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Trust and its determinants: Evidence from the Trustlab experiment

Fabrice Murtin,
Lara Fleischer,
Vincent Siegerink,
Arnstein Aassve,
Yann Algan,
Romina Boarini,
Santiago González,
Zsuzsanna Lonti,
Gianluca Grimalda,
Rafael Hortala Vallve,
Soonhee Kim,
David Lee,
Louis Putterman,
Conal Smith

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Trust and its determinants: Evidence from the Trustlab experiment

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Fabrice Murtin, Statistics and Data Directorate, +33 (0)1 45 24 76 08, Fabrice.MURTIN@oecd.org; Lara Fleischer, Statistics and Data Directorate, +33 (0)1 45 17 65 08, Lara.FLEISCHER@oecd.org; Vincent Siegerink, Statistics and Data Directorate, +33 (0)1 45 24 14 76, Vincent.SIEGERINK@oecd.org.

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Trust and its determinants: Evidence from the Trustlab experiment

Fabrice Murtin, Lara Fleischer and Vincent Siegerink (OECD Statistics and Data Directorate), Arnstein Aassve (Bocconi University), Yann Algan (Sciences Po Paris), Romina Boarini (OECD General Secretariat), Santiago Gonzalez and Zsuzsanna Lonti (OECD Public Governance Directorate), Gianluca Grimalda and Ulrich Schmidt (Kiel University), Rafael Hortala Vallve (London School of Economics), Soonhee Kim and David Lee (Korean Development Institute), Louis Putterman (Brown University), Conal Smith (associated with the OECD Statistics and Data Directorate at the time of the first Trustlab rounds).

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Abstract/Résumé

This paper describes the results of an international initiative on trust (Trustlab) run in six OECD countries between November 2016 and November 2017 (France, Germany, Italy, Korea, Slovenia and the United States). Trustlab combines cutting-edge techniques drawn from behavioural science and experimental economics with an extensive survey on the policy and contextual determinants of trust in others and trust in institutions, administered to representative samples of participants. The main results are as follows: 1) Self-reported measures of trust in institutions are validated experimentally, 2) Self-reported measures of trust in others capture a belief about trustworthiness (as well as altruistic preferences), whereas experimental measures rather capture willingness to cooperate and one's own trustworthiness. Therefore, both measures are loosely related, and should be considered complementary rather than substitutes; 3) Perceptions of institutional performance strongly correlate with both trust in government and trust in others; 4) Perceived government integrity is the strongest determinant of trust in government; 5) In addition to indicators associated with social capital, such as neighbourhood connectedness and attitudes towards immigration, perceived satisfaction with public services, social preferences and expectations matter for trust in others; 6) There is a large scope for policy action, as an increase in all significant determinants of trust in government by one standard deviation may be conducive to an increase in trust by 30 to 60%.

Keywords: trust, cooperative games, no cooperative games, trust in institutions, implicit association test

JEL Classification: C710, C720, C800, C910

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Ce document expose les résultats d'un programme international sur la confiance (dénommé Trustlab), mené à bien dans six pays de l'OCDE entre novembre 2016 et novembre 2017 (Allemagne, Corée, États-Unis, France, Italie et Slovénie). Le projet Trustlab allie, d'une part, des techniques de pointe issues des sciences comportementales et de l'économie expérimentale et, d'autre part, une vaste enquête sur les déterminants politiques et contextuels de la confiance dans autrui et dans les institutions, réalisée auprès d'échantillons de participants représentatifs. Les principaux résultats sont les suivants : 1) les mesures auto-déclarées de la confiance dans les institutions sont validées par les données expérimentales ; 2) les mesures auto-déclarées de la confiance dans les autres traduisent une croyance en la loyauté d'autrui (ainsi que des préférences altruistes), tandis que les mesures expérimentales reflètent davantage une propension à coopérer et la propre loyauté des participants. Par conséquent, les deux types de mesures affichent une faible corrélation et devraient être considérés comme des compléments plutôt que comme des substituts ; 3) la perception des performances des institutions est étroitement liée à la confiance à la fois dans les pouvoirs publics et dans autrui ; 4) la perception de l'intégrité des pouvoirs publics est le principal déterminant de la confiance qui leur est accordée ; 5) outre les indicateurs associés au capital social, comme les relations de voisinage et l'attitude vis-à-vis de l'immigration, la perception de la satisfaction à l'égard des services publics, les préférences sociales et les attentes influent sur la confiance en autrui ;

6) l'action des pouvoirs publics a un rôle crucial à jouer, dans la mesure où la progression d'un écart-type de tous les déterminants majeurs de la confiance dans les institutions peut se traduire par une augmentation de la confiance de 30 à 60 %.

Mots-clés : confiance, jeux coopératifs, jeux non-coopératifs, confiance dans les institutions, test d'association implicite

Classification JEL : C710, C720, C800, C910

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1. Introduction

"Virtually every commercial transaction has within itself an element of trust, certainly any transaction conducted over a period of time. It can be plausibly argued that much of the economic backwardness in the world can be explained by the lack of mutual confidence", K. Arrow (1972, p. 357).

1. Numerous studies have identified trust – both trust in institutions and trust in other people – as a key ingredient of social and economic progress (see Algan and Cahuc, 2015, for a review). It has been linked to income per capita and economic growth (Putnam, 1993; Ahn and Hemmings, 2000; Temple, 2000; Algan and Cahuc, 2013), health status and health-related behaviour (Lochner et al., 2003; Lindström, 2005; Brown et al., 2006), crime rates (Buonanno et al., 2009) and subjective well-being (Helliwell and Wang, 2010, Boarini et al., 2012). In this context, the decline in trust in public institutions experienced by several countries since 2008 financial crisis has been a source of serious concerns. Indeed, trust in a broad range of public and private institutions has fallen the most in the OECD countries that have been hit most by the crisis (i.e. those that have experienced the largest falls (or the smallest growth) in household income and earnings since 2005, as well as some of the largest increases in long-term unemployment, OECD, 2017a). This decline of trust (which in some countries spanned several decades) has gone hand in hand with an increase in non-mainstream voting and populism in several countries (Inglehart, Norris, 2016; Algan et al., 2017).

2. While overcoming this "trust crisis" has become a policy priority, the difficulty of identifying credible measures of trust has been a practical challenge. For instance, Glaeser et al. (2000) challenged the validity of *self-reported* measures of trust in others from surveys based on evidence of their poor correlation with *behavioural* measures (i.e. based on experiments) of trust in others. Survey measures of trust in government have also been criticized for capturing the popularity of current governments rather than 'structural' trust in governmental institutions (Parker et al., 2014).

3. Trustlab aims to shed light on both measurement and policy challenges in restoring trust. On the measurement front, Trustlab is the first internationally comparable and nationally representative data collection exercise on trust and other social preferences based on techniques from behavioural science and experimental economics, which allows comparing and better understanding both self-reported and experimental measures of trust. Validity is usually analysed in terms of face validity (whether the measure makes sense intuitively), convergent validity (whether the measure correlates well with other proxy measures of the same concept) and construct validity (whether the measure behaves as theory and common sense dictate). Since experimental and survey measures represent different indicators of the same construct, Trustlab allows for the examination of convergent validity. On the policy

front, Trustlab combines a range of trust measures with an extensive survey on their likely policy and contextual determinants.

4. As such, Trustlab is related to recent initiatives such as the UN Sustainable Development Goals, particularly Goal 16 ("Promote access to justice for all and build effective, accountable and inclusive institutions at all levels."). The internal OECD Trust Strategy: i) underscores the need to regularly collect data on trust, as described in the *OECD Guidelines on Measuring Trust* (OECD, 2017b); ii) reflects on the drivers of trust and on strategies to rebuild public trust, as laid out in the OECD's *Trust and Public Policy* report (OECD, 2017c).

5. This paper describes the content of the Trustlab experiment, which has been run in six countries as of December 2016 (France, Germany, Italy, Korea, Slovenia and the United States). Overall, Trustlab confirms some validity to survey measures of trust in others and trust in institutions, and highlights the large scope for improving trust via a range of policy actions. In particular:

   - Experimental data on trust in government derived from psychometric tests show that participants' implicit trust in government is higher than their self-reported trust. Despite this difference in level, experimental and self-reported trust in government are robustly correlated within countries. A weak correlation is found between the two measures across countries;
   - Both self-reported and measures of behavioural trust in other people are determined by beliefs and other-regarding preferences, but this set of preferences may differ: both measures are correlated with the expected trustworthiness of others and the respondent's altruism, but behavioural trust additionally captures willingness to cooperate in the context of a specific interaction. In addition, a person's exhibited trustworthiness, rather than expected trustworthiness of others, is more important in explaining behavioural trust: In the experiment, people's own behaviour predicts decisions about how much they can trust others, whereas the survey measure captures an inherent belief about others' trustworthiness. Therefore, both measures are loosely related, but should be considered rather complementary;
   - The main policy determinants of (self-reported) trust in government are perceived government integrity, government reliability and government responsiveness, as well as satisfaction with certain public services, government fairness and perceptions of integration of immigrants;
   - The perceived quality of institutions also matters for (self-reported) trust in others. Additional determinants of trust in others are social preferences and expectations, along with measures associated with social capital such as neighbourhood connectedness and attitudes towards immigration.
   - To highlight the scope for policy action, an increase in all significant determinants of trust in government by one standard deviation may be conducive to an increase in trust by 30 to 60%;

6. The paper is structured as follows: Section 2 introduces a unified conceptual framework on the determinants of trust, drawing on a wide literature review from different disciplines, while Section 3 describes the Trustlab infrastructure and dataset. Descriptive results on the state of trust in 2017 are presented in Section 4, followed by a comparison of self-reported and experimental measures of trust (Section 5), and by an empirical analysis of the determinants of trust (Section 6). The paper concludes

by identifying some priorities for future research that could be addressed by the rich Trustlab dataset.

2. Conceptual framework

2.1. What is trust?

7. Trust is conventionally defined as

   "a person's belief that another person or institution will act consistently with their expectations of positive behaviour" (OECD, 2017b).

   This definition combines different approaches to trust from various disciplines (political science, sociology, economics, psychology) capturing both behavioural and attitudinal aspects. In any specific interaction, a trusting person consciously places resources at the disposal of another party without the means to guarantee that these will be returned (Fehr, 2009). But, beyond an individual's observable behaviour, trust also includes invisible cognitive and normative aspects: trust will be influenced by expectations about other people's trustworthiness and about whether others, even strangers, share the same fundamental values (Hardin, 2004; Uslaner, 2002).

8. Trust defined this way also allows for flexibility regarding 'who' is to be trusted, and encompasses both trust in other people ('interpersonal trust') and more abstract entities like public institutions ('institutional trust'). These notions can then be further broken down into trust in specific groups of people or types of institutions (Box 2.1).

9. A critical aspect when discussing how trust is formed concerns whether people's levels of trust are fixed or change in time. Is trust a deeply engrained cultural component of a country or region that is passed on from one generation to the next, and constitutes thus a highly stable psychological propensity? Or can an individual's environment influence trust levels over the lifetime? Obviously, the room for policy intervention would be rather small and more long-term oriented in the former case, and larger and immediate in the latter.

10. Both views on how trust is formed have some element of truth, as illustrated by Putnam's seminal works on the evolution of social capital. In his 1993 landmark book "Making democracy work", Putnam compares the high trust regions of North Italy (whose cities experienced democratic self-rule in the medieval period) with Southern Italy, arguing that current trust levels are largely determined by this historical legacy. However, in his book "Bowling alone", Putnam (2000) documents the stark decline of membership in voluntary associations in the United States over the past 50 years, and attributes this trend to the individualization of leisure activities and increase in watching TV. In this second narrative, trust is changing over time and influenced by changes in one's environment. One goal of the conceptual framework described below is to account for both short and long-run determinants of trust.

Box 2.1. Trust in whom exactly are we interested in?

The trust literature often distinguishes between different parts of government and different types of persons. Many authors argue that such distinctions are fundamental to understanding trust meaningfully (e.g. Delhey, Newton and Welzel, 2011; Hardin, 2004).

While the broad notion of institutional trust encompasses all types of public institutions, a focus on specific institutions (i.e. the government, the parliament, the judicial system, the police, the civil service) is more useful in a policy perspective. However, empirical analysis also suggests that, when presented with a wide range of institutions, people's responses can be grouped into three categories (political institutions, law and order institutions, and non-governmental institutions) (OECD, 2017c; Schneider, 2016).

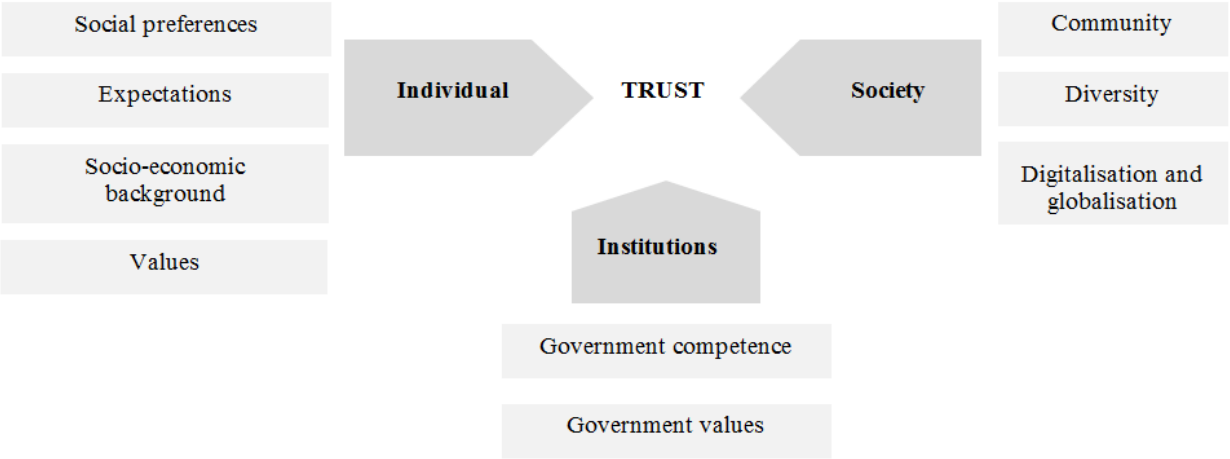
Similarly, the broad notion of interpersonal trust can be deconstructed in the two categories of 'limited' trust and 'generalised' trust. Limited trust refers to trust between people who know each other well (including family, friends, and people living in one's immediate neighbourhood), whereas generalised trust captures trust between casual acquaintances or complete strangers (Putnam, 2000; Delhey et al., 2011). The distinction between limited and generalised trust partly overlaps with that between 'bonding' and 'bridging' social capital, differentiating between relationships among strongly-tied, inward-looking groups of people of similar background and outlook, and those fostered by weakly-tied, outward-looking networks bringing together people of different backgrounds (Gittell and Vidal, 1998, Coleman 1990). Empirical evidence indicates that limited and generalised trust are typically inversely related: People with strong family ties tend to have a lower trust in strangers than those with weak family ties (Enrich and Gambetta, 2010; Greif and Tabellini, 2010). Since cooperation with people that one does not know personally is necessary to generate productive social and economic interactions, and the circle of strangers will always be larger than one's immediate social connections, generalised trust is of greater interest when the focus is in on the creation of public goods. Unless otherwise specified, the term 'interpersonal trust' as used in this paper to refer to generalised trust.

2.2. The Individual, Institutional, and Societal determinants of trust

11. Trustlab takes into account three main channels that may influence trust: i) an individual's characteristics, including her preferences, expectations and socio-economic background; ii) the institutional environment the individual acts in; iii) and the societal and community context (Figure 2.1). Both short and long-term factors, as well as micro and macro-level aspects are thus addressed.

12. Obviously, the causal chains from each determinant will differ depending on the type of trust considered. Nevertheless, previous studies document that there trust in others and trust in institutions share a number of common drivers.

Figure 2.1. Conceptual framework of the determinants of trust



2.2.1. Individual determinants

13. At the individual level, people's trust is shaped by their social preferences, their expectations regarding the behaviour of other people, as well as general socio-economic and characteristics and their religious and political affiliations.

Social preferences

14. A range of research findings suggests that, beyond material benefits, individuals value the act of cooperation per se. In this perspective, each person has intrinsic motivations and social preferences which are linked to cooperation and to the psychological cost of non-cooperating (Bowles and Polania-Reyes, 2012; Falk et al., 2015). These other-regarding preferences allow collaboration to emerge in large groups of strangers (Bowles and Gintis, 2007; Algan and Cahuc, 2009). Two prominent examples of such social norms are altruism and reciprocity. Altruistic individuals will cooperate with others without expecting any material benefit in return (Andreoni, 1989; Anderson, Goeree, and Holt, 1998). Reciprocal preferences imply that people dislike when their trust is not returned, and are willing to punish others that do not respect cooperative norms, even at a cost to their own outcomes (Fehr, 2009; Hoff et al., 2011). These social preferences are thus likely to be especially important for interpersonal trust.

Expectations

15. An individual's beliefs about the trustworthiness of other people, as well as his or her willingness to take risk, affect how much trust a person is willing to place in the hands of others (Swap and Johnson-George, 1982; Fehr, 2009). There is evidence that people are more averse to taking risk in interactions involving other individuals than when outcomes are determined randomly, as the first situation involves a risk premium to offset the possibility of 'trust betrayal' (Bohnet and Zeckhauser, 2004).

For example, entrepreneurs, who are disproportionally exposed to risks associated with informal agreements with other people report higher interpersonal trust levels compared to others in both survey and experimental measures (Guiso et al., 2006; Naef and Schupp, 2009).

16. Expectations also matter for institutional trust, e.g. people who consider themselves as exposed to greater risks of financial problems or job losses in the future will display lower trust in the public institutions that fail toprovide this security (Bouckaert et al., 2002; Inglehart and Norris, 2016).). In Europe, for example, a decline in trust in institutions has gone hand in hand with a rise in unemployment and voting for non-mainstream, populist parties in the aftermath of the Great Recession (Algan et al., 2017). In a similar vein, a perceived lack of equality and mobility may be a source of frustration among those who do not reap the benefits of economic growth and feel left behind in increasingly unequal societies (Alesina, 2017).

Socio-economic background

17. A number of demographic and socio-economic characteristics of individuals have been consistently found to be highly correlated with trust, including age, gender, education, income level, labour force status, and migration background (Alesina and La Ferrara, 2000; Algan and Cahuc, 2013). For example, interpersonal trust tends to increase with age (Putnam, 2000; Stolle et al., 2008; Tokuda et al., 2008; Li and Fung, 2012; Clark and Eisenstein, 2013), possibly due to older people being more motivated to give back to others, believing them to be good and trustworthy in return (Poulin and Haase, 2015). There is also a positive relationship between interpersonal and institutional trust and educational status (and, although less strong, income) (Stolle et al., 2008; Helliwell and Wang, 2010; Carl and Billari, 2014). People that are better off financially and more educated are likely to have more opportunities to take part in society (e.g. through volunteering and political participation), helping them to develop and maintain larger and more diverse social networks (Helliwell and Putnam, 2007; OECD, 2015b). The cognitive skills gained through education also allow for a better understanding of government functions, translating into higher trust of public institutions (Christensen & Laegreid, 2005).

Values

18. A person’s values about how society should be organised also shape their trust in other people as well as in institutions. For instance, religious attendance (whatever the religious affiliation) is a strong correlate of social ties (Schoenfeld 1978; Traunmüller 2011) and, through this channel, of people's trust. Furthermore, one’s political orientation is likely to act as a mitigating factor when formulating judgements about public institutions: in the United States for instance, trust in government is always higher for members of the party of the incumbent President (Pew, 2015). One specific value relevant to trust is preferences for redistribution, which often reveal deeply ingrained views about the role of government (Alesina et al., 2012).

2.2.2. Institutional determinants

19. The institutional context in which people operate is crucial to strengthen cooperation as well as inspire trust in the institutions themselves. Both the competence of institutions to carry out their role and the values and intentions that guide government

action are key determinants of trust (OECD, 2017c; Bouckaert and Van der Walle, 2004; Nooteboom, 2007; Bouckaert, 2012).

Government competence

20. Government competence encompasses the ability to deliver quality public services, to respond to citizen needs and to effectively manage social, economic and political uncertainty. Institutional trust indeed responds to shocks in government performance as measured by large scandals in government agencies (Keele, 2004). Moreover, citizens' evaluations of public services regularly have been found to be quite accurate with respect to objective performance indicators (Van Ryzin, 2007) and feeds into the idea promulgated by the New Public Management Literature for greater emphasis on improving customer service as a means to strengthen trust (Aberbach, 2007). Nevertheless, the direction of causality between quality of public services and trust is not straightforward, since levels of trust in institutions might also impact perceptions of quality of services received (Walle and Bouckaert, 2013).

Government values

21. The notion of government values revolves around norms of integrity in terms of low corruption and high standards of accountability, openness of the policy process to the participation of citizens, and fair and equal treatment of all population groups.

22. People are less likely to trust institutions riddled by corruption, and there is a robust cross-country correlation between trust in institutions and perceptions of corruption (Anderson and Tverdova, 2003; OECD, 2013). At the same time, low institutional trust may hinder government efforts to improve integrity, and a society with weak interpersonal trust and non-cooperative norms is likely to be more tolerant of non-compliance with regulations and laws (Morris and Klesner, 2010; Aghion et al., 2010). When it comes to the connection between fairness and institutional trust, experiences of discrimination have been found to harm perceptions of trustworthiness of government actors (Wang, 2016).

23. Beyond institutional trust, government values also matter for interpersonal trust since fair and effective institutions enable a person to extend trust to strangers without putting themselves at risk (Gambetta, 1993; Tabellini, 2008; Herrmann et al., 2008; OECD, 2017c). A strong positive relationship between interpersonal trust and the quality of the legal system has been repeatedly established in cross-country studies, with similar results for other measures of institutional quality, such as the rule of law, the strength of property right protection, accountability, or corruption (Rothstein and Uslaner, 2005). For example, tax evasion is lower in the Swiss cantons with higher democratic participation, underscoring the impact of inclusion in democratic processes on cooperative behaviour (Frey, 1998).

2.2.3. Societal determinants

24. Since trust involves an interaction between two or more people or entities, the societal context in which these interactions occur influences a person's willingness to trust. This societal context encompasses aspects of community, the connectedness to other people in society, the community's diversity, attitudes towards globalisation, and ideals about how society should be organised.

