5.4	12.9	14.3	29.3	43.7	39.4	34.7	16.8	89.3	82.9	6.4
ISSP 2009	2.8	1.1	6.2	6.5	26.6	29.6	40.6	40.8	23.8	21.9	85.8	86.6	0.8
ISSP 1999	1.1	0.6	5.9	5.9	18.4	19.7	41.8	50.3	32.9	23.5	89.3	88.8	0.5
ISSP 1992	0.7	1.5	4.2	4.2	14.0	18.4	37.9	37.2	43.1	40.2	91.5	91.5	0.0

Note: Average equality is calculated based on the degree of inequality assigned to each society type by Evans et al. (1992) where 0 refers to type A as the most unequal and 100 to type E as the most equal. Types B, C and D score 47, 80 and 93 in this classification. 2009 and 2019 figures use post-stratification weights. See Table 2 for textual description of diagrams A to E.

Source: ISSP Research Group (1994, 2002, 2017, 2022), Bahna et al. (2022)

Table 4 Explaining subjective position in the social hierarchy, OLS regression

	1992						1999					
	All countries		Czechia		Slovakia		All countries		Czechia		Slovakia	
	Beta	p	Beta	p	Beta	p	Beta	p	Beta	p	Beta	p
Male (ref = female)	0.145	<0.001	0.024	0.867	-0.368	0.057	0.210	<0.001	0.286	0.001	0.047	0.705
Age (years)	-0.061	<0.001	0.000	0.952	-0.009	0.247	-0.153	<0.001	-0.014	<0.001	-0.010	0.031
Education (years)	0.311	<0.001	0.069	0.027	0.115	0.003	0.370	<0.001	0.056	0.002	0.066	0.020
ISEI	0.256	<0.001	0.015	0.014	0.011	0.162	0.340	<0.001	0.015	<0.001	0.010	0.050
Unemployed	-0.523	<0.001	-0.228	0.610	-0.516	0.264	-0.744	<0.001	-0.970	<0.001	-0.834	<0.001
GDP	0.575	<0.001					0.624	<0.001				
Gini	-0.244	0.009					-0.133	0.093				
Income: bottom quartile			-0.249	0.176	-0.351	0.181			-0.369	0.002	-0.585	0.001
Income: top quartile			0.201	0.287	-0.039	0.874			0.823	<0.001	0.930	<0.001
Random Effects												
σ^2	2.46						2.35					
τ_{00}	0.12	country					0.13	country				
ICC	0.05						0.05					
N	14	country					18	country				
Observations	13369		536		296		15336		1385		802	
Marginal R ² / Conditional R ²	0.228 / 0.264		0.059 / 0.046		0.113 / 0.091		0.286 / 0.322		0.194 / 0.190		0.186 / 0.179	

	2009						2019							
	All countries		Czechia		Slovakia		All countries		Czechia		Slovakia 1		Slovakia 2	
	Beta	p	Beta	p	Beta	p	Beta	p	Beta	p	Beta	p	Beta	p
Male (r. female)	0.103	<0.001	0.460	<0.001	-0.031	0.747	0.074	0.001	0.184	0.059	0.156	0.109	0.167	0.077
Age (years)	-0.121	<0.001	-0.002	0.660	-0.004	0.202	-0.091	<0.001	-0.012	<0.001	-0.003	0.350	-0.002	0.482
Education (yrs)	0.190	<0.001	0.017	0.041	0.121	<0.001	0.210	<0.001	0.015	0.437	0.014	0.305	0.013	0.342
ISEI	0.459	<0.001	0.025	<0.001	0.016	<0.001	0.346	<0.001	0.009	0.002	0.014	<0.001	0.015	<0.001
Unemployed	-0.635	<0.001	-0.823	<0.001	-0.892	<0.001	-0.422	<0.001	-0.042	0.903	-0.232	0.411	-0.185	0.507
GDP	0.540	<0.001					0.300	0.086						
Gini	0.217	0.036					-0.116	0.490						
Bott. quart. inc.			-0.575	<0.001	-0.531	<0.001			-0.572	<0.001	-0.553	<0.001	-0.541	<0.001
Top quart. inc.			0.698	<0.001	0.619	<0.001			0.501	<0.001	0.239	0.026	0.226	0.031
Unemp. exp.											-0.443	<0.001		
Unemp. ex. bad													-0.606	<0.001
Random Effects														
σ^2	2.49						2.59							
τ_{00}	0.23	country					0.29	country						
ICC	0.08						0.10							
N	41	country					16	country						
Observations	44247		772		828		20922		1146		605		631	
Marginal R ² / Conditional R ²	0.185 / 0.254		0.226 / 0.219		0.244 / 0.238		0.155 / 0.241		0.112 / 0.106		0.189 / 0.178		0.211 / 0.201	

Source: ISSP Research Group (1994, 2002, 2017, 2022), Bahna et al. (2022)

Table 5 Explaining subjective perception of social structure in ISSP 1992 and 1999, binary logistic regression

