

EKONOMIA I PRAWO. ECONOMICS AND LAW Volume 22, Issue 1, March 2023 p-ISSN 1898-2255, e-ISSN 2392-1625 www.economicsandlaw.pl

ORIGINAL ARTICLE received 18.09.2022; revised 13.02.2023; accepted 31.03.2023 Citation: Bentkowska, K. (2023). Trust and the quality of formal institutions. *Ekonomia i Prawo. Economics and Law*, 22(1), 21–35. https://doi.org/10.12775/EiP.2023.002.

Trust and the quality of formal institutions

KATARZYNA BENTKOWSKA

SGH Warsaw School of Economics, Collegium of Business Administration, Institute of Markets and Competition, al. Niepodleglości 162, 02-554 Warszawa, Poland ⊠ kbent@sgh.waw.pl © orcid.org/0000-0002-2063-2529

Abstract

Motivation: Trust plays an important role in the functioning of individuals at every level and research confirms that it is linked to economic development. As the levels of trust differ across the countries it is crucial to explore the reasons for such variation and to identify determinants of trust. Trust is often used in research to operationalise informal institutions, however, it can also reflect the quality of formal institutions. Therefore, it is vital to investigate whether trust is to a large extent a deeply rooted attitude, which does not lend itself to intentional shaping or it can be generated by better institutional performance. It remains unclear how institutional performance influences trust, there are many doubts concerning for example the diversion of this relation. The evidence on the relationships between generalised and institutional trust also persists mixed.

Aim: The paper aims to investigate the relationship between generalised and institutional trust with the quality of formal institutions.

Results: The research confirms the positive relationship between generalised and institutional trust for the total group of 22 European countries. Similarly, higher levels of both kinds of trust are related to better institutional performance. However, when the countries are analysed separately as capitalist and post-socialist, the results differ. The aforementioned relationships are confirmed for capitalist countries. Post-socialist countries are characterized by a lower level of trust and lower quality of institutions. Nevertheless, for this group, there is no evidence for the relationship between generalised and institutional trust, and only partial evidence for the relationship between institutional trust and institutional performance. The results support the concepts underlining the influence of institutions' quality on trust but some observations are inclined to concepts suggesting that trust



is culturally determined and regardless of institutional performance decades are needed for its development.

Keywords: generalised trust; institutional trust; informal institutions; formal institutions; institutional quality JEL: D02; O17; Z13

1. Introduction

Trust is reported to have a significant impact on individuals at every level and its influence in different fields cannot be overestimated. Numerous analyses explain and confirm its role in facilitating contacts between entities, establishing cooperation and developing shared solutions, reducing transaction costs, encouraging desired individual behaviours and acting according to existing rules. Trust enables better anticipation and planning of actors' actions. Such advantages lead to better economic development so according to research trust influences the well-being of societies (Bjørnskov, 2012; Guiso et. al., 2006; Knack & Keefer, 1997; Tabellini, 2010; Zak & Knack, 2001). Fukuyama (1997, p. 180) noted that it is easier to assess the economic value of trust if we imagine what the world would be like without it. Even though there is an abundance of positive associations between trust and outcomes in different fields, the determinants of trust remain undertheorized and empirically unexplored (Rothstein & Stolle, 2008). The literature on determinants of trust is less developed than that concerning its consequences (Bjørnskov, 2007). Meanwhile, the levels of trust in various countries differ even in the same region.

Trust is a widely held subject of analysis. It is differently operationalised, various categories of trust are investigated, their role in many fields is examined and numerous determinants are verified. Nonetheless, our understanding of trust has many gaps. I intend to concentrate on the problems related to trust in institutions. It is sometimes assumed that the quality of institutions determines the levels of trust (Knack, 2002; Rothstein & Stolle, 2008). However, the reverse relationship is also considered in the literature because trust may influence institutional performance (Cruz-García & Peiró-Palomino, 2019; Knack, 2002). As Greif (1994) noted it's culture that determines the institutional structure of society and its development trajectories. Besides, it is unclear whether formal institutions are created because of distrust in others or they are a reflection of trust among people willing to cooperate (Platje, 2008). Levels of trust determine the ability and the perceived need to undertake reforms (Berggren et al., 2016).

