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**HOW GOOD IS TRUST?
MEASURING TRUST AND ITS ROLE FOR THE PROGRESS OF SOCIETIES**

OECD Statistics Working Paper

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ABSTRACT

This paper investigates the notion and role of trust in modern societies as a first step towards the construction of indicators that could better inform our understanding of societal progress. Trust is commonly viewed as a proxy indicator of social capital, and a high level of trust is considered a factor that can enhance economic growth and social well-being. Indicators of trust inform about the quality of people's interactions with others, hence on their assessment of the extent to which other people in the community are perceived as potential partners rather than as rivals.

The paper, starting from the various notions and theories of trust provided in literature, discusses different definitions of trust, its various dimensions (*i.e.* interpersonal and institutional trust), their relation to the broader notion of social capital, and the different factors that affect it. It then overviews the measures currently used to assess trust, discussing their advantages and disadvantages. Questions assessing the degree of trust of respondents towards other people and institutions have been asked in dozens of large-scale surveys worldwide, and these data highlight systematic relations between trust and various dimensions of economic and social well-being. The paper concludes by noting the limits of available evidence and the scope for improvements through better survey design and more comparable survey questions.

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1. Introduction

1. Trust is the foundation of most personal relationships, which in turn are key determinants of human well-being and economic development. Theoretical and empirical analysis shows that high levels of interpersonal trust make many aspects of life more enjoyable and productive. Trust, if it is matched by trustworthy behaviour in others, reduces the costs of dealing with risks and uncertainty (Helliwell, 2001).

2. Generally speaking, trust refers to the confidence that people have in others that they will act as we might expect. Hence, it reflects people's subjective perception of people's reliability. But the relevance of trust goes further than that: trust may be regarded as a key driver of progress within a specific society. Trust is often associated with the concept of social capital, and sometimes it is even considered a proxy for it. Indeed, several authors have focused on trust when studying social capital and the determinants of human well-being.¹ Arrow (1972), for example, remarked that much of the economic backwardness in the world can be explained by the lack of mutual confidence and trust. Since then, scholars from different fields have investigated the role of trust for economic and social development.

3. Trust is a multidimensional concept. It can refer to trust in people belonging to different groups, to family members, and even to private organisations and public institutions. Because of its complexity, the notion of trust has generated much discussion in the literature. This paper provides an overview of how trust has been defined and measured, focusing on the relationship between trust and some of the relevant dimensions for the progress of societies, such as economic growth, individual well-being and governance.

4. The level of trust differs among people within a society, and among neighbourhoods and societies. Some measures of trust also display some variation over time. Much of the efforts to analyse trust have been directed towards understanding which circumstances will promote trust and which will stifle it. Even if trust improves social and political interactions, it is not always good or necessary. On the contrary, a certain level of distrust may be necessary to cope with everyday life and to be protected from abuses stemming from market and political power. To evaluate the role of trust it is of paramount importance to assess the relationships between trust and other dimensions of human well-being.

5. The paper proceeds as follows. Section 2 defines the context of the analysis, starting from the more general concept of social capital and highlighting the way trust relates to it. Section 3 examines and classifies different definitions of trust provided in the literature. Section 4 reviews how different forms of trust are being measured in practice while Section 5 analyses the main factors which can foster or stifle the accumulation of trust. Finally Section 6 explores the link between trust and some dimensions of a country's progress and Section 7 concludes.

2. From general to specific: social capital and trust

6. Several theoretical contributions have underlined the important role of trust as either an element of social capital or as one of its key determinants. The concept of social capital has been studied within different theoretical traditions, and this heterogeneity has led to a vast and sometimes confusing literature.

¹ See, among others, Arrow (1972, 1974), Luhmann (1979), Dasgupta (1988), Gambetta (2000), Fukuyama (1995), Knack and Keefer (1997) and La Porta *et al.* (1996).

While first discussed in the fields of sociology and political science², the concept of social capital has also influenced economic research, as it suggests a different understanding of human actions than that embodied in traditional economic models. In the social capital perspective, individuals not only contribute to modify the environment (social, as well as natural) where they live, but their actions are also shaped by a range of societal factors. The concept of social capital hence allows going beyond the forms of capital (natural, physical and human) that are traditionally considered in economic theory, to account for a range of aspects and patterns in social interactions that are ignored by conventional economic models (OECD, 2001).

7. The social capital literature has drawn attention to the network of relationships of each person, and to the resources embedded in these relations. At the individual level, emphasis is given to the actual and potential benefits that one draws from formal and informal ties with others (Burt, 1992). At the collective level, these relationships are typically regarded as enabling collective actions and improving social outcomes (Freel, 2000; Nahapiet and Ghoshal, 1998). Social capital has also been examined in terms of its impact on the well-being of regions and/or societies (Bourdieu, 1986; Coleman, 1990; Putnam, 1993a and 1993b, Helliwell and Putnam, 2004) suggesting its potential importance for economic growth and sustainable development.

8. Lydia J. Hanifan (1961) provided one of the first systematic references to the concept of social capital in 1961, when drawing the attention to the importance of community participation in enhancing school performance³. The idea of social capital came back to life and received more credit with the theoretical contributions of Bourdieu (1986), who viewed social capital as an individual resource which is used for private purposes. This approach, however, effectively ignores trust and cooperation and differs from the research that draws attention to the spill-over effects of social interactions, hence considering social capital as a resource of the entire community rather than of the person possessing it. In the rest of this section, the focus of the discussion will be on those theories that consider trust as a key element of social capital.

9. One broad distinction within the social capital literature is between those theories that stress the role of networks and relationship among people and those that emphasise the importance of shared norms.

- The first interpretation, developed by Coleman (1988, 1990) within the framework of the sociology of rational choice, considers networks as a source of social capital and emphasises the relations that people have within each network. Coleman defines social capital as the component of human capital that allows members of a given society to trust one another and to co-operate in the formation of new groups and associations. In Coleman's perspective, individuals do not act independently of each other but develop trust through continuous interactions. Social capital, in contrast to physical and human capital, is embedded in the relationships among individuals. In other words, the patterns of social organisations and interactions determine social capital. In Coleman's perspective, the degree of trustworthiness of social organisations is the most important form of social capital.
- Putnam (1993b) and Fukuyama (1995) shifted the focus to the cultural dimension of social capital, by emphasising the inclination of people toward co-operation, trust, reciprocity and civic associations. Both authors stressed the willingness of people to co-operate with each other, and underlined how trust among individuals is rooted in a shared culture. Putnam (1993b) first

² Sociologists tend to view social capital as an intangible resource that individuals can achieve through their social networks and strategically use to their own advantage. Conversely, political scientists tend to associate social capital with community engagement and participation in political institutions.

³ Hanifan was a superintendent of schools in West Virginia.

suggested an idea of social capital that has greatly influenced the research that followed, and that has since become the most recognised approach. In his comparative study of regional performance in Italy over a period of nearly 20 years, Putnam argued that the success of governments depends in a large part on the horizontal ties between people and elected officials.⁴ Putnam defined social capital as referring to those “*features of social life, networks, norms and trust that enable participants to act together more effectively to pursue shared objectives*” (Putnam, 1993b). In this approach, trust is an outcome of networks and norms, which both serve as a prerequisite for building trust (Roth, 2006). This perspective is further elaborated by Fukuyama, who stressed the integration of social capital and trust. Fukuyama defined social capital as “*an instantiated informal norm that promotes co-operation between two or more individuals*” (Fukuyama, 2000). The norms that constitute social capital can range from reciprocity among friends, to complex and articulated doctrines such as religions. Building on this perspective, trust may be regarded as enforced not only for instrumental reasons – *i.e.* one person co-operates with another because this facilitates the attainment of his personal goals – but also because shared norms may enhance the chances of social punishment in the event of non-cooperative behaviours (Guiso *et al.*, 2004).

10. OECD (2001) provided a definition of social capital that is very close to the formulation proposed by Putnam.⁵ This definition recognises that both networks and shared norms play a role in creating the conditions for co-operative behaviours among people based on trust, and it is very close to the definition given by the World Bank.⁶

11. Starting from these definitions, several authors have further developed the concept of social capital emphasising the specific role of trust. For example Alesina and La Ferrara (2002) agree with Putnam in considering trust as one of the major components of social capital. They argue that social capital enhances economic growth first by improving the functioning of public institutions, and second by facilitating economic transactions, especially in complex areas such as financial markets, thereby reducing the effect of market failures.

12. Paldam and Svendsen (2000) instead, *define* social capital as the level of trust within a group, rather than just as one of its components, where the group may extend to the whole society. This definition reduces *de facto* social capital to trust and implies that measures of trust provide the best single indicator of the level of social capital in a group. This reductionist definition of social capital is not the one shared by most authors (nor is the one used in this report), which rather regards trust as one of the most important components of social capital, but is very influential in empirical research where very often trust is used as a proxy to measure social capital. It is thus essential to reach a common view on how to define and measure trust, and how to differentiate this from other components of social capital.

⁴ Putnam studied the economic and political performance of regional governments in Italy (*regioni*) from 1970 to 1989. His study explained a large part of the difference in performance between Southern and Northern regions in terms of the presence of different types of networks. Putnam contrasted the greater efficiency of those regions in Northern and Central Italy where norms of trust and reciprocity derived from centuries of horizontal voluntary associations to that of southern regions that relied more on patron-client relationships.

⁵ Networks together with shared norms, values and understanding that facilitates co-operation within or among groups (OECD 2001: 41).

⁶ The World Bank suggests that “*social capital refers to the institutions, relationships, and norms that shape the quality and quantity of a society's social interactions. [...] Social capital is not just the sum of the institutions which underpin a society – it is the glue that holds them together*”. <http://go.worldbank.org/K4LUMW43B0>

3. What is trust?

13. As shown in the previous section most authors regard trust as a key component of social capital. Therefore, before investigating the relationship between trust and the progress of societies in more detail, it is important to better understand what it is meant by *trust*. Many researchers have given specific definitions of trust, sometimes arriving at different conclusions. This depends on the multidimensionality of the concept, but also on the fact that the label “trust” is sometimes used to describe a variety of very different phenomena, such as morality, empathy, reciprocity, civility, respect, solidarity, tolerance and fraternity.

14. Most definitions of trust are based on the concept of individual expectations and, in particular, on the confidence that others will act as we expect. Arguing on these lines, Sarageldin and Dasgupta (2001) described trust as “*the expectation of one person about the action of others that affects the person's choice*”. Gambetta (2000) gave a similar definition, while also introducing the concept of subjective probability: he described trust as the subjective probability with which a person (or a group) assesses that another person (or a group) will perform a particular action, with this subjective probability influencing a person's own actions. In this perspective, trust is important because it allows this kind of assessment before the person can actually observe such action, or even independently of his capacity to monitor it. A slightly different definition was given by Fukuyama (1995), who introduced the concept of shared norms, defining trust as the expectation that arises within a community when other people behave in predictable, honest and co-operative ways. This expectation is typically rooted in people's adherence to a shared set of norms.

15. A different perspective is provided by Williamson (1993), who explained trusting behaviour in terms of a calculative response to the incentive structure confronting each person, where this incentive structure encompasses material, social and psychological rewards. Hence, Williamson used the term trust to describe personal relationships like friendship, love and kinship, or features of the institutional environment in which contracts and transactions are embedded. The trading networks of diamond dealers, which allow them to monitor each other closely and to operate with high levels of trust (Granovetter 2005), is one example of these types of relations.⁷

16. Beyond this great diversity of definitions, it is possible to conceptualise the terms of trusting relationships as “**A trusts B to do X**” (Hardin, 2004). This general formulation sees trust as the relation between two parties concerning a particular action or range of actions (Kohn, 2008). Depending on the characteristics of A and B, and on who the trust is directed to, it is possible to distinguish different forms of trust. This allows moving beyond the various “labels” used by various authors in this field, so as to identify the relationship between the various definitions.

