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PERCEPTIONS OF CORRUPTION OVER TIME

General perception of corruption

The first question we want to ask is how Croatian citizens perceive corruption in the civil service. Perception of corruption and the extent of corruption are not the same. Perception, even if it is merely a reflection of public debate or public opinion, affects people's behaviour, their trust and their functioning in society. Let us remember the famous dictum by American sociologist William Thomas: "If men define situations as real, they are real in their consequences."[1]

Therefore, if people perceive corruption as widespread, they will behave differently than if they thought there was no corruption. For example, general trust in institutions (to be dealt with later in the text) may be affected if it is believed that there is widespread corruption in the civil service. Of relevance here are the data gathered in December 2003 and January 2004, during the project *South East European Social Survey* funded by the Norwegian Ministry of Science. The survey was conducted in Croatia using a representative sample of 2550 respondents, of which we used only a half (1250) because the whole sample was divided into two groups so that more questions could be used.

A second survey financed by the Ministry of Science of Croatia was conducted in March 2010 by the Institute for Social Research, as part

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[1] William I. Thomas, Dorothy Swaine Thomas: The Child in America. Alfred Knopf. New York, 1928.

of the project called *Stratification and the Value System in Croatia*, using a representative sample of 1000 respondents.

The essential questions concerned the distribution of the perception of corruption in Croatia, whether it was possible to detect any social reasons for such perception, and whether any changes in perception had occurred during the period 2004-2010.

Particularly interesting is the fact that the 2010 survey brought corruption to the fore as one of the key elements of the crisis in Croatian society. One of our questions was: How did the revelation of corruption scandals, which started with the unexplainable resignation of Prime Minister Sanader, affect the perception of corruption? It might be expected that the high number of exposed cases and the determination of competent institutions to act against corruption, would lead to a perception among the public that corruption was being reduced or, at least, that progress was being made to eliminate corruption in government. Alternatively, it might be that the revelation of what nobody believed existed in society could increase cynicism and disappointment and the attempt to convince those who thought corruption was not as widespread as it actually was, combined, would contribute to a perception of an increase in corruption.

The threshold information in the analysis was the distribution of responses to the following question:

Table 1. Distribution of responses to the question
"In your opinion, how widespread are bribery and corruption among civil servants in this country?

Answer	2004		2010	
	N	%	N	%
Almost no one involved	15	1.2	2	0.2
Only a few involved	269	21.5	137	13.7
The majority involved	624	49.9	375	37.4
Almost everyone involved	274	21.9	440	43.9
Don't know	68	5.4	48	4.8
Total	**1250**	**100.0**	**1002**	**100.0**

The majority of citizens believe that corruption in the civil service was widespread in 2004. If the last two answers (the majority and almost everyone in the civil service are involved in bribery and corruption) are combined, 71.8% of Croatian citizens were of the opinion that corruption was widespread among civil servants in 2004.

The distribution of answers in 2010 survey shows that more citizens think that corruption is widespread. More than 81.3% of Croatian citizens surveyed believe that most or almost all civil servants are involved in corruption. During the intervening years between the two surveys, the public's perception of corruption has increased by 10%. Moreover, the number of citizens who believe that "almost everyone (is) involved " has doubled, from 21.9% to 43.9%. Based on these data one concludes that there has been a dramatic increase in the perception of corruption in the civil service in Croatia. The actions of combating corruption and revealing its scope have largely increased the perception of its existence.

It can be stated with certainty that public trust has continually decreasaed from 1995 until 2010. When the first World Values Survey was conducted in 1995 in Croatia, the same question regarding the perception of corruption was asked. The data presented by Stulhofer[2] are not comparable precisely, but the differences are nevertheless insignificant. Stulhofer's analysis excludes those who answered: "I don't know". Looking at the statement 'almost everyone is involved' in corruption, in 1995, 14.7% of respondents replied positively; compared with 23.2% in 2004 and 46.1% in 2010. Based upon the exact question asked at three different points in time over a period of fifteen years, it can be said with certainty that among the public in Croatia the perception of corruption has increased over time. Although the rise is more pronounced for the period 2004-2010, it existed during in the period 1995-2004 as well.