	1992																	
	TypeA						TypeAB						TypeDE					
	All countries		Czechia		Slovakia		All countries		Czechia		Slovakia		All countries		Czechia		Slovakia	
	OR	p	OR	p	OR	p	OR	p	OR	p	OR	p	OR	p	OR	p	OR	p
Male (ref = female)	0.892	0.045	1.167	0.477	0.786	0.357	0.878	0.018	0.776	0.173	0.983	0.950	1.078	0.215	1.163	0.463	0.943	0.851
Age (years)	1.019	0.590	1.005	0.546	1.009	0.366	1.122	0.001	1.002	0.827	1.017	0.126	0.899	0.004	0.994	0.468	0.990	0.418
Education (years)	0.941	0.120	1.012	0.805	0.956	0.396	0.866	<0.001	0.973	0.511	0.956	0.434	1.072	0.081	1.044	0.334	1.040	0.537
ISEI	1.004	0.918	0.988	0.235	1.006	0.611	1.003	0.920	1.001	0.918	1.021	0.084	0.961	0.273	0.995	0.602	0.985	0.241
Unemployed	1.085	0.529	0.572	0.486	0.517	0.340	0.894	0.415	0.568	0.350	0.427	0.152	1.245	0.144	1.003	0.996	4.069	0.020
Topbottom	0.861	<0.001	0.894	0.087	0.944	0.464	0.854	<0.001	0.845	0.004	0.965	0.673	1.156	<0.001	1.213	0.003	1.186	0.083
GDP	0.328	<0.001					0.361	<0.001					2.024	<0.001				
Gini	1.033	0.754					0.906	0.239					1.193	0.159				
Inc.: bottom quartile			1.419	0.190	0.980	0.956			0.785	0.314	0.606	0.158			1.155	0.591	1.206	0.648
Income: top quartile			0.993	0.981	1.005	0.989			0.816	0.403	3.821	0.004			0.979	0.937	0.453	0.098
Random Effects																		
σ^2	3.29						3.29						3.29					
τ_{00}	0.07	v ₃					0.05	v ₃					0.11	v ₃				
ICC	0.02						0.01						0.03					
N	8	v ₃					8	v ₃					8	v ₃				
Observations	7105		523		287		7105		523		287		7105		523		287	
Marginal R ² / Conditional R ²	0.265 / 0.281	0.017		0.017			0.241 / 0.251	0.028		0.081			0.131 / 0.158	0.025		0.060		

Source: ISSP Research Group (1994)

	1999																	
	TypeA						TypeAB						TypeDE					
	All countries		Czechia		Slovakia		All countries		Czechia		Slovakia		All countries		Czechia		Slovakia	
	OR	p	OR	p	OR	p	OR	p	OR	p	OR	p	OR	p	OR	p	OR	p
Male (ref = female)	1.063	0.160	1.074	0.566	0.994	0.965	0.944	0.159	0.839	0.153	1.107	0.639	0.985	0.730	1.201	0.255	0.934	0.808
Age (years)	1.065	0.016	0.999	0.751	1.003	0.645	1.135	<0.001	1.004	0.377	1.006	0.454	0.903	<0.001	0.991	0.117	0.998	0.837
Education (years)	1.025	0.508	1.046	0.079	1.024	0.492	0.896	0.001	1.036	0.161	0.991	0.859	1.042	0.242	0.942	0.077	1.082	0.209
ISEI	0.951	0.070	0.984	0.001	1.009	0.187	0.987	0.609	0.991	0.059	1.013	0.178	1.014	0.595	1.012	0.050	0.979	0.078
Unemployed	1.155	0.192	0.953	0.880	1.044	0.879	1.058	0.634	1.352	0.399	1.108	0.813	1.006	0.967	1.005	0.991	1.069	0.904
Topbottom	0.836	<0.001	0.792	<0.001	0.852	<0.001	0.835	<0.001	0.768	<0.001	0.848	0.007	1.200	<0.001	1.297	<0.001	1.240	0.007
GDP	0.386	<0.001					0.404	<0.001					2.238	<0.001				
Gini	0.990	0.950					1.065	0.646					0.999	0.992				
Inc.: bottom quartile			0.856	0.366	1.255	0.285			0.687	0.030	1.425	0.301			1.842	0.007	0.442	0.108
Income: top quartile			1.097	0.595	0.686	0.038			1.060	0.721	0.967	0.895			1.016	0.938	0.674	0.247
Random Effects																		
σ^2	3.29						3.29						3.29					
τ_{00}	0.53	country					0.37	country					0.21	country				
ICC	0.14						0.10						0.06					
N	17	country					17	country					17	country				
Observations	13968		1356		786		13968		1356		786		13968		1356		786	
Marginal R ² / Conditional R ²	0.271 / 0.372	0.042		0.039			0.279 / 0.352	0.047		0.017			0.243 / 0.287	0.031		0.018		

Source: ISSP Research Group (2002)

Table 6 Explaining subjective perception of social structure in ISSP 2009 and 2019, binary logistic regression

