

Decentralization of Europe: the effects of administrative and political decentralization on trust in government-related institutions

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Abstract

This paper studies whether administrative and political decentralization are affecting trust in government-related institutions across the 27 countries of the European Union. This study expects a positive relationship between both administrative and political decentralization on the one hand and trust in government-related institutions on the other. This is based on multiple empirical arguments that fiscal decentralization positively influences trust and the argument that fiscal, administrative, and political decentralization are interrelated dimensions. Based on the linear regression models executed for this paper, there is no positive linear relationship found between administrative or political decentralization and trust in any of the studied government-related institutions. Therefore, this study cannot underline the arguments discussed by previous scholars that decentralization positively affects trust in government-related institutions. These results indicate that more study on the concepts of administrative and political decentralization and trust in government-related institutions is needed.

Table of contents

1. Introduction.....	3
2. Theoretical framework.....	4
2.1 Decentralization	4
2.1.1 Fiscal decentralization	4
2.1.2 Administrative decentralization	4
2.1.3 Political decentralization	5
2.4 Trust.....	5
2.5 Effects of decentralization.....	6
2.6 Effects on decentralization on trust in government-related institutions	6
2.7 Conceptual model	7
2.8 Hypotheses.....	8
3. Methodology	8
3.1 Dependent variable	8
3.2 Explanatory variables	9
3.3 Analysis type.....	9
4. Results and Discussion	11
4.1 Descriptive statistics and comparison over time	11
4.2 Regression analyses.....	13
5. Conclusions.....	17
Bibliography.....	18
Appendix.....	20

1. Introduction

More than ever before, decentralized government institutions take over the work of government (Schneider, 2003). Decentralization is often promoted to achieve more economic efficiency and growth (Rodríguez-Pose and Ezcurra, 2011). Additionally, decentralization processes would increase the quality of governance and would cause a decrease in governmental corruption (Dincer, 2010). Decentralization would “create an environment that may foster more effective public policies that possibly influence citizens’ trust in government-related institutions” (Ligthart and Van Oudheusden, 2015, p.118). This increase in citizens’ trust in government institutions would, in turn, lead to a decrease in transaction costs (Rodríguez-Pose and Ezcurra, 2011), thus stimulating economic performance.

However, some European governments are having problems with (re)gaining trust from their citizens. In times of the COVID-19 pandemic, 23 of the 27 European Union countries experienced a decrease in trust in national governments between April and July 2020 (Politico, 2020). National governments have to regain their citizens’ trust in the coming years. The job is not only to look for drivers of distrust but also to look at positive influences of trust in government. This is important, since both from an economic and political perspective, trust in government is found to be beneficial for society (e.g., Knack and Keefer, 1997; Keele, 2007). Therefore, it is important to study the drivers of trust in government, especially in countries of the European Union.

Little research has yet been conducted on how trust in government institutions is related to decentralization. Few studies have focussed on the possible non-economic benefits of decentralization (Ligthart and Van Oudheusden, 2015). There are some examples of studies that look for a relationship between trust and fiscal decentralization (e.g., Dincer, 2010; Ligthart and Van Oudheusden, 2015; De Mello, 2004). However, these studies only study the role of fiscal decentralization. The role of administrative and political decentralization are undiscovered, but yet very important. According to Schneider (2003), fiscal, administrative, and political decentralization are not only three distinct dimensions, they are very much interrelated. For different dimensions of decentralization, the same outcomes can be expected. Therefore, it is important to study how administrative and political decentralization affect trust in government-related institutions. This article aims to find more insight into the influence of administrative and political decentralization on trust in government-related institutions in Europe.

As stated above, there is still a need for exploring the impact that different forms of decentralization have on trust in government institutions. Especially in the case of European countries, there is still a need for investigations on this topic. Therefore, this research aims to find out whether and to what extent administrative and political decentralization are affecting trust in government-related institutions across countries in the European Union. To study this research aim, the following question will have a central role in this research:

‘To what extent does decentralization affect trust in government-related institutions across countries in the European Union?’

This main question is further divided into two subquestions, as this article focusses on both administrative and political decentralization:

1. *'To what extent does administrative decentralization affect trust in government-related institutions across countries in the European Union?'*
2. *'To what extent does political decentralization affect trust in government-related institutions across countries in the European Union?'*

In the following paragraphs, multiple concepts, such as decentralization measurements and trust, will be worked out based on theory. Additionally, the effects of decentralization on trust will be discussed, resulting in a conceptual model and multiple expectations and hypotheses. After that, the methodology of this study will be described, and the results will be discussed through the scope of the literature review. Last, in the conclusion, the results will be summarized, as well as a reflection of the study.