Community aspects

25. Social connections are thought to encourage the development of interpersonal trust. Frequent interactions with other people, including friends and neighbours, foster the development of trust in others because such trust is inferred from ongoing social experiences, which in turn allow inferences about shared social norms in society at large (Offe, 1999; Glanville and Paxton, 2007). The link between a person's community relations and interpersonal trust has been established both in correlational and causal designs (Putnam 2000; Delhey and Newton 2003; Li, Pickles, and Savage 2005; Welch, Sikkink, and Loveland 2007; Sturgis, Patulny, and Allum, 2009; Glanville and Paxton, 2013). People who are civically engaged, are members of neighbourhood associations, and volunteering for good causes trust other people more (Putnam, 2000; Bekkers, 2012; Sivesind, 2012). At the same time, volunteering and civic engagement are positively associated with trust in government, even though the direction of causality is debated (Myong and Seo, 2015).

Diversity

26. A large part of research on interpersonal trust has focused on the importance of community diversity (both in terms of inequality and ethnic fractionalization) in building trust (Rothstein and Uslaner 2005; Algan and Cahuc, 2013). For instance, in the United States, people belonging to a group that has historically been discriminated against (minorities, and, to a lesser extent, women) or live in a community that is racially mixed and/or with a high degree of income disparity trust other people less (Putnam, 2002; Alesina and La Ferrara, 2002). Similar patterns have been found in other countries (Bjørnskov, 2006; Helliwell and Wang, 2010). It should be noted, however, that residential segregation, rather than ethnic diversity, might be the cause of low interpersonal trust (Uslaner, 2012).

27. Diversity has also been associated with institutional trust via the 'cultural backlash' that has shaped the recent rise of populism in several Western countries, and which has been associated with the resistance of formerly dominant groups against progressive social policies, increased immigration and changes in cultural values (Inglehart and Norris, 2016). Attitudes towards immigration, in particular, are a major component of narratives rejecting established political structures, particularly in countries accepted large numbers of refugees or have a history of immigration. Interestingly, perceived rather than actual diversity may be associated with acceptance of minority groups (Piekut and Valentine, 2014). In addition, OECD countries with large immigrant populations, such as Australia, Canada, Luxembourg, New Zealand and Switzerland, are all comparatively high trust countries, suggesting that the interplay between diversity and trust may be complex.

Digitalisation and Globalisation

28. Attitudes towards globalisation (as a potential source of economic insecurity) and inequality may play a role in people's experience of a changing economic landscape, and the ability of governments to manage these changes (Swank and Betz, 2002; Scheve and Slaughter, 2007). Indeed, the recent rise in populist movements and lower decreased trust in government have been associated as much with a cultural backlash as with a rejection of globalisation (Inglehart and Norris, 2016). Digitalisation, and the rising consumption of news that confirm people's opinions via social media echo

chambers has also been associated with increased polarization of social networks and perceptions of institutions.

3. Measuring trust

3.1. Experimental economics as a new toolkit to measure social preferences

29. Generally speaking, two types of trust measures can be distinguished: self-reported and experimental measures. Because of its intangible nature, researchers and policy makers long relied on self-reported measures of trust, typically collected via household surveys. Although there is evidence that self-reported measures, especially for interpersonal trust, provide valid and reliable information, it has not been possible to actually observe trust as such. (OECD, 2017b). Surveys also do not allow disentangling the variety of social preferences that shape trust, such as altruism and reciprocity. A revolution in experimental economics has led to the development of laboratory experiments designed to elicit a variety of social behaviours under controlled conditions through interactive games. Common protocols such as the trust game, public goods game, dictator game, or risk ladder are described below. These carefully calibrated experiments allow measuring people's behaviours and choices with monetary incentives at stake, and provide benchmarks against which survey questions can be compared. Experimental techniques from psychology, such as Implicit Association Tests, have also been used to measure respondent's implicit preferences compared to what they self-report in surveys.

3.2. The Trustlab platform

30. Trustlab is the first international instrument that combines experimental measures of trust and other social norms with an extensive survey of attitudinal, institutional and social determinants of trust. The tool is supported by an online data collection platform designed by the OECD and Sciences-Po Paris. The database currently contains data from six countries: France, Korea, Slovenia, the United States, Germany and Italy (Box 3.1), and is supported by a network of affiliated research institutions and government agencies[1].

31. In each country, the online platform is completed by a minimum sample of 1,000 respondents. This sample is provided by a private sector polling company and is nationally representative by age, gender and income (See Annex A.I, Table A A.1). Participants complete the platform online using a link provided by the polling company. Upon completion of the entire platform, participants are rewarded through a lump sum for their time and with an additional payoff that they can earn in the behavioural games. Certain exclusion criteria were applied to filter out poor quality

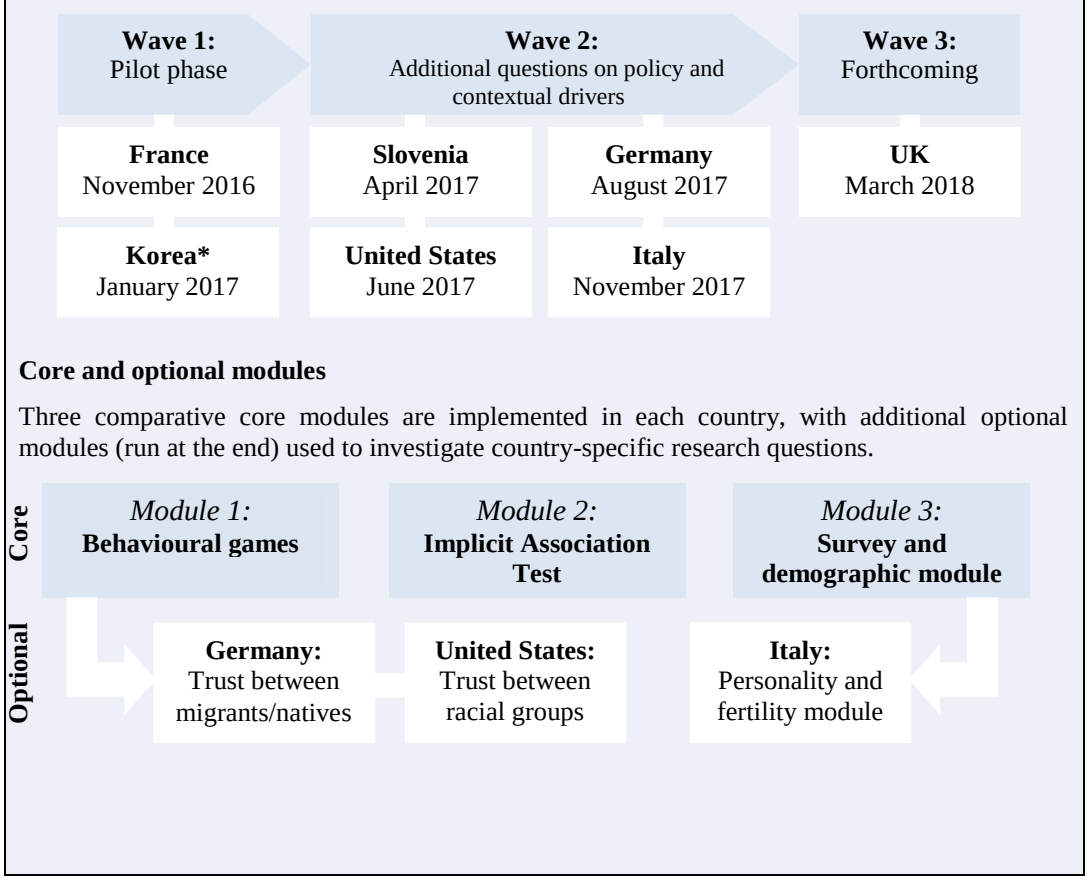
[1] Yann Algan at Sciences Po Paris; Soonhee Kim at the Korean Development Institute; the Government of Slovenia; Louis Putterman at Brown University; Gianluca Grimalda and Ulrich Schmidt at Kiel University; Arnstein Aassve at Bocconi University; Rafa Hortala-Vallve and Matteo Galizzi at the London School of Economics.

responses according to quality assurance measures described in Annex A.I (Table A A.1).

32. Trustlab consists of three modules, each focusing on a specific measure of trust. Module 1 contains three behavioural games, eliciting measures of social norms, including trust in others and trustworthiness. Module 2 is an Implicit Association Test specifically developed to capture implicit levels of trust in government and in the judicial system. Module 3 is a traditional survey module with an extensive set of questions on interpersonal and institutional trust, the determinants of each, as well as socio-economic and demographic background variables.

33. In addition to these three core modules, country-specific optional modules investigating specific topics of interest are available. In the United States and Germany, a second trust game was included focused on 'bilateral' trust between different ethnic and racial groups (in the former) and between natives and migrants (in the latter); while in the case of Trustlab Italy, an additional module is included questions on personality traits and fertility preferences. In this report, only the results of the three core modules are presented, while findings from the optional modules will be the subject of forthcoming papers.

Box 3.1. Trustlab project timeline and structure



Differences between waves

Slight changes (particularly in the set-up of the trust game) were made to Trustlab between Wave 1 (France and Korea) and Wave 2 (Slovenia, Germany, Italy, the United States and the United Kingdom) (see notes in Table 3.1). The survey module on policy and contextual drivers was only added in the second wave. In addition, a risk game was added to Module 1 in the case of the United States, Germany, Italy and the United Kingdom.

*Data collection in Korea lasted from November 2016 to January 2017 and overlapped with large scale protests surrounding a high profile corruption scandal eventually leading to President Park Geun-Hye's impeachment. The Korean results should therefore be interpreted with caution as trust in institutions might have been lower than usual during this particularly turbulent time.

3.3. Key measures of interest

34. Trustlab includes four key experimental and self-reported measures of interpersonal trust and trust in institutions (Table 3.1). All self-reported measures of trust included in Trustlab are drawn from best practices on trust measurement as described in the recently released OECD Guidelines on Measuring Trust (Box 3.2). Summary statistics of key measures of trust and social norms are shown in Annex A.I (Table A A.3).

Table 3.1. Experimental and survey measures of trust included in Trustlab

Measure of Interpersonal trust	Measure description	Measure output	Countries
Self-reported trust in others (OECD version)	On a scale from zero to ten, where zero is not at all and ten is completely, in general how much do you trust most people?	11 discrete options ranging from 0 (Not at all) to 10 (Completely)	DEU, ITA, SVN, USA only
Self-reported trust in others (Rosenberg version)	Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?	11 discrete options ranging from 0 (You can't be too careful) to 10 (Most people can be trusted)	All countries
Behavioural trust in others	Amount transferred from participant A to participant B in Trust game*	Response scale is represented by an endowment of 10 euro or equivalent. The response is given in an open box and allows non-integer responses.	All countries
Measure of Institutional trust	**Measure description**	**Measure output**	**Countries**
Self-reported trust in government	When answering the following questions, please think about [enter country here] institutions. How much trust do you have in the government?	11 discrete options ranging from 0 (I don't trust them at all) to 10 (I completely trust them)	All countries
Self-reported trust in the judicial system	How much trust do you have in the judicial system?	11 discrete options ranging from 0 (I don't trust them at all) to 10 (I completely trust them)	All countries
IAT trust	A latency score based on the relative speed of associations between "Trustworthy and Government" and "Untrustworthy" and vice versa	IAT D-score. This score is computed by subtracting the mean latency of the "Trustworthy" IAT block from the mean latency of the "Untrustworthy" IAT block and dividing this by the Standard Deviation of the latencies in the two blocks.	All countries
IAT trust	A latency score based on the relative speed of associations between "Trustworthy and the Judicial System" and "Untrustworthy" and vice versa		All countries

Box 3.2. The OECD Guidelines on Measuring Trust

The 2017 OECD Guidelines on Measuring Trust represent the first attempt to provide international guidance on how to collect, publish and analyse trust data through surveys to encourage their use by national statistical offices. The Guidelines cover both interpersonal and institutional trust and were released as part of the OECD Better Life Initiative, which aims to improve the quality and availability of data relevant for monitoring and analysing the many facets of people's well-being.

The Guidelines describe why measures of trust are relevant for monitoring and policymaking, and why national statistical agencies have a critical role to play in enhancing the usefulness of existing measures. Besides establishing what is known about the reliability and validity of existing measures of trust, the OECD Guidelines describe best approaches for measuring, reporting, interpretation and analysis.

The OECD Guidelines also include a number of prototype survey modules on trust that national and international agencies could readily use in their household surveys. Five core measures were selected for inclusion in the primary module, based on their statistical quality and ability to capture the underlying concepts of trust:

1. And now a general question about trust. On a scale from zero to ten, where zero is not at all and ten is completely, in general how much do you trust most people?

2. On a scale from zero to ten, where zero is not at all and ten is completely, in general how much do you trust most people you know personally?

Using this card, please tell me on a score of 0-10 how much you personally trust each of the institutions I read out. 0 means you do not trust an institution at all, and 10 means you have complete trust.

3. [COUNTRY'S] Parliament?

4. The police?

5. The civil service?

The first question captures generalised interpersonal trust, and is based on the long established Rosenberg question (introduced in 1957 and used widely, e.g. in the World Values Survey). However, there is an important difference – the original wording of the Rosenberg question refers to the concept of caution beyond absence of trust ("Generally speaking, would you say that most people can be trusted, or that *you can't be too careful in dealing with people*?"). Empirical evidence shows that vulnerable population groups (e.g. women and the elderly) report lower trust compared to other population groups when the 'caution rider' is present than in the case where a more neutral wording (that focuses solely on trust) is used (OECD, 2017b). Resulting responses might hence reflect differences in cautiousness rather than trust.

Wave 1 of Trustlab includes only the original Rosenberg question, while from Wave 2 onwards both the Rosenberg and the OECD question were used. When not specified, interpersonal trust as used in the following refers to the OECD question.

3.3.1. Module 1: behavioural games

35. In the behavioural games used in Module 1, respondents participate in a quasi-live interactive game with other platform participants. Because incentives are essential for

these games to work, participants have the opportunity to earn real rewards that were calculated and paid out after all participants made their decisions[2]. Because not all participants may be online at the same time, respondents may experience a small delay in finding out their payoff. To minimize financial costs, participants were only paid their earnings from one of the games they played, with the choice of which one randomized at the end of the platform. Respondents were notified of the rule before starting the experiment.

36. In the first game, the Trust Game, two respondents (Participant A and B) face each other and are given an initial sum of money (Berg et al., 1995; Table 3.2). The game yields a measure of trust (based on the behaviour of Participant A) and a measure of trustworthiness (based on the behaviour of B). Trustlab employs the 'strategy method' to assess trustworthiness, where Participant B makes 11 individual decisions for each possible amount that Participant A might send. In addition, except in the France and Korea waves, all participants played both roles in the game.

Table 3.2. Trust Game

	Endowment (units)	Participant A action:	Multiplication factor	Participant B action
A	10	Send part of endowment to B: **Trust**	3x	Send part back to A as a share of B total resources: **Trustworthiness**
B	10			

37. The second game is the Public Goods game (Fehr and Gaechter, 1999; Table 3.3). It involves a group of four participants who have to decide how much of their endowments they want to contribute to a joint public project. A respondent's contribution will depend on their willingness to cooperate as well as their trust in the other participants to do the same. Trustlab includes both an unconditional version of the public goods game, where respondents are not aware of the contribution of the other players; and a conditional version, where the average contribution of other participants is known using the strategy method. The strategy method asks respondents to make a decision as Participant B for each possible amount received by Participant A, and therefore allows an understanding of the full range of possible decisions..

Table 3.3. Public Goods game

	Endowment (units)	Participant A, B, C, D action	Multiplication factor	Payoff
A	10	Contribute to joint project: **Cooperation/Reciprocity**	1.6x	Joint project split evenly among A, B, C, D
B	10			
C	10			
D	10			

[2] Depending on the country context and available option of the survey company, respondents were paid via a bank transfer, PayPal, or with a voucher. Participants had the possibility to earn an amount that is equivalent to EUR 40. Average earnings were EUR 11.7 or equivalent. In the United States, a 1:1 exchange rate was used to limit cognitive burden. In Korea, amounts were converted at a rate of EUR 1 euro = WON 1 200 instead of the exact exchange rate in order to minimize cognitive burden. Throughout the paper, one unit refers to one euro or equivalent.

38. The third game, the Dictator game (Kahneman et al., 1986; Table 3.4) is similar in structure to the Trust Game - except for the fact that the second participant passively receives whatever sum the first player (the 'dictator') decides to send to her and that this transfer is not multiplied by any amount. This game thus provides data on levels of altruism to explain a person's level of trust and trustworthiness.

Table 3.4. Dictator Game

	Endowment (units)	Participant A action:	Multiplication factor	Participant B action
A	10	Send part to B: Altruism	None	none
B	0			

39. The Risk Ladder experiment (following Eckel and Grossman, 2002; Table 3.5) is used to elicit information on participants' risk preferences. In this game, respondents are not matched with another player but rather given six choices of gambles that involve increasing levels of risk, with expected payoffs increasing slightly as the risk goes up, therefore rewarding potential risk-taking. The Risk Ladder experiment was included in the platform for the United States, Germany, Italy and the United Kingdom.

Table 3.5. Risk ladder

	Low payoff/ High payoff	Probability		Low payoff/ High payoff	Probability
Choice #1	8	50%	Choice #2	7	50%
	8	50%		10	50%
Choice #3	6	50%	Choice #4	5	50%
	12	50%		14	50%
Choice #5	4	50%	Choice #6	1	50%
	16	50%		19	50%

40. Although the games included in Module 1 have been widely implemented in different settings, a main concern with experimental measures of trust relates to their external validity: So far, laboratory experiments mostly relied on small and non-representative samples of university students in Western countries. In the field of psychology, 96% of subjects in studies published in top journals were from "WEIRD" (Western, educated, industrialised, rich, and democratic) countries (Arnett, 2008). Researchers – often implicitly – assume that either there is little variation in experimental results across populations, or that these WEIRD subjects are as representative of the human species as any other population. This is not the case, as Heinrich et al. (2010) conclude in their comparative review across the behavioural sciences: WEIRD subjects are "among the least representative populations one could find for generalizing about humans", and there is substantial variability of results across countries. Indeed, Trustlab's emphasis on nationally representative samples in a cross-country comparative setting is a decisive step towards improving the quality of experimental data on trust.

41. Regardless, there is evidence that results obtained in the lab do translate into real world outcomes. Karlan (2005) uses the trust game to obtain individual-level

measures of tastes for reciprocity, and shows that these measures predict loan repayment among participants, up to one year later, in a Peruvian microcredit programme. De Oliveira et al. (2014) elicit subjects' tastes for cooperation in the lab using a traditional public goods game; they show that these experimental measures are correlated with subjects' contributions to local charities in a donation experiment and with whether they self-report contributing time and/or money to local charitable causes. Similarly, Laury and Taylor (2008) and Benz and Meier (2008) use public goods games to elicit information on participants' taste for cooperation, and show that this measure is associated with the probability to contribute to a public good in the field through a charitable donation. Algan et al. (2013) also show that experimental trust is a good predictor of contributions in online economics communities based on cooperation and non-monetary incentives, such as Wikipedia and open software. While these studies do not guarantee that these conclusions also hold for nationally representative samples, they provide initial positive evidence on for the convergent validity of the measures obtained in the Trust game.

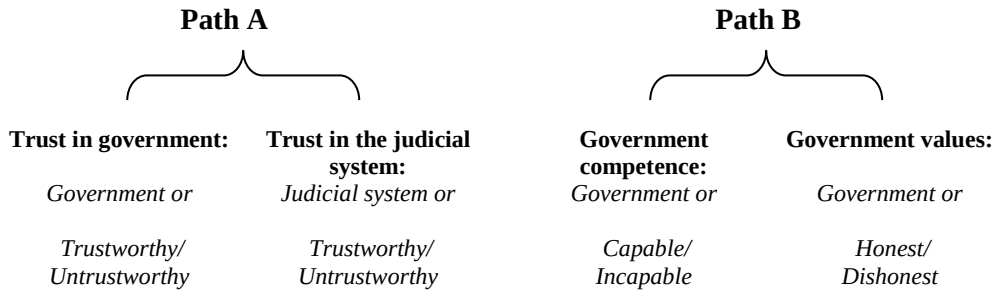
3.3.2. Module 2: Implicit Association Test

42. The Implicit Association Test (IAT), an experimental measure of trust in institutions, asks respondents to rapidly sort relevant words to the left and right hand sides of the computer screen. The IAT relies on the idea that a person will react more quickly when the concept and the evaluation that she makes of this concept are congruent in her subconscious. IATs are a psychometric technique used to test respondent attitudes where issues of social desirability may make them unwilling to respond honestly, or in areas that are difficult to measure through explicit self-reporting due to lack of awareness (Greenwald et al., 2002). These tests have been applied successfully to measure perceptions, stereotypes and attitudes towards commonly stigmatised social groups such as Black people, women and the elderly (Dasgupta and Asgari, 2004; Aberson et al., 2004).

43. Whereas more classic versions of the IAT are 'two-sided' – i.e. respondents are asked to sort between two opposing categories (e.g. Black/White, male/female), the version developed for Trustlab is 'one-sided', featuring a single sorting category shown at the top of the screen. This allows for an evaluation of a respondent's preference for a single construct rather than between two categories (Bluemke, 2008; Raccuia, 2016). In Trustlab, the target words of interest are the combination of the words 'Government' and either 'Trustworthy' or "Untrustworthy". These target words are paired in different combinations, and respondents are asked to sort stimuli words in the correct basket each time. Respondents who carry out the sorting task faster when 'Trustworthy' and 'Government' are paired receive a positive "D-score" and are deemed as trusting of the government. The speed with which these associations are made is referred to as the latency of associations. Respondents who display lower latencies when 'Government' and 'Untrustworthy' are paired receive a negative D-score and are deemed untrustworthy (See Table 3.1 for a description of the construction of the D-score).

44. Trustlab includes four versions of the IAT, with each respondent playing two versions after being randomized into either Path A or Path B (Figure 3.1). Beyond trust in government, other modules are used to assess implicit trust in the judicial system, implicit government competence and implicit government values.