- **Interpersonal trust** is distinguished by several authors according to whether it is directed to relatives or friends, on one side, or to strangers, on the other.⁸
 - Putnam uses the term **thick trust** when A and B are relatives or friends. This thick trust is based on experiences embedded in personal roots and relationships, and is generated by networks of kin and friends. Conversely, when A and B are people who do not know each other there is **thin trust**, which is based on reputations, norms and signals such as appearance or demeanour.

⁷ This view is based on the assumption that the networks internalizing norms discourage free riding and emphasize trust.

⁸ The term Social trust is sometimes used to describe a combination of interpersonal trust and civic engagement (Putnam, 2000; Blind, 2006). Other authors often use the terms interpersonal trust and social trust as synonyms. For instance the Rosenberg question (see section 4.1) is often considered by some authors as a measure of either interpersonal trust or social trust

- Uslaner (2002) distinguishes within the broad category of interpersonal trust (which he calls generalised trust) between **strategic trust** (when A trusts someone that he or she knows personally) and **moralistic trust** (when A trusts a stranger).
- **Political trust** (also called by some authors **systemic trust**) can be divided into a macro and micro component according to whether it describes trust in the political system and its institutions or trust in the personnel in charge of these institutions.
 - At a macro level, this type of trust is often referred to as **organisational or institutional trust**. This definition reflects an issue-oriented perspective, whereby citizens trust or distrust government or institutions because they are satisfied or dissatisfied with the current policies (Blind, 2006). Normally, institutional trust is used to analyse citizens' trust in institutions⁹ such as the parliament, the police, the armed forces and large companies (Luhmann 1979, Roth 2006); however, it can also refer to citizens' trust in private companies (see, for instance, the Edelman trust barometer survey).
 - At a micro level, this type of trust is sometimes referred to as **individuals' political trust**. This kind of trust is directed toward specific political leaders and it involves a person-oriented perspective. In this perspective, people trust or distrust government or institutions because of their approval or disapproval of specific political leaders (Blind, 2006).

17. The relations among different forms of trust are not always clear or explicit. Fukuyama (2000) illustrates the relation between thick and thin trust using the concept of “radius”, defined as the circle of people among whom co-operative norms operate. Building on this distinction, Fukuyama suggests that, in many Latin American societies, a narrow radius of trust produces a two-tier moral system, with high thin trust and good behaviour reserved for family and personal friends, and a lower standard of trust applied to interactions with strangers and public institutions. This two-tier moral system provides, in Fukuyama's opinion, a cultural foundation for corruption.

18. Although interpersonal trust and institutional trust are not mutually exclusive (Blind, 2006), there is continuing controversy in the literature about the causality of the relationship. On one side, as pointed out by modernization theorists, interpersonal trust is influenced by increasing political and social participation. Contacts with other members of the community allow people to know each other better and to improve their level of trust; in turn, this positive disposition, derived from their civic experience, is often extended to strangers (Fukuyama 1995, Levi 1997). However civic participation doesn't necessarily increase institutional trust. Veenstra (2002), for instance, argues that, in Canada, participation in civil society organizations increases interpersonal trust but not institutional trust. Similar conclusions are reached by a broader group of scholars (the called “new-institutionalists”, *e.g.* Blind, 2006) who maintain that a trustworthy government generates interpersonal trust, rather than the other way around. Evidence of the relation between interpersonal and institutional trust is described in Section 4.3 of this paper.

⁹ In this case A (an individual) trusts the institution B to do X, where X is the constitutive mission of B. So for example a citizen trusts police to protect him from crime.

4. Measuring trust

19. The different forms of trust can be measured in different ways. This section describes how trust has been measured in household surveys, and the methodological issues that arise. In particular, this section will stress that interpersonal trust and institutional trust are different concepts that need to be operationalised in different ways. The need for distinguishing them lies in the fact that they enter people's lives in different ways, and that they have different effects on various dimensions of a country's progress.

4.1. Interpersonal trust

20. Interpersonal trust has been used in many studies as a proxy for social capital (UK National Statistics, 2001).¹⁰ In fact, its widespread use in research largely depends on its interpretation as a "quick and dirty" proxy for social capital (Halpern, 1999). Interpersonal trust is relatively easy to measure, and indeed, questions on interpersonal trust have been used in many different surveys. Nevertheless, interpersonal trust is also a multidimensional concept (see Section 3), and its measures should reflect such multidimensionality: single item measures of interpersonal trust will likely fail in capturing this multidimensionality, potentially leading to measurement errors (Renno and Castro, 2008).

21. Most of the existing national or cross-national studies on trust (see box 1) rely on the Rosenberg question as single measure to test theories that relate interpersonal trust to other dimensions of a country's progress such as economic growth and personal well-being. However, as already noted above, this is a simplification of the problem because different dimensions of trust – towards family members, neighbours, strangers, colleagues, employers, police, etc. – are independently important for well-being.¹¹

22. The summary indicator based on the Rosenberg question (see box 1) allows comparing the level of interpersonal trust of communities across time and space. Figure 1 shows how interpersonal trust compares across countries based on data from the WVS. Levels of interpersonal trust are very different from country to country. People in Norway, Sweden and Denmark report the highest levels of trust in other people (more than 60% of interviewed answered that most of people can be trusted) while Turkey, Rwanda and Trinidad and Tobago are those with the lowest level of interpersonal trust (5% or less think that most people can be trusted). Most OECD countries have level of interpersonal trust higher than the world-average, but there are exceptions such as Mexico, Portugal and Turkey. On average, the level of trust among OECD countries is similar to the world average.

¹⁰ In this paragraph the term "interpersonal trust" is used to indicate trust in others than friends and relatives (thin trust). Though the term thin trust would have been more appropriate, it could have generated confusion because interpersonal trust is the term generally used and accepted in most of the literature on the subject.

¹¹ For a review of independent effects of several measures of trust, see Helliwell and Putnam, 2004.

Box 1 – Interpersonal trust: cross countries surveys and main questions

The **World Values Survey** (WVS) is the most commonly used cross-country survey to measure interpersonal trust.¹² The World Values Survey grew out of the European Values Survey (EVS) in 1981. The WVS is a worldwide investigation of socio-cultural and political change. It is conducted by a network of social scientists at leading universities all around the world (<http://www.worldvaluessurvey.org>). The second wave of the WVS was carried out after about ten years in 1990. Since then three further waves followed at intervals of approximately 5 years.

The WVS relies on the question developed by Rosenberg (1956): “*Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?*” to measure interpersonal trust¹³. The main indicator resulting from Rosenberg’s question is the percentage of people who reply “most people can be trusted”.

The WVS also collects a set of questions on trust in different groups of people such as neighbors, people you know personally, people you meet for the first time, people of another religion and people of another nationality. This set of questions allows to measure different dimensions of trust.

The **Gallup World Poll** surveys each year since 2005 residents in more than 140 countries representing 95% of the world’s adult population. Gallup asks a standard set of core questions that have been translated into the major languages of the respective countries (<http://www.gallup.com/Home.aspx>).

The Gallup World Poll doesn’t collect the Rosenberg question regularly in its standard annual survey. In 2005 published a panel study¹⁴ based on this question and in 2009 collected the Rosenberg question to study the quality of data in order to evaluate the possibility to collect it systematically.

Gallup has also measured interpersonal trust using the wallet question: “*In the city or area where you live, imagine you lost your wallet or something holding your identification or address and it was found by someone else. Do you think your wallet (or your valuables) would be returned to you if it were found by a neighbor/the police/a stranger?*”¹⁵

The **Eurobarometer** program was launched in the 1970s. Currently, the Eurobarometer public opinion surveys are conducted on behalf of, and coordinated by, the European Commission, DG Communication - Public Opinion Analysis Sector. Primary data and documentation are stored at the ICPSR and at GESIS (<http://www.gesis.org/en/services/data/survey-data/eurobarometer>).

Eurobarometer uses a question that measures how much citizens of one country trust citizens of other European countries (i.e. “*I would like to ask you a question about how much trust you have in people from various countries. For each country, please tell me whether...*”).¹⁶

¹² Sapienza *et al.* (2007:2) reported that among more than 7,000 papers analysing the economic effects of trust, around 500 of these use data from WVS.

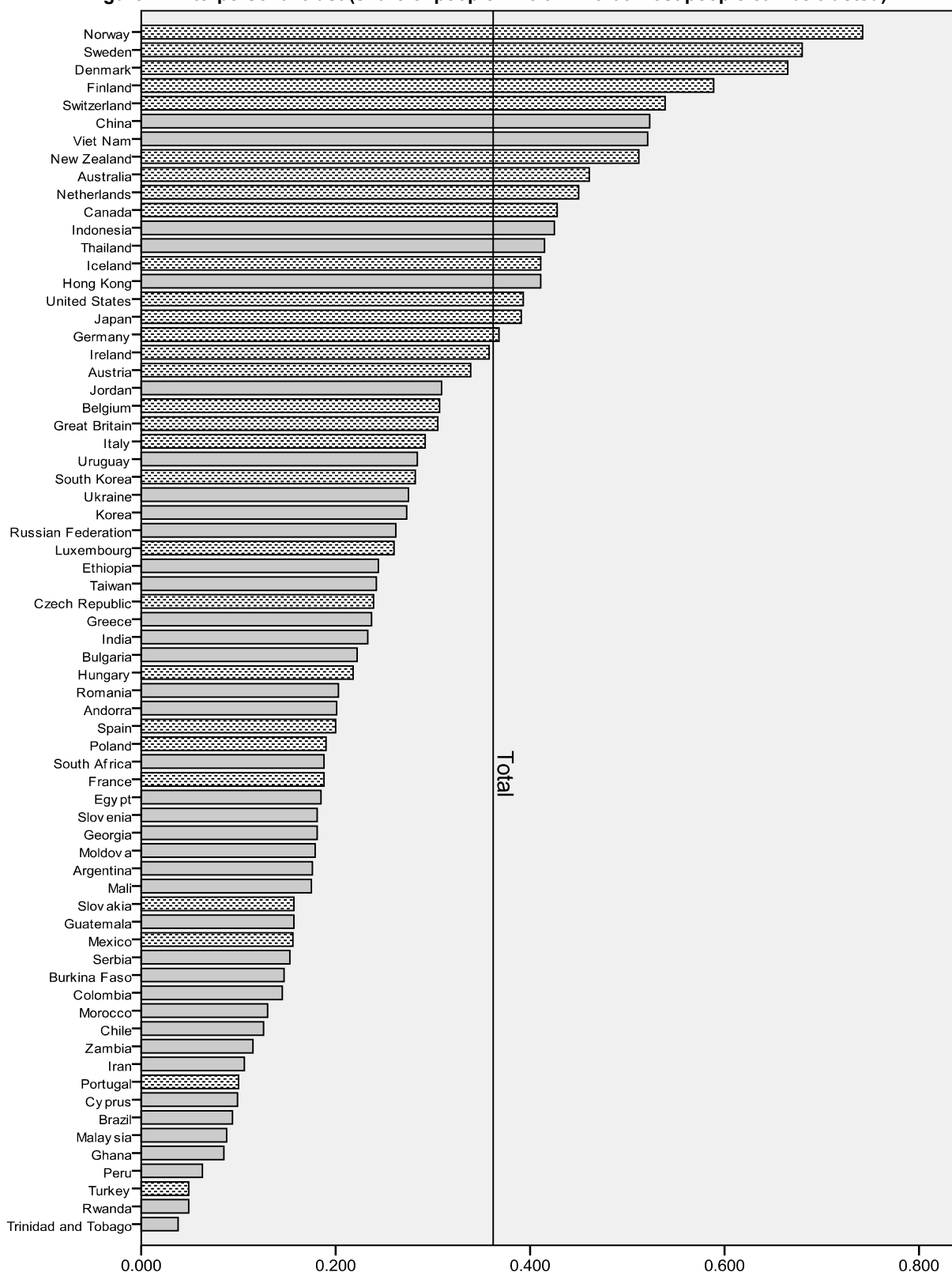
¹³ Possible answers: Most people can be trusted; Can’t be too careful; Don’t know.