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[2]   Aleksandar Stulhofer: Perception of Corruption and the Erosion of Social Capital in Croatia 1995-2003, Politička misao, Vol. XLI (2004), No. 5, pp. 74-86.

Perception of the extent of corruption

The next step in the analysis is whether all societal structures perceive corruption in an equal way. Are there specific socio-demographic groups who perceive the extent of corruption in society as relatively more or less pervasive? The interpretation of the obtained result is, of course, speculative in nature, since there are no data that provide a direct answer to the question of why these differences among socio-demographic groups exist. A question may be asked here whether the increase in corruption recorded in Table 1 takes place equally in all surveyed categories, or whether some categories perceive a greater or a smaller increase in corruption.

In order to facilitate the presentation of differences in the perception of corruption, a scale was developed a scale from 1 to 4, where 1 means that almost no one is involved in corruption, and 4 that almost everyone is involved. Statistically, this transformation may be somewhat dubious (the intervals between educational grades do not need to be equal as implied by our newly developed scale) but for the purpose of a visual presentation of data, these nuances need not be a great worry.

The analysis of different social structures is based on the following: education, age and profession. The first question was whether the perception of corruption is different among groups with different levels of education.

Table 2. Mean value of the extent of corruption by levels of education

Education	2004		2010	
	Mean	**N**	**Mean**	**N**
Primary school or lower	3.0578	294	3.3793	294
3-year vocational school	2.9746	236	3.3500	160
4-year grammar school or technical school	2.9822	394	3.3478	483
College	2.9115	113	3.2727	77
University	2.8601	143	3.1429	147
Total	**2.9780**	**1180**	**3.3134**	**954**

Table 3. Chi-Square

	2004			2010		
	Value	Df	Significance (2-tailed)	Value	Df	Significance (2-tailed)
Pearson's Chi-Square	38.379	16	.001	28.873	16	.025
Likelihood ratio	40.487	16	.001	26.192	16	.051

The perception of corruption <u>decreases with an increase in the level of education</u>. Less educated respondents believe that the civil service is more corrupt and that bribery is more widespread than respondents who are more highly educated. Although the differences are not large in the absolute sense (the average number for those with primary school education is 3.0578 and for those with a university degree 2.8601), they are statistically significant. The only correct interpretation is that those who are more educated perceive <u>corruption as less widespread than those who are less educated.</u> Both groups, however, perceive corruption and bribery as widespread in Croatia.

It cannot be said that persons with different levels of education perceive the extent of bribery and corruption in a significantly different way, but that there is a slight difference in their perceptions. The fact that the mean for those with primary school education is greater than 3 substantively means that the average perception goes beyond the statement 'majority involved /in corruption/' and shows a tendency towards the statement 'almost everyone involved'. As far as those with university education are concerned (as well as with all other levels of education), the mean is below 3, i.e. below the perception characterised by the statement 'almost everyone involved".[3]

Looking at the survey results for 2010, the perception of corruption has increased across all educational categories. In 2004 the mean was

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[3] Although the data are not directly comparable, a similar tendency can be found in the Eurobarometer Survey of 2009. In Europe, the same situation exists. As the level of education rises, the tendency is that the perception of the extensiveness of bribery decreases (Eurobarometer 72. Public Opinion in the European Union. First results. TNS Opinion & Social. December 2009).

above 3 only in the category of those with primary school, in 2010 all categories ended up in the same "class". Thus in 2010, all educational categories perceive the level of corruption beyond at that which in 2004 was ascribed only to those with primary education. Within this generally increased perception of corruption, the same regularity has remained, namely that those with lower education perceive corruption as more widespread than those with higher education.

The next step was to see whether there was a difference in the perception of bribery and corruption with respondents from different professions. Occupations were divided into seven major categories (farmers, unqualified and semi-qualified workers, qualified and highly-qualified workers, the self-employed, clerks and technicians, experts, and the last category which included entrepreneurs, politicians and managers). There is an overlap between professional classification and educational classification in that the educational level is higher for the more professional occupations. For the purpose of this analysis, oc-cupations have been arbitrarily put in a hierarchical order from "low" (farmers) to the "high" (entrepreneurs, politicians and managers). This arbitrary order assumes a corresponding hierarchy in educational, economic and social stature levels.