As a deeply rooted attitude created through the interaction between individuals, trust reflects informal institutions specific to a given society. Informal institutions embody societies' mentality and perceptions of the world and current events. They are unwritten codes of conduct rooted in people's consciousness, which tend to last a long time and are insensitive to deliberate change (North, 1994; Williamson, 2000). Institutional trust concerns confidence in formal rules introduced and enforced by the state. These formal constraints make the second pillar of the county's institutional system. Informal institutions can strengthen the impact of formal rules, weaken them or even make them inoperable. On the other hand, formal institutions can also influence the shape of informal institutions. Thus, both types of institutions cooperate and determine economic performance (North, 1994).

Trust is very commonly used as a proxy for informal institutions (Cruz-García & Peiró-Palomino, 2019; Tabellini, 2010; Williamson, 2009). However, it is sometimes criticized for reflecting not only deeply rooted attitudes but also the quality of formal institutions. For example, lack of trust in the government can be the result of certain cultural traits connected with general distrust but also of poor performance observed in everyday life. A similar view is stressed by Voigt (2018). An important question arises here: to what extent is the level of trust related to the quality of formal institutions? This seemingly simple question has no obvious answer. It remains unclear how institutional performance influences trust.

The problems become more complex if we evoke two commonly applied categories of trust which comprise generalised trust and institutional trust. While generalised trust concerns trust in individuals with whom there are no direct interactions and about whom there is no information, institutional trust, as a type of particularized trust, arises from interactions and depends on the characteristics, actions and reputation of a particular institution (Bjørnskov, 2007). The evidence of the relationships between them persists unclear (Mishler & Rose, 2001; Zmerli & Newton, 2008). Therefore, the paper aims to investigate the relationship between generalised and institutional trust with the quality of formal institutions. The analysis will help to determine whether trust is a deeply rooted attitude, which does not lend itself to intentional shaping or can be generated by better institutional performance.

My research, unlike many studies limited to single countries, presents a comparative analysis of the described relations in European countries. Moreover, it makes a distinction between capitalist and post-socialist countries and investigates the patterns of trust more than 20 years after the transition in the latter group. It concerns two categories of trust — generalised and institutional, assessed based on estimated indices comprising different aspects of trust, distinct from often used single variables representing trust.

The paper is structured as follows. Section 2 describes the interactions between trust and the quality of institutions. Section 3 explains my approach to the comparative analysis of trust in societies and describes the empirical proxies of trust. Section 4 presents the results of the empirical analysis and explains the patterns of trust in investigated countries. Section 5 presents the conclusions.

2. Trust and institutions — literature review

In recent years various crises have gradually undermined trust in institutions and there are growing concerns about the decline in the image of public administration and governments in many Western countries (Algan et al., 2018; Botsman, 2018; Camussi & Mancini, 2019; Hetherington, 1998; Inglehart, 1997). Thus it is crucial to investigate what determines trust in institutions.

As Mishler & Rose (2001) noted, two theoretical traditions explain the origins of trust and its development. Cultural theories (e.g. Putnam, 1993), underline that institutional trust is exogenous in the short run and independent of formal institutions' quality as it is shaped by deeply rooted norms in society. It is determined by generalised trust learned early in life. Inglehart (1997, p.15) emphasises that the early learned aspects of culture are resistant to change as it requires a huge effort to transform central elements of an adult's perception and abandoning them leads to uncertainty. Some research confirms the relationships between generalised and institutional trust and even if the interpretations of the findings differ, they suggest that generalised trust affects the perception of institutions (Rothstein & Stolle, 2008). However, some authors challenge this view. Brehm & Rahn (1997) argue that generalised trust may be as much the result of trust in institutions as the reverse, while Muller & Seligson (1994) evidence that interpersonal trust is the product of democracy and not its cause. Alesina & La Ferrara (2002) claim that trusting an institution is quite different from trusting a person and prove that the two categories are not correlated. Institutional theories (e.g. Coleman, 1990; Hetherington, 1998) regard trust as endogenous and based on the rational evaluation of institutions' performance. With this approach, some deficiencies and ambiguities are also perceived. Rothstein & Stolle (2008) appreciate the institutional approach for overcoming some problems of purely cultural and society-centred explanations of trust but recognise a lack of explanation of how the mechanism between institutions and trust works. Christensen & Laegreid (2005) perceive institutional trust as a multi-faceted concept, as the actual quality assessment is mixed with the influence of general images, ideology and stereotypes. Hudson (2006) suggests that trust is not simply ingrained into one's personality at an early age, it is affected by experiences, varies over a life cycle and is endogenous to institutional performance. My analysis does not presuppose the validity of any approach it is, however, intended to indicate whether the results support cultural or institutional explanations of trust.