¹⁴ <http://www.gallup.com/poll/18802/Gallup-Panel-People-Cant-Trusted.aspx>

¹⁵ Possible answers: Yes; No.

¹⁶ Possible answers: A lot of trust; Some trust; Not very much trust; No trust at all.

Figure 1. Interpersonal trust (share of people who think that most people can be trusted)



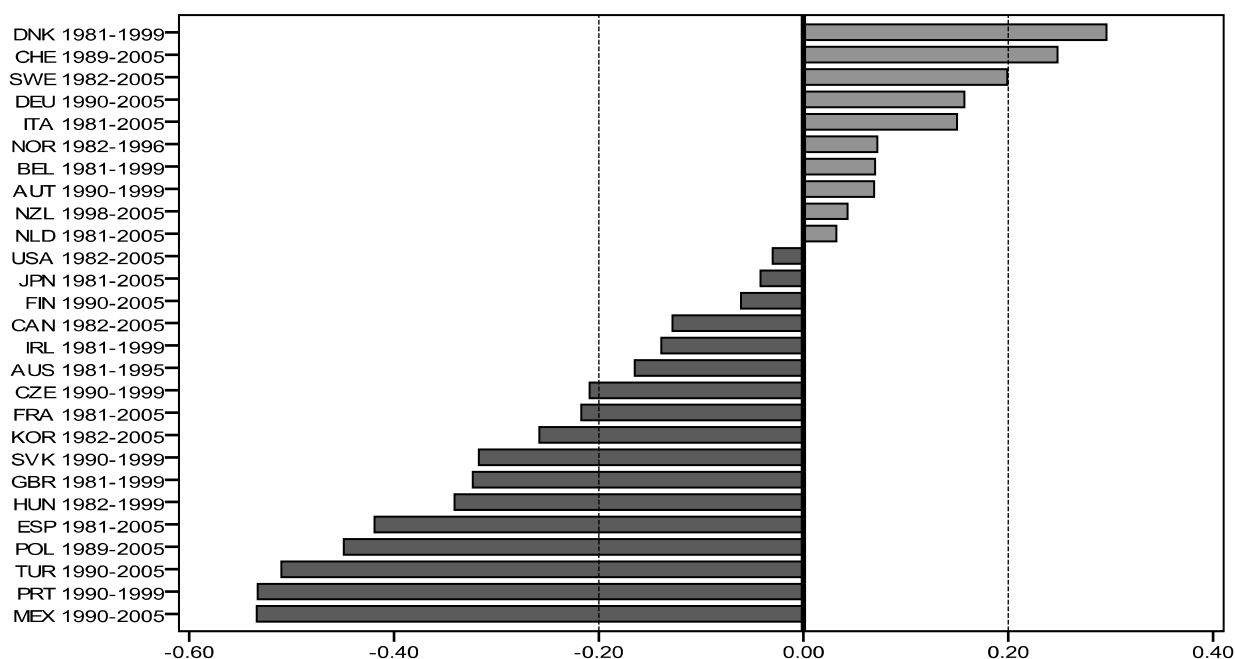
Source: World Value Survey, wave 2005-2008.

Note: The “dotted” bars refer to OECD countries. For Austria, Belgium, Czech Republic, Denmark, Greece, Hungary, Iceland, Ireland, Luxembourg, Portugal and the Slovak Republic, data refer to the wave 1994-1999. For Norway data refer to the 1996.

23. To explain these differences in country rankings, different arguments have been suggested. For example, Inglehart argues that societies with stronger self-expression values (*e.g.* tolerance of different groups, emphasis on civil and political freedoms) tend to rank higher on interpersonal trust.¹⁷ Indeed, the countries identified in the “Cultural Map of the World” as having strong “secular-rational” and “self-expression” values – mainly countries in Protestant Europe, like Sweden, Norway and Denmark but also Japan – have the highest levels of interpersonal trust according to Figure 1. On the other side, lay catholic countries which are characterised by low levels of both self expression and interpersonal trust. As Fukuyama argued, the main distinction is between high-trust societies, where trust extends beyond the circle of kinship, and low-trust societies, where trust is confined to blood relatives.

24. During the period covered by the WVS, interpersonal trust also appears to have changed significantly in several countries. Figure 2 shows that interpersonal trust has decreased by more than 20% (relative to the level recorded in the first survey available) in eleven countries, while it has increased by more than 20% in only three countries. In particular, interpersonal trust decreased by more than 50% in Mexico, Portugal and Turkey, while it decreased by more than 40% (in less than 20 years) in Poland and Spain. Only Sweden, Switzerland and Denmark show a significant increase in the level of interpersonal trust.

Figure 2. Change in interpersonal trust from the earliest to the latest survey in OECD countries. (Percentage difference base=earliest survey)



Source: World Value Survey, wave 2005-2008.

Note: For each country the years indicate the earliest and latest survey which collected information on interpersonal trust.

25. The Rosenberg question, however, does not operationalise interpersonal trust in a fully satisfactory way. Based on the formal definition of trust presented above (A trusts B to do X) the Rosenberg question fails in explicitly identifying who is B (a friend, a neighbour or a stranger) and in specifying the type of behaviour (X) expected from them. For example, do people answering the question

¹⁷ http://margaux.grandvinum.se/SebTest/wvs/articles/folder_published/article_base_54

think that other people can be trusted to give them directions in the street, to behave in socially acceptable ways, or to give them the details of their credit cards? In other words, this type of question provides no information on which aspects of trust the respondents are thinking of during the interview.

26. Glaeser *et al.* (2000), combining experimental and survey data, conclude that the Rosenberg question measures trustworthiness of other people more than trust *per se*. Their results show that when people answer the Rosenberg question they typically think of themselves. For this reason, Glaser *et al.* argue that the Rosenberg question is better in determining if the respondent is trustworthy rather than whether he trusts others. Glaeser *et al.* also argue that interpersonal trust should be measured using laboratory experiments, which have the virtue of measuring trust of individuals using homogenous groups of individuals and a standardised environment. However, laboratory experiments are difficult and costly to carry out while, from a practical point of view, self-assessments of trust are easy to answer and low-cost to collect. Glaeser *et al.*, recognising that survey data are easier to collect, suggest that surveys should implement questions on trust developed and validated empirically through other tools, such as questions about past trusting behaviour or behavioural questions.

27. Interpersonal trust has also been measured using different questions from the Rosenberg one. As shown in box 1 Eurobarometer uses a question that measures how much citizens of one country trust citizens of other European countries. This question has the advantage of identifying the person whose trustworthiness is being assessed but, as for the Rosenberg question, it fails to specify the type of behaviour under consideration. However, this question should be probably considered more as an indicator of stereotyped distrust with respect to specific ethnic groups or nationalities rather than providing information relevant for interpreting people's actual behaviour.

28. Readers Digest magazine conducted an interesting experiment in 1996. Several wallets containing 50\$ and ID of their fictitious owner were "lost" in strategic places in different cities in several countries. The percentage of returned wallet was then used to build an index of trustworthiness¹⁸. Another type of question that has been occasionally used to assess interpersonal trust and which is based on the same general idea is the so called *wallet question* (see box 1). The 2007 wave of the Gallup World Poll asked respondents in 86 countries whether it was likely that a neighbour, the police, or a stranger would return to the owner their lost wallet or valuables contained in them.¹⁹

29. The wallet question allows the measurement of different forms of interpersonal trust: a) trust in neighbours; b) trust in strangers; c) a particular aspects of institutional trust, *i.e.* trust in police staff. This question is also useful to assess the relations between specific forms of trust and other dimensions of progress. However, no survey has asked this question on a regular basis and even the 2007 Gallup data exclude several OECD countries such as the United States, Canada, Japan and others. These aspects hinder comparison between the Gallup data on lost wallet and those, based on the Rosenberg formulation, used in the WVS. The WVS has also a set of questions on trust towards specific others such as the neighbours, people you know personally, people you meet for the first time, people of another religion, etc. but, once again, the type of behaviour expected from them (our X) is not specified in this set of questions.

30. Gallup data on the wallet question show Austria, Finland, Ireland, New Zealand, Norway, and Switzerland in the top 10 of countries with the highest level of interpersonal trust for the three types of agents. Police and neighbours are trusted almost equally to return valuables in 21 countries, but in the majority of countries, citizens are more trusting of their neighbours than they are of the police. Not surprisingly trust in strangers is lower, but it is relatively high in countries such as New Zealand, Switzerland and Norway. However, in nearly 80 nations around the world, less than one-quarter of

¹⁸ http://www.readersdigest.ca/mag/1997/03/think_01.html

¹⁹ <http://www.gallup.com/poll/102346/Many-World-Citizens-Trust-Neighbors-More-Than-Police.aspx>

respondents believe strangers would return a lost wallet to its rightful owner. In Cambodia, El Salvador, and Laos, almost no one believes strangers would return valuables.

31. The wallet question is more specific and quasi-behavioural; in other terms, it has the advantage of clearly identifying both who is B and the type of action expected from them (*i.e.* to return a lost wallet or valuables). While the Rosenberg question may reflect cultural attitudes, the wallet question is based upon experience and seems more plausible as an indicator of the respondent's expectations and of the trustfulness in others that he or she is likely to exhibit in daily interactions (Soroka, Helliwell and Johnston, 2007).

32. The relationships between Rosenberg and wallet questions have been explored in a study by Soroka, Helliwell and Johnston (2007). Table 1, reproduced from this study, shows the high level of overlap between these two questions. In general, people who think that a wallet is likely to be returned, are 30 points more likely to say that "people can be trusted" and 30 points less likely to say "you can't be too careful". The wallet item with the least discriminatory power to distinguish between trustful and trustless people refers to the police; a reflection of how ubiquitous is trust in the police. The other three items - even when referring to strangers - show equal capacity to discriminate. However the authors point out that these discrepancies are also higher than what can be expected from random measurement error. They conclude that the Rosenberg question could be related to Uslaner's "*moralistic trust*" that it is the sort of behaviour people learn in church or at school. This may invite responses that describe what people *should think* rather than what they actually *do think*. On the contrary the wallet question refers to "*strategic trust*" and it is closely linked to everyday experiences and influenced by neighbourhood context (Soroka, Helliwell and Johnston, 2007).

Table 1. Relationships between Rosenberg question and wallet question

Wallet Question	Rosenberg question		
	Can't be too careful	Most people can be trusted	
	NEIGHBOUR		
Not at all likely	65.5% (359)	34.5% (189)	$\chi^2 = 170.8$ p < .001
Likely	34.5% (688)	65.5% (1,307)	
	CLERK		
Not at all likely	66.8% (268)	33.2% (133)	$\chi^2 = 129.8$ p < .001
Likely	36.6% (879)	63.4% (1,522)	
	POLICE		
Not at all likely	65.5% (146)	34.5% (77)	$\chi^2 = 56.8$ p < .001
Likely	39.7% (1,192)	60.3% (1,811)	
	STRANGER		
Not at all likely	60.8% (996)	39.2% (643)	$\chi^2 = 155.8$ p < .001
Likely	27.6% (124)	72.4% (325)	

Source: Reproduced from Soroka, Helliwell, and Johnston, 2007.

Note: Cells contain row percentages with counts in parentheses.

33. In conclusion, the Rosenberg question should be used when there is need to evaluate if in a country there is a system of beliefs and values that foster trust and co-operation among its members. On the contrary the wallet question should be used to measure level of trust to specific subjects in practical

situations. Nevertheless the high level of overlap between the two questions justifies the use of the Rosenberg one when more specific information is not available.