Table 4. Mean value of the extent of corruption according to different occupations

Occupation	2004		2010	
	Mean	**N**	**Mean**	**N**
Farmers	2.8750	24	3.5217	23
Unqualified and semi-qualified	3.0968	155	3.4179	67
Qualified and highly-qualified	2.9911	338	3.3654	260
Self-employed	2.9231	13	3.4783	46
Clerks and technicians	2.9358	265	3.1389	216
Experts	2.7374	99	3.1732	127
Entrepreneurs, politicians, managers	3.0109	92	3.0455	22
Total	**2.9655**	**986**	**3.2760**	**761**

Table 5 Chi-Square

	2004			2010		
	Value	**Df**	**Significance (2-tailed)**	**Value**	**Df**	**Significance (2-tailed)**
Pearson's Chi-Square	50.817	24	.001	38.957	24	.028
Likelihood ratio	48.335	24	.002	41.951	24	.013

As may be expected, a similarity exists with the findings for 2004. If we exclude the extremes in the first step of the analysis – farmers at the bottom and entrepreneurs, politicians and managers at the top - we obtain similar results to those in Table 2. The perception of corruption decreases among the higher occupations in the same way as perceived corruption decreased with increased educational levels.

Unqualified and semi-qualified workers perceive corruption as more prevalent as compared with qualified and highly-qualified workers, who in turn perceive more pervasive corruption than the self-employed and clerks and than experts, who perceive less corruption than all other occupations. The differences are relative (i.e., the mean for unqualified and semi-qualified workers is 3.0968 and the mean for experts is 2.7374), which means that all occupational groups perceive corruption as widespread, but that the perception is somewhat stronger with unqualified and semi-qualified workers.

Not all occupational groups fit this trend. Among farmers, the perception of corruption is lower than that of all other occupations, except that of experts. Entrepreneurs, politicians and managers, however, perceive corruption as more widespread than would be expected from them with regard to their social status (and average education).

It is mostly experts (who are also the most educated and in that respect the analysis is compatible with the one in the previous table) who believe there is relatively little corruption. On the contrary, unqualified and semi-qualified workers, whose level of education is the lowest, believe that bribery and corruption are widespread. Entrepreneurs, politicians and managers, regardless of their education, believe that there is more corruption than the comparable group of experts.

Does this mean that entrepreneurs, politicians and managers are more exposed to potential corruption, or simply that this occupational

category is more sensitive to corruption? Why do persons in the lower occupational levels (unqualified and semi-qualified workers), perceive corruption as most widespread - is it because they are the ones who are its victims, and who suffer the most? Or is it because members of this occupational group simply repeat what they hear?

Numerically, for the 2004 study, the mean goes beyond number 3, thus the perception is 'the majority is involved' and gets close to 'almost everyone is involved' only in the case of unqualified and semi-qualified workers, as well as entrepreneurs, politicians and managers, although it is only a 'marginal' or an insignificant increase going beyond 3.

In the 2010 study, the average perception of corruption goes beyond 3 for all occupational groups. The differences that were typical for the year 2004 have mostly disappeared. In the 2010 responses, the perception of corruption now decreases relatively regularly by occupation. The 'particularity' of the entrepreneurs, politicians and experts has disappeared because the perception of corruption has increased among other occupational categories. In the case of farmers, the perception of corruption has increased from 2.875 in 2004 to 3.5217 in 2010. Among self-employed persons the increase was from 2.9358 in 2004 to 3.1389 in 2010. For the occupational category of experts, politicians and managers, whose perception of corruption was very high in 2004 (after unqualified and semi-qualified workers), there has been a very slight increase in perception of corruption (from 3.0109 to 3.0455), such that all other categories have left them behind.

Similar results of the perception of corruption among occupational groups exist in countries of the European Union where there are small but regular patterns of the perception of corruption decreasing slightly by professions. For example, 29% of managers, 37% of the self-employed, 38% of other white-collar workers, and 40% of manual workers in countries of the European Union, believe that corruption is widespread within the judiciary. As many as 32% of managers, 37% of the self-employed, 38% of other white-collar workers and 43% of manual workers, believe that corruption exists within the police. Corruption within the customs service exists in the opinion of 30% of

managers, 40% of the self-employed, 38% of white-collar workers, and 38% of manual workers.[4]

Finally, the third dimension is age. The entire population was divided into four age groups (18-32, 33-45, 46-58, 59 and older).