In the literature, the support for the existence of the relationship between institutional quality and trust is stronger for institutional trust than generalised trust. Christensen & Laegreid (2005) evidence that satisfaction with public services increases trust in public institutions. Moreover, trust in one institution positively affects trust in other institutions. Camussi & Mancini (2019) indicate that local public service performance affects institutional trust significantly,

while the impact on generalised trust is small. Bjørnskov (2007) finds no support for the thesis that democracy and rule of law can create generalised trust.

The role of trust becomes critical for new regimes in post-socialist countries as their predecessors proved unworthy of trust (Mishler & Rose, 2001). Here, the replacement of the institutional system introduced institutional discontinuity and people had to face institutions different from those socialized throughout their lives. Therefore, the initial trust in new institutions can be low. Besides, many studies indicate that post-communist societies are less trusting (e.g. Bjørnskov, 2007). Paldam & Svendsen (2001) attribute it to the replacement of social capital by official societies' organization by the communist regimes inhibiting the development of uncontrolled cooperation and using fear and distrust as elements of control. This effect may persist — Algan & Cahuc (2010) divide trust into the inherited component of trust and the time variation part, and inherited trust explains a significant share of economic differences between developed countries. Sztompka (2016, p. 163) mentions the sustainability of the social order among the factors that foster trust in society. Their opposite are radical social changes that trigger defensive reactions in the form of distrust. The transition was undoubtedly such a radical change. However, if trust is significantly shaped by institutional quality, their good performance can support trust relatively quickly. If trust depends rather on deeply ingrained social norms it will take decades before trust develops sufficiently to support new institutions as Putnam (1993) indicated.

3. Methods

Twenty-two European countries were selected, for which extensive data from several sources were available to analyse trust. For in-depth analysis, I divided the countries into capitalist and post-socialist. This division results from the fact that post-socialist countries are characterised by lower levels of trust than countries that had been developing capitalism for many years. The different development trajectories of the two groups may result in different shapes of trust patterns.

To analyse trust I used data from:

- European Value Survey (EVS, 2020);
- European Social Survey (ESS, 2018);
- European Quality of Life Survey (EQLS, 2018).

From the available questions, I selected those that enable the evaluation of trust. They were grouped to reflect two categories of trust i.e. generalised trust and institutional trust. Such categories of trust recur in various studies, although they are not necessarily referred to using the same names. They are also differently operationalized. Data for generalised trust concern trust in others in general as well as in certain groups of people. Proxies for trust in different organizations and system solutions are quantified with questions showing how much confidence people have in each of them. The proxies concerning institutional trust are similar to those included in related analyses (e.g. Mishler & Rose, 2001; Rothstein& Stolle, 2008). The selection of proxies is largely determined by data availability. In further research, other proxies can be chosen to capture both categories of trust more fully.

I used factor analysis to verify the proper selection of questions for the two identified categories of trust¹. This made it possible to determine whether the group of questions is homogeneous and whether they measure similar phenomena. It also made it possible to determine the internal structure of the scale and extract the component factors. I determined the number of factors comprising a given category of trust with the Kaiser criterion — the eigenvalue had to exceed the value of one. I defined the factors using the Varimax orthogonal rotation. To check the appropriate selection of questions and determine the internal consistency of each category, I conducted also a Cronbach's alpha test².

Generalised trust comprises one coherent factor explaining 85% of the variance, while institutional trust encompasses two factors explaining 84% of the variance (Table 1). In the latter case, the components of each factor are arranged according to the size of the variables' factor loadings. The first factor is connected mainly with the political system as it concerns confidence in concepts that could be described as embodying the general actors and system solutions. They are rather portrayed in people's minds as they usually do not deal with them personally. The second factor could be described as trust in implementation institutions since it captures actors and system solutions providing order and social infrastructure for everyday life. Their nature is perceived as less political. The result is consistent with Rothstein & Stolle (2008, p. 444) criticizing that no distinction is made between confidence in the institutions on the implementation side.