4.2. Institutional trust

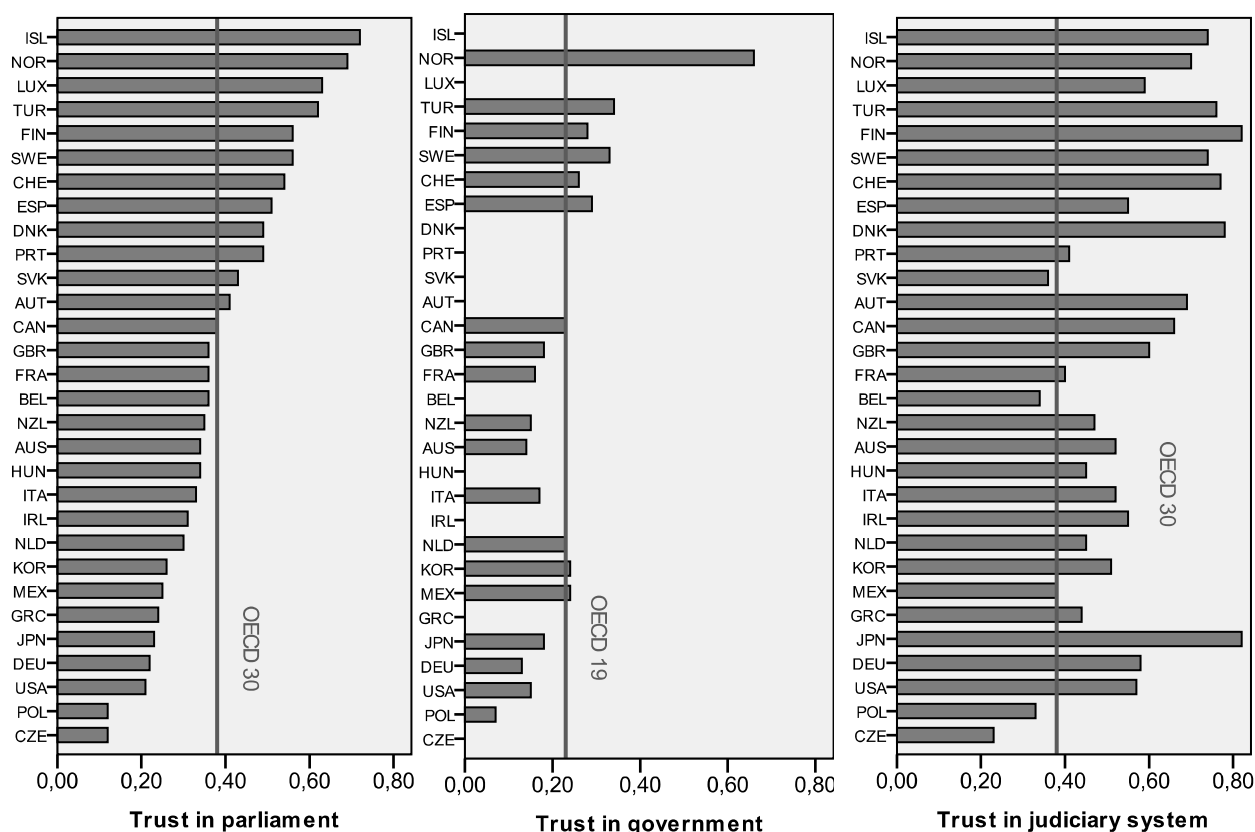
34. Trust in political institutions measures the degree in which individuals have confidence in the institutions (government and parliament) and public administration of the country where they live (OECD, 2007). Institutional trust is essential for the stability of societies and for the functioning of democracy.

35. Institutional trust is generally measured through surveys asking individuals to rate their confidence in a number of organisations. There are many surveys undertaken by governmental and nongovernmental organizations that give information on institutional trust in the developed world. These include those undertaken by the World Economic Forum, the Australian Government Information Management Office (AGIMO), the United Nations Online Network in Public Administration and Finance (UNPAN) and the United Nations Development Program (UNDP).

36. The WVS also asks individuals to rate their confidence in a large number of institutions and organisations starting from the parliament, which is the central representative institution of democracies, and including government, civil service, political parties, armed forces, police, press, churches, labour unions, the justice and education systems (see Appendix 1). There are large differences across OECD countries in terms of citizens' trust on different institutions. On average, 38% of individuals across 30 OECD countries reported a high trust in parliament but with large differences between countries (Figure 3). Trust in parliament is high in Iceland, Norway, Luxembourg and Turkey (more than 60%) but significantly lower in Korea, Mexico, Greece, Japan, Germany, United States, Poland and Czech Republic (less than 25%).

37. Confidence is generally lower for governments than for parliaments, with only 23% of citizens of the nineteen OECD countries considered reporting a high level of trust. Across countries, the correlation between trust in parliament and trust in government is quite strong, and the ranking of the countries is pretty much the same (but comparison is limited by the different geographical coverage of the two indicators). Cross-country differences are also sizable when considering the perception of citizens on the functioning of the judiciary system. On average, confidence in the judiciary is much higher than in the case of the legislative and executive branches of governments, with 55% of respondents across thirty OECD countries reporting a high level of trust in this institution, varying from more than 80% in Finland and Japan to less than 35% in Poland and the Czech Republic. While the level of trust in each country varies significantly with respect to the institution considered, the judiciary system is always the most trusted institution. For instance, Japan combines very low trust in parliament and government but high trust in the judiciary system.

Figure 3. Institutional trust in OECD countries. Share of people expressing “high” confidence in each institution



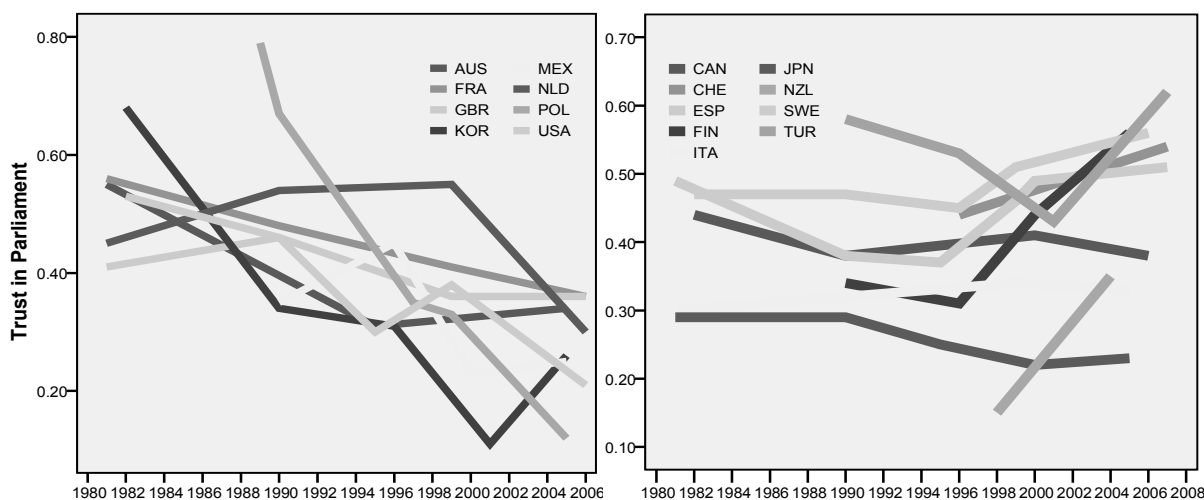
Source: World Value Survey, wave 2005-2008.

Note: For Austria, Belgium, Czech Republic, Denmark, Greece, Hungary, Iceland, Ireland, Luxembourg, Portugal and the Slovak Republic data refer to the wave 1994-1999; for Norway, data refer to the 1996. The indicators refer to the share of respondents indicating either “a great deal” or “quite a lot of confidence” in the parliament, the government and the political parties.

38. An important empirical question is whether citizens’ trust in political institutions has changed over time. Modernisation theorists like Almond and Verba (1963) and Finifter (1970) argue that higher levels of political participation are associated with higher levels of institutional trust. This view remains, however, quite controversial as other studies associate a more active political involvement with *lower* political trust. In particular, higher levels of education and the diffusion of information may lead citizens to a more critical judgement of political institutions (see Section 5.3).

39. Since the mid-1960s several studies have shown decreasing institutional trust in government and political institutions in all the advanced industrialised democracies (Dalton and Wattenberg, 2000). Data from the WVS shows how trust in parliament – which is considered here as the key representative institution of democracies – has changed in the last 20 years in seventeen OECD countries. Cross-country differences are important. A first group of countries shows a pronounced decline in trust in parliament: these include Poland, Korea, the United States as well as Mexico, France and the Netherlands. A second group of countries – in particular Sweden, Turkey, New Zealand and Spain – shows increasing or constant levels of trust in parliament (Figure 4).

Figure 4. Trends in trust in parliament in selected OECD countries



Source: World Value Survey, different waves.

Note; This figure considers only OECD countries for which data from the last wave of the WVS were available.

40. Similarly, the Gallup Word Poll measures citizens' confidence in key institutions such as the military, the judiciary and courts, and national governments, as well as confidence in the honesty of elections (see Appendix 1). The data from these questions are aggregated by Gallup in a composite National Institutions index²⁰ (Gallup, 2008). According to this index Finland, Denmark, Norway and the Netherlands are the countries with the highest level of trust in institutions while Hungary, Czech Republic and Korea are those at the bottom of the list. Both Spearman's rho and Kendall's tau, calculated on countries ranked according to trust in Parliament and the National Institutions index, show a moderate correlation because the National Institutions index take into consideration also other institutions as well as citizens' perception of the honesty of elections (see appendix 1).

41. Eurobarometer (EB)'s standard survey also includes a specific set of questions on trust in European institutions²¹, which is collected twice every year since 1999 with a harmonised methodology. Data collected in autumn 2008 showed that 47% of the Europeans trusted the European Commission and 51% the European Parliament but trust in these institutions was declining compared to autumn 2007. Finally the EB provides also information on trust in statistics which is an important dimension of democracy (see Box 2).

²⁰ Index scores are calculated at the individual record level using the following procedure: the four items (see appendix 1) are scored as 1 in case of positive answers and all other answers (including "don't know" and "refused") are assigned a score of 0. Missing items are not included in the calculation. An individual record has an index calculated if it has valid scores for at least three questions. A record's final index score is the unweighted mean of valid items multiplied by 100. The final country-level index score is the mean of all individual records for which an index score was calculated. Country-level weights are applied for this calculation.

