What Factors Predetermine Trust in Mass Media and State Institutions? Evidence from the Czech Republic

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Abstract: This study analyses the factors that predetermine the trust in mass media and state institutions in the Czech Republic. The empirical evidence is based on the analysis of trust in several types of mass media (print newspapers, TV and radio). Researchers find strong evidence for the fact that the general public in the Czech Republic does not depict much trust in printed media (newspapers and magazines) while television and radio enjoy somewhat higher degree of confidence. In addition, researchers find that trust in mass media is statistically significantly related to the satisfaction with current political situation and life satisfaction in general. Moreover, citizens who trust mass media are also likely to show higher level of trust in law enforcement and governmental institutions. Furthermore, the results show that wealthier citizens report lower confidence in mass media.

Key words: Mass media, trust, public institutions, state, Czech Republic

INTRODUCTION

Mass media is arguably the most important source of information in the modern world (Gitlin, 2003; Wimmer and Dominick, 2006). In addition to the traditional mass media (e.g., newspapers, magazines and radio) known from as early as the 19th century, one can witness the rise in popularity of the new forms of mass media, such as TV (available for the general public since the 1950's and 1960's) and most notably, the internet (Bromley and Bowles, 1995; Morris and Ogan, 1996; Sijuwade, 2013).

The importance of both traditional and novel mass media received even more attention in the context of current economic and financial crisis. Given the fact that economically self-fulfilling beliefs can substantially influence economic processes (Fuster *et al.*, 2010; Mussa, 1976; Abdolmaleki, 2012; Obuh, 2013), it is important to know to what extent people believe that the information, they get through the mass media corresponds to reality.

Confidence in mass media also proved to be important in the context of trust to state institutions and organizations in general. Several studies showed that the trust in media is significantly correlated with the trust in these institutions (La Porta *et al.*, 1997; Alesina and La Ferrara, 2002; Kohring and Matthes, 2007; Mosch and Prast, 2008; Torgler, 2008; Carlin *et al.*, 2009; Aghion *et al.*, 2009). In general, information published in mass media and the level of trust in mass media is closely linked to political events (Hudson, 2006). The direction of influence of this effect might be both ways. For example, Zimmer (1979) describes how the watergate affair impacted on the public's trust in people and confidence in the mass media in the United States. Mishler and Rose (2001) investigate the origins of political trust in institutional and cultural theories in post-communist societies and find that the socialist legacy represents a considerable obstacle for the smooth institutional change, since many people tend to rely upon the state and the public goods it provides for its citizens.

However as Tsfati and Ariely (2013), point out the knowledge of trust in mass media is still limited and only a few studies apply statistical tools to explore the link between trust in media and other factors. Therefore, this study provides a novel insight of the determinants of trust in mass media in the Central and Eastern European context. Researchers study factors related to the level of trust, mass media in the Czech Republic over the period of economic and financial crisis (from 2008-2012). The findings yield a substantial linkage of trust to government and police, life satisfaction, satisfaction with current political situation, political orientation, gender and economic activity of the respondents.

Corresponding Author: Wadim Strielkowski, Department of Marketing Communication and PR, Faculty of Social Sciences, Charles University in Prague, Smetanovo Nabr. 6,110,01 Praha 1, Prague, Czech Republic **Data description:** The data come from the representative public opinion surveys conducted by the Institute of Sociology of the Academy of Sciences of the Czech Republic from 2008 until 2012, 2 times per year (in March and September). The data is representative for the population of the Czech Republic older than 15 years.

The total number of valid observations amounted to 9733. For the numbers and percentages of missing observations (Table 1).

Overall levels of trust to different types of mass media:

On average, for the period from 2008-2012 in the Czech Republic radio is the mass media that is most trusted by the general public. Television is trusted statistically significantly less and the least trusted in type of mass media is printed type-newspapers and magazines. For the average levels of trust and 95% confidence intervals please (Fig. 1).