2. Theoretical framework

In this section, theory concerning decentralization and trust in government-related institutions will be discussed and linked to one another.

2.1 Decentralization

In scientific literature, there are many methods to define and measure decentralization. Among scholars, there is little consensus on what decentralization means and on how it should be measured (Schneider, 2003). Decentralization is mostly viewed as a shift of authority from central governments towards local governments (Rodden, 2004). This shift of authority is measured and distinguished in multiple different ways. However, decentralization is most often distinguished into three dimensions: fiscal, administrative, and political decentralization (e.g., in Rodríguez-Pose and Ezcurra, 2011; Schneider, 2003). Some papers use different terms for the same kind of decentralization. Below, fiscal, administrative, and political decentralization will be discussed and defined.

2.1.1 Fiscal decentralization

The most often used dimension of decentralization is fiscal decentralization. In their paper, Rodríguez-Pose and Ezcurra (2011, p.627) refer to fiscal decentralization as “the transfer of resources to subnational tiers of government”. Additionally, more fiscal policy-making authority is transferred to lower levels of government (Ligthart and Van Oudheusden, 2015). It is about how much fiscal impact is ceded to non-central governments (Schneider, 2003). Treisman (2009) discovered that fiscal decentralization is not only about the division of revenues and expenditures between levels of government. A fiscally decentralized state can also be defined as a state where subnational governments have greater autonomy in collecting their taxes over their population. This is supported by Marks et al.'s (2008) definition of fiscal autonomy, which focuses on the independent taxation of the population by the regional government. Fiscal decentralization is often measured by taking the subnational government expenditures as a share of total government expenditures (Ligthart and Van Oudheusden, 2015). This is often combined with the subnational government revenues as a share of total government expenditures (Rodríguez-Pose and Ezcurra, 2011; Schneider, 2003).

2.1.2 Administrative decentralization

Administrative decentralization refers to the amount of autonomy subcentral government entities possess relative to central government (Rodríguez-Pose and Ezcurra, 2011; Schneider, 2003). In contrast to an administrative decentralized government, a government is called administratively

centralized if lower-level governments have no power to overrule the central government (Treisman, 2009).

Some scholars use different terms to describe administrative decentralization. For example, Rodden (2004) uses the term *policy decentralization* to describe the amount of autonomy local governments have relative to the central government. Marks et al. (2010) use the term *institutional depth* to range the amount of autonomy that regional governments get from the central government. A regional government with a high level of *institutional depth* is not subject to central government veto.

As addressed by Rodden (2004), administrative decentralization is less often used because it is difficult to measure. However, there are multiple ways of measuring administrative decentralization. In his paper, Schneider (2003) points out two types of measurements for administrative decentralization. First, the amount of autonomy that subcentral governments have can be indicated by the percentage of local revenues from taxes. Taxes differ from other types of revenues, as they offer the greatest degree of autonomy (compared to e.g., loans or transfers). The second measurement of administrative decentralization drafted by Schneider (2003) is the percentage of revenues not accounted for by transfers, for example, taxes and loans.

As described above, the definition of institutional depth by Marks et al. (2010) is treated the same as administrative decentralization. Marks et al. (2010) measure this institutional depth differently. They scale institutional depth on a scale from 0 to 3, where the lower scores are for regions that have only single-purpose administrations (for example environmental purposes). Higher scores are given to regions that have general-purpose administrations and are not subject to central government veto.

2.1.3 Political decentralization

The third dimension of decentralization is political decentralization. A political decentralized system is a system where non-central governments are allowed to set up their own political functions of governments, for example by having regional elections (Schneider, 2003). Schneider mentions that in a political decentralized system, local political actors and issues are at least partly independent from the national level. Therefore, regional government entities are authorized to make their own policy decisions (Treisman, 2009). Political decentralization is measured by the existence of elections on the municipality, state, or provincial level (e.g., Schneider, 2003; Rodden, 2004). Again, Marks et al. (2008) use a different term to describe the same dimension of decentralization. They measure *Representation* by investigating whether regions' assemblies and executives are directly elected or appointed by the central government. Therefore, this paper considers *Representation* to be the same as political decentralization.

2.4 Trust

Before diving into the possible effects decentralization dimensions could have on trust in government, it is important to define this trust in government. Trust is a contestant term, but there is consensus among scholars that trust is at least relational (Levi & Stoker, 2000). This relationship implies that person's A trust in person B is based on the belief that person B will act in person A's interest (Levi, 2003; Newton, 2012). Trust in government-related institutions is in this paper defined as the "judgment of the citizenry that the system and the political incumbents are responsive, and will do what is right even in the absence of constant scrutiny" (Miller and Listhaug, 1990, cited by Ligthart and Van Oudheusden, 2015, p.117). How trust is measured in this paper will be discussed in the methodology section.