²¹ http://ec.europa.eu/public_opinion/archives/eb/eb70/eb70_en.htm

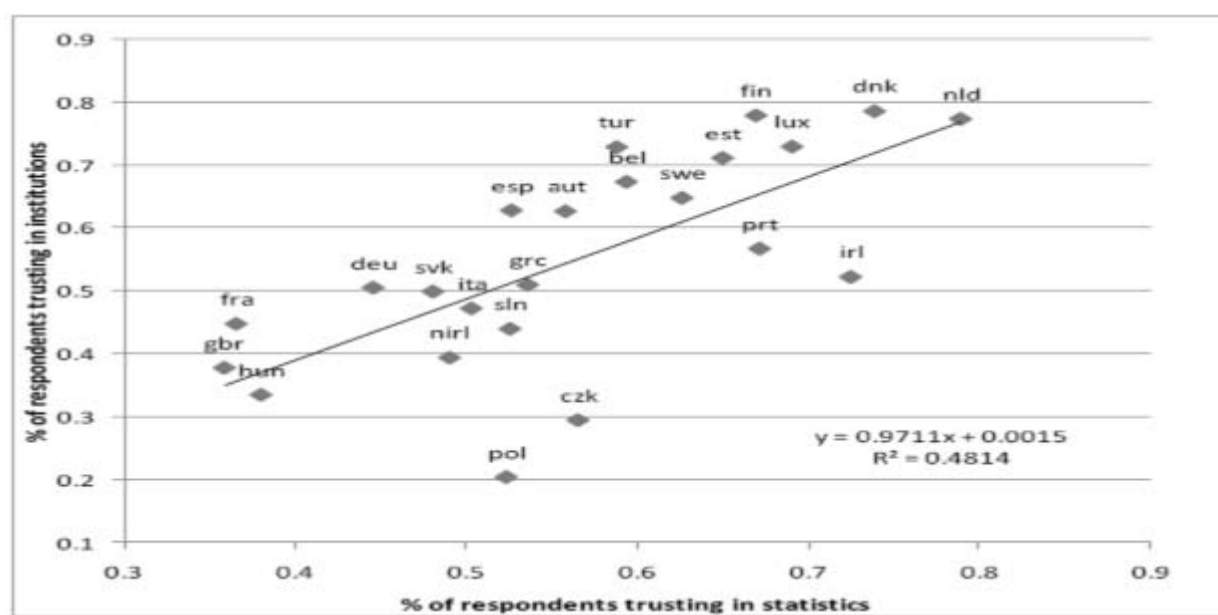
Box 2 - Trust in statistics

Statistical information plays an important role in measuring the outputs/outcomes delivered by various policies. In fact, in a world of costly information, citizens will usually spend more time informing themselves about their own private purchases than about public policies, where their efforts will have little effect on outcomes. Therefore, voters, like shareholders of a large firm, face the difficult task of monitoring the activities of large hierarchies staffed by people who have information and expertise that is unavailable to the average voter. The relation between the trust in statistics and in governance institutions is therefore important (Giovannini, Oliviera and Gamba, 2008).

To this aim, a new question on trust in official statistics was included among the questions on trust in institutions collected by Eurobarometer in surveys carried out in April and May 2007. This survey covers the population aged 15 years old and over of various EU nationalities resident in each state.

The chart below displays a positive relation between trust in statistics and trust in political institutions across OECD countries. In the top right of the figure, the Netherlands, Finland and Denmark have the highest percentage of respondents having both trust in statistics and in institutions; conversely, France, the United Kingdom and Hungary have the lowest percentage of trust in both. Poland and the Czech Republic are outliers because a quite high trust in statistics is not matched by a comparable level of trust in political institutions.

Trust in Statistics vs. Trust in Institutions



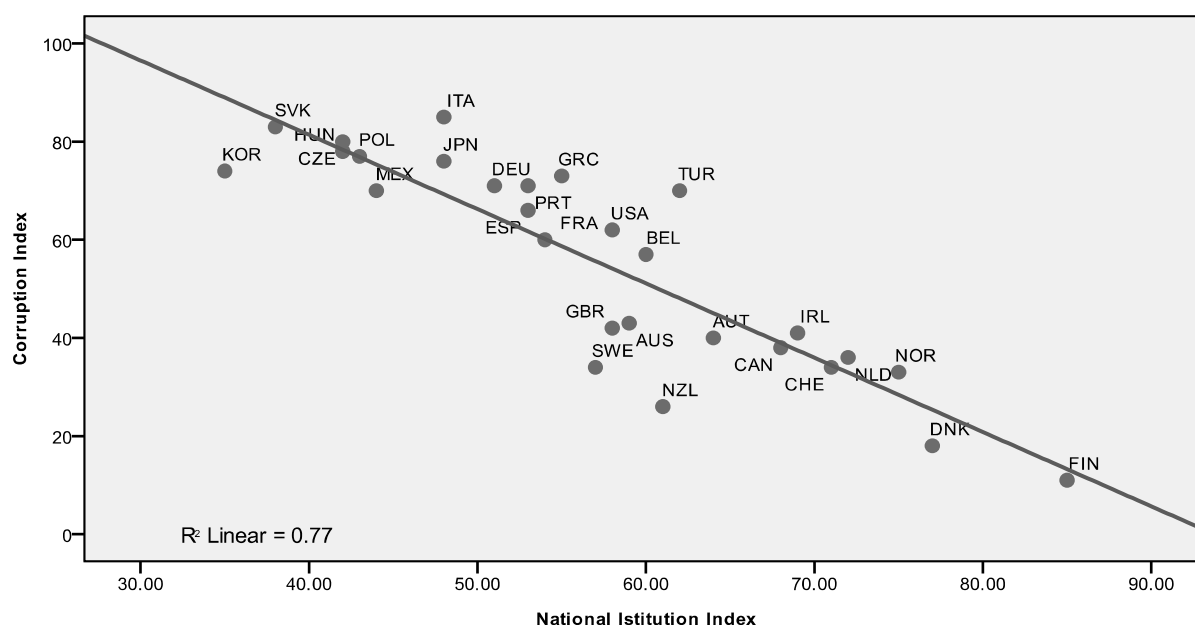
Source: Eurobarometer survey, 2008

42. Both the Gallup World Poll and the WVS use a common methodology and questionnaire, which allow comparing results among countries and over time. The Gallup World Poll presents the additional advantage that it collects data every year and for a larger number of countries, allowing wider and more timely comparisons. Moreover the Gallup collects additional information on factors influencing institutional trust such as perceived corruption. These data show that institutional trust is closely related to perceptions of corruption. Political corruption – the misuse of public office for private gain – is one of the most important factors contributing to lower institutional trust in both the developed and the developing world (Blind, 2006). Perceived corruption is important, as it is not enough for political leaders and institutions to fight corruption: they also have to avoid appearing as corrupt (Warren 2006). Indeed

perceived corruption has a strong effect on institutional trust even when the episodes of corruption cannot be identified easily.

43. Many different initiatives measure perceived corruption²². The Gallup World Poll uses two questions on corruption in businesses and in the government: this allows building an aggregate corruption index²³. Figure 5 shows a strong negative correlation between the Gallup National Institutions Index and the Corruption Index: countries with a high level of perceived corruption (like the Slovak Republic, Poland, Hungary, Korea and Italy) have below-average levels of trust in institutions, while countries scoring a low level of perceived corruption (like Norway, Denmark, and Finland) have much higher levels of institutional trust. Unfortunately, the lack of information on interpersonal trust in the Gallup world poll makes impossible to study the relationships between these three factors and, in particular, to analyse the effect of corruption on interpersonal trust.

Figure 5. Correlation between National Institutions index and corruption index in 28 OECD countries²⁴.



Source: Gallup World Poll, Year 2007

44. The WVS, the Eurobarometer and the Gallup World Poll data on institutional trust cannot be easily compared with each other. First, there are differences in the wording of the questions: the WVS and the Gallup use the word “confidence” while Eurobarometer uses the word “trust”; the formulation of the question is also quite different (see appendix 1). Second, the response categories differ (with possible answers “tend to trust” or “tend not to trust” for Eurobarometer; “a great deal of confidence”, “quite a lot of confidence”, “not very much confidence” or “none at all” for WVS; and “yes” or “no” for Gallup). Third, the institutions analysed are quite different: the only institution that is surveyed by all three sources is national government, while few institutions are surveyed by two out of three sources.

²² See also <http://www.transparency.org/> and <http://www.worldbank.org/wbi/governance/wp-corruption.html>

²³ The index is based on two questions: Is corruption widespread within businesses located in your country or not? – Is corruption widespread throughout the government in your country or not?. It is calculated using the same procedure as for the national institutions index (see note 20).

²⁴ Gallup data are not available for Iceland and Luxembourg.

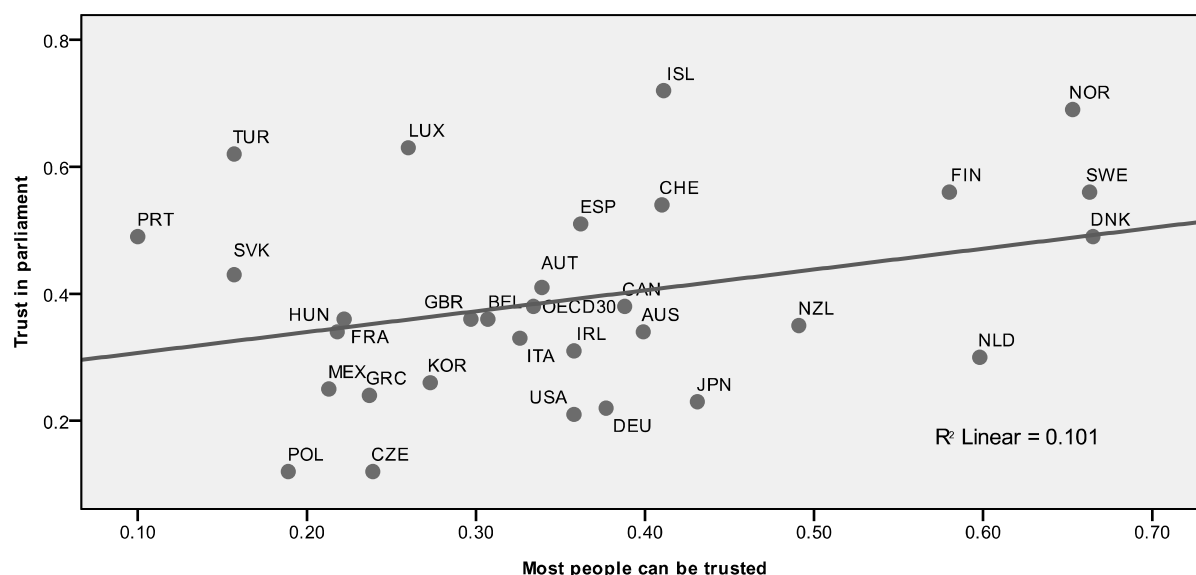
4.3. Relations between interpersonal and institutional trust

45. Very often measures of interpersonal trust – and in particular the Rosenberg question – are wrongly assumed to unravel the basic dispositions of individuals in a broad range of situations and interactions. In this perspective, the lack of precision in the way the Rosenberg question operationalises interpersonal trust is considered an advantage and this question is assumed to reveal the fundamental psychological identity of the people (Newton 2001). More precisely, measurers of interpersonal trust only inform about how people evaluate the trustworthiness of others in their community, and cannot be considered as an indicator of the psychological attitude towards the world.

46. As argued by Newton (2001), surveys that ask questions about both interpersonal trust and institutional trust highlight a weak or non-existent relationship between them. In other words, it is impossible to predict a person's trust in other people from their trust in government (and vice versa): these are different forms of trust that are largely independent of each other. Nevertheless, the analysis of institutional trust should focus attention not on individuals but on political systems as a whole. Even a lack of association between interpersonal and institutional trust at individual level can coexist with a positive relationship between interpersonal and institutional trust at the aggregate level, measured by averaging the interpersonal and institutional trust scores across all people in a country.

47. Figure 6 shows a weak positive association between interpersonal trust and trust in parliament for the thirty OECD countries considered. However, the relationship is weak and several countries appear as outliers. On one side, Turkey and Luxembourg show high trust in parliament but low interpersonal trust; on the other side, the Netherlands combine high interpersonal trust and low trust in parliament.

Figure 6. Correlation between interpersonal and institutional trust



Source: World Value Survey, wave 2005-2008.

Note: For Austria, Belgium, Czech Republic, Denmark, Greece, Hungary, Iceland, Ireland, Luxembourg, Portugal, Slovak Republic trust data refer to the wave 1994-1999. For Norway trust data refer to the 1996.

5. Factors increasing or stifling trust

48. Both individual and social characteristics, as well as their interactions, influence how much people trust each other. Trusting others may, in some communities, be a moral or cultural attitude, derived from past experience or tied to the composition of one's community. Alesina and La Ferrara (2000-2002) argued that trust towards strangers is mainly related to three factors: a) individual characteristics, such as education, income and race; b) belonging to groups traditionally discriminated against; c) the characteristics of the community to which people belong.