Based on factor analysis, I estimated indices for the trust categories. As general trust consists of a single factor, its value was calculated as the variables' arithmetic mean. In the case of institutional trust, its value was calculated as a weighted average taking into account the values of the two individual factors' loadings that make up this category of trust³.

To evaluate formal institutions, I use the Worldwide Governance Indicators (2021) comprising: Voice and Accountability, Political Stability, Government

 $^{^{\}rm 1}$ The necessary conditions for the factor analysis (value of the determinant, KMO and Bartlett's test) are met.

 $^{^2\,}$ It is generally assumed that Cronbach's alpha test's value should be at least 0.7 for the scale to be considered reliable. In my analysis, the values of Cronbach's alpha are very high and exceed 0.9.

³ The calculation was the following — two factors explain 84% of the variables' variance — the first factor 50%, the second 34%. Since 84 is the total, i.e. 1, 50% is x. Hence, the first factor has a weight of 50x100/84 and so 0.6, the second 0.4. The final institutional trust index is 0.6 x factor 1 + 0.4 x factor 2.

Effectiveness, Regulatory Quality, Rule of Law and Control of Corruption (Kaufmann et al., 2010).

4. Results

To investigate the relationships between the two categories of trust and between trust and institutional quality I verify the appropriate correlations.

For the total group of countries, there is a high correlation between generalised and institutional trust $(0.832)^4$ (Table 2). Chart 1 reveals that the levels of both categories of trust are significantly higher for capitalist countries (except for Italy). Of the post-socialist countries only Estonia scores above the average in both categories, while Lithuania is a bit above the average in terms of generalised trust.

Correlation coefficients imply that all relationships between both categories of trust and institutional performance are statistically significant and very strong (for Political Stability the coefficient indicates only moderate correlation). So institutional trust seems to be related to the quality of formal institutions. Such results seem intuitive — the quality of institutions could determine the confidence placed in them, but the problem is more complex.

The relationships appear different when countries are divided into capitalist and post-socialist (Table 3). For the capitalist countries, there still is a very high correlation between generalised and institutional trust (0.845). Generalised trust is related to the quality of most formal institutions, except for Political Stability. The relationships between institutional trust and institutions' quality are also evident — the is a very strong correlation in most cases (again Political Stability makes an exception — here the correlation is moderate).

The results start to seem more puzzling for post-socialist countries. They are characterized by lower levels of generalised and institutional trust and lower quality of institutions. Nevertheless, for this group, there is no evidence neither for the relationship between generalised and institutional trust nor for the relationship between institutional trust and institutions' performance. Only for the quality of Control of corruption, there is a strong correlation with institutional trust. Control of corruption may be an indicator that has received increased public attention and people tend to appreciate discernible improvements. Still, the quality of institutions is related to generalised trust. However, it is perplexing that the institutional trust in post-socialist countries seems not to depend on institutional performance.

To examine the lack of correlation more closely, I take a step back and verify the relationships between the quality of the institutions and the two identified factors — Trust in the political system and Trust in implementation institutions, instead of with the indicator of institutional trust overall (Table 4). There still is no confirmed relationship between generalised trust and these two factors.

 $^{^4}$ The correlation index (0.3–0.5) is considered as moderate, (0.5–0.7) strong, and above 0.7 very strong.

There are also no confirmed relationships between Trust in the political system and institutional performance. Nevertheless, in the case of Trust in implementation institutions, their quality seems to be linked to the institutions' quality (except for Political Stability) — the correlations coefficients indicate a very strong relationship. This supports the observation that in practice people distinguish between various types of institutions and place varying degrees of trust in them (Rothstein & Stole, 2008). The explanation for such results may be as follows people make real judgements about the institutions with which they have direct contact such as the police. Likewise, Camussi & Mancini (2019) focus on local public institutions with which societies interact daily and show that their quality affects trust. But since people are distrustful in the case of more general categories of institutions, such as government, they tend to distrust them regardless of their performance. Trust in institutions linked to the political system may be more insensitive to changes in the quality of institutions. Post-socialist societies may be accustomed to mistrusting the state — and this deeply ingrained distrust seems to dominate the actual performance. Christensen & Laegreid (2005) similarly state that people asked about institutions in general terms tend to be more sceptical than for specific services. They perceive far-away government officials as incompetent and dishonest rather than those institutional representatives they interact. The results prove, that the countries' experience with communism determines the path of dependence and shapes the patterns of trust in society.