	2009																	
	TypeA						TypeAB						TypeDE					
	All countries		Czechia		Slovakia		All countries		Czechia		Slovakia		All countries		Czechia		Slovakia	
	OR	p	OR	p	OR	p	OR	p	OR	p	OR	p	OR	p	OR	p	OR	p
Male (ref = female)	1.023	0.362	0.940	0.710	1.125	0.446	0.925	0.001	0.856	0.339	1.368	0.141	1.004	0.881	0.921	0.705	0.556	0.053
Age (years)	0.993	0.635	0.989	0.049	1.010	0.078	1.082	<0.001	0.994	0.264	0.998	0.797	0.960	0.007	1.008	0.314	0.999	0.959
Education (years)	0.933	0.001	0.963	0.221	1.063	0.141	0.923	<0.001	1.004	0.780	1.097	0.114	1.046	0.025	1.007	0.636	1.007	0.922
ISEI	0.993	0.616	1.000	0.996	1.009	0.193	0.939	<0.001	0.998	0.784	1.022	0.016	1.029	0.047	1.008	0.298	0.985	0.212
Unemployed	1.106	0.034	1.228	0.544	1.232	0.508	1.126	0.023	1.399	0.380	1.227	0.683	0.946	0.381	1.499	0.397	0.601	0.497
Topbottom	0.854	<0.001	0.825	0.001	0.769	<0.001	0.852	<0.001	0.920	0.142	0.726	<0.001	1.151	<0.001	1.242	0.005	1.229	0.045
GDP	0.380	<0.001					0.419	<0.001					2.110	<0.001				
Gini	0.888	0.451					0.959	0.754					1.121	0.317				
Inc.: bottom quartile			1.029	0.893	1.068	0.772			1.174	0.453	2.214	0.032			0.649	0.169	0.886	0.785
Income: top quartile			1.269	0.294	1.002	0.990			1.057	0.799	0.897	0.660			0.865	0.615	1.114	0.747
Random Effects																		
σ^2	3.29						3.29						3.29					
τ_{00}	0.53	v ₅					0.37	v ₅					0.27	v ₅				
ICC	0.14						0.10						0.08					
N	41	v ₅					41	v ₅					41	v ₅				
Observations	42035		758		782		42035		758		782		42035		758		782	
Marginal R ² / Conditional R ²	0.227 / 0.334	0.033		0.040		0.219 / 0.299	0.011		0.045		0.163 / 0.227	0.023		0.015				

Source: ISSP Research Group (2017)

	2019																	
	TypeA						TypeAB						TypeDE					
	All countries		Czechia		Slovakia		All countries		Czechia		Slovakia		All countries		Czechia		Slovakia	
	OR	p	OR	p	OR	p	OR	p	OR	p	OR	p	OR	p	OR	p	OR	p
Male (ref = female)	0.997	0.943	0.977	0.900	1.386	0.077	0.942	0.058	1.097	0.466	1.356	0.129	1.002	0.946	0.957	0.784	0.706	0.163
Age (years)	1.024	0.251	1.009	0.154	1.003	0.677	1.101	<0.001	1.004	0.379	0.996	0.553	0.941	0.002	1.000	0.992	1.004	0.595
Education (years)	0.981	0.468	1.014	0.714	0.950	0.081	0.970	0.161	0.986	0.576	0.993	0.786	0.976	0.298	1.048	0.133	0.973	0.471
ISEI	0.953	0.045	0.999	0.848	1.000	0.955	0.925	<0.001	0.992	0.031	0.996	0.387	1.000	0.987	1.001	0.894	1.000	0.993
Unemployed	1.185	0.028	1.162	0.817	1.708	0.301	1.160	0.048	1.174	0.721	5.865	0.091	1.016	0.856	0.793	0.715	0.000	0.979
Topbottom	0.869	<0.001	0.803	<0.001	0.799	0.005	0.882	<0.001	0.978	0.566	0.752	0.001	1.134	<0.001	1.033	0.519	1.626	<0.001
GDP	0.377	<0.001					0.435	<0.001					1.908	<0.001				
Gini	0.914	0.645					0.895	0.483					1.100	0.522				
Inc.: bottom quartile			0.735	0.248	0.878	0.615			1.051	0.789	0.947	0.849			1.323	0.236	1.142	0.699
Income: top quartile			0.918	0.727	0.623	0.025			0.818	0.209	0.869	0.516			1.325	0.144	0.642	0.109
Unemp. exp. bad					0.605	0.021					0.593	0.019					1.436	0.189
Random Effects																		
σ^2	3.29						3.29						3.29					
τ_{00}	0.40	country					0.26	country					0.23	country				
ICC	0.11						0.07						0.06					
N	16	country					16	country					16	country				
Observations	20056		1075		607		20056		1075		607		20056		1075		607	
Marginal R ² / Conditional R ²	0.240 / 0.323	0.018		0.051		0.199 / 0.258	0.017		0.042		0.124 / 0.181	0.009		0.050				

Source: ISSP Research Group (2022), Bahna et al. (2022)