49. Homogeneity within a given community is a key factor in the development of trust because individuals tend to trust more those similar to them²⁵. From this perspective, interactions between people are an important factor to foster trust. People have more trust in others with whom they are used to interact. Thus, trust will be higher in more open societies that reward co-operative behaviours and encourage interactions among people. On the contrary, in close societies dominated by strong family ties and shared norms, and where social interactions among people are strongly formalised, interpersonal trust is less developed, and high level of thick trust (among relatives and people who belong to the same group) will coexist with low levels of thin trust (towards strangers). One example of the trust patterns that characterise closed groups is provided by the street gangs of New York, which exhibit a high trust within the group and low trust between groups, limited and regulated by the norms of the group.

50. Trust is influenced by the psychological process that allows recognising someone as similar to us. It is hence likely that variables such as age, gender, race, family status and education have an important role in its development.²⁶ From a general perspective, trust is influenced by the distances or similarities among people. These similarities can be assessed from several perspectives:

- *Geographic distance* has a significant effect on the level of trust of individuals. Such distance can be measured by the distance or proximity between countries, or by size of the community where people live, or by commonality between their languages, as aspect which is sometimes considered as an indicator of a common culture (Giuliano *et al.* 2006).
- *Somatic characteristics* provide a proxy measure of the distance between two populations based on the frequency of specific traits (hair, skin colour, etc.) present in the indigenous population: people tend to trust more others who look like themselves.
- *Evolutionary distance* is used as another proxy of cultural similarity between populations (Guiso *et al.*, 2007a; Ammerman and Cavalli-Sforza, 1985). Genetic distance (a measure of the similarity of genetic material between individuals of the same species) is highly correlated with several cultural distance measures, *e.g.* the population's linguistic roots.
- *Cultural roots*: Sharing the same upbringing origin (*e.g.* a French tradition) could also affect the level of trust. The same applies to religion.

²⁵ Bjørnskov (2006: 2) argues that “when people evaluate the actions of other individuals who are similar to themselves, they can relatively easily understand the background, situation and motives of the actions while the chances for misinterpretation and suspicion towards these motives are much more pronounced when people have to evaluate the actions of those who do not share their status, position in society, ethnicity”.

²⁶ Zucker (1986: 63) argues that the “greater the number of social similarities the more people assume that common background expectations do exist and hence trust can be relied upon”.

51. A key factor for increasing the level of trust is the extent to which a society can smooth the differences between social groups, *e.g.* by striving to achieve equal opportunities and strengthening co-operation. Knack and Zack (2001) showed that interpersonal trust towards others is higher in societies that are fairer, ethnically, socially and economically more homogeneous, and where legal and social mechanisms for constraining opportunism are better developed. In societies where minorities are historically discriminated against, discrimination plays a negative effect on the general level of trust of the society. Even when trust between members of the minority is high (*e.g.* as they need to protect each other from outsiders), the level of trust between the different groups may be very low. Indeed, those who dislike inter-racial contact will tend to trust other less the more heterogeneous their community is (Alesina and La Ferrara 2002). In general, it is possible to say that people have different “affiliations” (*e.g.* you can be both a migrant Indian and a Hindu), with different types of affiliation prevailing in different situations, with consequences for their effects (positive or negative) on trust and social capital.

52. Legal institutions and freedoms also play a central role in breeding trust. In a community where criminal behaviour is effectively prosecuted, for example, individuals will trust other people more because they will feel better protected against improper conduct. The level of civil liberties, along with the legal structure of a country, the security of property rights, the regulations of credit, labour and business, the quality of bureaucracy and of welfare provision, all affect the development of trust (Alesina and La Ferrara 2000-2002). Conversely, non-democratic societies breed distrust to justify and maintain oppressive measures that stifle freedom. For instance Gambetta (1988, 1990) argues that the Spanish, who controlled southern Italy before the unification in 1861, exploited distrust to destroy confidence between its people, in particular between Neapolitans and Sicilians, disrupting market functioning and undermining the rule of law. According to Gambetta, the biggest legacy of this political use of distrust was the flourishing of the powerful criminal groups that still affect Southern Italy.

53. Trust can also be affected by the media. In particular, information about other countries, or about specific groups or minorities, disseminated by the media can affect people’s opinions and feelings. For example, Guiso *et al.* (2007b) highlight the negative association between information about other countries (measured using press coverage) and trust towards people from other countries, as newspapers tend to report principally bad news nurturing negative stereotypes.

54. In order to conceptualize the way in which different factors affect the creation and destruction of interpersonal trust, Uslaner (2002) define individuals situated within the radius of a person’s group as belonging to his or her “moral community”. For this reason, religious and ethnic origins are important variables that can influence trust. The debate on the importance of religion remains, however, controversial. For example, Guiso *et al.* (2004, 2006, 2007a) believe that the same religion shared by a population creates a better level of interpersonal trust, while Alesina and La Ferrara (2000-2002) suggest that religious beliefs and ethnic origins do not significantly affect interpersonal trust. More detailed studies like those of Putnam (1993b) and La Porta *et al.* (1996) suggest that different religions have different impacts on interpersonal trust: in particular, hierarchical religion such as Catholicism and Islam discourage horizontal ties among people and hence the formation of thick trust; conversely, countries with large Protestant and Confucian populations are more trusting because these religions tend to encourage horizontal ties among citizens.

55. A vital civil society with a high level of interpersonal trust is a prerequisite for a good level of institutional trust. However, institutional trust also requires transparency and accountability of institutions. As argued above, institutional trust²⁷ can be destroyed by corruption (either real or perceived), which cast a shadow on the transparency of the institutions. Moreover institutional trust implies legitimacy, which embodies the consent that citizens accord to the ruling government and/or state institutions. If citizens

²⁷ This paragraph is a summary of the conclusions made by Blind (2006).

think that a government rightfully holds and exercises power, then that government enjoys political legitimacy and is perceived as trustworthy. Blind (2006) sums up that “*rule of law, an independent judiciary, free, fair and regular elections, legitimate parliamentary processes, a healthy civil society, fighting corruption and appearances of corruption, local governance and decentralization, and finally, e-governance all contribute to the enhanced transparency and accountability of the political system*”. Any political action with the intention of fostering trust and promote good governance has to be transparent and based on the principle of accountability.

6. The role of trust for the progress of societies

56. Societies are better off when their members co-operate than when they do not. Social science research further suggests that networks, norms and trust, which together form what is referred to as social capital, are essential prerequisites for co-operation. Researchers have argued that higher levels of social capital are associated with higher well-being, as well as greater economic development (Arrow, 1972; Fukuyama, 1995), more effective political institutions (Putnam, 1995), and lower crime rates (Hagan, Merkens, and Boehnke, 1995). This section reviews evidence on the relations between interpersonal and institutional trust and some dimensions of the progress of societies, as identified in the taxonomy created by the OECD Global Project on “Measuring the Progress of Societies”.²⁸ Much of this evidence suggests that trust is associated to a range of positive outcomes. While this research seldom allows determining whether the relation between trust and these other dimensions of societal progress is “causal” (rather than reflecting the importance of some other factor bearing on both), evidence of such associations is in itself an important finding that warrants attention.

57. The relation between different forms of trust and some particular dimensions of the progress of societies such as economic growth has been extensively researched empirically, while the relation between trust and other dimensions of progress are either unexplored or still unclear. Moreover, the word “trust” is often used in the literature in a generic way, without a clear assessment of which form of trust is under investigation. This makes it more difficult to assess which effects can be attributed to interpersonal trust and which to other form of trust.

6.1. Economic growth

58. A vast literature has documented the existence of a positive relationship between interpersonal trust and economic growth. This evidence is consistent with the intuition that when people trust each other more they are more willing to trade, which raises their economic well-being. Essentially, when **A** trusts **B** to do **X**, where **X** is an economic transaction, interpersonal trust facilitates co-ordination and co-operation for mutual benefit, reduces the incentives for opportunism, and helps finding solutions to collective action problems (Putnam, 1995; Roth, 2007). Other researchers have argued that the association goes the other way around, *i.e.* that high economic growth creates and is facilitated by geographical mobility, which in turn determines a higher level of interpersonal trust building relationships among people that reduce wariness of strangers.

59. Various theories have stressed the role of interpersonal trust in facilitating market exchanges. For instance, Arrow (1972) and Roth (2007) argue that trust improves the functioning of economic systems because market exchange requires, or is greatly facilitated by, trust. This has a direct effect on economic

²⁸

See www.oecd.org/progress/taxonomy

growth by reducing transaction costs and making possible types of organisations that are less encumbered by extensive rules, contracts, litigation and bureaucracy (Fukuyama 1995). Moreover, where there is a high level of trust there is less need to control possible malfeasance by partners, and more time to dedicate to other activities, such as innovation in new products or processes. Finally a higher level of interpersonal trust makes it easier to solve problems that require collective action (Whiteley 2000; Roth 2007).

60. Several studies provide empirical support to the notion of a positive relationship between trust and economic development. Tabellini (2006) analysed the correlation between culture (measured by trust, respect for others and confidence in individual self-determination) and economic development in a sample of European countries, showing that these variables favour economic development. These cultural traits are strongly correlated with economic development not just in European countries, but also in a broad sample of countries.²⁹

61. Trust influences economic growth also through its effect on financial markets and on the quality of public policy (Putnam 1993b). For example, Guiso *et al.* (2004) showed that social capital in general, and interpersonal trust in particular, plays an important role in financial development across Italy: in regions where social capital³⁰ is low, individuals tend to hold a much larger proportion of their wealth in cash, rather than using financial instruments such as stocks (Alesina and La Ferrara, 2002). On this point however, it would be useful to assess the role of human capital – in particular the individuals' level of education and skills – on trust in financial tools.

62. Empirical studies of the relation between interpersonal trust and economic growth, based on cross-country data from the WVS, have found a strong positive correlation between the percentages of individuals who trust others and the country's rate of economic growth. Knack and Keefer (1997), for example, show that an increase in one standard deviation in interpersonal trust at country-level predicts an increase in economic growth of more than one-half of a standard deviation. This result is supported by Helliwell (1996), for a smaller set of countries, and by Easterly and Levine (1997) and Rappaport (1999), who found that in several countries (including the United States) racial fragmentation reduces interpersonal trust and, through this channel, economic growth.

63. The WVS data show a significant correlation between interpersonal trust and levels of per capita GDP in OECD countries (Figure 8): countries with a higher GDP per capita have a higher level of interpersonal trust, with a stronger association ($R^2=0.58$) when excluding Luxembourg (a country that combines the highest GDP per head and a below average level of interpersonal trust).