Figure 3.1. The two paths of Trustlab's Implicit Association Test



45. There are multiple reasons explaining why people may not be able or willing to accurately report attitudes. Socially desirable responding is one possibility. For example, looking at racial attitudes in the United States, non-Hispanic whites openly expressed racial prejudice in opinion surveys for many years (Schuman, 1997); then, as racism became less socially acceptable, 90% or more of white non-Hispanics today endorse racial equality when probed in surveys (Valentino, Hutchings, and White, 2002). However, IATs show that 75% of white participants still implicitly prefer white over black, and the Race IAT has been shown to reliably and repeatedly predict discriminatory behaviour among participants who describe themselves as racially egalitarian (Banaji and Greenwald, 2013).

46. Another possibility is that cognitive fallacies may distort evaluations of performance. Availability bias, as originally described by Kahneman and Tversky (1973), may induce people to consider more salient for their responses to self-reported questions, events involving the government than positive ones; this could potentially cause respondents to underreport their actual trust in institutions. Indeed, the mediating effect of the media in determining institutional trust has been discusses, with trust in government reported to be lower in countries where the ideological distance between government and national media outlets is bigger (Ceron and Memoli, 2015).

3.3.3. Module 3: survey measures

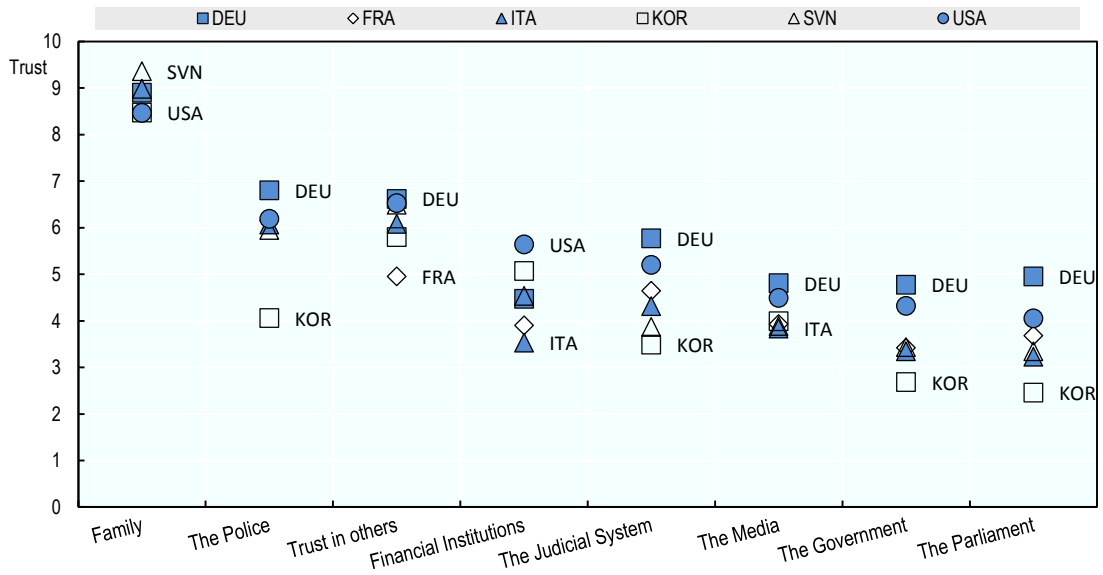
47. The survey module includes a range of questions on trust in institutions and their potential determinants. The questionnaire consists of a comprehensive set of questions on interpersonal and institutional trust, the determinants of each, as well as socio-economic and demographic background variables. These questions are presented in Annex A.III.

4. The state of trust in 2017

48. This section provides an overview of the state of trust as measured in the Trustlab dataset, benchmarked against estimates from other sources, and sets the scene for the empirical analyses in the following sections.

49. Levels of self-reported trust in different groups of people and in institutions vary by type of trust and between countries (Figure 4.1). While average trust in others is on the positive side of the scale in most countries (>5 on a 0-10 response scale), trust in most institutions is always on the negative side of the scale (<=5 on a 0-10 response scale). In the majority of countries, the government or the parliament are the least trusted institutions, while the police are the most highly trusted one. Interesting differences between countries exist, for example between respondents from the United States and Germany: in the former participants place comparatively high trust on financial institutions and less on the judicial system, while in the latter they trust the judicial system more than financial institutions. In Italy and France, financial institutions are also more distrusted compared to what is observed in other countries.

Figure 4.1. Self-reported trust in different groups and institutions across countries

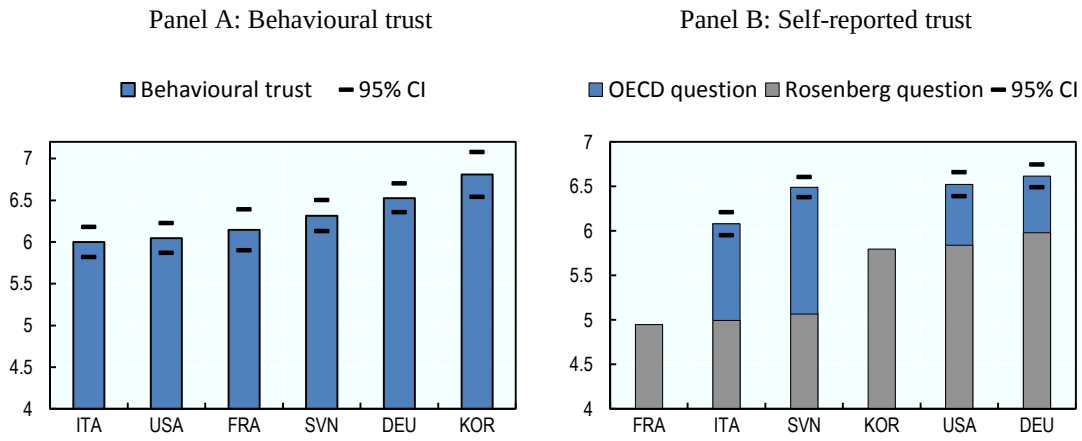


Note: In the case of trust in others, data for France and Korea are based on the Rosenberg question; those for Germany, Italy, Slovenia and the United States are based on the OECD question (See Table 3.1 for differences between the two questions).
Source: Trustlab (France: 2016; other countries: 2017).

4.1. The state of trust in others

50. Turning to trust in others, the self-reported measure of trust and the behavioural measure yield similar levels of trust. On a scale from 0 to 10, average self-reported trust across the six participating countries is 6.43 for the OECD question and 5.44 for the Rosenberg question, while average experimental trust, referring to the amount sent by Participant A, is 6.31. While the measures yield similar levels, the individual country rankings for both measures differ slightly. The United States performs relatively well in terms of self-reported interpersonal trust, but behavioural trust is lower than most comparator countries except Italy. Similarly, Korea, while falling into the middle of the cross-country comparison for self-reported trust, displays the highest level of experimental trust. Of course, definite statements about country rankings should be taken with care, since the confidence intervals for the various countries are largely overlapping.

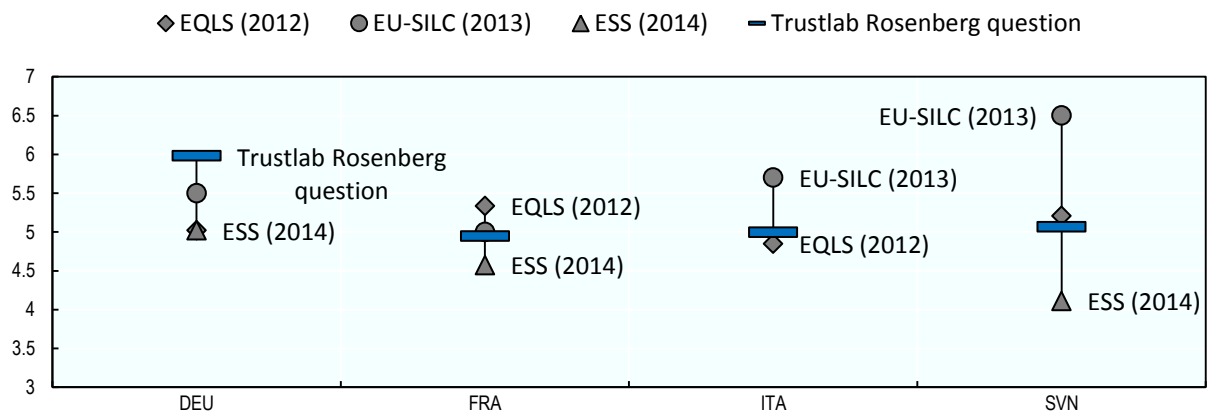
Figure 4.2. Self-reported and behavioural measures trust in others by country



Note: For Panel A, the 'OECD question' was asked in the case of Germany, Italy, Slovenia and the United States. Because the OECD question yields a systematically higher measure than the Rosenberg question, results from the two questions are laid over each other on the same bar. Panel B is based on the Participant A sent amount in the trust game. In France and Korea, the sample was randomized into participating as either Participant A or Participant B, and therefore the sample size is split in half. In the other countries, all respondents made decisions as both A and B.
Source: Trustlab (France: 2016; other countries: 2017).

51. Trustlab-based measures of trust in others are broadly comparable to those available through other sources, with estimates typically falling within the range of measures from large scale household surveys that have included comparable measures of interpersonal trust (e.g. the European Union Statistics on Income and Living Conditions, the European Quality of Life Survey, or the European Social Survey, Figure 4.3).

Figure 4.3. Trustlab estimates of trust in others typically fall within the range of estimates produced by other large surveys on trust

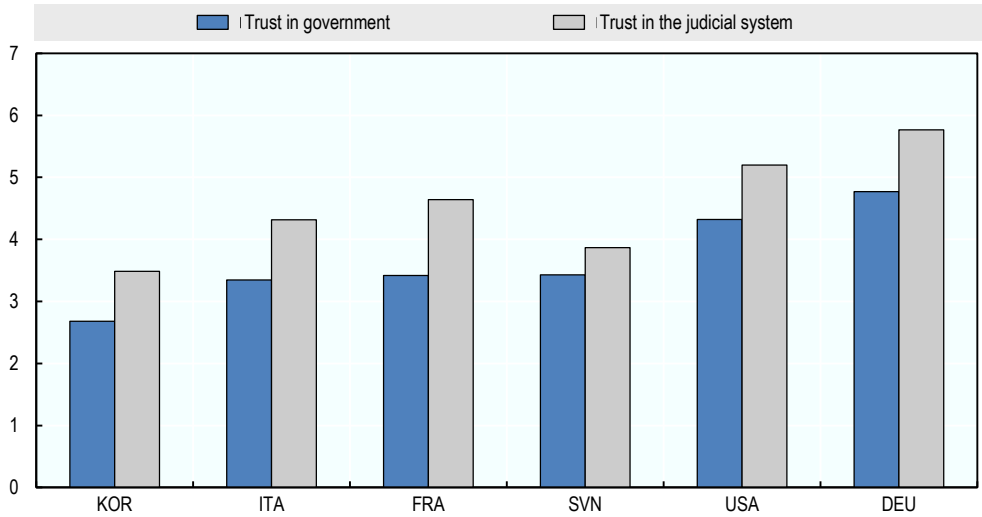


Note: As explained in Box 3.2, the OECD question is the preferred measure of trust in others. However, for the purpose of comparability with other surveys, this graph shows the Rosenberg estimate from Trustlab, since this is the question wording used in the other surveys shown in this graph.
Source: European Union Statistics on Income and Living Conditions (EU-SILC, 2013), European Quality of Life Survey (EQLS, 2014), European Social Survey (ESS, 2014), Trustlab (2016/2017).

4.2. The state of trust in government

52. Trust in government is low across all countries participating in Trustlab, with estimates ranging from 2.68 in Korea to 4.77 in Germany (Figure 4.4). Trust in the judicial system, the other main institution of inquiry in Trustlab, is slightly higher, but still at the low end of the scale in most countries. There is a strong correlation (r=0.72) between trust in government and trust in the judicial system across individuals in the Trustlab sample.

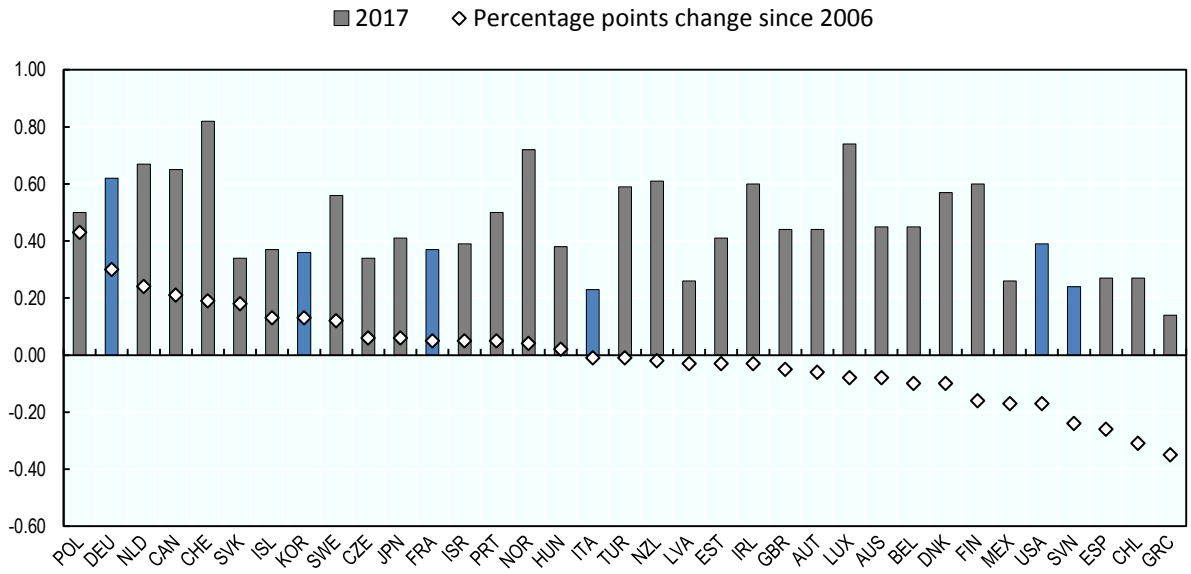
Figure 4.4. Self-reported trust in government and trust in the judicial system



Note: See Table 3.1 for survey question wording.
Source: Trustlab (France: 2016; other countries: 2017).

53. The low levels of trust in government found in Trustlab have been documented elsewhere. According to data from the Gallup World Poll, in most OECD countries a majority of people does not trust their government (Figure 4.5). In addition, among some Trustlab countries, three (Italy, Slovenia and the United States) have witnessed a decline in trust between 2006 and 2017.

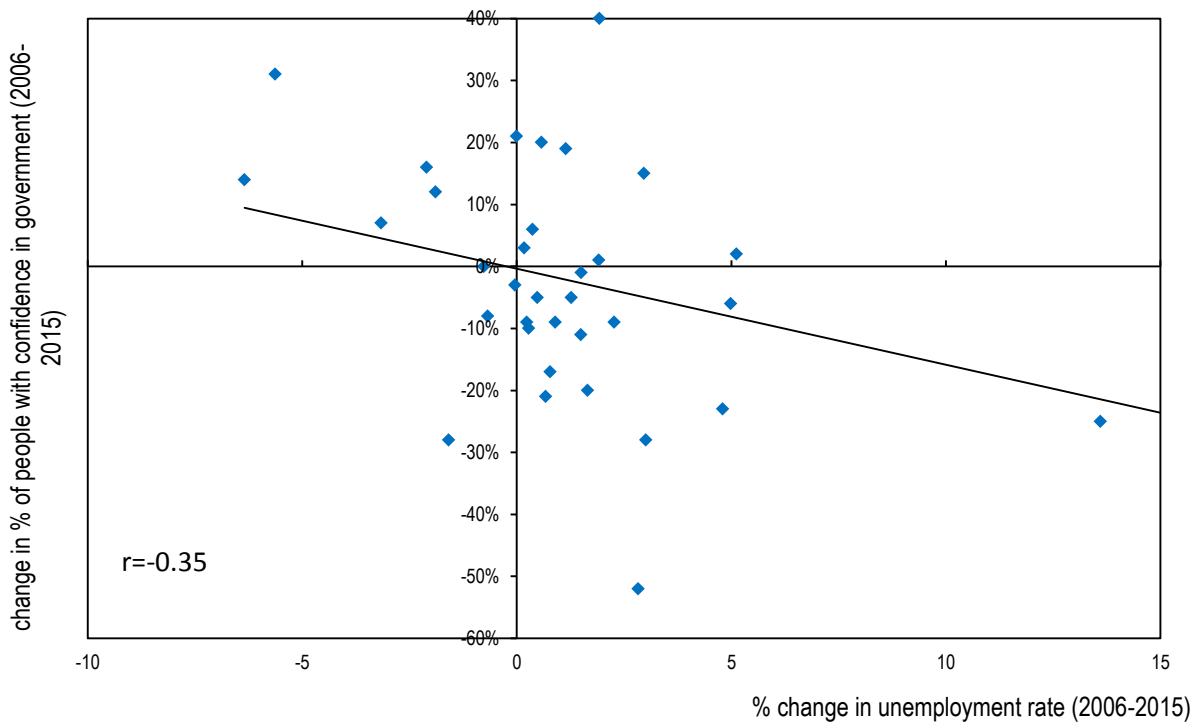
Figure 4.5. Trust in government between 2006 and 2017 in OECD countries



Note: Percentage share of respondents reporting to have confidence in the national government. For Iceland and Luxembourg, no data was available for 2006 and so data from 2008 was used instead.
Source: Gallup World Poll.

54. One possible explanation of the decline in trust in government that occurred in some countries is that this is a result of the 2008 financial crisis and the ensuing recession. Economic insecurity due to globalisation and technological progress, in combination with the sharp increase in unemployment in Europe after the crisis, may also be partly responsible for such decline (Algan et al., 2017). Indeed, unemployment and trust in government are negatively associated (Figure 4.6). At the same time, governments were often blamed for allowing income inequality to worsen both before and in the aftermath of the crisis, as the rich got richer while the middle class and poorer households experienced slow growth (if not a decline) in their living standards (OECD, 2017a). Indeed, trust as measured by the Gallup World Poll has fallen by more than 15 percentage points in Greece and Spain – some of the OECD countries that experienced the largest falls (or the smallest growth) in household income and earnings since 2005, as well as some of the largest increases in long-term unemployment. By contrast, the average resident is generally better off than they were in 2005 in some of the countries where trust has increased the most (e.g. Germany, Poland, the Slovak Republic; see Figure 4.5).

Figure 4.6. Change in unemployment rates and trust in government in OECD countries (2006-2015)



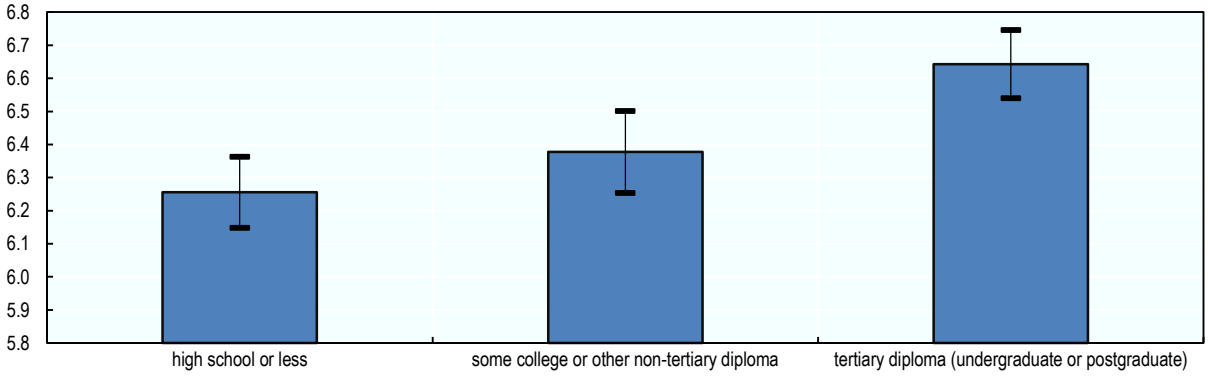
Note: This figure shows the change in unemployment rates and confidence in national government for all OECD countries between 2006 and 2015, except for Switzerland (where data on unemployment rates and trust refer to 2010 and 2015) and Iceland and Luxembourg (where data on trust are for 2008).
Source: Gallup World Poll and OECD.

4.3. Trust across demographic groups

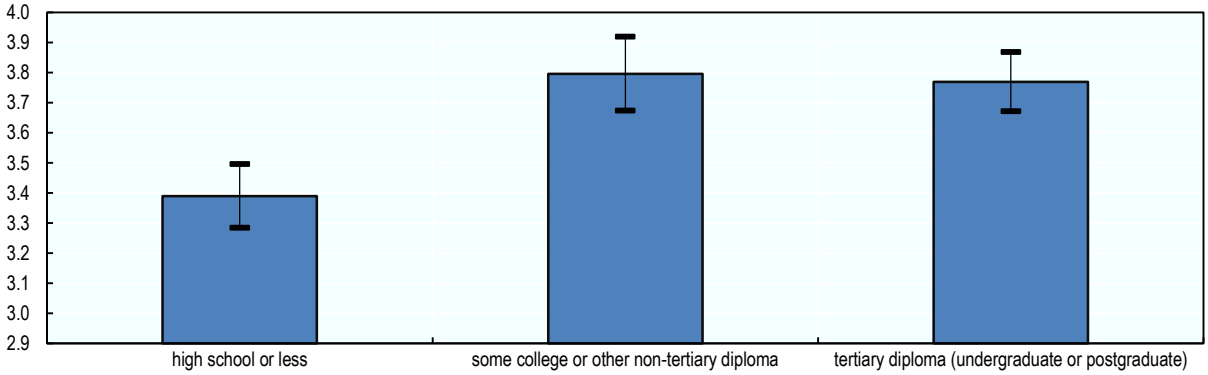
55. To monitor well-being, it is important to disentangle trust among different population groups in order to identify the parts of society where distrust is most concentrated. One of the strongest demographic correlates of trust based on self-reported data is educational attainment. Indeed, according to Trustlab data, the gap in self-reported trust between the highest and lowest educated is about 0.3 points for both trust in others and trust in government (Figure 4.7).

Figure 4.7. Trust by education level, mean with 95% confidence intervals

Panel A: Trust in others



Panel B: Trust in government



Note: Figures show mean trust in others and trust in government with 95% confidence intervals.
Source: Trustlab (France: 2016; other countries: 2017).