Table 6. Mean value of the extent of corruption by age groups

Age groups	2004		2010	
	Mean	**N**	**Mean**	**N**
18 - 32	3.0068	292	3.3576	330
33 - 45	2.9712	312	3.2627	255
46 - 58	2.9435	283	3.2627	217
59 and older	2.9898	294	3.3673	147
Total	**2.9780**	**1181**	**3.3119**	**949**

Table 7. Chi-Square

	2004			2010		
	Value	**Df**	**Significance (2 tailed)**	**Value**	**Df**	**Significance (2 tailed)**
Pearson's Chi-Square	44.248	12	.000	26.725	12	.008
Likelihood ratio	39.247	12	.000	24.227	12	.019

We can see that there is a significant difference in perception of corruption among different age groups for both the 2004 and 2010 studies. The youngest and the oldest have relatively stronger perceptions of corruption. The age group from 46 – 58 has, relatively speaking, the lowest perception of corruption. The same structure has remained among the age groups in the 2010 study, the only change being an increased perception of corruption among all ages groups In the 2004 study, the average perception was slightly above 3 only among the youngest group; in the 2010 study the average perception of corruption was above 3 with all age groups. If we compare the Croatian situation with that of Europe, we can confirm the analogy that the youngest age group has a tendency to perceive a higher level of corruption than other age groups. However, this analogy is not

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[4]   Eurobarometer 72. Public Opinion in the European Union. First results. TNS Opinion & Social. December 2009.

valid with the older age group because, in Europe, the situation is reversed. The older age group tends to perceive corruption as least spread compared to other age groups.

A possible interpretation

Our basic finding has been that everyone perceives bribery and corruption as widespread. There are, however, differences in the perception of its extent along lines of key socio-demographic characteristics. The less educated and those of lower social status (with the exclusion of the very top) perceive corruption as more widespread. The youngest and the oldest also perceive corruption as more widespread than those of middle age. A possible interpretation could be that the extent of corruption is perceived as greater by those who are its potential victims. People of lower social positions (measured either by profession or education) have fewer connections and less impact and are not networked. Therefore, when they need services from governmental, health-care, educational or other public institutions, they must resort to illegal means.

More educated people in higher positions are closer to the centres of power and can achieve more easily whatever they need because they are better networked, have more acquaintances. In their interaction with people in different public institutions they come across the same or even lower social groups who, in their contacts with them, behave in accordance with the rules. The same applies to age groups where the oldest and the youngest are the least powerful and influential and those of middle age the most influential.

The exclusion of entrepreneurs, managers and politicians can be explained by the fact that, on the one hand, they are the most exposed to corruption and the most aware of the difficulty of doing business in a corrupt environment (managers and entrepreneurs), and on the other, are the most conscious of the extent of corruption and its impact on society in general (politicians).

If we go back to the hypothesis of how the intensified fight against corruption, and the revelation and processing of a large number of corruption cases in public service, impact upon the perception of corruption, the conclusion is unambiguous. The perception of corruption

rises, and the perception of its scope gets closer to the statement: 'almost everyone is involved'.

The revelation of a series of corruption cases in the countries of the European Union results, as a rule, in a significant rise in perceived corruption. In Finland, for example, an intensive discussion on the financing of political parties has begun, followed by allegations of corruption and suspect election donations. This has resulted in a sharp rise in the perception of corrupt politicians at a national level, by as much as 36%. In 2009, as many as 63% of Finns believe that corruption is widespread among politicians, as opposed to 27% in 2007. In the United Kingdom, the discovery that a number of representatives claimed false travelling costs led to a scandal and to several resignations. Consequently, the number of those who believe that corruption is widespread among politicians increased from 44% in the autumn of 2007 to 62% at the end of 2009. A similar process took place in Bulgaria where the government, elected in June 2009, proclaimed the fight against corruption as its main priority. We give these examples to illustrate the rule that revealing corruption and fighting seriously against it leads to a situation where corruption is perceived as more widespread than before. This rule is obvious in its extreme form in Croatia as well.