Over time, the evolution of average level of trust to mass media was rather uneven (Fig. 2-4), however not all the changes visible on graphs were statistically significant. Figure 2-4, one could note visible but not in all the cases statistically significant fall in trust to mass

	Cases							
	Valid		Missing		Total			
Variables	Ν	Percent	Ν	Percent	Ν	Percent		
Trust newspapers	9378	96.4	355	3.6	9733	100		
Trust TV	9447	97.1	286	2.9	9733	100		
Tust radio	9121	93.7	612	6.3	9733	100		
Own results								

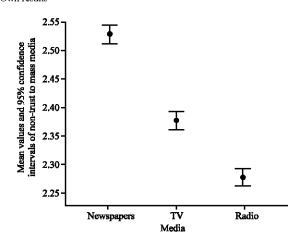


Fig. 1: Averages and 95% confidence intervals for overall levels of non-trust to 3 types of conventional mass media: Printed media (newspapers and magazines), television and radio; small numbers represent bigger level of trust comparing to large numbers (1 = Absolutely trust; 4 = Absolutely no tust); own results

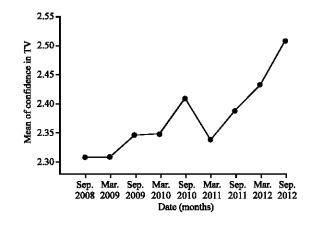


Fig. 2: Averages of confidence in TV over time; Small numbers represent bigger level of trust comparing to large numbers (1 = Absolutely trust, 4 = Absolutely no tust); own results

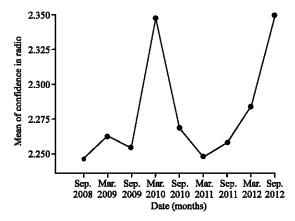


Fig. 3: Averages of confidence in radio over time: Small numbers represent bigger level of trust comparing to large numbers (1 = Absolutely trust; 4 = Absolutely no tust); own results

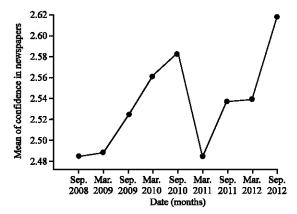


Fig. 4: Averages of confidence in newspapers over time: Small numbers represent bigger level of trust comparing to large numbers (1 = Absolutely trust, 4 = Absolutely no tust); own results

media in September to March, 2010 which was followed by recovery in next period and consecutive loss of trust in periods after.

One could deduce that this was the year when fear of economic crisis and future in the economic development culminated which might lead to substantial reduction in trust to all the state and non-state institutions. For more extensive discussion about pro-cyclical nature of trust to public institutions (Stevenson and Wolfers, 2011).

MATERIALS AND METHODS

Following the discussion and the literature review presented. Researchers formulate the research hypotheses:

H₁: Confidence in mass media is related to trust to state institutions

The direction and the sign of this relationship is however unclear. In the case when mass media publishes negative information about the state institutions, people who believe mass media will tend to trust state institutions less. In the case of positive representation of state authorities in mass media the effect might be the opposite.

H₂: Confidence in mass media is related to subjective life satisfaction represented by subjective life satisfaction itself, subjective standard of living and subjective satisfaction with current political situation. The directions and signs of the relations are however unclear

The empirical model and its estimation: In order to estimate the proposed empirical model, researchers employ the multinomial ordinal logit regression (Table 2).

The dependent variables are the subjective level of confidence in:

• Newspapers and magazines

Table 2: Estimations: Explaining confidence in traditional	l mass media (newspapers	, television	and radio) order	red logit estin	nations
Variables	Estimate newspapers	Sig	Estimate TV	Sig	Estimate