Multiple scholars find societal benefits of trust in government, both from an economic and a political perspective. According to Knack and Keefer (1997), trust in government is positively associated with social capital, which in its turn is positively related to economic growth. Additionally, Zak and Knack (2001) find that “trust, and the social and institutional factors that affect it, significantly influence growth rates.” From a political perspective, trust in government is also found to have positive effects. Without trust, political leaders are less likely to succeed in confronting and addressing emerging issues. On the other hand, a higher level of trust in the government makes it easier to implement policy without obstruction (Keele, 2007). This is also supported by Levi (2003), who states that trust in government positively affects citizen’s tolerance with government demands and regulations.

2.5 Effects of decentralization

A lot of studies focus on the benefits of decentralization. For example, Altunbaş and Thornton (2012) provide empirical arguments that fiscal decentralization can reduce corruption in a country¹. Their results are also robust for both administrative and political decentralization. Another example of a scholar focussing on the positive side of decentralization is Seabright (1996), who provides evidence that decentralization leads to the citizens being better informed about the actions of local government. This ensures local governments to be better accountable towards their citizens.

However, there is no consensus among scholars about the effects of decentralization being purely positive. Prud’homme (1995) argues that decentralization could lead to an increase in disparities and less efficiency. This negative relationship between fiscal decentralization and efficiency is also supported by Martínez et al. (2018). Treisman (2009) emphasizes that administrative decentralization can have both positive as negative consequences. He argues that on the one hand, an administrative decentralized body could reassure people demands more effectively. On the other hand, less effective leadership on lower government levels could lead to higher costs and greater citizen frustration. Furthermore, Treisman (2009) argues that political decentralization could have contradicting results as well. He states that centralization favours the nationwide majority, where decentralization favours the local majority. Therefore, in both political centralized and political decentralized systems, some voters will be frustrated and there is not a single best option. This contradicting results among various studies show the importance of more research on the effects of decentralization.

2.6 Effects on decentralization on trust in government-related institutions

Knowing this, how is trust in government-related institutions affected by decentralization, more specifically, by administrative and political decentralization? Dincer (2010) shows that trust and fiscal decentralization are positively related. However, he uses a broader definition of the term trust. His study reflects on the effects decentralization patterns have on social capital and trust in society. The results of Dincer’s study are further limited as only fiscal decentralization is being explored as an explanatory variable, and the study focuses on U.S. states’ data. However, these results can be used as a basis that fiscal decentralization and trust are positively related.

Ligthart and Van Oudheusden (2015) also supports these results. They find a positive relationship between fiscal decentralization and trust in government-related institutions. These results are interesting, as they focus primarily on the effects of decentralization on trust in government-related institutions. The government-related institutions that are covered in the study of Ligthart and Van

¹These arguments are also supported by Fisman and Gatti (2000), as their estimates suggest that fiscal decentralization is significantly and strongly related to lower corruption levels.

Oudheusden (2015) are the government, the parliament, the civil services, and political parties. Ligthart and Van Oudheusden (2015) provide evidence that fiscal decentralization positively affects trust in all these government institutions. Furthermore, their study is not only limited to one country, as it focuses on 42 countries across the world. Again, the results are limited as the study focuses on fiscal decentralization and does not take administrative and political decentralization into account.

A final study that focuses on the effects of decentralization on social capital is that of De Mello (2004). His cross-country study concludes that fiscal decentralization is positively influencing social capital, which he, among others, measures by confidence in government institutions.

These studies all point towards the same outcome, that fiscal decentralization positively affects trust in government institutions. However, to my knowledge, there are no studies that are focussing on the relationship between administrative and political decentralization and trust in government institutions. Empirical studies mostly focus on fiscal decentralization, as it is easy to measure and its data is better available (Rodden, 2004). The dimensions of administrative and political decentralization are harder to measure, and therefore, studies focusing on these forms of decentralization are limited. However, fiscal, administrative and political decentralization are not only three distinct dimensions. The three dimensions of decentralization are also very much interrelated (Schneider, 2003). One can thus expect that for different dimensions of decentralization, the same outcomes can be identified. Based on these arguments, this paper expects that administrative and political decentralization will positively affect trust in government-related institutions. This expectation is further strengthened by the positive effects of administrative and political decentralization on governance (Altunbaş and Thornton, 2012). An administrative and political decentralized system would bring the government closer to its citizens. This would make the government more committed to local needs and problems (De Mello, 2004). Additionally, it is easier to hold local politicians accountable in a decentralized political system (Dincer, 2010). Overall, the improved government’s responsiveness would lead to higher levels of trust in government-related institutions (Ligthart and Van Oudheusden, 2015).