Perception of corruption and trust in institutions

It has already been stated that the perception of corruption has a huge impact on the public's functioning and its views of the world. Further analysis will examine this impact. The question is whether the perception of the extent of bribery and corruption is connected with trust in institutions.[5] In the 2010 survey, respondents were asked about the extent of their trust in various state institutions. Although a correlation is not proof of causality, we shall start from the hypothesis that if someone perceives corruption as more widespread, then he

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[5] For a detailed analysis of trust see the chapter The Trust of Croatian Citizens in Institutions. It must be mentioned here that in his research, A. Stulhofer (Perception of Corruption and the Erosion of Social Capital in Croatia 1995-2003, Politička misao Vol. XLI (2004), No. 5, pp. 74-86) found that the perception of corruption (measured by the same question as here) was the only significant predictor of the general social trust in people.

Table 8. Pearson's R correlation between corruption and trust in institutions

Trust in institutions	Church	Military	Judiciary	Press	TV	Trade Unions	Police	Government	Parliament	Political parties	EU	UN
How widespread is corruption?												
2004	-.115**	-.062*	-.072*	-.048	-.060*	-.015	-.057*	-.044	-.036	-.060*	-.036	-.011
2010	-.090**	-.143**	-.124**	-.054	.104**	-.088**	-.198**	-.135**	-.131**	-.063	-.120**	-.127**

** Correlation significant at the level 0.01 (a 2-tailed test).
* Correlation significant at level 0,05 (a 2-tailed test).

or she will consequently have less trust in the most important social institutions. Table 8 below shows a correlation between the perception of the extent of corruption and trust in institutions based on the responses received from the 2010 survey. A positive coefficient means that the stronger the perception of corruption, the weaker the public trust is in institutions. The data show that such a correlation is present. The more the public perceives the existence of bribery and corruption as widespread, the less it trusts institutions. There are no exceptions to this rule, but we can see that this connection is stronger in the case of some institutions and relatively less strong with others.

All coefficients have a negative sign. It means that between the trust in institutions and the perception of corruption there is a negative correlation, i.e. the higher the perceived corruption the less trust there is in institutions, and vice versa, because we cannot make any conclusions from the correlation in the causal sense. However, we believe that the perception of corruption undermines trust in institutions and not vice versa; in other words, the trust in institutions impacts upon the perception of corruption.

Trust in institutions is certainly more stable and it can be changed under the influence of a perception of corruption, which is more variable. In general, the correlation between the public trust in institutions and the perception of corruption is higher in 2010 than it was in 2004 (the only exception being the correlation between the trust in the church and the perception of corruption). In 2004 the correlation between trust in the church and the perception of corruption was -.115, and was significant at the .001 level.

Other less significant correlations were the ones between the perception of corruption and the trust in the military, judiciary, television, police, and political parties. All other correlations are insignificant, but it is important to note that they all have negative signs. In the 2010 survey results, all correlations (except for the one concerning trust in the church) became higher and significant at the .001 level. The 2010 survey results indicate that increased perception of corruption has decreased the trust in institutions. In the 2004 survey the correlation between public trust in the Government, the Parliament, and trade unions and the perception of corruption did not reach the level of significance, although it did show a negative sign. In 2010, all these correlations are much higher and are significant, which points to the conclusion that the higher the perception of corruption, the lower the trust in these institutions. The same conclusion can be drawn about trust in the EU and the UN. These correlations were not statistically significant in 2004 but are becoming significant now. The only correlations that are not significant for 2010 are those between the perception of corruption and the trust in the press and in political parties. Therefore, an increase in the perception of corruption has led to an increase in the correlation between the trust in institutions and the perception of corruption.

Perception of corruption and voting in the presidential elections

A final question is whether the voting in the presidential elections is in any way connected with the perception of corruption? There are two main reasons for this question. First, 'new justice' was one of the main

mottos of the campaign of the candidate Ivo Josipović, one of the main initiators of the Act on the exemption from the statute of limitations of the crimes committed during the transformation of property. On the basis of this fact alone it would be expected that support for President Josipović would be stronger among those who are more sensitive to the corruption phenomenon. Conversely, public perception of the candidate Milan Bandić was largely connected with (unproven) corruption. This fact supports the thesis that those who supported Milan Bandić considered corruption to be of less importance, placing other things before it. On the basis of all these facts a hypothesis can be made that Ivo Josipović's voters can be distinguished from supporters of Milan Bandić because they perceive corruption as a widespread problem.