Variables	Estimate newspapers	Sig.	Estimate TV	Sig.	Estimate radio	Sig.
Trust to mass media = 1 ^a	-2.967***	0.000	-2.742***	0.000	-2.533***	0.000
Trust to mass media = 2^{a}	-0.149	0.521	0.186	0.431	0.589**	0.015
Trust to mass media $= 3^{a}$	1.916***	0.000	2.269***	0.000	2.589***	0.000
Trust to government	0.092^{***}	0.003	0.045	0.145	0.058^{*}	0.071
Trust to police	0.083***	0.001	0.168^{***}	0.000	0.175***	0.000
Age	0.003	0.280	0.004	0.153	0.002	0.410
Income per person	-0.001	0.159	0.001	0.465	0.001	0.483
September, 2008	-0.195*	0.071	-0.470***	0.000	-0.285**	0.012
March, 2009	-0.153	0.139	-0.315***	0.003	-0.098	0.360
September, 2009	-0.033	0.755	-0.254**	0.018	-0.134	0.222
March, 2010	-0.154	0.141	-0.429***	0.000	-0.078	0.475
September, 2010	0.155	0.147	-0.098	0.365	-0.125	0.264
March, 2011	-0.220**	0.024	-0.300***	0.002	-0.163	0.110
September, 2011	-0.092	0.371	-0.202**	0.052	-0.135	0.207
March, 2012	-0.215**	0.034	-0.093	0.363	-0.145	0.171
Life satisfaction: Very satisfied	-0.503***	0.001	-0.537***	0.001	-0.698***	0.000
Life satisfaction: Satisfied	-0.595***	0.000	-0.614***	0.000	-0.641***	0.000
Life satisfaction: Neither satisfied nor unsatisfied	-0.504***	0.000	-0.623***	0.000	-0.564***	0.000
Life satisfaction: Not satisfied	-0.440***	0.001	-0.497***	0.000	-0.438***	0.002
Standard of living: Good	0.210^{**}	0.018	0.094	0.298	-0.068	0.462
Standard of living: Neither good nor bad	0.074	0.335	0.057	0.469	0.029	0.721
Satisfaction with current political situation: Very satisfied	-1.122***	0.000	-1.209***	0.000	-0.091	0.756
Satisfaction with current political situation: Satisfied	-0.654***	0.000	-0.647***	0.000	-0.434***	0.000
Satisfaction with current political situation: Neither	-0.556***	0.000	-0.563***	0.000	-0.421***	0.000
satisfied nor unsatisfied						
Satisfaction with current political situation: Unsatisfied	-0.241***	0.000	-0.262***	0.000	-0.225***	0.001
Political orientation: Left	0.132^{*}	0.064	0.080	0.271	0.108	0.149
Political orientation: Center	0.165***	0.008	0.152**	0.017	0.149**	0.023
Education: Primary	0.101	0.329	0.031	0.769	0.009	0.935
Education: Secondary without state exit exam	0.166^{*}	0.067	0.108	0.241	0.114	0.230
Education: Secondary with state exit exam	0.031	0.722	0.061	0.493	-0.003	0.977
Men	0.145***	0.004	0.210^{***}	0.000	0.210^{***}	0.000
Lives with a partner	-0.035	0.533	0.006	0.914	0.028	0.639
Town_size: Village	0.023	0.735	0.024	0.724	0.083	0.241
Town_size: Town	0.218^{***}	0.000	0.130**	0.030	0.212^{***}	0.001
Economicall not active	0.134	0.412	0.360**	0.030	0.316^{*}	0.064

Parameters	Estimate newspapers	Sig.	Estimate TV	Sig.	Estimate radio	Sig.
Student	0.017	0.920	-0.064	0.708	-0.071	0.687
Retired	-0.036	0.818	-0.236	0.140	-0.257	0.119
Unemployed	0.103	0.544	-0.049	0.776	0.008	0.963
Self employed	0.357***	0.007	0.458***	0.001	0.365***	0.009
Chief employed	0.421***	0.005	0.432^{***}	0.005	0.494***	0.002
Other employed	0.260**	0.023	0.280^{**}	0.017	0.249**	0.038
Qualified manual worker	0.060	0.643	0.051	0.699	0.118	0.381
N	6103.000		6103.000		6103.000	
Model fitting information (significance)	0.000		0.000		0.000	
Pseudo R ² (Cox and Snell)	0.048		0.052		0.045	
Pseudo R ² (Nagelkerke)	0.054		0.058		0.051	
Pseudo R ² (McFadden)	0.022		0.024		0.022	

The dependent variables are trust in newspapers, TV and radio; ***,**,*Significant on 1, 5 and 10% level; Omitted reference variables: Trust to mass media = 4; September, 2012 dummy = Life satisfaction very unsatisfied; Standard of living: Bad = Satisfaction with current political situation = Very unsatisfied; Political orientation = Right; Education = Higher; Women = Lives without a partner (single); Town_size = City, Economically active = Other manual worker, Employment = Housewife; Own results; *Threshold

- TV
- Radio

The independent variables are:

- Confidence in state institutions: Regression factor scores from confidence in president, government, parliament, senators (Table 2)
- Confidence in police, courts, army-regression factor scores (Table 2)
- Subjective life satisfaction (1-5 from very satisfied to very dissatisfied)
- Subjective standard of living (1-3 from good to bad)
- Subjective satisfaction with current political situation (1-5 from very satisfied to very dissatisfied)