64. Not all authors, however, agree on the existence of a positive association. An important distinction is often made between developed and developing countries in terms of the relation between trust and economic development. Roth (2007), analysing 41 countries from 1980-2004, found that economic growth was negatively related to *changes* in interpersonal trust. The negative relationship is mainly driven by developed countries³¹ (especially liberal market economies and Scandinavian countries); conversely, in (developing) countries with low levels of trust, an increase in interpersonal trust is

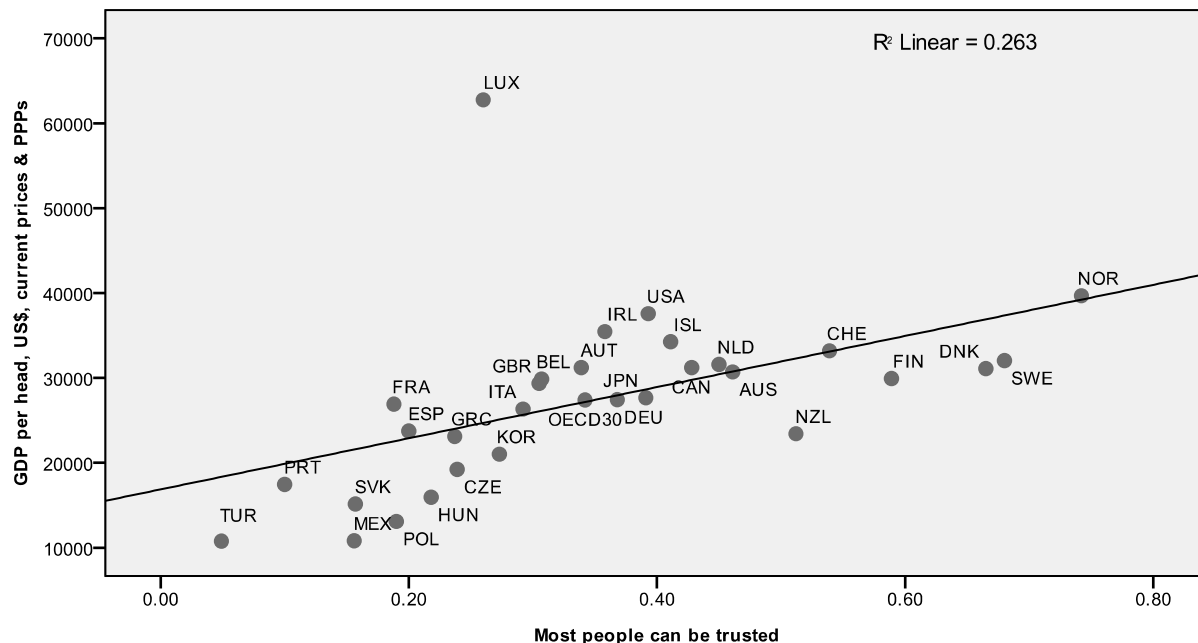
²⁹ Tabellini (2006: 3) explains that “historically more backward regions (with higher illiteracy rates and worst [sic] political institutions) tend to have specific cultural traits today: less trust in others, less respect for others, less confidence in the individual”.

³⁰ Guiso *et al.* (2004) measure social capital through data on participation in elections and blood donations.

³¹ Roth underlines that interpersonal trust is significantly related (with a negative sign) not only to economic growth but also to trust in parliament and trust in companies; across OECD countries, an increase of both variables is negatively related to economic growth.

associated to higher economic growth.³² This difference suggests that too much trust can also stifle economic growth (Roth 2007:27).

Figure 7. Correlation between trust in people and GDP per head



Source: Trust, World Value Survey wave 2005-2008; GDP, OECD 2006; GNI, World Bank 2007 data.

Note: Trust data for Austria, Belgium, Czech Republic, Denmark, Greece, Hungary, Iceland, Ireland, Luxembourg, Portugal and Slovak Republic refer to the wave 1994-1999. For Norway trust data refer to the 1996.

65. In areas where the enforcement of laws is weak, the willingness to finance other firms and individuals depends crucially on the possibility of imposing sanctions and/or the existence of moral norms in the community. Guiso *et al.* (2004) find evidence that the effect of social capital on informal credit is not significant in Italian regions with better enforcement of laws, but it is three times as large (and statistically significant) in areas with weak legal enforcement. This suggests that countries that lack social capital may compensate for its effects with better legal enforcement. Interpersonal, trust seems crucial in less developed societies (Sen 1999), where it acts as a substitute for the lack of formal institutions that elsewhere, guarantee necessary co-operation (Durlauf and Fafchamps 2005).

6.2. Governance

66. There is also evidence that higher levels of various types of trust can foster better governance and increase institutional effectiveness. As argued by Putnam (1994): “Trust as part of social capital is not a substitute for effective public policy but rather a prerequisite for it and in part a consequence of it”.

³² Roth points out that even if the results “appear to be robust... it is possible that the findings are partly due to omission of some variable not considered, that measurement error affect the results, or that the model is misspecified in other ways. Further investigations are necessary to collaborate it.” (2007:27)

67. Putnam (1993b) found that in the northern and central regions of Italy, where levels of interpersonal trust are higher, governments are more effective in responding to citizens' needs and in providing higher-quality public services. Similarly, the study of La Porta *et al* (1997) shows that, across countries, the effects of institutional trust on governance performance are both statistically significant and quantitatively large. Since citizens and bureaucrats have few opportunities to interact directly, and to develop high level of interpersonal trust, confidence in institutions must rely on the trustworthiness of the institution as an abstract entity.³³

68. Knack and Keefer (1997) analysed responses to the World Value Surveys for a sample of about 30 countries and found a positive correlation between measures of citizens' confidence in government and subjective indicators of bureaucratic efficiency. Similar conclusions were reached by Knack (2000) for the United States and by Rice and Sumberg (1997), using slightly different measures. However, other studies suggest that the direction of causation may be in the opposite direction, *i.e.* people trust more effective governments that are able to create economic growth, new jobs, more efficient services and greater access to education (Fiorina, 1978; Mackuen *et al.*, 1992).

69. Interpersonal trust has long been associated with trust in government institutions and with citizens' political participation. Considerable amounts of empirical research demonstrate that interpersonal trust can enhance governmental accountability, facilitate agreement when political preferences are polarized, and promote political innovation (Knack, 2000). Furthermore, where interpersonal trust is higher there is less need for the government to invest in formal mechanisms to enforce contracts and rules, leaving more resources available for other purposes.³⁴ Moreover, trust through political participation, increases individuals' knowledge of politics and public affairs. Such knowledge, especially if shared among a large number of citizens, increases government accountability and is an important check on the inclination of politicians and bureaucrats to pursue their personal interests. In the United States data from the 1992 National Election Study show results consistent with these conclusions. Similarly, La Porta *et al.* (1997) and Knack and Keefer (1997), using cross-country data, reached similar conclusions using survey measures of citizen confidence in government and indicators of bureaucratic efficiency.

70. Higher trust can also reduce inefficiencies associated with political polarization, and facilitate agreement among citizens. As suggested by Putnam (2000), where trust is higher, government majorities and opposition are more open to fruitful debate and more likely to agree on ground rules. Putnam (1993) also found that, in the more civic and trusting regions of Italy, political leaders are more willing to compromise with their opponents for the well-being of their citizens.

71. Other studies have shown that trust facilitates political innovation. More trustful societies reach agreements more easily, and respond quicker and better to newly identified problems. For example, Putnam (1993) suggests that trust facilitates the provision of efficient day-care programs, family clinics, job-training centres, investments and economic development, and the setting of ambitious environmental standards.

72. Of course good governance and specific policies (such as those aiming at increasing communication among citizens and a country's educational level) have a significant impact on trust. As Knack and Zack suggest: "*good policy initiates a virtuous circle: policies that raise trust efficiently, improve living standards, raise civil liberties, enhance institutions, and reduce corruption, further raising trust. Trust, democracy and the rule of law are, thus, the foundation of abiding prosperity.*" (Knack and

³³ In other words A (a person) trusts B (an institution) not because A has a high interpersonal trust in someone working in B, but because A believes B trustworthy enough to perform the duties it is traditionally assigned.

³⁴ One of the outcomes of this situation, as argued earlier, is higher economic growth.

Zack, 2003). For these reasons, government policies, whatever their intended effects, should be vetted for their indirect effects on citizens' trust and social capital in general. For example, if, as Putnam (1994) suggests, trust is fostered more by home ownership than by public or private tenancy, then housing policy should take this effect into account. The same applies to other areas of public policies.

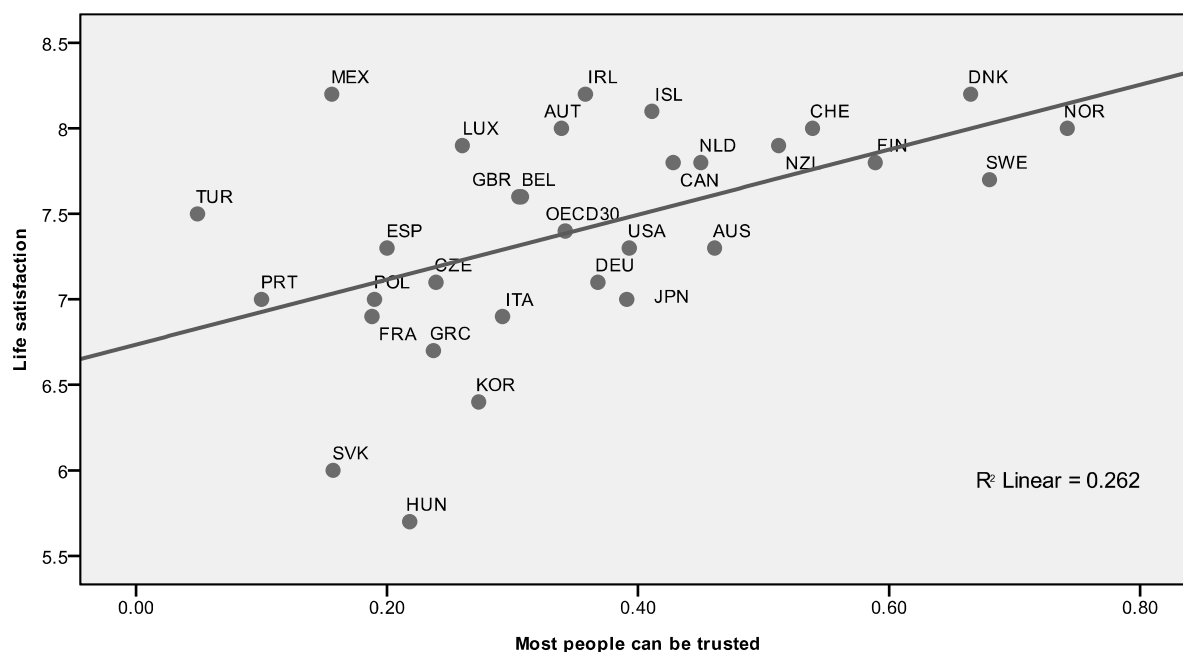
6.3. Subjective well-being

73. Higher levels of trust are closely associated with greater life satisfaction and subjective well-being in communities, workplaces and nations. This suggests that the level of trust of a society is at the basis of the well-being of its citizens (Fukuyama, 1995; Roth, 2006).

74. The relationship between interpersonal trust and subjective well-being has been highlighted in several studies (e.g. Helliwell, 2008a). Evidence shows that living in an environment where other people can be trusted has substantial effects on the subjective well-being of respondents, as high level of trust improves the network of interpersonal relationships among people. Trust in the workplace also has also a strong effect in improving subjective well-being (Helliwell and Huang, 2005 and 2008).

75. Interpersonal trust is correlated with positive life assessments measured using the WVS question “All things considered, how satisfied are you with your life as a whole these days?”. The relation across OECD countries, as shown in Figure 8, is slightly weak but Helliwell and Putnam (2004) comparing data from different surveys found that feeling able to trust others - both those among whom one lives and works and those in authority - is strongly associated with higher subjective well-being. Subjective well-being is a critical aspect of individual welfare.

Figure 8. Interpersonal trust and subjective well-being



Source: World Value Survey, wave 2005-2008.

Note: Trust data for Austria, Belgium, Czech Republic, Denmark, Greece, Hungary, Iceland, Ireland, Luxembourg, Portugal, Slovak Republic data refer to the wave 1994-1999. For Norway trust data refer to the 1996.