I employ several robustness tests that confirm my empirical results. In the factor analysis, the construction of indicators has been verified with analogous data from different sources. In some cases, there are similar questions in different surveys (EVS, ESS, EQLS) for example indicating whether most people can be trusted or whether there is confidence in parties, parliament, government or police. The results obtained were similar.

As a test, I also look for explanations of trust others than institutional quality and verify partial correlations. In the literature, there are many control variables that can affect trust. Usually, they are connected with macroeconomic stability, income inequality, social capital, ethnic fractionalization, and some individual and environmental characteristics like education, religion, personal experiences, health condition, family economic conditions, and ties with society. Therefore, I include a wide range of control variables from the mentioned fields. The first group of control variables concerns social capital and relations in society i.e.: tension between different racial and ethnic groups (EQLS), attitude toward immigrants (ESS), perceived tolerance of immigrants and perceived tolerance of ethnic minorities (Legatum Prosperity Index), tensions between old and young people (EQLS), GINI index and poverty gap (World Bank), social participation measures connected with volunteering and joining social activities (Legatum Prosperity Index, EQLS, EVS). The second group captures economic conditions: GDPpc growth, satisfaction with job and satisfaction with accommodation (EOLS). The third group pictures personal characteristics and experiences: mean years of schooling (HDI), satisfaction with education (EQLS), health (Legatum Prosperity Index), religiousness measures (ESS, EVS), perception of ties with others (EQLS), satisfaction with family life (EQLS), satisfaction with life (ESS), optimism about own future (EQLS), attitude toward dealing with problems (EQLS) and political engagement (ESS, EVS).

The result of partial correlations between generalised and institutional trust and institutional performance with the mentioned control variables are in some cases a bit lower but still can be described as strong or very strong. The only exception is Political Stability — here the partial correlation often does not confirm the relationships with trust. But as there was no correlation of this variable with generalised trust and that with institutional trust was weaker, such results seem adequate. Thus, none of the included control variables does deny the existence of investigated relationships.

5. Conclusion

The analysis confirms the relevance of investigating the issues connected with trust and institutions as there are still many gaps to be filled. Clearly, there is need for further research concerning the causality of the relation between trust and institutions' quality. My results regarding the origins of trust and its development are mixed. They partly support institutional theories indicating the relevance of increasing institutions' quality as it affects trust. This is the case of capitalist countries and some institutions in post-socialist countries. Nevertheless, concepts suggesting that trust is culturally determined also seem to be to some extent correct as in post-socialist countries trust in the political system is not related to its performance. However, even in post-socialist countries the performance of implementation institutions matters. If the institutional theories provide proper explanations of trust patterns, a low level of trust in society cannot be simply attributed to its cultural traits and the government is responsible for its development as the quality of institutions remains at its disposal.

The quality of institutions seems to determine trust rather in countries which have not suffered institutional discontinuities and regime changes. As there is only partial confirmation on the relationship between the quality of institutions and institutional trust in post-socialist countries, it could be perceived as confirmation of theories suggesting that it is not easy to strengthen trust in the short term. However, simultaneously the implications for public policy indicate that there should be an emphasis on institutional performance as people appreciate it in case of some institutions and place their trust in them according to the quality. This is vital, especially for post-socialist countries where the levels of trust are markedly lower. Besides, Knack & Keefer (1997, p. 1284) noted that generalised trust is crucial in poorer countries with weaker formal institutions and stressed that in case of low trust improving institutional quality becomes even more important than where trust is higher. Again the findings on the need for improvements in institutional performance are important for post-socialist countries.