Researchers control for the following variables:

- Political orientation (left-center-right)
- Date of the survey
- Social and demographical characteristics:
 - Age of the respondents
 - Income per person (income per family divided to number of persons in family)
 - Education (primary to higher, 4 categories)
 - Family life: Lives with a partner
 - Size of the town respondents live in
 - Gender
 - Economic activity (active/not active)
 - Occupation

RESULTS AND DISCUSSION

Confidence in state institutions: It appears that confidence in newspapers and radio is positively and statistically significantly related to trust to state institutions. No statistically significant relation was found

with respect to TV. Respondents who trust newspapers and radio are also likely to show higher level of trust in state institutions. In all the 3 cases (newspapers and magazines, TV and radio), confidence in mass media is positively and statistically significantly related to trust to composed variable reflecting the overall level of confidence in police, courts and army. Respondents who trust mass media are also likely to show higher level of trust in police courts and army.

The relation between trust to mass media and state institutions might be viewed from 2 different perspectives. The 1st similarly to Aleknonis (2013), reflects the idea that in many post-communist countries mass media might be still viewed as a part of state institutions and therefore, trust to the media and the institutions reflect the overall level of trust to the state in general, as opposed to private firms and organizations.

The 2nd, perspective is based on the nature of the information about the state published in the mass media. Media present state institutions to be trustworthy and the respondent trusts the mass media, he might be more inclined to exert more trust to state institutions.

At this point, researchers are not able to differentiate between the 2 perspectives (it would require content analysis which would be a topic of completely different paper), however from the point of view of implications, they represent completely different effects. In the 1st frame of explanation, the consumer of content is much less critical to the quality of information and therefore, the mass media has much less ability to serve, as the watch dog and protect democracy. In the 2nd frame of explanation where the content influences the level of trust to state institutions, researchers would believe that in the case mass media publishes negative information about the state institutions, people, still trusting mass media, might change their opinion about some of the state institutions which in the case of functioning civil society might lead to a correction in state institutions.

Life satisfaction: In all the 3 cases (newspapers and magazines, TV and radio), confidence in mass media is positively and statistically significantly related to life satisfaction compared to the reference category of those who are totally dissatisfied with their lives.

Respondents who trust mass media are also likely to be more satisfied with their lives compared to those who are totally dissatisfied with their lives. However, the absolute size of the relevant coefficient did not prove to diminish with the diminishing level of life satisfaction.

The relation between trust to mass media and life satisfaction can be interpreted from 3 perspective's: Psychological profile of the respondents (more subjectively happy people tend to be more trusting in general), content of information in the mass media (entertaining mass media may produce more subjective satisfaction with life) and 3rd variables which might influence the relation between trust to mass media and overall life satisfaction. Psychological profiles of the respondents: In general, trusting people might be subjectively happier.

As for the prevailing content of the mass media, one would need to perform more detailed analysis of the similarities and differences in the prevailing contents in the different types of mass media. From the 1st sight, one can deduce that radio is the type of mass media with higher percentage of entertainment comparing to informing or advertising. Most of the radio listeners listens to the music while working or consuming different type of information (for example reading newspapers).

The 3rd variables which were not possible to take into account in this analysis might have substantial influence to relationships studied. The most important of those are arguably the frequency and total time spent with media consumption on one hand and the types of programs one chooses to watch on the other hand. One can argue that respondents who choose mostly entertaining part of the programs are likely to trust mass media more and be more satisfied with their lives. On the other hand, those who choose to watch news and critical analytical programs might have a tendency to trust media less and be less satisfied with their lives.

Standard of living: Respondents who consider their standard of living to be good, show smaller lever of trust in newspapers and magazines, comparing to those who report their standard of living to be neither good nor bad and those who consider their standard of living to be bad. No other relationship (e.g., TV or radio) proved to be statistically significant.

It is no accident that newspapers and magazines were the only type of mass media significantly related to subjective standard of living given the fact that most of the newspapers and magazines are to be paid for per issue. Researchers can continue in this line of argumentation by stating that those who can better access to newspapers and magazines have better information about its content. In this view, seems interesting to find that they trust mass media less which might be explained by less trustable content of these printed media.