5. Experimental trust and self-reported trust

56. One of the main goals of Trustlab is to provide evidence on the convergent validity of self-reported measures of trust, and to understand whether experimental measures may provide complementary information on trust. This section first compares self-reported measures of trust in institutions and IAT-based measures of trust in government; and then self-reported measures of trust in others and experimental measures derived from the behavioural games.

5.1. Experimental trust in government is higher than self-reported trust…

57. Previous studies have compared self-reported attitudes towards, race, gender, or national identity to scores based on the IAT across population groups. For example, Greenwald et al. (1998) compare the effect size of students' implicit racial attitudes from an IAT with a 'Feeling Thermometer' of self-reported racial attitudes towards Black and White people. Presently, our interest lies predominantly in people's feelings of government trustworthiness and in differences between countries in the share of people that are trusting. This requires making a few strong assumptions about the interpretations of the scale of both experimental and self-reported trust. For each, a threshold needs to be determined to distinguish people who are trusting from people who do not trust institutions.

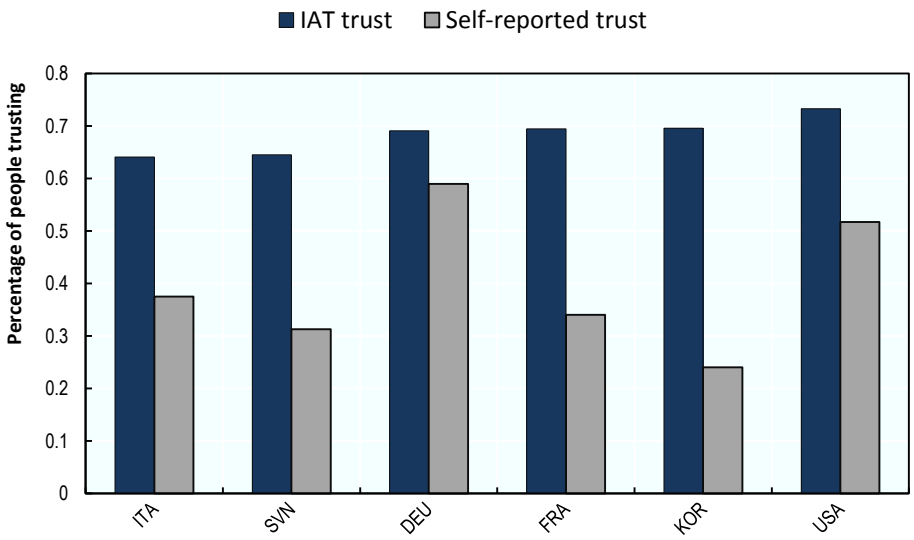
58. We compute the percentage of people who display trust in government for each measure of trust. For the experimental measure, the threshold for trusting is set using the latency of associations in the IAT: i.e. People with a positive IAT score are quicker at categorizing words in the correct category when the word "Government" is associated with the word "Trustworthy"; those with a negative score make the associations faster with the "Government-Untrustworthy" pair. Based on this, we assume that people with a positive D-score are implicitly trustworthy of government, and vice versa (See Table 3.1 for more explanation of the computation of the D-score).

59. For the self-reported measure, we use responses to the survey question on trust in government to assign people to groups of trusting and not trusting of government. Here, people with a score *above* 5 on the eleven-point scale are assumed to trust the government (in line with the scale labelling shown in Annex A.I, Table A A.3). Indeed, this method relies on the assumption that respondents interpret the mid-point of the scale as the threshold between trusting and not trusting. This assumption may be subject to cultural or personal differences. However, robustness checks have been carried out and the interpretation of the following results still holds for trust scores only taking into account higher levels of the threshold.

60. Contingent on these assumptions, results consistently show that a larger share of people display implicit trust in government than the share that indicates to have trust in the government in self-reports (Figure 5.1). This discrepancy is consistent across countries covered, with most people displaying high experimental trust in

government despite reporting levels of trust at the lower end of the scale. This result confirms recent results from United States surveys (Intawan and Nicholson, 2017).

Figure 5.1. Experimental trust is higher than self-reported trust



Note: This figure shows the proportion of people trusting the government, for each measure. Experimental trust is classified as having a D-score higher than zero, meaning that respondents are quicker at sorting words when the target word 'Government' is paired with the target word 'Trustworthy', rather than 'Untrustworthy'. Self-reported trust is classified using a threshold of 5 on the survey response scale, meaning that respondents with a response of 5 or higher are considered to be trusting.
Source: Trustlab (France: 2016; all other countries: 2017).

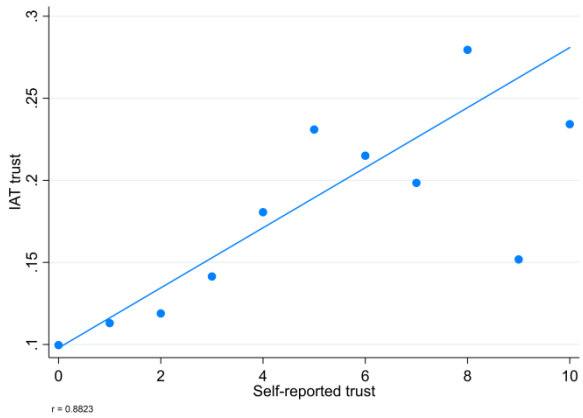
61. The experimental trust scores provide a new perspective into how to interpret self-reported levels of trust in governments. It can indeed be argued that, in today's political climate, expressing trust in government is likely to evoke at least mild social disapproval and be the socially undesirable response (Intawan and Nicholson, 2017). In addition, salient negative events involving the government in media and public discourse may cause an 'availability bias' when evaluating government performance. Easton (1975) has warned about the danger of conflating cynicism vis-à-vis the government with low trust. This discrepancy between self-reported and experimental trust confirms that self-reports may be affected by such factors; a closer look into more ingrained implicit sentiments towards institutions is thus warranted.

5.2. …but self-reported trust predicts experimental trust in government

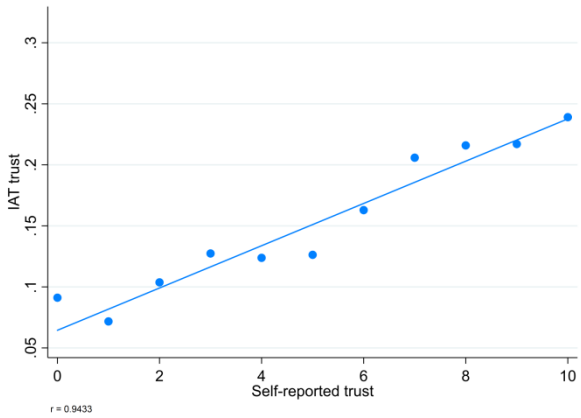
62. In spite of difference in levels, self-reported and experimental measures of trust in government correlate positively with each other at the individual level. Respondents reporting low self-reported trust also reveal lower experimental trust, and vice versa. This finding is replicated for trust in the judicial system (Figure 5.2).

Figure 5.2. Correlation between experimental and self-reported trust in institutions

Panel A: Trust in government



Panel B: Trust in the judicial system



Note: Data points show the mean IAT D-score for each possible value of self-reported trust.
Source: Trustlab (France: 2016; all other countries: 2017).

63. A multivariate analysis confirms these findings (Annex A.II, Table A A.4 and Table A A.5). Controlling for a range of individual characteristics, experimental trust in government is significantly and positively related with self-reported trust in government and trust in the judicial system. Respondents with high levels of self-reported trust in government on average have higher IAT scores than those that report low trust.

64. This important finding suggests that, despite a downward reporting bias that affects its overall level, self-reported trust in government does manage to capture implicit feelings of people vis-à-vis the government, and there is therefore positive evidence that survey measures are convergent valid. In turn, these results also speak to the validity of the IAT in distinguishing between different levels of trust in government, as has been successfully proven in other areas such as measuring racism, ageism or gender stereotyping before.

5.3. Self-reported trust in others captures expected trustworthiness of others and personal altruism…

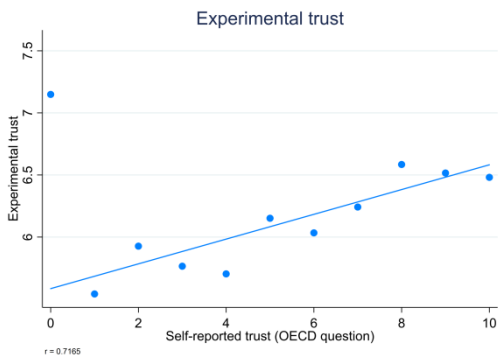
65. So far, the literature comparing self-reported trust and experimental trust has found mixed results, and has relied largely on small and unrepresentative samples. One of the first studies by Glaeser et al. (2000), based on a sample of 189 students, finds that while individual responses based on the Rosenberg question are not correlated with experimental trust, they are strongly and significantly correlated with trustworthy behaviour in the trust game. Lazzarini et al. (2004) repeat the same experiment in Brazil, while also investigating the impact of a face-to-face experimental set-up, as opposed to an anonymous set-up for the trust game: their results confirm Glaeser et al.'s findings that survey-based measures of generalised trust correlate with individual experimental trustworthiness but not with their scores on experimental trust. Conversely, Fehr (2003), based on a larger and representative sample in Germany, found no correlations between self-reported trust in others and experimental measures of either one's own's trust or trustworthiness. While there are

currently no cross-country experimental studies involving large-scale representative samples beyond Trustlab, an alternative approach is to look at the results of a systematic meta-analysis of experimental studies. Johnson and Mislin (2011) undertake a thorough meta-analysis of experimental studies, based on the trust game, covering 162 replications of the trust experiment, 35 countries and over 23 000 respondents. Although most of these studies are small (the average sample size is 148), they cover a wide range of countries, both developing countries (e.g. Cameroon and Uganda) and developed countries (e.g. the United States and Sweden). Contrary to earlier experimental studies, Johnson and Mislin find a significant positive correlation between the self-reported measure of generalised trust and trusting behaviour in experimental games, but no relationship with experimental trustworthiness. One explanation for this apparent contradiction is that the authors consider the relationship between country-average levels of trust in both self-reports and experiments, while the studies cited earlier look at individual-level correlations.

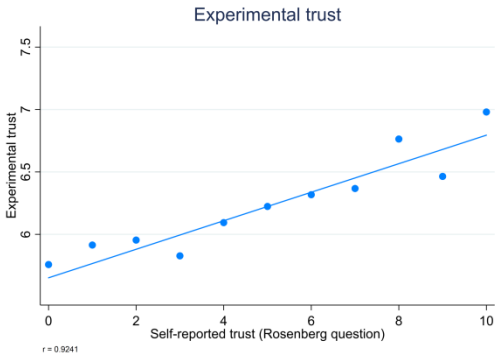
66. The international nature and representative samples of Trustlab allow for taking a fresh look at the puzzle of the relationship between self-reported and experimental measures of trust in others. A preliminary analysis shows a positive correlation between the two measures for the full sample of countries (Figure 5.3. Experimental and self-reported trust in others). This conclusion is, however, less clear-cut when considering patterns within different countries, with weak or no correlations in the United States and France but stronger correlations in the other countries. In the United States, there is a positive correlation between experimental trust and self-reported trust based on the Rosenberg question, but no correlation when using the OECD question.

Figure 5.3. Experimental and self-reported trust in others

Panel A: OECD question



Panel B: Rosenberg question

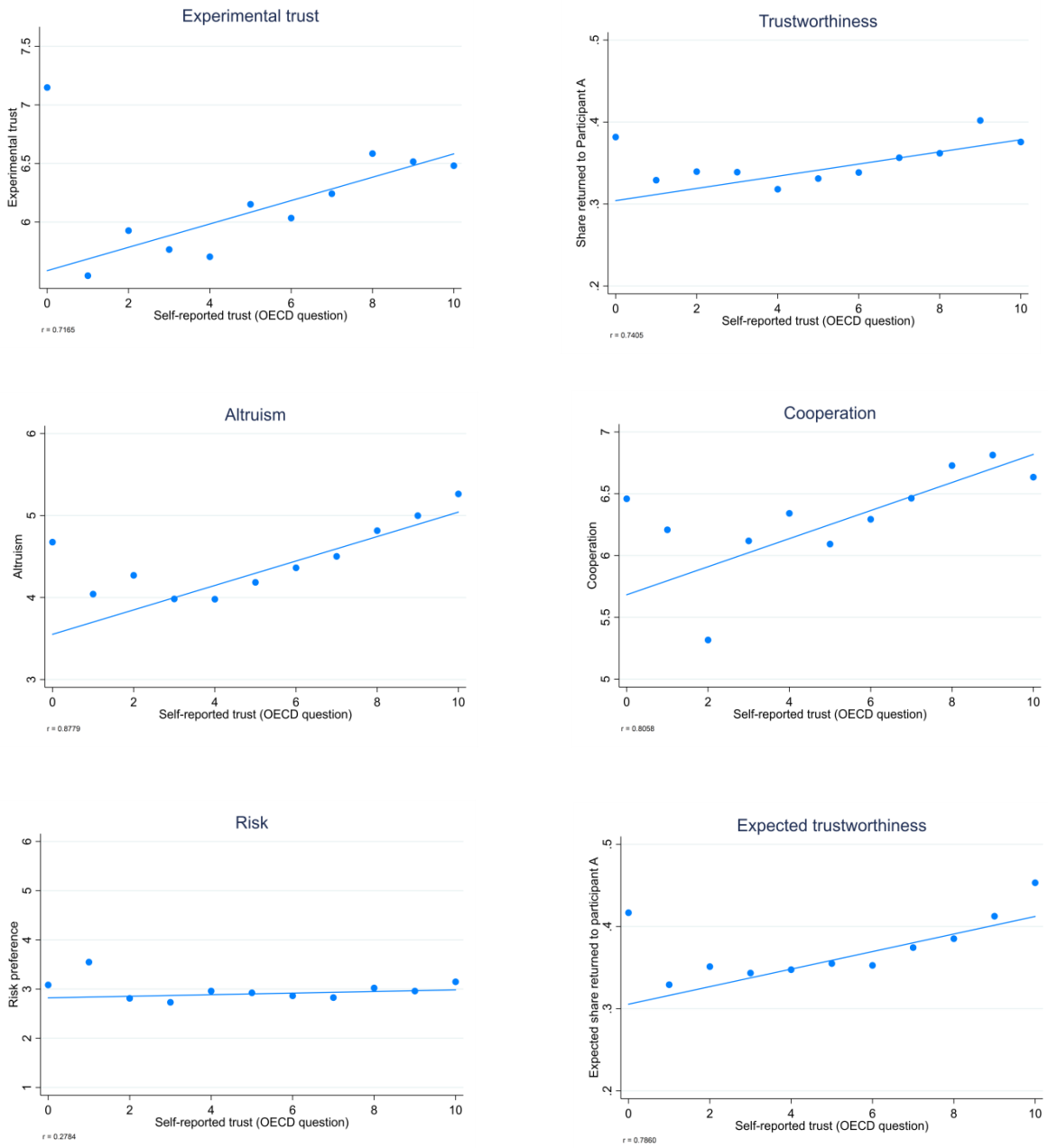


Note: Data points shown represent the mean levels of behavioural trust for each value of self-reported trust.
Source: Trustlab (Panel A: Slovenia, Germany, United States, Italy; Panel B: all countries).

67. Self-reported trust is not only correlated with the experimental measures of trust but also with one's own trustworthiness, with the expected trustworthiness of others, as well as cooperation, altruism and (to a lesser extent) risk preferences (see also Gachter et al., 2004 for a comparison of other-regarding preferences and trust). While expected trustworthiness is not technically a behavioural measure but rather a self-reported question (asking respondents how much they *expect* a hypothetical participant B to send back to Participant A), in the context of a behavioural game,

there is also a strong positive correlation between self-reported trust and expected trustworthiness.

Figure 5.4. Social norms and self-reported trust



Note: These figures include data for Slovenia, Germany, United States and Italy only, except for the 'Risk' panel, where no data for Slovenia is available. Data points shown here represent the mean levels of self-reported trust for each value of trust, trustworthiness, altruism, cooperation, risk preference, and expected trustworthiness. Trustworthiness is the share of the amount received by Participant B that is sent back to Participant A (an average of the eleven decisions made by B). Altruism is the amount sent by Participant A to Participant B. Cooperation is the amount invested into the joint project in the Public Goods game. Risk represents one of six risk ladder choices, where 1 is the most risk averse, and 6 is the most risk loving. Finally, expected trustworthiness represents the amount a respondent expects to receive back from Participant B in the case when Participant A sends 5 units.
Source: Trustlab (2017).

68. Multivariate analysis shows that what is really captured by the self-reported trust question is altruism and expected trustworthiness of others (Table 5.1). Self-reported trust is thus explained by both a preference (i.e. an innate moral value of how to behave) as well as an expectation (i.e. a belief of how others may behave). This conclusion is supported by the idea that expected trustworthiness of others, rather than one's own experimental trustworthiness, matters the most for evaluating trust in other people (see also Fehr, 2009 for a similar argument).

Table 5.1. Self-reported trust captures altruism and expected trustworthiness…

	I: Preferences					II: Expectations			III: Combined
	The dependent variable is self-reported trust in others								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Preferences									
Trust in others (experimental)	0.120				0.004				-0.023
	(0.06)				(0.06)				(0.07)
Trustworthiness (experimental)		0.142**			0.056				0.023
		(0.04)			(0.03)				(0.04)
Altruism (experimental)			0.274***		0.245***				0.216***
			(0.02)		(0.01)				(0.02)
Cooperation (experimental)				0.135**	0.028				0.014
				(0.04)	(0.03)				(0.04)
Expectations									
Risk preference (experimental)						0.002		-0.014	-0.025
						(0.04)		(0.03)	(0.03)
Expected trustworthiness (experimental)							0.239***	0.254**	0.186**
							(0.03)	(0.03)	(0.02)
Individual characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	4101	4101	4101	4101	4101	3094	4101	3094	3094
R^2	0.036	0.037	0.050	0.037	0.051	0.039	0.045	0.054	0.063

Notes:
a The regressions in this table include data from Slovenia, United States, Germany and Italy. The regressions that include risk preference as an explanatory variable do not include Slovenia as this game was only include after the Slovenia data collection.
b All regressions in this table rely on Ordinary Least Squares estimators with robust standard errors clustered by country.
c Individual characteristics include respondents' age, gender, education, household income, individual income, labor force status, immigration status and the degree of urbanization of place of residence.
Robust standard errors in parentheses. *=p<0.10, **=p<0.05, ***=p<0.01.

5.4. …while behavioural trust adds the dimension of willingness-to-cooperate in a strategic social interaction

69. Like self-reported trust, behavioural trust correlates with expected trust of others and altruism (Table 5.2). Other-regarding preferences for cooperation are the most important determinant of experimental trust. This suggests that, unlike self-reported trust, behavioural trust captures the people's willingness to cooperate in the context of a specific strategic social interaction. In addition, experimental a person's own exhibited trustworthiness, rather than expected trustworthiness of others, is more important in explaining behavioural trust (the coefficients can be compared as all covariates are normalised). In the experiment, people rely on their own behaviour to

make decisions about how much they can trust others, whereas the self-reported measure captures a wider belief about others' trustworthiness. These findings are partly in line with Sapienza et al. (2007) who argue that the trust question mainly captures people's beliefs (about others and themselves) rather than preferences, while the behavioural measure captures both. Table 5.2 suggests that both self-reported and behavioural trust are driven by beliefs and preferences, but that the set of preferences that is most relevant is different from those shaping experimental trust. Therefore, both trust measures are related, but should be considered as complementary since they do not measure the same concept entirely.

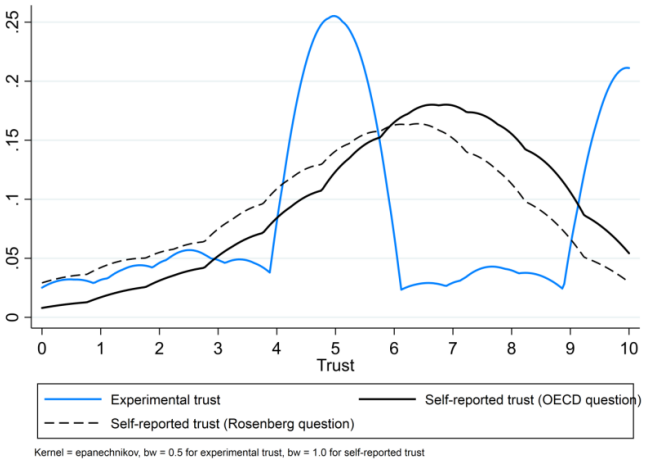
Table 5.2. Behavioural trust mainly captures cooperation and trustworthiness

	I: Preferences				II: Expectations			III: Combined
	The dependent variable is experimental trust in others							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Preferences								
Trustworthiness (experimental)	0.375***			0.239***				0.213***
	(0.01)			(0.01)				(0.02)
Altruism (experimental)		0.334***		0.147***				0.138**
		(0.01)		(0.01)				(0.01)
Cooperation (experimental)			0.440***	0.318***				0.304***
			(0.01)	(0.02)				(0.02)
Expectations								
Risk preference (experimental)					0.064**		0.049**	0.023
					(0.01)		(0.01)	(0.01)
Expected trustworthiness (experimental)						0.254***	0.241***	0.055**
						(0.01)	(0.01)	(0.01)
Individual characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	4127	4127	4127	4127	3117	4127	3117	3117
R^2	0.158	0.129	0.207	0.292	0.024	0.082	0.086	0.297

Notes:
a The regressions in this table include data from Slovenia, United States, Germany and Italy. The regressions that include risk preference as an explanatory variable do not include Slovenia as this game was only include after the Slovenia data collection.
b All regressions in this table rely on Ordinary Least Squares estimators with robust standard errors clustered by country.
c Individual characteristics include respondents' age, gender, education, household income, individual income, labor force status, immigration status and the degree of urbanization of place of residence.
Robust standard errors in parentheses. *=p<0.10, **=p<0.05, ***=p<0.01.

70. The conceptual differences between self-reported and behavioural trust can be further dissected by looking at the distributions of trust measures (Figure 5.5). While self-reported trust is distributed almost normally in the population, with a peak between six and seven, behavioural trust has a strongly bimodal distribution. One third of participants send 5 units or equivalent to Participant B, implying a substantial degree of trust, and another third exhibit full trust by sending 10 units. This distribution could suggest that, rather than considering the trust decision as a spectrum of beliefs, it might be conceived of as a spectrum of strategic decisions, where the end- and mid- point on the scale offer convenient cognitive aids for foreseeing and calculating potential consequences of the behavioural trust decision which involves a monetary transaction.