The results concerning the relationship between generalised and institutional trust are also mixed. The two categories of trust are correlated in capitalist countries, while in post-socialist countries, there is no confirmation for such relation. Institutional trust doesn't seem a direct extension of generalised trust. These observations also suggest that even in distrustful societies trust in institutions can be strengthened by good institutional performance — this may be easier to achieve than in the case of generalised trust which seems less dependent on the state's deliberate actions. Knack (2002) noted that discovering that social capital matters is much easier than increasing it. However, at least institutional trust can be strengthened by actions aimed at increased institutional performance. As Paldam & Svendsen (2001) observed, active inference in building social capital is useless, still the governments may create a proper environment by fighting negative social capital — by analogy, their task may be to reduce distrust.

References

- Alesina, A., & La Ferrara, E. (2002). Who trust others. *Journal of Public Economics*, 85(2), 207–234. https://doi.org/10.1016/S0047-2727(01)00084-6.
- Algan, Y., & Cahuc, P. (2010). Inherited trust and growth. *American Economic Review*, 100(5), 2060–2092. https://doi.org/10.1257/aer.100.5.2060.
- Algan, Y., Guriev, S., Papaioannou, E., & Passari, E. (2018). The European trust crisis and the rise of populism. *EBRD Working Paper*, 208, 1–128. https://doi. org/10.2139/ssrn.3128274.
- Berggren, N., Daunfeldt, S., & Hellström, J. (2016). Does social trust speed up reforms: the case of central-bank independence. *Journal of Institutional Economics*, 12(2), 395–415. https://doi.org/10.2139/ssrn.2546809.
- Bjørnskov, C. (2007). Determinants of generalized trust: a cross-country comparison. *Public Choice*, 130, 1–21. https://doi.org/10.1007/s11127-006-9069-1.
- Bjørnskov, C. (2012). How does social trust affect economic growth. *Southern Economic Journal*, 78(4), 1346–1368. https://doi. org/10.4284/0038-4038-78.4.1346.
- Botsman, R. (2018). Who can you trust. Penguin Random House.
- Brehm, J., & Rahn, W. (1997). Individual-level evidence for the causes and consequences of social capital. *American Journal of Political Science*, 41(3), 999– 1023. https://doi.org/10.2307/2111684.
- Camussi, S., & Mancini, A. (2019). Individual trust: does quality of local institutions matter. *Journal of Institutional Economics*, 15(3), 487–503. https:// doi.org/10.1017/s1744137418000279.
- Christensen, T., & Laegreid, P. (2005). Trust in government: the relative importance of service satisfaction, political factors and demography. *Public Performance & Management Review*, 28(4), 487–511.
- Coleman, J.S. (1990). Foundations of social theory. Harvard University Press.

- Cruz-García, P., & Peiró-Palomino, J. (2019). Informal, formal institutions and credit: complements or substitutes. *Journal of Institutional Economics*, 15(4), 649–671. https://doi.org/10.1017/s1744137419000018.
- EQLS. (2018). European quality of life survey integrated data file, 2003–2016. https://doi.org/10.5255/UKDA-SN-7348-3.
- ESS. (2018). European social survey round 9 data: data file edition 3.1. https://doi. org/10.21338/NSD-ESS9-2018.
- EVS. (2020). European values study 2017: integrated dataset (EVS 2017). Data file version 4.0.0. https://doi.org/10.4232/1.13897.
- Fukuyama, F. (1997). Zaufanie: kapitał społeczny a droga do dobrobytu. PWN.
- Greif, A. (1994). Cultural beliefs and the organization of society: a historical and theoretical reflection on collectivist and individualist societies. *Journal of Political Economy*, 102(5), 912–951. https://doi.org/10.1086/261959.
- Guiso, L., Sapienza, P., & Zingales, L. (2006). Does culture affect economic outcomes. *Journal of Economic Perspectives*, 20(2), 23–48. https://doi.org/10.1257/jep.20.2.23.
- Hetherington, M.J. (1998). The political relevance of political trust. *American Political Science Review*, 92(4), 791–808. https://doi.org/10.2307/2586304.
- Hudson, J. (2006). Institutional trust and subjective well-being across the EU. *Kyklos*, 59(1), 43–62. https://doi.org/10.1111/j.1467-6435.2006.00319.x.
- Inglehart, R. (1997). *Modernization and postmodernization: cultural, economic and political change in 41 societies.* Princeton University Press.
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2010). The worldwide governance indicators: methodology and analytical issues. *World Bank Policy Research Working Paper*, 5430, 1–28. https://doi.org/10.1596/1813-9450-5430.
- Knack, S. (2002). Social capital and the quality of government: evidence from the States. *American Journal of Political Science*, 46(4), 772–785. https://doi. org/10.2307/3088433.
- Knack, S., & Keefer, P. (1997). Does social capital have an economic payoff: a cross-country investigation. *Quarterly Journal of Economics*, 112(4), 1251– 1288. https://doi.org/10.1162/003355300555475.
- Mishler, W., & Rose, R. (2001). What are the origins of political trust: testing institutional and cultural theories in post-communist societies. *Comparative Political Studies*, 34(1), 30–62. https://doi.org/10.1177/0010414001034001 002.
- Muller, E., & Seligson, M. (1994). Civic culture and democracy: the question of causal relationships. *American Political Science Review*, 88(3) 635–652. https://doi.org/10.2307/2944800.
- North, D.C. (1994). *Institutions, institutional change and economic performance.* Cambridge University Press.
- Paldam, M., & Svendsen, G. (2001). Missing social capital and the transition in Eastern Europe. *Journal of Institutional Innovation, Development and Transition*, 5, 21–34.