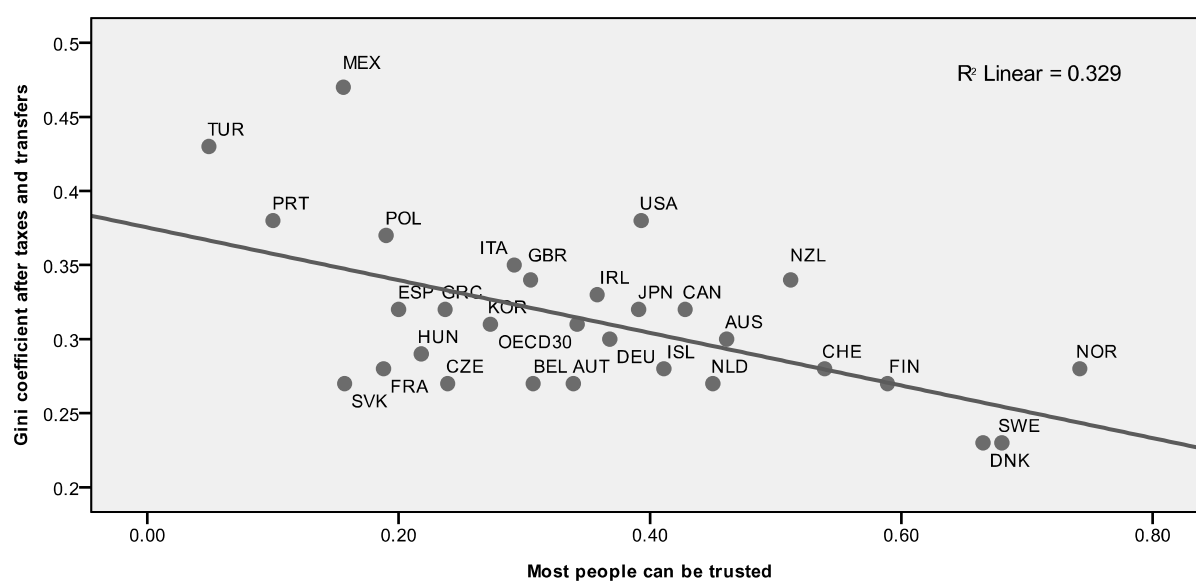
76. A growing amount of research has focused on the role of psychosocial factors such as trust, optimism and sociability as determinants for subjective well-being (Di Tella *et al*, 2003). Among these factors, interpersonal trust is typically regarded as an important predictor of higher subjective well-being, while negative attitudes (such as mistrust, hostility, suspiciousness and cynicism) are related to poor psychological well-being. Finally the ability of governments to provide a trustworthy environment and to deliver services honestly and efficiently is of paramount importance for life satisfaction in countries with bad governance and low incomes (Helliwell and Huang, 2008b).

6.4. Income inequality

77. Uslaner (2006, 2003) reports evidence that interpersonal trust is also correlated with income inequality: in countries with wider income inequalities, he argues, it is more difficult to establish bonds between those at the top and those at the bottom of the income scale. Economic inequality reduces trust because people in different strata will be less likely to share a sense of common purpose and to trust each other. Moreover economic inequality reduces the optimism for the future and a high level of pessimism may stifle interpersonal trust. The relation between trust and income inequality is so strong that some authors argue that inequality is one of the best predictors of trust (Knack and Keefer, 1997; Zack and Knack, 2001& 2003; Rothstein and Uslaner 2005, Pickett and Wilkinson, 2009). Uslaner also argues that countries with a higher level of interpersonal trust are more likely to have open markets, to use new communication technologies such as the Internet, and less concerned about the possibility that these Internet transactions will violate their own privacy.

78. Figure 9 shows substantial differences between OECD countries in the level of interpersonal trust and income inequality (measured by the Gini index). In Portugal, Turkey, Mexico and Poland (countries with high levels of income inequality) the percentage of people who think that most people can be trusted is between 10% and 20%, as compared to an OECD average of 33%. On the other side, countries like Finland, Netherlands, Norway Denmark and Sweden (where income inequality is considerably lower), between 58% and 66% think that most people can be trusted.

Figure 9. Interpersonal trust and income inequality



Source: Interpersonal trust, World Value wave 2005-2008; Income inequality, OECD mid-2000s.

Note: Trust data for Austria, Belgium, Czech Republic, Denmark, Greece, Hungary, Iceland, Ireland, Luxembourg, Portugal and Slovak Republic refer to the wave 1994-1999. For Norway trust data refer to the 1996.

79. Inequality is a powerful social divider which corrodes trust and divides people. We tend to choose our friends among our near equals and we usually have little to do with those much richer or much poorer than us: as a consequence, it is harder for us to trust them (Wilkinson and Pickett 2009; Wilkinson, 2005). Rothstein and Uslaner (2005) also argue, using statistical techniques that inequality effects trust while there is no direct effect of trust on inequality. This suggests that is not the level of economic well-being of a country that increases trust but, rather, the level of economic equality. Inequality generates a positional negative externality because it is the relative position that counts and the comparison with others much richer than us reduce either the level of trust and well-being (Bartolini 2003).

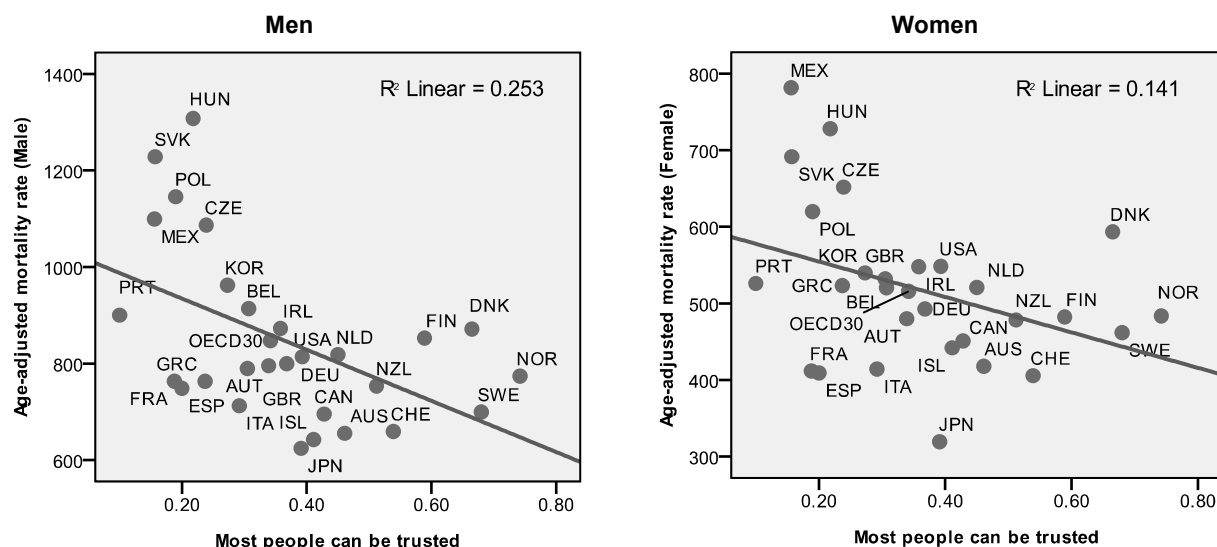
6.5. Mortality and health

80. Interpersonal trust is also important for people's health, and the relation is typically mediated by the effect of income inequality on trust. In an attempt to explain why American states with smaller income differences had higher life expectancies, Kawachi *et al.* (1997) showed that trust act as a mediator between inequality and mortality. They found that people living in areas with low levels of interpersonal trust have higher (age-adjusted) mortality rates.³⁵ According to this study, each percentage increment in the share of people agreeing that others would take advantage of them was associated with an increase in mortality of 6.7 deaths per 100 000. This study points to the existence of a positive effect of income inequality on mortality mediated by interpersonal trust. When income inequality increases so does the level of social mistrust, which is strongly related to mortality; if the effect of interpersonal trust is controlled for, the residual effect of income inequality on mortality becomes negligible. Thus, Kawachi and his colleagues argue that lower trust is one of the pathways through which higher income inequality exerts its toll on population mortality.

81. Figures 10 show the correlation of interpersonal trust with age-adjusted mortality rate for males and females in OECD member countries. At the OECD level there is only a weak association between these two variables and data doesn't reproduce the same linear pattern showed by Kawachi *et al.* in their study of US states. Many countries, such as Mexico, Czech Republic, Hungary, Poland, Slovak Republic, have very high level of mortality in comparison to their level of interpersonal trust. At the OECD level age-adjusted mortality rates are related more strongly to GDP per capita than trust suggesting that the effect between trust, inequality and mortality should be analysed more in depth at cross country level.

³⁵ Kawachi *et al.* (1997) used the Rosenberg question from the General Social Survey to measure social mistrust (the percentage of people responding "you can't be too careful in dealing with people").

Figure 10. Interpersonal trust and age-adjusted mortality rates



Source: Interpersonal trust, World Value wave 2005-2008; Age-adjusted mortality rate, OECD 2003.

Note: Trust data for Austria, Belgium, Czech Republic, Denmark, Greece, Hungary, Iceland, Ireland, Luxembourg, Portugal and Slovak Republic refer to the wave 1994-1999. For Norway trust data refer to the 1996.

7. Conclusions

82. Trust is one of the dimensions of the framework to measure the progress of societies proposed by the OECD Global Project. In this framework, trust is considered as a key input into human wellbeing because it indicates the willingness of individuals to co-operate with others. As underlined in this paper trust has emerged as one of the best available measure of social capital and the evidence in this paper shows that trust displays close associations with a number of other dimensions of social progress.

83. Despite this positive conclusion, existing evidence and research on trust remains limited in important ways.

- First, trust has different forms (*e.g.* in family members, friends, strangers and institutions) that cannot be assumed to substitute for each other.
- Second, the proliferation of labels to indicate the same phenomenon (*e.g.* thick, strategic, social and interpersonal trust) hinders constructive dialogue. The alternative use of social and interpersonal trust to refer to the same construct is the most evident example. While the notion of trust allows many subtle distinctions, a balance need to be found between what is analytically useful and excessive precision stifling measurability.
- Third, most existing measures provide an inadequate operationalisation of the underlying construct. Despite its widespread use, there is only scant evidence on the validity and reliability of the Rosenberg question. The wallet question might be a useful addition, since it allows separating different domains, and the meaning of the question is clear to both respondents and researchers.

- Fourth, there is also need of systematic comparisons between the Rosenberg question and the wallet question to explain the differences between the two. More generally there is the need to empirically validate questions on trust through other tools, such as questions about past trusting behaviour or behavioural questions.
- Fifth, data availability remains an issue, in terms of both country-coverage and repeated observations that hinder analysis of how trust changes over time.
- Finally, cross-sectional surveys allows identifying associations between trust and other variables, while only longitudinal data would allow testing for the existence of causal relations.

84. Some of these limits could be addressed through better surveys methodology. In particular, the definition of trust proposed by Hardin (2004), which distinguishes among three components of a “trusting” relationship (A trusts B to do X) is a good starting point to reach operational definitions that could be applied to various contexts and lead to more informative indicators.

85. There is no clear theoretical account of how to build trust but evidences show that trust can be destroyed by various social and economic forces such as corruption and lack of freedom. Promoting trust requires coping with these aspects. The introduction of trust questions in official surveys could be an important step forward for monitoring the level of trust of societies using consistent and timely indicators. The OECD plans to make greater use of available data on the different forms of trust in the context of its work on measuring progress of societies.

Appendix 1 - Questions to measure institutional trust in various international surveys

Eurobarometer	WVS	Gallup
For each of them, please tell me if you tend to trust it or tend not to trust it?	I am going to name a number of organisations. For each one, could you tell me how much confidence you have in them: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all?	Do you have confidence in each of the following, or not?
The National Government	Armed Forces Justice System The Government	The military? Judicial system and courts? National governments? Honesty of election?
	Banks Churches Television	Financial institutions or banks Religious organisations (churches, mosques, temples, ecc.) The quality and integrity of the media Health care or medical system
The National Parliament	The Police Parliament Education System The Press Labour Unions The Civil Services The Political Parties Major Companies The Environmental Protection Movement The Women's Movement The European Union NATO Charitable or humanitarian organizations International Monetary Fund (IMF) Non governmental Organizations (NGOs) Religious leaders	The local police force
The Citizen's Associations The Committee of the Regions of the European Union The Convention on the future of the European Union The EC Council of Ministers The European Central Bank The European Commission The European Court of Auditors The European Court of Justice The European Ombudsman The European Parliament The Public The Social and Economic Committee of the European Union		

The squared questions are those used for the calculation of the Gallup National Institutions Index (see page 17).

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