Figure 5.5. Distributions of self-reported and behavioural trust



Source: Trustlab 2016-2017 (OECD question: Slovenia, Germany, United States, Italy; Rosenberg question: all countries; experimental trust: all countries).

6. The determinants of trust

71. This section empirically assesses the individual, institutional and societal determinants of trust identified in the conceptual framework. To provide context, descriptive features of the key institutional variables used in the analyses are provided first. The remaining analyses are based on data from Slovenia, Germany, the United States and Italy, as the policy component of the platform was only added to Trustlab after the French and Korean data collections had been implemented.

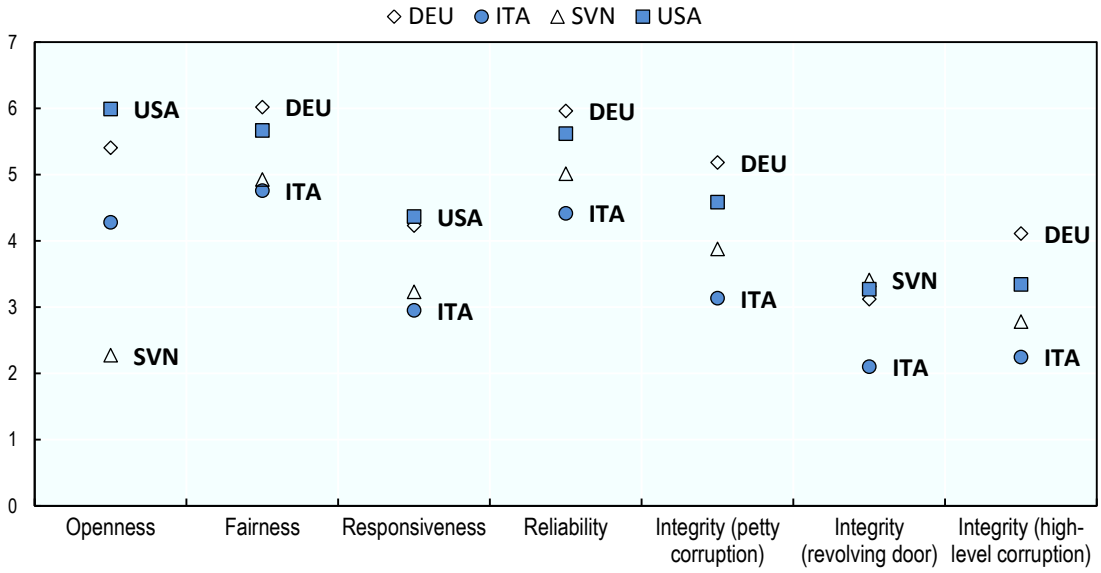
72. The main results described in this section for self-reported trust in government are the following: i) government values, particularly high-level integrity of politicians appear to be strong determinants of trust in government; ii) overall satisfaction with public services, and most particularly satisfaction with education, health care, child care, welfare systems and perceived security strongly correlate with trust in institutions; iii) other contextual factors robustly associated with trust in government are positive perceptions of immigrants' integration and perceptions of social mobility. Financial security and religiosity are also moderately associated with higher trust in government.

73. For trust in others, i) social norms, notably altruism, and ii) expectations, notably risk preferences and expected trustworthiness are significant determinants; iii) the community and society variables of neighbourhood connectedness and attitudes towards immigration are strongly associated with trust in others; and finally iv) a positive experience with public services also matter for trust in others, even when trust in institutions is included in the equation.

6.1. Perceptions of government quality

74. Self-reported (dis)trust in government as measured by Trustlab is partially explained by people's perceptions of government values and government competence, including (dis)satisfaction with public services (Section 2). A set of situational questions included in Trustlab's survey module presents respondents with a hypothetical situation that involves a government stakeholder, asking them to imagine how they expect the stakeholder to behave for several dimensions of government competence and values (Figure 6.1). For example, government openness refers to the extent to which respondents think they would have an opportunity to voice concerns when a decision affecting their community was taken by a local or regional government. The situational question on government responsiveness asks about the speed at which complaints about bad quality public services would be resolved. The full list of questions can be found in Annex A.III. While perceptions of government openness, fairness, and integrity belong to the dimension of government values, responsiveness and reliability relate to government competence.

Figure 6.1. Government competence and values dimensions by country

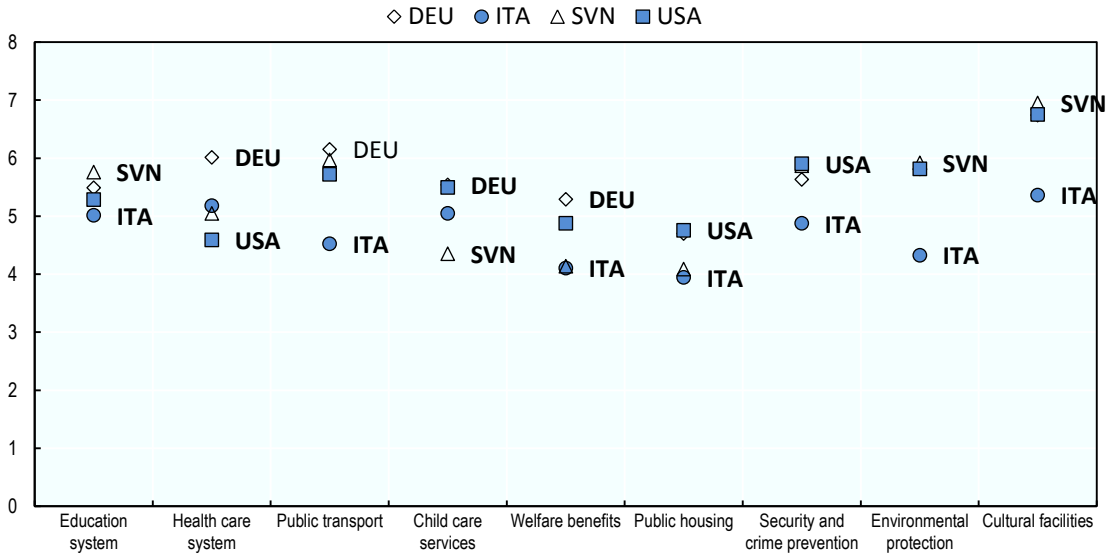


Note: These results are based on a series of situational questions that ask respondents to predict government behaviour in a specific context. Questions were asked on a scale from zero to ten, where zero denotes the most negative perception and ten denotes the most positive perception. See Annex A.III for a list of questions.
Source: Trustlab (2017).

75. Results show that while most governments are deemed to be relatively open, fair, and reliable, people are more pessimistic with regards to institutional responsiveness and integrity. Most respondents seem to believe that government officials will likely accept a job in the private sector in exchange for political favours (Integrity – revolving door), and many do not believe that governments will address problems about poor quality services after a complaint from users. Differences between countries are large, with Slovenians considering their governments to be much less open than respondents in other countries. On average, in Germany, the country with the highest level of self-reported trust in government, respondents also expect the government to act most favourably in the competence and values dimensions.

76. Public service satisfaction in most countries is higher than trust in government itself. While there is a strong correlation between satisfaction levels of different services within countries, some countries perform decidedly better in certain areas than others. For example, the United States scores lowest on satisfaction with the health care system, both across countries and across dimensions, while it scores highest on security and crime prevention relative to comparator countries (Figure 6.2).

Figure 6.2. Satisfaction with government services by country

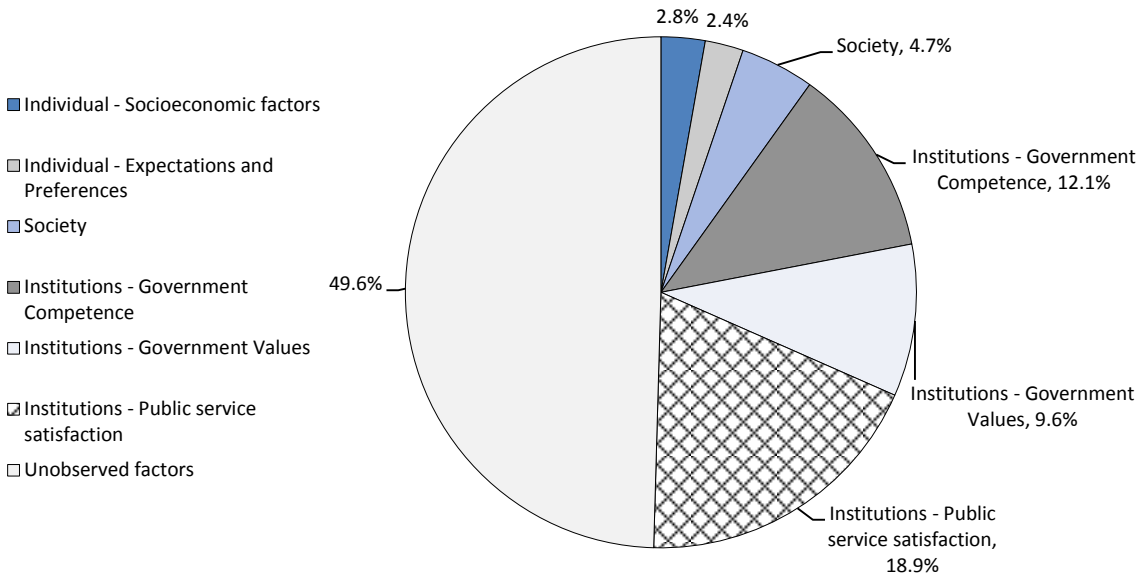


Note: Questions were asked on a scale from zero to ten, where zero denotes complete dissatisfaction with the service, and ten denotes complete satisfaction.
Source: Trustlab (2017).

6.2. The determinants of self-reported trust in government

77. The importance of institutional factors for trust in government is highlighted by regression analysis of the various policy determinants that are included in Trustlab (see Annex A.II, Table A A.6). Figure 6.3 displays the contributions of the various factors in the model. Institutional characteristics (i.e. competences and values, and perceptions about public service delivery) account for about 40% of differences in self-reported trust in government among respondents. Factors related to perceptions about society and individual characteristics account for 10% of these differences. Almost half of the variance in self-reported trust is not explained by the factors considered in the model.

Figure 6.3. Explanatory power of the various determinants of self-reported trust in government



Note: This figure reports the explanatory power of the various factors classified by group in the selected regression presented in Annex A.II, Table A A.6.
Source: Trustlab 2017 (Slovenia, Germany, United States, and Italy).

78. These results indicate that government reforms and improvements in public services' can have a large impact on rebuilding trust in government if they translate into higher levels of service satisfaction and improvements in perceptions of government values and competence. In total, increasing perceptions of government performance and satisfaction with public services by one standard deviation could improve self-reported trust in government by 2.13 points, i.e. by more than 50% compared with the current average level of 3.66 points among Trustlab countries. Such a change would require a standard deviation improvement in perceptions in all of the categories.

79. Of course, this analysis is subject to limitations. The importance of some categories may be inflated due to the number of explanatory variables included and the direct of causation is not clear cut. In addition, the causal link alluded to above should be treated with caution, since there may be other possible pathways. For example, perceived service satisfaction may be higher among people that have higher trust in government. Future analyses are necessary to further disentangle these issues, but the current findings point to the interconnection between improvements in government services and government performance and trust.

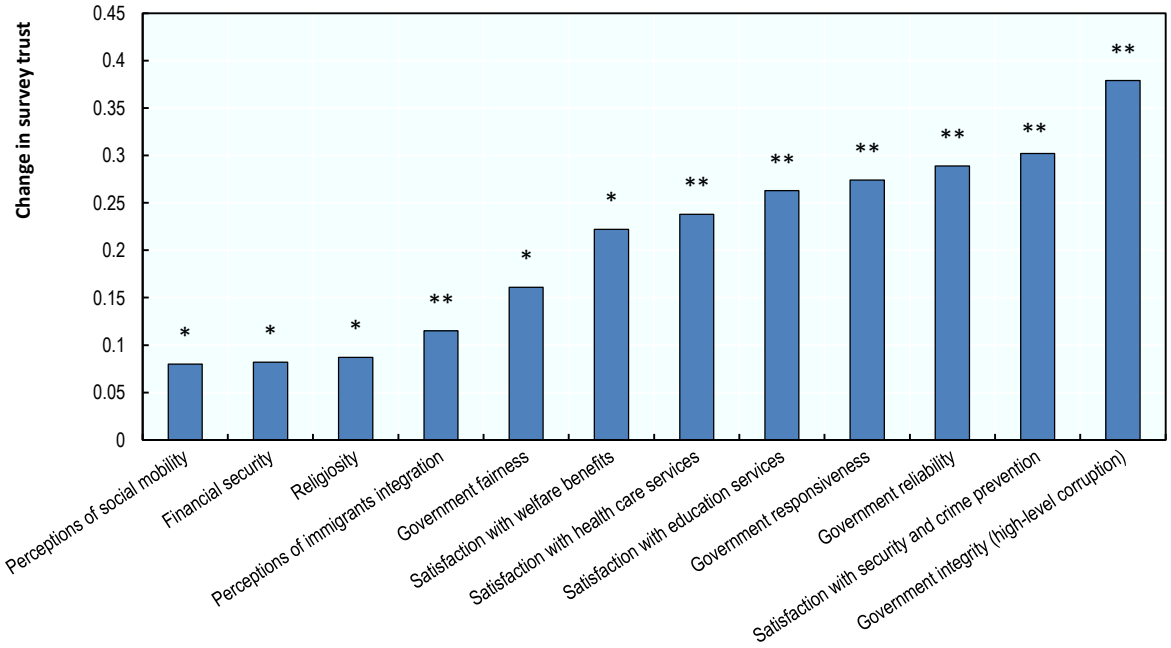
80. The most important determinants of self-reported trust in government are perceptions of high-level corruption, followed by perceptions of government reliability (the extent to which people think the government will provide adequate support in the context of a natural disaster) and government responsiveness (i.e. the degree to which people believe governments respond to citizen complaints regarding public services, Figure 7.4). When it comes to public services, satisfaction with security and crime

prevention services and with the education and health care systems and provision of welfare benefits are significant determinants of trust. As shown in Figure 6.2, there is scope for improvement in all of these areas.

81. Turning to societal determinants of trust in government, perceptions of social mobility and financial security are associated with higher levels of trust. In addition, people who feel that immigrants are well integrated in society report having higher trust in government. And finally, there is a moderate positive relationship between religiosity and higher levels of trust in government.

Figure 6.4. The determinants of self-reported trust in government across Trustlab countries

Change in self-reported trust associated with one standard deviation increase in…



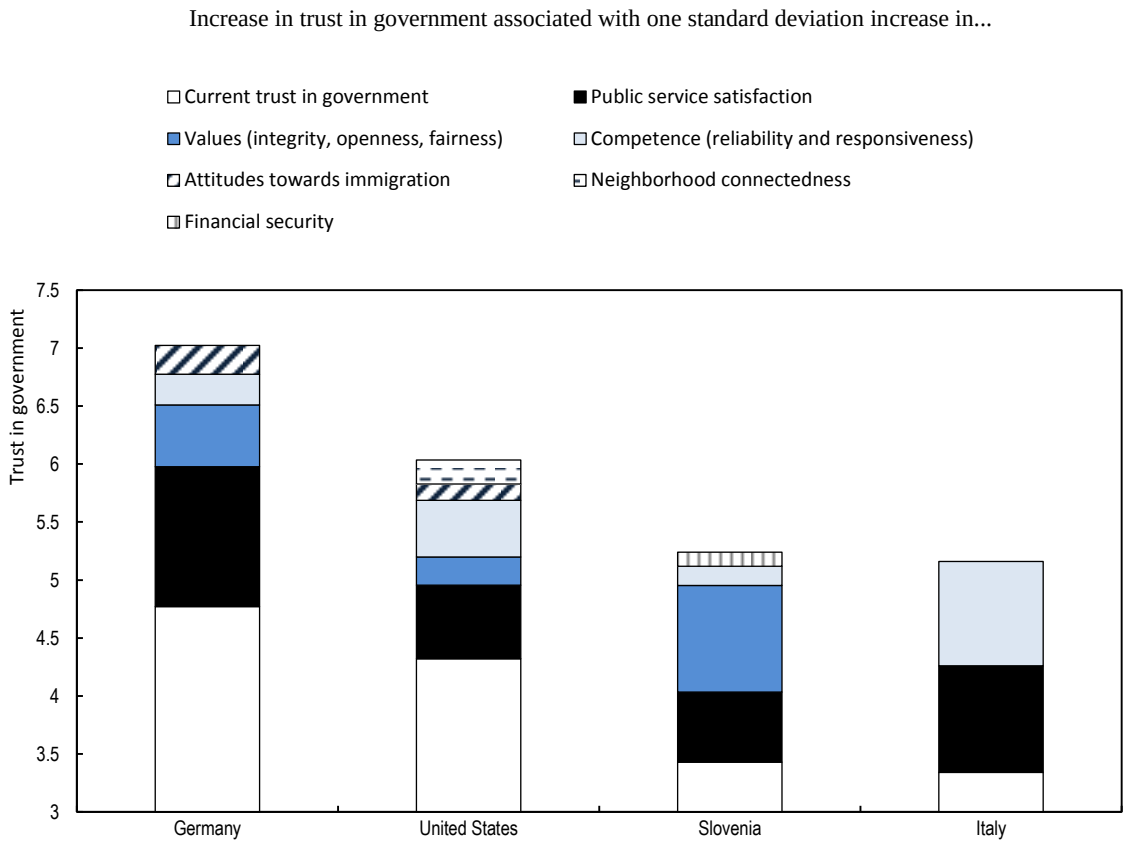
Note: This figure shows the most robust determinants of self-reported trust in government in an ordinary least squares estimation that controls for individual characteristics. See Annex A.II, Table A A.6 for full regression results.
Source: Trustlab 2017 (Slovenia, Germany, United States, and Italy).

82. The factors associated with self-reported trust in government differ in importance by country (Figure 6.5). In all countries, satisfaction with public services plays an important role. In Slovenia, government values seem to be much more important in explaining trust in government than in the other countries, a pattern that is possibly explained by the low level of government openness reported in the country. In Italy, low government competence and dissatisfaction with public services explain a large share of people's self-reported distrust in institutions.

83. There are differences in societal factors between countries, too. In Germany particularly, attitudes towards immigration play a relatively important role. More positive attitudes towards immigration are associated with a higher trust in government, which may reflect recent policies in Germany in response to refugee flows (this result is thus likely to dependent on the decisions of this particular

government). In the United States, neighbourhood connectedness is found to be more important than in the other countries, while this variable is not significant at all in Italy and Slovenia.

Figure 6.5. The determinants of self-reported trust in government between countries

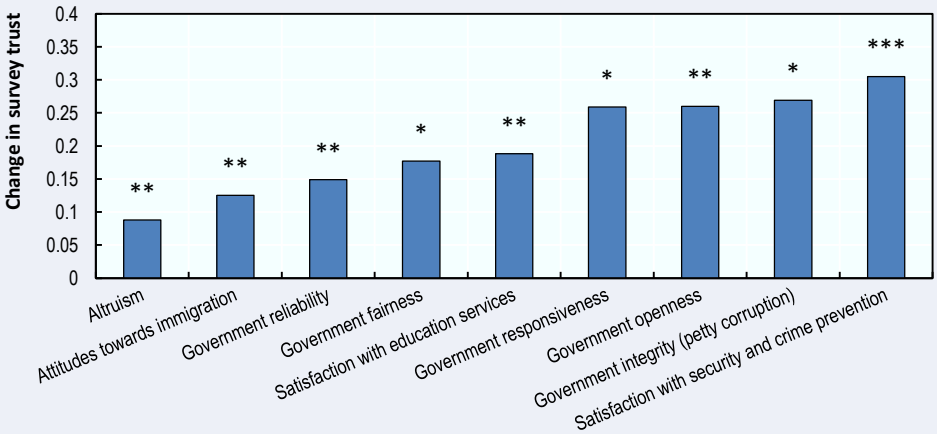


Note: This figure is based on regression analysis reported in Annex A.II, Table A A.7. All coefficients included in this analysis are significant at the p<0.1 level or less.
Source: Trustlab 2017 (Slovenia, Germany, United States, and Italy).

Box 6.1. Trust in government and trust in the civil service

Most of the analysis on trust in institutions in this paper focuses on trust in *government*. Intuitively, this may appear to be a narrow approach, as it is plausible that people distinguish between the institutions as a whole and the current government in power. However, previous analyses have shown that survey respondents often do not distinguish between the two concepts when reporting their trust level (OECD, 2017b). Similarly, in Trustlab, the correlation between self-reported trust in the government and in other institutions is high. For example, the correlation between trust in the civil service and trust in government is 0.74.

Moreover, many of the determinants of self-reported trust in the civil service are the same as those identified for trust in government: service satisfaction, perceptions of government integrity, responsiveness and reliability are all important factors. There are only differences in their relative importance: perceptions of government openness, or the degree to which governments consult citizens in local or regional government decisions, is more important for trust in civil servants, while perceptions of low-level corruption or bribery (rather than high-level corruption) are more important determinants of trust in the civil service than of trust in government.



Note: This figure shows the most robust determinants of self-reported trust in the civil service in an ordinary least squares estimation that controls for individual characteristics. The regression uses an identical specification to the one used in the analysis of the determinants of trust in government in Annex A.II, Table A A.6 (IV).
Source: Trustlab 2017 (Slovenia, Germany, United States, and Italy).