Table 9 below shows how the respondents to the 2010 survey voted in the elections.

Table 9. Voting in the presidential elections

Candidate voted for	N	%
Milan Bandić	161	16.9
Did not vote	313	32.8
Ivo Josipović	480	50.3
Total	**954**	**100.00**

The number of respondents who claim to have voted for Josipović is higher than was the case in the elections. The discrepancy may lie in the very characteristics of the sample, as there is a well-known tendency for persons to say they voted for the winner after an election, or in the tendencies of those who voted for Milan Bandić (either because of the correlation between education and the tendency to announce publicly one's own political preferences, or the tendency to hide the fact that the respondent voted for the loser), or because of a combination of any these factors.

Moreover, we are not interested in the representative quality of the results, but in the differences between the groups of voters. Table 10 shows how corruption is perceived by respondents to the 2010 survey who voted for either of the two candidates.

Table 10. Voting in presidential elections 2010 and average perception of corruption

Candidate voted for	Mean on the scale of the perception of corruption
Milan Bandić	3.1677
Did not vote	3.3419
Ivo Josipović	3.3438

Although in each group the average is above 3 (i.e. the statement 'the majority is involved' in corruption), in the case of those who appeared at the polls and those who voted for Josipović, this has moved towards the middle, between the position 'the majority is involved' and 'almost everyone is involved' in corruption. An analysis of variance using, the F test is 4.015 and is statistically significant at the .018 level. This confirms that the groups of voters are statistically different in terms of the perception of corruption.

Tuckey's test shows which groups can be classified in subsets. Regarding the perception of corruption, Tuckey's test clearly classifies the voters into two subsets. One subset are those who supported Milan Bandić and who perceive corruption as less widespread, and the other subset are those who voted for President Josipović (as well as those who did not go to the polls) and who perceive corruption as more widespread.

Table 11. Tuckey's test

Candidate	N	Subset for alpha=0.05	
		1	2
Milan Bandić	161	3.1677	
Did not vote	313		3.3419
Ivo Josipović	480		3.3438
Significance		1.000	.999

The means of homogenous subsets are shown.

Therefore, our hypothesis is confirmed. Those who voted for Josipović (as well as those who did not appear at the polls), perceive corruption as more widespread than those who voted for Milan Bandić.

Although even those who voted for Milan Bandić believe that corruption is widespread, those who supported Josipović (even those who did not vote – there is no difference between these two groups) are stronger in their positions.

Indeed, people who perceive corruption as more widespread voted for Josipović because they thought, we believe, that he and his campaign offered more guarantee that corruption will be suppressed or they resignedly decided not to vote. In contrast voters who consider corruption to be a lesser problem, opted for some other criteria and voted for Milan Bandić.

We conclude that perception of corruption is an important independent factor, because its impact on voting cannot be annulled by other factors. For example, it is well known that those with higher education voted for Josipović. It cannot be stated that this "explains" the correlation of the perception of corruption and voting, because respondents with higher education perceive corruption as relatively less widespread. If (based on the 2010 survery results) education were a factor that "explained" the correlation, than those respondents who voted for Josipović would perceive less corruption than those who voted for Bandić. Therefore, it can be concluded that the attitude towards corruption, regardless of other factors, did play a part in deciding how to vote.

Conclusion

The perception of corruption has significantly changed in the last fifteen years; namely it has increased. The increased perception of corruption is the result of events in Croatian society, especially the recent large numbers of corruption cases that have been discovered. The perception of corruption is not totally identical among all population categories, although the trend toward perceiving it as increasing is universal. Perception of corruption is correlated with trust in institutions. With corruption perceived as increasing, this negative

correlation has become even more significant. The perception of corruption is also correlated with voting on the last presidential election, in which those perceiving corruption as more widespread voted for Josipović and those who voted for Bandić perceived corruption as a little bit less widespread (although both groups perceive corruption as being widely present in Croatia). Accordingly, it can be stated that perception of corruption is a significant indicator of social change and is also connected with a series of other phenomena like trust in institutions and voting behaviour.