On the other hand, researchers might expect that people with better subjective living standard might have a tendency to exercise more critical thinking (however, this theory would need further examination) and be more aware of private ownership of the newspapers and magazines and the possible role the owner of the media plays in the types of information provided and the style of its presentation.

Satisfaction with current political situation: According to the results, in almost all the cases hold that the more, the respondents trust, the mass media, the more they are likely to be satisfied with current political situation (except very satisfied respondents and trust to radio where the relation did not prove to be statistically significant). Given often critical information about politics and corruption presented in media this finding seems to be rather surprising. The overall levels of satisfaction with current political situation are also far from ideal: Around 60% of respondents are dissatisfied with current political situation. On the other hand, researchers can argue that those who tend to trust the mass media might be those who do not consume their production often or consume only entertaining part of production. These people are likely to be not adequately informed about the current political situation which paradoxically may lead to better opinion about it.

Time dummies: The substantial increases in trust to mass media in September, 2008 and March, 2011 visible in Fig. 2-4 (given the reverse coding of responses they are visible as declines) proved to be statistically significant for all the types of mass media (September, 2008) and only in case of printed media and TV (March, 2011). No statistical significance was found in the case of radio (March, 2011). On the other hand, one may notice that trust to radio is relatively stable over time (the only statistically significant dummy is September, 2008). The level of trust to printed media proved to be 2nd most stable among the three mass media studied (3 time dummies from September, 2008, March, 2011 and 2012 were statistically significant on conventional levels). The most volatile type of media, as for the level of trust is TV (6 time dummies are statistically significant).

CONCLUSION

Arguably, mass media is one of the most important sources of information on economic crisis and therefore, especially in the times of economic crises, it is important to study the factors which are correlated with trust to mass media. In this study, researchers study the evolution of the confidence to traditional mass media over the period from 2008-2012. Researchers find that the most stable level of trust (almost 70% of the respondents who trust or rather trust the media is enjoyed by the radio. In this case, only one dummy variable proved to be statistically significant. More volatile level of trust (>50% of the respondents trust or rather trust this media) is granted to newspapers and magazines. In this case, 3 time variables proved to be statistically significant (Table 2). The most volatile over time type of the mass media studied was TV. In this case, approximately 70% of the respondents definitely trust or rather trust TV and 6 out of 8 time dummy variables proved to be statistically significant.

Besides evolution of trust to mass media over time, researchers study factors which might affect and be affected by the level of trust to mass media. Researchers find that trust to newspapers, magazines and radio is positively and significantly related to trust to state institution (researchers use combined indicator of trust in President, Parliament, Government, Senate) and trust to all the studied media is positively and significantly related to a combined indicator representing trust to police courts and army. Researchers argue that the reasons behind this finding might be 2 fold. Firstly similarly to the argument of Aleknonis (2013), mass media in the post-communist countries might be still viewed as a part of state institutions, even though most of them are private. Secondly, the relation between trust to state institutions and mass media might be influenced by the content of the relevant media (more positive information about the state may lead to more trust to the state institutions).

IMPLICATIONS

Furthermore, all the level of trust to all of the studied proved to be positively and statistically significantly related to all the categories of life satisfaction compared to the reference category of those who are totally dissatisfied with their lives. Researchers argue that the reasons behind this finding may be both psychological (happy people have a tendency to trust more) or related to the type of prevailing in the media (entertaining versus informing).

Good standard of living proved to be statistically important only in the case of trust to newspapers and magazines (respondents who consider their standard of living to be good report less trust to newspapers and magazines). Given the fact that newspapers and magazines are the only type of mass media where the respondents pay for each issue and therefore, only those who can and willing afford to buy this medium have relevant information about the content, reserachers may argue that either more subjectively well off respondents can exercise more critical thinking and they are more informed about private ownership of the media or the information in newspapers and magazines they read (which would be not a representative sample), invokes a certain level of distrust.

One should also, however note that more objective indicator of wealth of the respondents-income per person researchers control for.

Probably the most important relation studied, in this study is relation of trust to traditional types of the mass media and subjective satisfaction with the current political situation. Researchers find that more the respondents trust the mass media, more they are likely to be satisfied with current political situation (except very satisfied respondents and trust to radio where the relation did not prove to be statistically significant). Given rather low level of satisfaction with current political situation and the overall negative image of political representation reproduced in mass media, this finding is rather surprising.

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