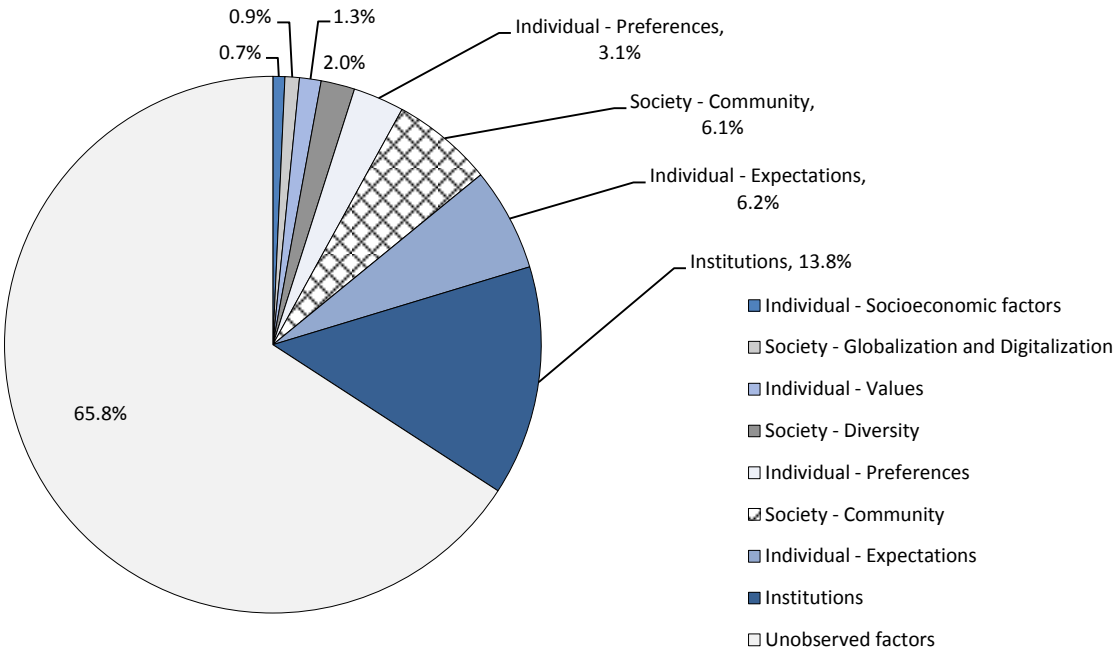
6.3. The determinants of self-reported trust in others

84. When it comes to interpersonal trust, self-reported trust is associated with each of the three broad set of determinants: individual, institutional and societal factors (Annex A.II, Table A A.7). To start with Individual determinants, there is limited evidence that experimental and self-reported trust correlate with one another. While experimental trustworthiness does explain self-reported trust in others when only controlling for individual characteristics, when other social norms and expectations

are included in the analysis, the trust relations lose significance. In this case, a combination of altruism (both experimental and self-reported) and expected trustworthiness shape self-reported trust. This suggests that people are guided both by a strategic consideration as well as a preference for altruistic behaviour. In addition, this analysis shows that while the risk game was not a significant determinant of self-reported trust, self-reported risk preferences do matter in explaining trust. Interestingly, both left-wing and right-wing political orientations appear positively in the regression, suggesting that people in the political centre report having lower trust in others than people on the political fringes.

85. The community-related variables in the societal dimension are particularly important drivers of trust in others (Figure 6.6). In particular, neighbourhood connectedness, the degree to which people feel close to those living in their area, correlates very strongly with trust in others. This highlights the importance of local and urban policy in improving trust in others: building strong communities and avoiding isolation seems key. In addition, positive attitudes towards immigration is also significant driver of self-reported trust in other people.

Figure 6.6. Explanatory power of the various determinants of self-reported trust in others



Note: This figure reports the explanatory power of the various factors classified by group in the selected regression presented in Annex A.II, Table A A.8.
Source: Trustlab 2017 (Slovenia, Germany, United States, and Italy).

86. Finally, some of the institutional factors that are so important in explaining trust in government also contribute to trust in others, representing in fact the largest explanatory share. This implies that trust in others and trust in institutions are closely related, with links in both directions. In particular, satisfaction with education services and with security and crime prevention appear strongly associated with trust in government. Some authors have argued that institutional quality (and indirectly trust in institutions) is important for trust in others because of the importance of legal

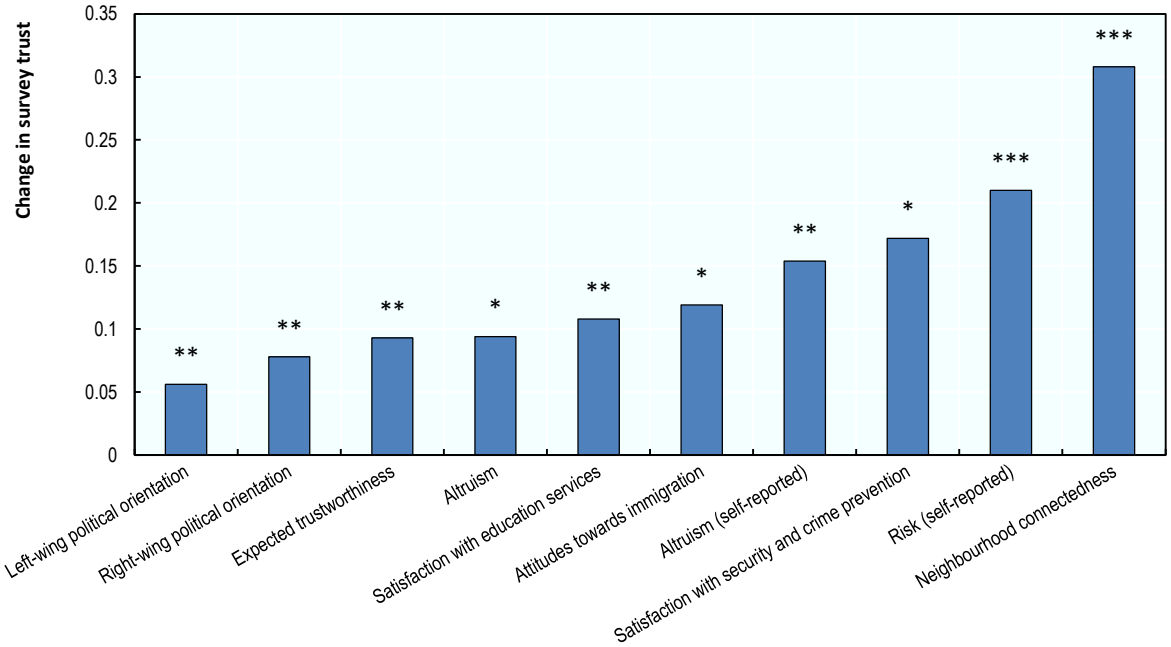
or social checks and balances in underwriting a trust relation (Rothstein, 2011; Algan and Cahuc, 2013). Algan and Cahuc (2013) also point to the potential co-evolution of trust and institutions that can create multiple equilibria.

87. Figure 6.7 shows which variables in the multivariate analysis represent the most important determinants of trust in others, with neighbourhood connectedness, risk preferences and satisfaction with security and crime prevention services showing the highest coefficients. This finding points to the importance of each of the three dimensions of the conceptual framework (Individual, Institutions and Society) in explaining trust in others.

88. One important note of caution in drawing conclusions from this analysis is the possibility that common method variance bias may give greater importance to the self-reported measures included in the model than to behavioural measures. The reasoning behind this concern is that the similarity of the medium through which survey responses are obtained may produce some artificial covariance that is independent of the content of the questions, potentially inflating the effects of survey measures (Podsakoff et al., 2003). For this reason, the relative coefficients of the behavioural and self-reported measures in the model should be interpreted with caution.

Figure 6.7. The determinants of self-reported trust in others in Trustlab countries

Change in survey trust associated with one standard deviation change in…



Note: This figure shows the most robust determinants of self-reported trust in government in an ordinary least squares estimation that controls for individual characteristics. See Annex A.II, Table A A.8 for full regression results.
Source: Trustlab 2017 (Slovenia, Germany, United States, and Italy).

89. Based on the analysis presented in this paper, Trustlab data confirms an interplay between trust in government and trust in others, with strong effects of trust in

institutions on trust in others and vice-versa in multivariate regressions (Annex A.II, Table A A.6 and Table A A.7). The direction of causality between the two variables is not conclusive. When assuming a causal effect from trust in institutions to trust in others, an improvement by one standard deviation of trust in government and trust in institution would yield an improvement in trust in others by around 10%. These effects are significant only for self-reported trust but not experimental trust.

7. Conclusions

Overall, Trustlab provides evidence that confirms the convergent validity of self-reported measures of both trust in others and trust in institutions, as well as highlights the scope for significantly improving trust via policy action. In more detail:

- Self-reported measures of trust in institutions are validated by their experimental counterpart; experimental measures also indicate that more people may trust their government than implied by self-reported measures.
- Self-reported measures of trust in others capture a belief about trustworthiness of others (as well as altruistic preferences), whereas behavioural measures of trust also capture participants' willingness to cooperate. Therefore, both measures are related, but should be considered as complementary.
- Perceptions of institutional performance strongly correlate with self-reported measures of both trust in government and trust in others.
- Perceived government integrity is the strongest determinant of trust in government.
- In addition to perceived quality of institutions, social preferences and expectations, alongside neighbourhood connectedness and attitudes towards immigration matter for trust in others.
- To highlight the scope for policy action, an increase in all significant determinants of trust in government by one standard deviation would increase trust in institutions from to 60%.

While these findings are of high interest, it is also important to be clear about the limitations of the current study.

- Links between perceived institutional performance and self-reported trust could reflect personality traits rather than institutional performance per se (i.e. a pessimistic person is likely to rate government performance more poorly, respond more negatively to survey questions, and trust less in the trust game).
- Investigating whether actual differences in government performance affected trust would require more observations of people in different jurisdictions. Currently, cross-country differences are the only place where we can observe differences in government performance, and error bars are too large to systematically test this across the existing six countries.

Regarding future developments of the Trustlab platform, several directions could be envisaged for future surveys:

- New survey questions directed towards *specific policy interventions* that are deemed capable of improving trust in institutions could be introduced. For instance, questions such as "I find easy to fill my tax records" or "There is reasonable waiting time for hospital admission" are good candidates for inclusion.

- New laboratory experiments with a strong policy content could be implemented. This could concern, for instance, the willingness-to-pay taxes under good or bad institutional settings.
- Alternatively, new experiments covering other social norms related to, say, corruption, sense of effort, time preferences, could be introduced. Likewise, Implicit Association Tests on race or gender bias could be considered depending on the country context.
- Finally, additional tests capturing IQ, or various cognitive and non-cognitive skills, could shed new light on the relationship between education, skills and trust.

References

Aberbach, J.D. (2007), "Citizens and Consumers", *Public Management Review*, Vol. 7, No. 2, pp. 225-246.

Aberson, C.L, C. Shoemaker and C. Tomolillo (2004), "Implicit bias and contact: the role of interethnic friendships", *Journal of Social Psychology*, Vol. 144, No. 3, pp. 335-347.

Ahn, S. and P. Hemmings (2000), "Policy influences on economic growth in OECD countries: An evaluation of the evidence", *OECD Economics Department Working Papers*, No. 246, OECD Publishing, Paris, DOI: http:/dx.doi.org/10.1787/581718238837.

Alesina, A., G. Cozzi and N. Mantovan (2012), "The Evolution of Ideology, Fairness and Redistribution", *The Economic Journal*, Vol. 122, No. 565 pp. 1244-1261.

Alesina, A. and E. La Ferrara (2002), "Who Trusts Others?", *Journal of Public Economics*, Vol. 85, pp. 207-34.

Alesina, A., S. Stantcheva and E. Teso (2017), "Intergenerational Mobility and Preferences for Redistribution", *NBER Working Paper*, No. 23027.

Alesina, A. and E. Zhuravskaya (2009), "Segregation and the quality of government in a cross-section of countries", *The American Economic Review*, pp. 1872-1911.

Algan, Y., Y. Benkler, M. Fuster Morell, and J. Hergueux (2013), "Cooperation in a Peer Production Economy – Experimental Evidence from Wikipedia", *NBER Conference Paper*.

Algan, Y. and P. Cahuc (2013), "Trust, growth and well-being: New evidence and policy implications", *IZA Discussion Paper*, No. 7464.

Algan, Y. and P. Cahuc (2010), "Inherited trust and growth", *The American Economic Review*, Vol. 100, No. 5, pp. 2060 2092.

Algan, Y., P. Cahuc and A. Shleifer (2012), "Teaching Practices and Social Capital", *The American Economic Journal: Applied Economics.*

Algan, Y., S. Guriev, E. Papaioannou and E. Passari (2017), "The European Trust Crisis and the Rise of Populism", BPEA Conference Drafts.

Algan, Y., C. Hémet and D.D. Laitin (2016), "The Social Effects of Ethnic Diversity at the Local Level: A Natural Experiment with Exogenous Residential Allocation", *The Journal of Political Economy*, Vol. 124, No. 3, pp. 696-733.

Algan, Y., C. Hémet and D. Laitin (2012), "Diversity and Public Goods in a Republican Setting", *Sciences Po working paper*.

Anderson, C.J. and Y.V. Tverdova (2003), "Corruption, Political Allegiances, and Attitudes toward Government in Contemporary Democracies", *The American Journal of Political Science*, Vol. 47, No. 1, pp. 91-109.

Anderson, S.P., J.K. Goeree and C.A. Holt (1998), "A theoretical analysis of altruism and decision error in public goods games", *The Journal of Public Economics*, Vol. 70, No. 2, pp. 297-323.

Andreoni, J. (1989), "Giving with Impure Altruism: Applications to Charity and Ricardian Equivalence", *The Journal of Political Economy*, Vol. 97, No. 6, pp. 1447–1458.

Arnett, J.J. (2008), "The neglected 95%: Why American psychology needs to become less American", *American Psychology*, Vol. 63, No. 7, pp. 602-614.

Arrow, K. (1972), "Gifts and exchanges", *Philosophy & Public Affairs*, Vol. 1, No. 4, pp. 343-362.

Banaji, M.R., and A.G. Greenwald (2013), "The blindspot", www.washingtonpost.com/opinions/blindspot-hidden-biases-of-good-people-by-mahzarin-r-banaji-and-anthony-g-greenwald/2013/02/08/4c42d6b8-6a1b-11e2-ada3-d86a4806d5ee_story.html?utm_term=.e24b1ba4cf8a (accessed on 4 May 2017).

Baron, A. and M.R. Banaji (2006), "The development of implicit attitudes. Evidence of race evaluations from ages 6 and 10 and adulthood", *Psychological Science*, Vol.17(1), pp. 53-8.

Bekkers, R. (2012), "Trust and volunteering: Selection or causation? Evidence from a 4 year panel study", *Political Behavior*, Vol. 34 (225).

Benabou, R. and J. Tirole, (2011), "Laws and Norms", *NBER Working paper*, n°17579.

Benz, M. and S. Meier (2008), "Do people behave in experiments as in the field? Evidence from donations", Vol. 11, No. 3, pp. 268-281.

Berg, J., J. Dickhaut and K. McCabe (1995), "Trust, reciprocity, and social history", *Games and Economic Behavior*, Vol. 10, pp. 122 142.

Bisin, A. and T. Verdier (2001), "The Economics of Cultural Transmission and the Dynamics of Preferences", *The Journal of Economic Theory*, Vol. 97, pp. 298-319.

Bjørnskov, C. (2006), "Determinants of generalized trust: A cross-country comparison", *Public Choice*, Vol. 130, pp. 1-21.

Bluemke, M. and M. Friese (2008), "Reliability and validity of the Single-Target IAT: Assessing automatic affect towards multiple objects", *The European Journal of Social Psychology*, Vol. 38, No. 6, pp. 977-997.

Boarini, R., et al. (2012), "What makes for a better life?: The determinants of subjective well-being in OECD countries – Evidence from the Gallup World Poll", *OECD Statistics Working Papers*, No. 2012/03, OECD Publishing, Paris, https://doi.org/10.1787/5k9b9ltjm937-en.

Bouckaert, G. (2012), "Trust and public administration", *Administration*, Vol. 60, No. 1, pp. 91-115.

Bouckaert, G. and S. Van de Walle (2003), "Comparing measures of citizen trust and user satisfaction as indicators of 'good governance': Difficulties in linking trust and satisfaction indicators", *The International Review of Administrative Science*s, Vol. 69, No. 3, pp. 329-343.

Bouckaert, G., S. Van de Walle, B. Maddens, and J.K. Kampen, (2002), "Identity vs. Performance: An Overview of Theories Explaining Trust in Government", Leuven: Public Management Institute.

Bowles, S. and H. Gintis (2007), "Cooperation", in Durlauf S.N. and L.E. Blume (eds.) (2008), *New Palgrave Dictionary of Economics, 2nd Edition*, Palgrave Macmillan.

Bowles, S. and S. Polania-Reyes (2012), "Economic incentives and social preferences: Substitutes or complements?", *The Journal of Economic Literature*, Vol. 50 (2), pp. 368-425.

Brown, T.T. et al. (2006), "The empirical relationship between community social capital and the demand for cigarettes", *Health Economics*, Vol. 15 (11), pp. 1159-1172.

Buchan, N.R., R.T.A.. Croson, and S. Solnick (2008), "Trust and gender: An examination of behavior and beliefs in the Investment Game", *The Journal of Economic Behavior & Organization*, Vol. 68, pp. 466-476.

Buonanno, P., D. Montolio and P. Vanin (2009), "Does social capital reduce crime?", *The Journal of Law & Economics*, University of Chicago Press, Vol. 52(1), pp. 145-170.

Carl, N. and F.C. Billari (2014), "Generalized trust and intelligence in the United States", *PLoS ONE*, Vol. 9(3).

Clark, A.K. and M.A. Eisenstein (2013), "Interpersonal trust: An age-period-cohort analysis revisited", *Social Science Research*, Vol. 42, pp. 361-375.

Coleman, J. (1990), "Social capital in the creation of human capital", *The American Journal of Sociology*, Vol. 94, Supplement: Organizations and Institutions: Sociological and Economic Approaches to the Analysis of Social Structure, pp. S95-S120.

Cuciniello, M. and G. Nasi (2014), "Transparency for Trust in Government: How Effective is Formal Transparency?", International Journal of Public Administration, Vol. 37, No. 13, pp. 911-921.

Dasgupta, N. and S. Asgari (2004), "Seeing is believing: Exposure to counterstereotypic women leaders and its effect on the malleability of automatic gender stereotyping", *Journal of Experimental Social Psychology*, Vol. 40, No. 5, pp. 642-658.

Delhey, J. and K. Newton (2003), "Who trusts? The origins of social trust in seven societies", *European Societies*, Vol. 5, No. 2, pp. 93-137.

Delhey, J., K. Newton and C. Welzel (2011), "How general is trust in 'most people'? Solving the radius of trust problem", *American Sociological Review*, Vol. 76, No. 5, pp. 786-807.

Easton, D. (1975), "A re-assessment of the concept of political support", *British Journal of Political Science*, Vol. 5(4), pp. 435-457.

Eckel, C.C. and P.J. Grossman (2002), "Sex differences and statistical stereotyping in attitudes toward financial risk", *Evolution and Human Behavior*, Vol. 23, pp. 281-295.

Edlund, J. (1999), "Trust in government and welfare regimes:Attitudes to redistribution and financial cheating in the USA and Norway", *The European Journal of Political Research*, Vol. 35, No. 3, pp. 341-370.

Engel, C. (2011), "Dictator games: A meta study", *Experimental Economics*, Vol. 14, No. 4, pp. 583-610.

Ermisch, J. and D. Gambetta (2010), "Do strong family ties inhibit trust?", *The Journal of Economic Behavior and Organisations*.

European Commission (2015), "Quality of life in Europe - Facts and views - Governance", http://ec.europa.eu/eurostat/statistics-explained/index.php/Quality_of_life_in_Europe_-_facts_and_views_-_governance (accessed on 4 May 2017).

Falk, A. et al. (2015), "The nature and predictive power of preferences: Global evidence", *IZA Discussion Paper*, No. 9504.

Fehr, E. (2009), "On the economics and biology of trust", *The Journal of the European Economic Association*, Vol. 7, No. 2 3, pp. 235-266.

Fehr, E. et al. (2003), "A nation-wide laboratory: Examining trust and trustworthiness by integrating behavioral experiments into representative surveys", *CESifo Working Paper Series*, No. 866; *IZA Discussion Paper*, No. 715.

Fehr, E. and S. Gaechter (1999), "Cooperation and Punishment in Public Goods Experiments", *CESifo Working Paper*, No. 183.

Frey, B. (1998), "Institutions and morale: The crowding-out effect, in economics, values and organization", Ben-Ner A. and L. Putterman (eds.), (in: Economics, values and organization), New York: Cambridge University Press.

Gachter, S., B. Herrmann and C. Thoni (2004), "Trust, voluntary cooperation, and socioeconomic background: Survey and experimental evidence", *The Journal of Economic Behavior & Organization*, Vol. 55, No. 4, pp. 505-531.

Gambetta, D. (1993), *The Sicilian Mafia. The Business of Private Protection*, Harvard University Press.

Gittell, R. and A. Vidal (1998), *Community Organizing: Building Social Capital as a Development Strategy*, Sage, Newbury Park, CA.

Glaeser, E. et al. (2000), "Measuring trust", *The Quarterly Journal of Economics*, Vol. 115, No. 3, pp. 811-846.

Glanville, J.L. and P. Paxton (2013), "Do social connections create trust? An examination using new longitudinal data", *Social Forces*, Vol. 92, No. 2, pp. 545-562.

Glanville, J.L. and P. Paxtion (2007), "How do we learn to trust? A confirmatory tetrad analysis of the sources of generalized trust", *Social Psychology Quarterly*, Vol. 70, pp. 230-242

Greenwald, A.G., D.E. McGhee and J.L.L. Schwartz (1998), "Measuring individual differences in implicit cognition: The implicit association test", *The Journal of Personality and Social Psychology*, Vol. 74, No. 6, pp. 1464-1480.

Greenwald, A.G., B.A. Nosek and M.R. Banaji (2002), "Understanding and using the implicit association test: I. An improved scoring algorithm", *The Journal of Personality and Social Psychology*, Vol. 85, No. 2, pp. 197-216.

Greif, A. and G. Tabellini (2010), "Cultural and institutional bifurcation: China and Europe compared", *The American Economic Review Papers and Proceedings*, Vol. 100, No. 2, pp. 1-10.

Guiso, L., P. Sapienza and L. Zingales (2008), "Trusting the stock market", *The Journal of Finance*, Vol. 63, No. 6, pp. 2557-2600.

Guiso, L., P. Sapienza and L. Zingales (2006), "Does culture affect economic outcomes?", *The Journal of Economic Perspectives*, Vol. 20(2), pp. 23-48.

Guiso L., P. Sapienza and L. Zingales (2004), "The role of social capital in financial development", *The American Economic Review*, Vol. 94 (3). pp. 526-56.

Hardin, R. (2004), *Trust and Trustworthiness*, Russel Sage Foundation, New York.