Platje, J. (2008). Institutional capital as a factor of sustainable development: the importance of an institutional equilibrium. *Technological and Economic Development of Economy*, 14(2), 144–150. https://doi. org/10.3846/1392-8619.2008.14.144-150.

Putnam, R. (1993). Making democracy work. Princeton University Press.

- Rothstein, B., & Stolle, D. (2008). The state and social capital: an institutional theory of generalized trust. *Comparative Politics*, 40(4), 441–459. https://doi.org/10.5129/001041508x12911362383354.
- Sztompka, P. (2016). Kapitał społeczny: teoria przestrzeni międzyludzkiej. Znak.
- Tabellini, G. (2010). Culture and institutions: economic development in the regions of Europe. *Journal of the European Economic Association*, 8(4), 677–716. https://doi.org/10.1111/j.1542-4774.2010.tb00537.x.
- The Worldwide Governance Indicators. (2021). Aggregate governance indicators 1996–2020. Retrieved 29.09.2021 from http://info.worldbank.org/ governance/wgi.
- Voigt, S. (2018). How to measure informal institutions. *Journal of Institutional Economics*, 14(1), 1–22. https://doi.org/10.1017/S1744137417000248.
- Williamson, C.R (2009). Informal institutions rule: institutional arrangements and economic performance. *Public Choice*, 139, 371–387. https://doi. org/10.1007/s11127-009-9399-x.
- Williamson, O.E. (2000). The new institutional economics taking stock looking ahead. *Journal of Economic Literature*, 38(3), 595–613. https://doi. org/10.1257/jel.38.3.595.
- Zak, P., & Knack, S. (2001). Trust and growth. *Economic Journal*, 111(470), 295–321. https://doi.org/10.1111/1468-0297.00609.
- Zmerli, S., & Newton, K. (2008). Social trust and attitudes toward democracy. *The Public Opinion Quarterly*, 72(4), 706–724. https://doi.org/10.1093/poq/nfn054.

Acknowledgements

Author contributions: author has given an approval to the final version of the article.

Funding: this research was fully funded by the SGH Warsaw School of Economics.

Note: the results of this study were presented at the 5th Scientific Conference , Institutions: theory and practice' (15–16 September, 2022, Toruń, Poland).

Appendix

Table 1. Generalised and institutional trust indices

Generalised trust	Institutional trust				
 most people can be trusted or that you can't be too careful in dealing with people (EVS); trust in people in your neighbourhood (EVS); trust in people you know personally (EVS); trust in people you meet for the first time (EVS); 	Trust in the political system: - confidence in political parties (EVS); - confidence in government (EVS); - confidence in parliament (EVS); - confidence in the legal system (EQLS);				
 trust in people of another religion (EVS) trust in people of another nationality (EVS); most people would try to take advantage of you if they got the chance, or would they try to be fair (ESS); most of the time people try to be helpful or they are mostly looking out for themselves (ESS). 	 confidence in the justice system (EVS); confidence in civil service (EVS). Trust in implementation institutions: confidence in the education system (EVS); confidence in armed forces (EVS); confidence in the health care system (EVS); confidence in the police (EVS). 				

Source: Own preparation.

Table 2.Correlations between trust and formal institutions' quality

Specification	1	2	3	4	5	6	7	8
generalised trust Spearman's rho	1.000	.832**	.859**	.893**	.809**	.516*	.859**	.906**
sig. (2-tailed)	-	.000	.000	.000	.000	.014	.000	.000
institutional trust Pearson correlation	.817**	1	.778**	.847**	.810**	.474*	.862**	.823**
sig. (2-tailed)	.000	-	.000	.000	.000	.026	.000	.000

Notes:

1 — generalised trust; 2 — institutional trust; 3 — voice and accountability; 4 — rule of law; 5 — regulatory quality; 6 — political stability; 7 — control of corruption; 8 — government effectiveness.

N=22; ** significant at 0.01; * significant at 0.05.

All coefficients in Table 2 are Person except from Spearman for General trust for all countries as it lacks normal distribution.

Source: Own preparation.

Specification	1	2	3	4	5	6	7	8
generalised trust in capitalist countries	1	.845**	.797**	.794**	.875**	.519	.907**	.879**
sig. (2-tailed)	-	.001	.003	.004	.000	.102	.000	.000
institutional trust in capitalist countries	.845**	1	.891**	.896**	.866**	.714*	.882**	.904**
sig. (2-tailed)	.001	-	.000	.000	.001	.014	.000	.000
generalised trust in post-socialist countries	1	.523	.625*	.719*	.620*	.691*	.671*	.696*
sig. (2-tailed)	-	.099	.040	.013	.042	.018	.024	.017
institutional trust in post-socialist countries	.523	1	.423	.578	.568	.244	.614*	.497
sig. (2-tailed)	.099	-	.194	.062	.068	.470	.045	.120

Table 3. Correlations between trust and formal institutions' quality in different groups of countries

Notes:

l — generalised trust; 2 — institutional trust; 3 — voice and accountability; 4 — rule of law; 5 — regulatory quality; 6 — political stability; 7 — control of corruption; 8 — government effectiveness.
 N=ll; ** significant at 0.01; * significant at 0.05.

All coefficients in Table 3 are Person except from Spearman for General trust for all countries as it lacks normal distribution.

Source: Own preparation.

Table 4.

Correlations between trust and formal institutions' quality in post-socialist countries — institutional trust splintered

Specification	1	2	3	4	5	6	7	8	9
generalised trust Spearman's rho	1	.294	.455	.625*	.719*	.620*	.691*	.671*	.696*
sig. (2-tailed)	-	.381	.160	.040	.013	.042	.018	.024	.017
trust in the political system	.294	1	158	.012	.174	.203	.001	.166	.109
sig. (2-tailed)	.381	-	.644	.973	.609	.549	.997	.625	.750
trust in implemen- tation institutions	.455	158	1	.748**	.756**	.689*	.440	.833**	.718*
sig. (2-tailed)	.160	.644	-	.008	.007	.019	.176	.001	.013

Notes:

l — generalised trust; 2 — trust in the political system; 3 — trust in implementation institutions; 4 — voice and accountability; 5 — rule of law; 6 — regulatory quality; 7 — political stability; 8 — control of corruption; 9 — government effectiveness.

N=ll; ** significant at 0.01; * significant at 0.05.

All coefficients in Table 4. are Person except from Spearman for General trust for all countries as it lacks normal distribution.

Source: Own preparation.

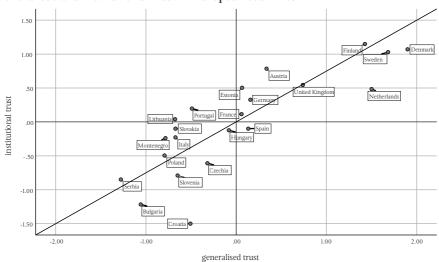


Chart 1. Generalised and institutional trust in European countries

Source: Own preparation.