Heinrich, J., S.J. Heine and A. Norenzayan (2010), "The weirdest people in the world?", *Behavioral and Brain Sciences*, Vol. 33, pp. 61-135.

Helliwell, J., et al. (2014), "Good Governance and National Well-being: What Are the Linkages?", *OECD Working Papers on Public Governance*, No. 25, OECD Publishing, Paris, https://doi.org/10.1787/5jxv9f651hvj-en.

Helliwell, J.F. and R.D. Putnam (2007), "Education and social capital", *Eastern Economic Journal*, Vol. 63(1), pp. 1-19.

Helliwell, J.F. and S. Wang (2010), "Trust and well-being", *National Bureau of Economic Research*, Working Paper No. 15911.

Herrmann, B., C. Thöni and S. Gachter (2008), "Antisocial punishment across societies", *Science*, Vol. 319.

Hoff, K., M. Kshetramade and E. Fehr (2011), "Caste and punishment: The legacy of caste culture in norm enforcement", *The Economic Journal*, Vol. 121, pp.449-475.

Ichino, A. and G. Maggi (2000), "Work environment and individual background: Explaining regional shirking differentials in a large Italian firm", *Quarterly Journal of Economics*, Vol. 115(3), pp. 1057-1090.

Inglehart, R. and P. Norris (2016), "Trump, Brexit, and the rise of populism: Economic have-nots and cultural backlash", *HKS Working Paper No. RWP16-026*.

Intawan, C. and S.P. Nicholson (2017), "My trust in government is implicit: Automatic trust in government and system support", Unpublished manuscript.

Jimenez, P. and G. Iyer (2016), "Tax compliance in a social setting: The influence of social norms, trust in government, and perceived fairness on taxpayer compliance", *Advances in Accounting*, Vol. 34, pp. 17-26.

Johnson, N.D. and A. Mislin (2012), "How much should we trust the WVS trust question?", *Economics Letters*, Vol. 116, pp. 210-212.

Johnson, N.D. and A. Mislin (2011), "Trust games: A meta-analysis", *The Journal of Economic Psychology*, Vol. 32, pp. 865-889.

Kahneman, D., J.L. Knetsch and R.H. Thaler (1986), "Fairness and the assumptions of economics", *The Journal of Business*, Vol. 59(4), pp. 285-300.

Karlan, D.S. (2005), "Using experimental economics to measure social capital and predict financial decisions", *The American Economic Review*, Vol. 95, No. 5, pp. 1688-1699.

Koopmans, R. and M. Schaeffer (2016), "Statistical and perceived diversity and their impacts on neighborhood social cohesion in Germany, France and the Netherlands", *Social Indicators Research*, Vol. 125, pp. 853-883.

Laury, S. and L. Taylor (2008), "Altruism spillovers: Are behaviors in context-free experiments predictive of altruism toward a naturally occurring public good?", *The Journal of Economic Behaviora and Organization*, Vol. 65, No. 1, pp. 9-29.

Lazzarini, S.G. et al. (2004), "Measuring trust: An experiment in Brazil", *Insper Working Papers*, Vol. 049/2004.

Li, T. and H.H. Fung (2012), "Age differences in trust: An investigation across 38 countries", *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*.

Li, Y., A. Pickles and M. Savage (2005) "Social capital and social trust in Britain", *European Sociological Review*, Vol. 21, No. 2, pp. 109-123.

Lindström, M. (2005), "Social capital, the miniaturization of community and high alcohol consumption: A population-based study", *Alcohol and Alcoholism*, Vol. 40 (6), pp. 556-562.

Lochner, K.A. et al. (2003), "Social capital and neighborhood mortality rates in Chicago", *Social Science & Medicine*, Vol. 56, pp. 1797-1805.

Lovec, M. (2016), "Between EU-phoria and EU-phobia: Populism in Slovenia", TruLies-Europe.de blog post, 25. Dec. 2016.

Morrone, A., N. Tontoranelli and G. Ranuzzi (2009), "How good is trust?: Measuring trust and its role for the progress of societies", *OECD Statistics Working Papers*, No. 2009/03, OECD Publishing, Paris, https://doi.org/10.1787/220633873086.

Mudde, C. (1999), "The single-issue party thesis: Extreme right parties and the immigration issue", *West European Politics*, Vol. 22, No. 3, pp. 182-197.

Myeong, S. and H. Seo (2016), "Which type of social capital matters for building trust in government? Looking for a new type of social capital in the governance era", *Sustainability*, Vol. 8, No. 322.

Naef, M. and J. Schupp (2009), "Measuring trust: Experiments and surveys in contrast and combination", *IZA Discussion Paper*, No. 4087.

Nooteboom, B. (2007), "Social capital, institutions and trust", *Review of Social Economy*, Vol. 65, No. 1, pp. 29-53.

Nunn, N., and L. Wantchekon, (2011), "The slave trade and the origins of mistrust in Africa", *The American Economic Review*, Vol. 101, No. 7, pp. 3221-3252.

OECD (2015), *Government at a Glance 2015*, OECD Publishing, Paris, https://doi.org/10.1787/gov_glance-2015-en.

OECD (2015), *Education at a Glance 2015: OECD Indicators*, OECD Publishing, Paris, https://doi.org/10.1787/eag-2015-en.

OECD (2013), *Government at a Glance 2013*, OECD Publishing, Paris, https://doi.org/10.1787/gov_glance-2013-en.

OECD (2017a), *How's Life? 2017: Measuring Well-being*, OECD Publishing, Paris, https://doi.org/10.1787/how_life-2017-en.

OECD (2017b), *OECD Guidelines on Measuring Trust*, OECD Publishing, Paris, https://doi.org/10.1787/9789264278219-en.

OECD (2017c), *Trust and Public Policy: How Better Governance Can Help Rebuild Public Trust*, OECD Public Governance Reviews, OECD Publishing, Paris, https://doi.org/10.1787/9789264268920-en.

Offe, C. (1999), "How can we trust our fellow citizens?", in Warren, M.E. (ed.), *Democracy and Trust*, Cambridge: Cambrigde University Press, pp. 42-87.

de Oliveira, A.C., R.T. Croson and C. Eckel (2014), "One bad apple? Heterogeneity and information in public good provision", *Experimental Economics*, pp. 1-20.

Parker, S., G.R. Parker and T.L. Towner (2014), "Rethinking the meaning and measurement of political trust", in Eder, C., I.C. Mochmann and M. Quandt (eds.), *Political Trust and Disenchantment with Politics, Social Sciences E-Books online*, BRILL, pp. 59-82.

Pew Research Center (2015), "Beyond distrust: How Americans view their government", November 2015.

Piekut, A. and G. Valentine (2016), "Perceived diversity and acceptance of minority ethnic groups in two urban contexts", *European Sociological Review*, Vol. 32, No. 3, pp. 339-354.

Podsakoff, P.M., S.B. MacKenzie and J. Lee (2003), "Common method biases in behavioral research: A critical review of the literature and recommended remedies", *The Journal of Applied Psychology*, Vol. 88, No. 5, pp. 879-903.

Poulin, M.J. and C.M. Haase (2015), "Growing to trust", *Social Psychological and Personality Science*, Vol. 6(6), pp. 614-621.

Putnam, R.D. (2000), *Bowling Alone: The Collapse and Revival of American Community*, Simon & Schuster (eds.), New York.

Putnam, R., R. Leonardi and R.Y. Nanetti, (1993), *Making Democracy Work*, Princeton, NJ: Princeton University Press.

Raccuia, L. (2016), "Single-target implicit association tests predict voting behavior of decided and undecided voters in Swiss referendums", *PLoS ONE*, Vol. 11, No. 10.

Rothstein, B. and E. Uslaner (2005), "All for all: Equality, corruption and social trust", *World Politics*, Vol. 58, No. 3, pp. 41-72.

Sapienza, P., A. Toldra and L. Zingales (2007), "Understanding trust", *NBER Working Paper No. 13387*.

Scheve, K.F. and M.J. Slaughter (2007), "A New Deal for globalization", *Foreign Affairs*, Vol. 86, No. 4.

Schneider, I. (2017), "Can we trust measures of political trust? Assessing measurement equivalence in diverse regime types", *Social Indicators Research*, Vol. 133, No. 3, pp. 963-984.

Schoenfeld, W.N. (1978), "Image of man: The effect of religion on trust: A research note", *Review of Religious Research*, Vol. 20, No. 1, pp. 61-67.

Schuman, H. (1997), *Racial Attitudes in America: Trends and Interpretations*, Harvard University Press, Boston.

Sivesind, K.H., T. Pospisilova and P. Fric (2013), "Does volunteering cause trust? A comparison of the Czech Republic and Norway", *European Societies*, Vol 15(1).

Stolle, D., S. Soroka and R. Johnston (2008), "When does diversity erode trust? Neighborhood diversity, interpersonal trust and the mediating effect of social interactions", *Political Studies*, Vol. 56, No. 1, pp. 57-75.

Sturgis, P., N. Allum and I. Brunton-Smith (2009), "Attitudes over time: The psychology of panel conditioning", in Lynn P. (ed.), *Methodology of longitudinal surveys*, pp. 113-126, New York, NY: John Wiley & Sons.

Swank, D. and H. Betz (2002), "Globalization, the welfare state and right-wing populism in Western Europe, *Socio-Economic Review*, Vol. 1, No. 2, pp. 215-245.

Swap, W.C. and C. Johnson-George (1982), "Measurement of specific interpersonal trust: Construction and validation of a scale to assess trust in a specific other", *The Journal of Personality and Social Psychology*, Vol. 43(6), pp. 1306-1317.

Tabellini, G. (2008), "Institutions and Culture", *The Journal of the European Economic Association*, Papers and Proceedings, Vol. 6 (2-3).

Temple, J. (2000), "Growth effects of education and social capital in the OECD countries", *OECD Economics Department Working Papers*, No. 263, OECD Publishing, Paris, https://doi.org/10.1787/882344562861.

Tokuda, Y. et al. (2008), "Interpersonal trust and quality-of-life: A cross-sectional study in Japan", *PLoS ONE*, Vol. 3(12).

Traunmüller, R. (2010), "Moral communities? Religion as a source of social trust in a multilevel analysis of 97 German regions", *European Sociological Review*, Vol. 27, No. 3, pp. 346-363.

United Nations (2015), "Transforming our world: The 2030 agenda for sustainable development", A/RES/70/1, United Nations General Assembly, New York.

Uslaner, E. (2012), *Segregation and Mistrust: Diversity, Isolation and Social Cohesion*, Cambridge University Press.

Uslaner, E. (2002), *The Moral Foundations of Trust*, Cambridge University Press.

Valentino, N.A., V.L. Hutchings and I.K. White (2002), "Cues that matter: How political ads prime racial attitudes during campaigns", *The American Political Science Review*, Vol. 96 (1), pp. 75-90.

van de Walle, S. and G. Bouckaert (2013), "Public service performance and trust in government: The problem of causality", *The International Journal of Public Administration*, Vol. 29, No. 8&9, pp. 891-913.

van Ryzin, G. (2007), "Pieces of a puzzle: Linking government performance, citizen satisfaction, and trust", *Public Performance & Management Review*, Vol. 30, No. 4, pp. 521-535.

Wang, C. (2016), "Government performance, corruption, and political trust in East Asia", *Social Science Quarterly*, Vol. 97, No. 2, pp. 211-231.

Welch, M.R., D. Sikkink and M.T. Loveland (2007), "The radius of trust: Religion, social embeddedness and trust in strangers, *Social Forces*, Vol. 86, No. 1, pp. 23-46.

Annex A.

Annex A.I. Summary statistics

Table A A.1. Total number of responses and exclusions to ensure survey quality

Inclusion criterion	Description	FRA	KOR	SVN	USA	DEU	ITA	**Tot.**
Total number of complete responses	Total number of respondents who successfully completed the survey platform	1218	1330	1072	1287	1091	1105	**7104**
Excluded due to bad IAT	Response excluded from analysis because it was too slow, too fast, or included too many mistakes	99	166	47	151	63	62	**588**
Excluded due to survey response set repetitions	Respondent repeated the same response for each question on at least three separate screens (for selected screens)	29	29	17	61	27	27	**190**
Excluded due to too fast completion of platform	Respondent completed full platform in less than 10 minutes (manual exclusion only in France and Korea)	73	14	0	0	0	0	**87**
Total number of good completes	**Total number of respondents included in analysis**	**1055**	**1137**	**1011**	**1090**	**1011**	**1016**	**6320**
Additional exclusions due to missing survey responses	Response excluded from regression analyses because the respondent answered "Don't know" to 5 questions or more (independent variables only)	n/a	n/a	20	74	49	25	**168**
Total number of respondents included in regression analyses	**Total number of respondents included in regression analyses**	**n/a**	**n/a**	**991**	**1016**	**962**	**991**	**3960**

1. To ensure the quality of the sample, three criteria were applied to exclude poor responses. The first criterion excludes respondents who completed the IAT too slow, too fast, or with too many mistakes. The second criterion excludes responses to the survey that were too repetitive. Certain survey screens include a series of multiple questions: respondents are excluded if all questions were given the same value, for three separate screens. The third criterion excludes responses where the total survey time was too fast (less than 10 minutes) to ensure that respondents paid attention to the rules of the games and the questions. In France and Korea, these responses were manually removed, in the other countries, participants who were too fast were automatically excluded from the dataset upon completed the platform.

Table A A.2. Descriptive statistics of demographic variables

Variable name	Question/description	Obs.	Mean	Obs.	Mean	Obs.	Mean	Obs.	Mean	Obs.	Mean	Obs.	Mean	Obs.	Mean
		Total		*France*		*Korea*		*Germany*		*United States*		*Slovenia*		*Italy*	
Age: 18-34	Respondent's age is between 18 and 34 years old	6320	0.31	1055	0.29	1137	0.28	1011	0.35	1090	0.32	1011	0.33	1016	0.31
Age: 35-49	Respondent's age is between 35 and 49 years old	6320	0.35	1055	0.32	1137	0.26	1011	0.41	1090	0.35	1011	0.37	1016	0.37
Age: 50-65	Respondent's age is between 50 and 65 years old	6320	0.34	1055	0.39	1137	0.45	1011	0.23	1090	0.33	1011	0.30	1016	0.31
Female	Respondent is female	6320	0.51	1055	0.51	1137	0.51	1011	0.44	1090	0.61	1011	0.49	1016	0.51
HH income: low	Equivalised household income: bottom 20%	6320	0.24	1055	0.15	1137	0.23	1011	0.20	1090	0.29	1011	0.36	1016	0.20
HH income: middle	Equivalised household income: 20th to 80th percentile	6320	0.59	1055	0.61	1137	0.61	1011	0.57	1090	0.53	1011	0.59	1016	0.61
HH income: high	Equivalised household income: top 20%	6320	0.18	1055	0.24	1137	0.16	1011	0.23	1090	0.18	1011	0.05	1016	0.18
Low education	Highest education level achieved: High school diploma or less	6320	0.35	1055	0.28	1137	0.20	1011	0.21	1090	0.41	1011	0.49	1016	0.51
Medium education	Highest education level achieved: Some college, diploma, trades certificate or other post-school qualification	6320	0.25	1055	0.38	1137	0.38	1011	0.15	1090	0.23	1011	0.16	1016	0.17
High education	Highest education level achieved: Tertiary education diploma	6320	0.41	1055	0.34	1137	0.42	1011	0.64	1090	0.36	1011	0.35	1016	0.32
Low education (parents)	Highest education level achieved by either one of respondent's parents: High school or less	4128	0.57	0	0.36	0	0.42	1011	0.00	1090	0.00	1011	0.70	1016	0.81
Medium education (parents)	Highest education level achieved by either one of respondent's parents: Some college, diploma, trades certificate or post-school qualification	4128	0.22	0	0.40	0	0.26	1011	1.00	1090	1.00	1011	0.14	1016	0.08
High education (parents)	Highest education level achieved by either one of respondent's parents: Tertiary education diploma	4128	0.21	0	0.24	0	0.32	1011	0.00	1090	0.00	1011	0.16	1016	0.12
Employed or self-employed	Labour force status: employed or self-employed	6320	0.68	1055	0.70	1137	0.63	1011	0.68	1090	0.72	1011	0.69	1016	0.67
Inactive or unemployed	Labour force status: inactive or unemployed	6320	0.32	1055	0.30	1137	0.37	1011	0.32	1090	0.28	1011	0.31	1016	0.33
Native	Respondent was born in survey country	6320	0.94	1055	0.94	1137	0.91	1011	0.93	1090	0.96	1011	0.95	1016	0.96
Rural	Respondent lives in rural area or village	6320	0.42	1055	0.43	1137	0.24	1011	0.03	1090	0.64	1011	0.72	1016	0.51
Town	Respondent lives in a town	6320	0.17	1055	0.23	1137	0.21	1011	0.05	1090	0.17	1011	0.12	1016	0.23
Urban	Respondent lives in an urban area	6320	0.41	1055	0.34	1137	0.55	1011	0.91	1090	0.19	1011	0.15	1016	0.26

Table A A.3. Definitions and descriptive statistics of key experimental and self-reported measures of trust and social norms

Variable name	Question/description	Obs.	Min. value	Max. value	Mean	SD
Trust in others (OECD question)	In general, how much do you trust most people? 0 = Not at all; 10 = Completely	4102	0	10	6.43	2.09
Trust in others (Rosenberg question)	Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people? 0 = You can't be too careful; 10 = Most people can be trusted	6266	0	10	5.44	2.41
Trust in government	How much trust do you have in the following to act in the best interest of society? Government. 0 = I don't trust them at all; 10 = I fully trust them	6269	0	10	3.65	2.52
Trust in the judicial system	How much trust do you have in the following to act in the best interest of society? The Judicial System. 0 = I don't trust them at all; 10 = I fully trust them	6273	0	10	4.53	2.56
Experimental trust in others	Amount sent by Participant A in trust game	5253	0	10	6.28	2.99
Experimental trustworthiness (share)	Amount sent back by Participant B in trust game, proportionate to amount available	5195	0	1	0.34	0.19
Expected trustworthiness (share)	Amount expected to be sent back by Participant B in trust game, proportionate to amount available	4128	0	1	0.37	0.2
Altruism	Amount sent by Participant A in dictator game	6320	0	10	4.49	2.47
Cooperation	Amount invested by Participant A in public goods game	6320	0	10	6.46	2.97
Risk preference	Choice in risk lottery	3117	1	6	3.93	1.69
IAT trust in government	D-score of IAT trust in government	2923	-1.93	2.31	0.17	0.36
IAT trust in the judicial system	D-score of IAT trust in the judicial system	2897	-2.2	2.36	0.15	0.36
IAT government values	D-score of IAT government values	2917	-1.91	2.07	0.09	0.36
IAT government competence	D-score of IAT government competence	2892	-1.93	2.5	0.2	0.36

Annex A.II. Econometric analyses

2. Table A A.4 shows the correlation between self-reported trust in government and IAT trust when controlling for individual characteristics. One standard deviation increase in IAT trust represents almost one point increase in self-reported trust in government. In addition, the table shows the relation between the 'Competence' and 'Values' IATs, where respondents were asked to associate Government-related words and words related to competence and honesty. Both have an equally strong relationship with self-reported trust in government, but when included in a regression together, it is implicit government values that appears to explain a significant share of self-reported trust in government. Table A A.5 shows a similar analysis for self-reported trust in the judicial system and IAT trust. Here too there is a positive correlation, albeit slightly weaker than for trust in government.

3. The policy and contextual drivers of trust in government and trust in others are presented in Table A A.6 and Table A A.8 respectively. Both trust in others and trust in government are regressed using independent variables derived from the three broad categories presented in the conceptual framework: Individual factors (Column 1), Institutions (Column 2) and Society (Column 3). Each of the individual categories is first regressed on the dependent variable, first including the full set of variables, and in the following using a selection determined by a stepwise regression.

4. In the final columns (Columns 4 and 5), all three categories are grouped together. The very last column additionally includes trust in others as an explanatory variable for trust in government, and vice versa. For trust in government, both experimental trust and self-reported trust are included as explanatory variables.

5. Table A A.7 presents the results from the full trust in government model (used in Table A A.6, Column 4) for each country individually. Since the survey module was only implemented after the French and Korean surveys, results are shown for the remaining four countries. While institutional variables explain trust in government in all countries, differences exist in their relative importance. For example, while government competence explains an important part of trust in Italy and in the Unites States, government integrity and openness play a larger role in Slovenia and Germany.

6. In all regressions, independent variables are normalized, meaning that coefficients reported represent the change in the dependent variable as a result of one standard deviation increase in the explanatory variable. In the regressions using independent variables from the survey module (A6, A7 and A8), missing values for respondents where a total of 5 or less values were missing were imputed using a multivariate normal regression. Respondents with more than 5 missing values were dropped from the analysis (see Annex A.I for statistics on exclusion criteria).

7. Individual characteristics controlled for in the regression analyses are age, gender, education level, parental education level, equivalised household income, labour force status, immigration status, and the geographic area in which the respondent lives (rural area, town or city).

Table A A.4. Self-reported trust in government and IAT trust

	(1)	(2)	(3)	(4)
	The dependent variable is self-reported trust in government			
Implicit trust				
IAT trust in government	0.798***			
	(0.16)			
IAT government competence		0.504**		0.334
		(0.17)		(0.20)
IAT government values			0.586**	0.524*
			(0.18)	(0.21)
Individual characteristics	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes
N	2899	2871	2895	2630
R^2	0.127	0.104	0.109	0.116

Notes:

a The regressions in this table include data from all six Trustlab countries used in this paper (France, Korea, Slovenia, United States, Germany and Italy)

b All regressions in this table rely on Ordinary Least Squares estimators with robust standard errors clustered by country.

c Explicit trust in government is based on a self-reported assessment of trust in government/the judicial system that asks respondents "On a scale from zero to ten, how much trust do you have in the government/the judicial system?"

d Implicit trust in government refers to the IAT D-score, which is constructed according to standard procedures (see Greenwald, Nosek and Banaji [2003]).

e Individual characteristics include respondents' age, gender, education, household income, individual income, labor force status, immigration status and the degree of urbanization of place of residence.

Robust standard errors in parentheses. *=p<0.10, **=p<0.05, ***=p<0.01

Table A A.5. Self-reported trust in the judicial system and IAT trust

	(1)	(2)
	Self-reported trust in the judicial system	Self-reported trust in government
Implicit trust		
IAT trust in the judicial system	0.682***	0.500**
	(0.13)	(0.15)
Individual characteristics	Yes	Yes
Country fixed effects	Yes	Yes
N	2878	2870
R^2	0.137	0.12

Notes:

a The regressions in this table include data from all six Trustlab countries used in this paper (France, Korea, Slovenia, United States, Germany and Italy)

b All regressions in this table rely on Ordinary Least Squares estimators with robust standard errors clustered by country.

c Explicit trust in government is based on a self-reported assessment of trust in government/the judicial system that asks respondents "On a scale from zero to ten, how much trust do you have in the government/the judicial system?"

d Implicit trust in government refers to the IAT D-score, which is constructed according to standard procedures (see Greenwald, Nosek and Banaji [2003]).

e Individual characteristics include respondents' age, gender, education, household income, individual income, labor force status, immigration status and the degree of urbanization of place of residence.

Robust standard errors in parentheses. *=p<0.10, **=p<0.05, ***=p<0.01

Table A A.6. Determinants of trust in government

	(1) Self-reported trust in government	(2) Self-reported trust in government	(3) Self-reported trust in government	(4) Self-reported trust in government	(5) Self-reported trust in government
Individual determinants: social preferences					
Cooperation	-0.017			-0.002	-0.012
	(0.04)			(0.02)	(0.01)
Reciprocity	0.052			0.042	0.038
	(0.04)			(0.03)	(0.03)
Negative reciprocity (self-reported)	-0.086			-0.026	-0.027
	(0.07)			(0.04)	(0.04)
Positive reciprocity (self-reported)	-0.081			-0.012	-0.019
	(0.06)			(0.03)	(0.04)
Altruism	0.117			0.058	0.040
	(0.04)			(0.04)	(0.04)
Donation	0.097			0.059	0.060*
	(0.04)			(0.02)	(0.02)
Altruism (self-reported)	0.124			0.003	-0.017
	(0.07)			(0.04)	(0.04)
Trustworthiness	-0.046			-0.034	-0.034
	(0.03)			(0.02)	(0.03)
Individual determinants: expectations					
Expected trustworthiness	0.133			0.042	0.029
	(0.06)			(0.04)	(0.04)
Risk (self-reported)	0.134			0.007	-0.023
	(0.09)			(0.04)	(0.04)
Financial security	0.355**			0.082*	0.073*
	(0.04)			(0.03)	(0.02)
Perceptions of social mobility	0.624***			0.080*	0.064
	(0.04)			(0.02)	(0.03)
Individual determinants: values					
Religiosity	0.319*			0.087*	0.081
	(0.08)			(0.02)	(0.03)
Left-wing political orientation	0.155			0.070	0.066
	(0.06)			(0.04)	(0.04)
Right-wing political orientation	-0.058			-0.036	-0.046
	(0.10)			(0.09)	(0.09)
No political orientation disclosed	-0.424**			-0.201**	-0.184**
	(0.07)			(0.03)	(0.03)
Institutional determinants: government competence					
Government responsiveness		0.338**		0.274**	0.246*
		(0.07)		(0.06)	(0.07)
Government reliability		0.345**		0.289**	0.283**
		(0.07)		(0.06)	(0.06)
Satisfaction with education services		0.299**		0.263**	0.240**
		(0.04)		(0.04)	(0.05)
Satisfaction with health care services		0.247**		0.238**	0.231**
		(0.03)		(0.03)	(0.03)
Satisfaction with public transportation		-0.031		-0.057	-0.063
		(0.11)		(0.11)	(0.11)
Satisfaction with welfare benefits		0.245*		0.222*	0.233*
		(0.06)		(0.06)	(0.06)
Satisfaction with security and crime prevention		0.351**		0.302**	0.274**
		(0.06)		(0.05)	(0.05)
Satisfaction with cultural facilities		0.014		-0.006	-0.010
		(0.04)		(0.04)	(0.04)
Satisfaction with environmental services		-0.023		0.009	-0.004
		(0.06)		(0.05)	(0.05)

Institutional determinants: government values					
Government integrity (petty corruption)		-0.124		-0.111	-0.113
		(0.08)		(0.05)	(0.06)
Government integrity (revolving door)		-0.002		0.000	-0.003
		(0.06)		(0.07)	(0.06)
Government integrity (high-level corruption)		0.405**		0.379**	0.361**
		(0.06)		(0.06)	(0.06)
Government openness		0.167		0.125	0.126
		(0.10)		(0.12)	(0.12)
Government fairness		0.161*		0.161*	0.170*
		(0.05)		(0.04)	(0.04)
Preferences for tax distribution		-0.055		-0.048	-0.046
		(0.06)		(0.04)	(0.04)
Societal determinants: community and diversity					
Neighbourhood connectedness			0.571**	0.111	0.069
			(0.12)	(0.04)	(0.04)
Regular social contact			-0.027	-0.020	-0.014
			(0.07)	(0.05)	(0.05)
No social contact			-0.020	-0.011	-0.008
			(0.03)	(0.02)	(0.03)
Regular volunteering			0.045	0.022	0.009
			(0.06)	(0.05)	(0.04)
No volunteering			-0.148*	-0.064	-0.063
			(0.05)	(0.05)	(0.05)
Perceived diversity			-0.052	-0.003	-0.004
			(0.07)	(0.05)	(0.05)
Perceptions of immigrants integration			0.480**	0.115**	0.104**
			(0.05)	(0.01)	(0.01)
Attitudes towards immigration			0.188	0.086	0.077
			(0.10)	(0.05)	(0.05)
Societal determinants: digitalisation and globalisation					
Attitudes towards globalisation			0.228*	0.032	0.019
			(0.07)	(0.03)	(0.03)
Info from Internet: a lot			-0.155	-0.078	-0.081
			(0.07)	(0.04)	(0.04)
Info from Internet: little to none			-0.048	-0.018	-0.021
			(0.05)	(0.03)	(0.03)
Trust in others					
Trust (experimental)					0.009
					(0.03)
Trust (self-reported)					0.291**
					(0.03)
Individual characteristics	Yes	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes	Yes
N	3941	3941	3941	3941	3927
R^2	0.25	0.5	0.24	0.52	0.52

Notes:

[a] All regressions rely on Ordinary Least Squares estimators with robust standard errors clustered by country.

[b] All independent variables were normalised and missing values were imputed using multivariate normal regression.

[c] All regressions control for a set of individual characteristics that include respondents' age, gender, education, household income, labour force status and the degree of urbanisation of the place of residence.

Standard errors in parentheses. *=<0.10, **=p<0.05, ***=p<0.01

Table A A.7. Determinants of trust in government, by country

	(1) Self-reported trust in government	(2) Self-reported trust in government	(3) Self-reported trust in government	(4) Self-reported trust in government
	Germany	*United States*	*Slovenia*	*Italy*
Individual determinants: social preferences				
Cooperation	0.012	0.011	-0.032	-0.033
	(0.07)	(0.07)	(0.06)	(0.07)
Reciprocity	0.112*	-0.002	0.016	0.062
	(0.06)	(0.06)	(0.06)	(0.06)
Negative reciprocity (self-reported)	0.001	0.048	-0.108*	-0.112
	(0.07)	(0.08)	(0.06)	(0.09)
Positive reciprocity (self-reported)	0.068	0.027	-0.066	-0.028
	(0.06)	(0.06)	(0.08)	(0.06)
Altruism	0.119*	0.107	0.084	-0.053
	(0.06)	(0.07)	(0.07)	(0.07)
Donation	-0.015	0.096**	0.056	0.009
	(0.06)	(0.05)	(0.05)	(0.07)
Altruism (self-reported)	0.025	-0.087	0.025	0.076
	(0.06)	(0.08)	(0.07)	(0.08)
Trustworthiness	-0.022	-0.052	0.010	-0.008
	(0.08)	(0.06)	(0.07)	(0.07)
Individual determinants: expectations				
Expected trustworthiness	-0.020	0.125**	-0.009	-0.005
	(0.07)	(0.06)	(0.08)	(0.07)
Risk (self-reported)	-0.055	0.073	-0.059	0.060
	(0.07)	(0.07)	(0.07)	(0.07)
Financial security	0.037	0.091	0.121*	0.003
	(0.08)	(0.07)	(0.06)	(0.08)
Perceptions of social mobility	0.000	-0.044	0.069	0.140*
	(0.08)	(0.08)	(0.07)	(0.08)
Individual determinants: values				
Religiosity	0.130*	0.115	0.050	0.077
	(0.07)	(0.07)	(0.08)	(0.07)
Left-wing political orientation	-0.049	0.097	0.078	0.078
	(0.07)	(0.08)	(0.07)	(0.08)
Right-wing political orientation	-0.054	0.174**	-0.219***	-0.161**
	(0.07)	(0.07)	(0.07)	(0.07)
No political orientation disclosed	-0.074	-0.294	-0.181	-0.314*
	(0.27)	(0.21)	(0.16)	(0.17)
Institutional determinants: government competence				
Government responsiveness	0.154	0.302***	0.139	0.473***
	(0.09)	(0.10)	(0.09)	(0.10)
Government reliability	0.265***	0.187*	0.168**	0.428***
	(0.10)	(0.10)	(0.08)	(0.09)
Satisfaction with education services	0.191*	0.331***	0.300***	0.217**
	(0.10)	(0.10)	(0.08)	(0.09)
Satisfaction with health care services	0.252**	0.102	0.208**	0.180*
	(0.11)	(0.09)	(0.09)	(0.10)
Satisfaction with public transportation	-0.004	0.132	-0.287***	0.059
	(0.10)	(0.09)	(0.08)	(0.10)

Satisfaction with welfare benefits	0.353***	0.094	0.216**	0.214**
	(0.10)	(0.09)	(0.09)	(0.11)
Satisfaction with security and crime prevention	0.411***	0.303***	0.167**	0.308***
	(0.09)	(0.10)	(0.08)	(0.09)
Satisfaction with cultural facilities	0.033	-0.079	0.054	0.138
	(0.10)	(0.10)	(0.08)	(0.10)
Satisfaction with environmental services	-0.041	0.013	0.124	-0.158
	(0.10)	(0.10)	(0.08)	(0.11)
Institutional determinants: government values				
Government integrity (petty corruption)	-0.054	-0.203**	0.063	-0.066
	(0.09)	(0.09)	(0.08)	(0.10)
Government integrity (revolving door)	0.080	0.090	-0.080	0.159
	(0.10)	(0.14)	(0.06)	(0.11)
Government integrity (high-level corruption)	0.345***	0.302**	0.427***	0.185
	(0.11)	(0.14)	(0.09)	(0.13)
Government openness	0.187*	-0.028	0.490***	-0.042
	(0.10)	(0.10)	(0.10)	(0.10)
Government fairness	0.143	0.268***	0.064	0.100
	(0.09)	(0.09)	(0.07)	(0.07)
Preferences for tax distribution	0.092	-0.124*	-0.065	-0.055
	(0.06)	(0.07)	(0.05)	(0.05)
Societal determinants: community and diversity				
Neighbourhood connectedness	0.066	0.208***	0.066	0.086
	(0.08)	(0.08)	(0.07)	(0.07)
Regular social contact	-0.055	0.106	-0.030	-0.109*
	(0.06)	(0.07)	(0.06)	(0.06)
No social contact	0.033	0.029	-0.030	-0.056
	(0.08)	(0.04)	(0.07)	(0.05)
Regular volunteering	0.048	-0.015	-0.113*	0.129
	(0.06)	(0.07)	(0.06)	(0.08)
No volunteering	-0.099	-0.177**	-0.028	0.033
	(0.08)	(0.07)	(0.07)	(0.06)
Perceived diversity	-0.058	-0.028	0.109**	-0.110
	(0.07)	(0.06)	(0.05)	(0.08)
Perceptions of immigrants integration	0.070	0.140*	0.090	0.115
	(0.09)	(0.08)	(0.06)	(0.07)
Attitudes towards immigration	0.249***	0.015	0.043	0.071
	(0.07)	(0.08)	(0.06)	(0.07)
Societal determinants: digitalisation and globalisation				
Attitudes towards globalisation	0.078	-0.005	0.020	0.091
	(0.08)	(0.08)	(0.06)	(0.06)
Info from Internet: a lot	-0.084	-0.065	0.001	-0.170***
	(0.06)	(0.07)	(0.06)	(0.06)
Info from Internet: little to none	-0.014	0.048	-0.105	-0.048
	(0.06)	(0.06)	(0.07)	(0.07)
Individual characteristics	Yes	Yes	Yes	Yes
N	957	1014	984	986
R^2	0.54	0.54	0.49	0.53

Notes:

[a] All regressions rely on Ordinary Least Squares estimators with robust standard errors.

[b] All independent variables were normalised and missing values were imputed using multivariate normal regression.

[c] All regressions control for a set of individual characteristics that include respondents' age, gender, education, household income, labour force status and the degree of urbanisation of the place of residence.

Standard errors in parentheses. *=<0.10, **=p<0.05, ***=p<0.01

Table A A.8. Determinants of trust in others

	(1) Self-reported trust in others	(2) Self-reported trust in others	(3) Self-reported trust in others	(4) Self-reported trust in others	(5) Self-reported trust in others
Individual determinants: social preferences					
Cooperation	0.020			0.044	0.041
	(0.03)			(0.04)	(0.04)
Reciprocity	0.021			0.022	0.017
	(0.02)			(0.02)	(0.02)
Negative reciprocity (self-reported)	-0.030			0.008	0.010
	(0.06)			(0.07)	(0.07)
Positive reciprocity (self-reported)	-0.013			0.007	0.010
	(0.05)			(0.04)	(0.04)
Altruism	0.133**			0.094*	0.085*
	(0.02)			(0.03)	(0.03)
Donation	0.009			0.003	-0.004
	(0.02)			(0.02)	(0.01)
Altruism (self-reported)	0.252***			0.154**	0.155**
	(0.02)			(0.02)	(0.02)
Trustworthiness	-0.009			-0.011	-0.003
	(0.04)			(0.04)	(0.04)
Individual determinants: expectations					
Expected trustworthiness	0.153***			0.093**	0.087**
	(0.00)			(0.01)	(0.02)
Risk (self-reported)	0.303***			0.210***	0.208**
	(0.02)			(0.02)	(0.02)
Financial security	0.206**			0.071	0.058
	(0.02)			(0.03)	(0.03)
Perceptions of social mobility	0.383**			0.111	0.100
	(0.08)			(0.05)	(0.05)
Individual determinants: values	0.223**				
Religiosity	(0.05)			0.071	0.055
	0.112			(0.05)	(0.05)
Left-wing political orientation	(0.04)			0.056**	0.044*
	0.059**			(0.01)	(0.01)
Right-wing political orientation	(0.01)			0.078**	0.081*
	-0.197**			(0.02)	(0.02)
No political orientation disclosed	(0.03)			-0.123**	-0.099*
				(0.02)	(0.03)
Institutional determinants: government competence					
Government responsiveness		0.365*		0.209	0.175
		(0.10)		(0.08)	(0.08)
Government reliability		0.134*		0.063	0.024
		(0.03)		(0.04)	(0.04)
Satisfaction with education services		0.185*		0.108**	0.077
		(0.05)		(0.02)	(0.03)
Satisfaction with health care services		0.071		0.062	0.028
		(0.02)		(0.04)	(0.04)
Satisfaction with public transportation		0.143*		0.105	0.108*
		(0.04)		(0.04)	(0.03)
Satisfaction with welfare benefits		-0.043		-0.058	-0.093
		(0.06)		(0.05)	(0.05)
Satisfaction with security and crime prevention		0.241**		0.172*	0.138*
		(0.05)		(0.04)	(0.04)
Satisfaction with cultural facilities		0.046		0.003	0.004
		(0.03)		(0.01)	(0.01)
Satisfaction with environmental services		0.036		0.092	0.088
		(0.04)		(0.04)	(0.03)

Institutional determinants: government values					
Government integrity (petty corruption)		-0.059		0.009	0.027
		(0.04)		(0.03)	(0.04)
Government integrity (revolving door)		0.069		0.063	0.061
		(0.03)		(0.05)	(0.04)
Government integrity (high-level corruption)		0.082		0.078	0.023
		(0.05)		(0.04)	(0.04)
Government openness		0.087		-0.019	-0.036
		(0.05)		(0.05)	(0.05)
Government fairness		-0.027		-0.051	-0.067
		(0.03)		(0.02)	(0.02)
Preferences for tax distribution		-0.018		-0.003	0.002
		(0.06)		(0.04)	(0.03)
Societal determinants: community and diversity					
Neighbourhood connectedness			0.580***	0.308***	0.297***
			(0.05)	(0.01)	(0.01)
Regular social contact			-0.008	-0.032	-0.029
			(0.02)	(0.02)	(0.03)
No social contact			-0.034	-0.032	-0.029
			(0.04)	(0.03)	(0.03)
Regular volunteering			0.134	0.081	0.080
			(0.06)	(0.05)	(0.05)
No volunteering			-0.092	-0.009	0.002
			(0.03)	(0.03)	(0.03)
Perceived diversity			0.016	-0.004	-0.001
			(0.02)	(0.02)	(0.02)
Perceptions of immigrants integration			0.238**	0.062	0.042
			(0.03)	(0.04)	(0.04)
Attitudes towards immigration			0.174**	0.119*	0.104
			(0.03)	(0.04)	(0.05)
Societal determinants: digitalisation and globalisation					
Attitudes towards globalisation			0.195**	0.076	0.072
			(0.04)	(0.03)	(0.03)
Info from Internet: a lot			-0.011	0.013	0.027
			(0.05)	(0.05)	(0.04)
Info from Internet: little to none			0.004	0.026	0.030
			(0.05)	(0.04)	(0.04)
Trust in government					
Trust in government					0.341**
					(0.04)
Individual characteristics	Yes	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes	Yes
N	3946	3946	3946	3946	3927
R^2	0.21	0.23	0.2	0.32	0.33

Notes:

[a] All regressions rely on Ordinary Least Squares estimators with robust standard errors clustered by country.

[b] All independent variables were normalised and missing values were imputed using multivariate normal regression.

[c] All regressions control for a set of individual characteristics that include respondents' age, gender, education, household income, labour force status and the degree of urbanisation of the place of residence.

Standard errors in parentheses. *=<0.10, **=p<0.05, ***=p<0.01

Annex A.III. Individual, institutional and societal determinants of trust included in Trustlab

Individual determinants	
Preferences	
Cooperation	*Experimental:* Amount invested in joint project in public goods game
	Experimental: Amount invested in joint project conditional to average input of other players
Reciprocity	*Negative reciprocity*: How willing are you to punish someone who treats others unfairly, even if there may be costs for you?
	Positive reciprocity: When someone does a favour, I am willing to return it. How well does this statement describe you as a person?
Altruism	*Experimental*: Amount transferred from participant A to participant B in dictator game
	Experimental: Voluntary donation to UNICEF after completion of Trustlab
	How willing are you to give to good causes without expecting anything in return?
Trustworthiness	*Experimental*: Amount transferred from participant B to participant A in Trust game
Expectations	
Expected trustworthiness	*Experimental*: Imagine you sent 5 Euro, so Participant B receives 15 Euro, making his or her total budget 25 Euro. Participant B has no information about your identity. What amount would you expect Participant B to return to you?
Risk aversion	*Experimental*: Risk ladder
	How do you see yourself: are you generally a person who tries to avoid taking risks, or are you fully prepared to take risks?
Financial security	When it comes to the financial situation of your household, what are your expectations for the 12 months to come, will the next 12 months be better, worse, or the same?
Perception of social mobility	Some people say there is not much opportunity to get ahead today for the average person. Others say anyone who works hard can climb up the ladder. Which one comes closer to the way you feel about this?
Socio-economic background	
Age, gender, income, education level, parental education, labour force status, place of residence, immigration status	
Values	
Political orientation	In political matters, people often talk of "the left" and "the right". How would you place your views on this scale, generally speaking?
Religiosity	How important would you say religion is in your own life?
Tax distribution	The government currently raises a certain amount of revenues through tax in order to sustain the current level of public spending. In your view, what would be the fair split of tax burden to sustain public spending? *Respondents are asked to indicate the tax burden on four groups in the income distribution: the top 1%; the next 9%; the next 40%; the bottom 50%*
Institutional determinants	
Government competence	
Satisfaction with public services?	How satisfied are you with the quality of: The education system? The health care system? Public transport? Child care services?

	Welfare benefits? Public housing? Security and crime prevention? Environmental services? Cultural facilities?
Government reliability	If a natural disaster occurs, do you think that the provision by government of adequate food, shelter and clothing will be timely and efficient?
Government responsiveness	If you were to complain about bad quality of a public service, how likely is that the problem would be easily resolved?
Government values	
Government integrity (petty corruption)	If a private citizen offers a government employee an improper payment in order to speed up administrative procedures, do you think that he or she would accept the bribe?
Government integrity (revolving door)	If a large business offered a well-paid job to a high level politician in exchange for political favours during their time in office, do you think that he/she would accept this proposal?
Government integrity (high-level corruption)	If a parliamentarian were offered a bribe to influence the awarding of a public procurement contract, do you think that he/she would accept the bribe?
Government openness	If a decision affecting your community were to be taken by the local or regional government, how likely is it that you and others in the community would have an opportunity to voice your concerns?
Government fairness	If an individual belongs to a minority group (e.g. sexual, racial/ethnic and/or based on national origin), how likely is it that he or she will be treated the same as other citizens by a government agency?
Political inefficacy	To what extent do you agree with the following statement: people like me don't have any say about what the government does?
Societal determinants	
Community	
Social connectedness	How often do you get together with friends?
Neighbourhood connectedness	How strongly do you feel connected to other people in your neighbourhood?
Volunteering	How often do you participate in voluntary activities to help people other than your direct relatives, friends or colleagues?
Diversity	
Perception of integration	To what extent do you agree with the following statements? Immigrants are not/are well integrated in our society.
Attitudes towards immigration	To what extent do you agree with the following statements? Our culture is undermined/is enriched by immigrants.
Perceived diversity	How high do you estimate the percentage of people of non-[Country] origin in your neighbourhood to be? With non-[Country] origin we mean people who were not born in [Country] or of whom at least one parent was not born in [Country]. Please give a percentage between 0 and 100.
Digitalisation and globalisation	
Digital connectedness	How much information about current events, public affairs, and the government do you get from:- TV- The Internet- Other people
Attitudes towards globalisation and trade	As you may know, international trade has increased substantially in recent years. Do you think government should try to encourage international trade or to discourage international trade?