2.7 Conceptual model

Below, a visual representation of the above-described relationship is presented (Figure 1). The model shows a positive relationship between administrative and political decentralization on the one hand and trust in government-related institutions on the other hand.

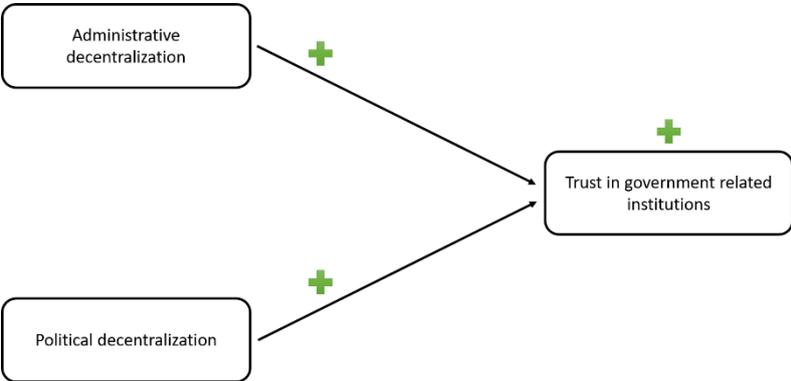


Figure 1: Conceptual Model

2.8 Hypotheses

From the concepts and theories explained in the theoretical framework, two hypotheses can be drawn. As also shown in the conceptual model (Figure 1), a positive relationship between both administrative and political decentralization on the one hand and trust in government-related institutions is expected. This results in the following hypotheses:

1. *Administrative decentralization is positively affecting trust in government-related institutions.*
2. *Political decentralization is positively affecting trust in government-related institutions.*

The method of testing these two hypotheses will be described in the following section.

3. Methodology

This paragraph will focus on the methods of data collection and data analysis used for this study. To understand how the research questions are being answered, a method of measurement will be described below.

3.1 Dependent variable

First, the dependent variable ‘trust in government-related institutions’ must be measured. This paper follows the method of Ligthart and Van Oudheusden (2015), where the World Value Survey (WVS) database is used.² The WVS database includes multiple waves of data collection. This paper uses three waves to have a sufficient amount of cases and to be able to make comparisons over time. The three waves used in this paper are the 1995-1999 wave, the 2005-2009 wave, and the 2017-2020 wave. The last wave is the most recent wave within the WVS database. Within the WVS database, multiple government-related institutions are included. In this article, these four variables within the database will be used:

1. Confidence: the government
2. Confidence: the political parties
3. Confidence: the parliament
4. Confidence: the civil service

This study focuses on how trust is being affected by decentralization in countries in the European Union. Therefore, the sample consist of the 27 member states of the European Union (see Appendix 1). These countries’ data is being measured in the three moments in time described above. As the database of the WVS is incomplete in providing data for all countries and moments in the sample, data from the European Value Survey (EVS) is being added to the database. The EVS provides data on the same variables as the WVS does, but is specifically adapted to the European context. The EVS and WVS even collaborated in the joint release of the EVS-WVS 2017-2020 dataset (European Value Survey, 2021). Therefore, these databases can easily be combined. The EVS has data available for the years 1981, 1990, 1999, 2008, and 2017. The EVS data of 1999 will be combined with the WVS 1995-1999 wave, the EVS data of 2008 will be combined with the WVS 2005-2009 wave and the EVS data of 2017 will be combined with the WVS 2017-2020 wave.

‘Trust’ is in these databases based on indicators from respondents, on a scale from ‘a great deal’ and ‘quite a lot’, to ‘not very much’ and ‘none at all’. This article measures the amount of trust in

²The WVS database is often used when it comes to measures of trust. Other examples of scholars that use this database are Zak and Knack (2001), Geys (2012), Jen et al. (2010)

government-related institutions by capturing the share of respondents stating that they have either 'a great deal' of confidence or 'quite a lot' confidence in the concerning government-related institution. This method is also used by the studies of Ligthart and Van Oudheusden (2015) and De Mello (2004).

3.2 Explanatory variables

As discussed in the literature review paragraph, there are multiple possible measurements of administrative and political decentralization. This paper will use the measurements discussed by Marks et al. (2008). As discussed earlier, they use different terms to describe and measure the concepts of administrative and political decentralization. However, their definitions and measures are very much comparable to other measurements of administrative and political decentralization. Therefore, the Regional Authority Index (RAI) database of Marks et al. (2016) will be used to measure administrative and political decentralization. Within this database, 81 countries (including all EU member states) are indexed for the amount of regional authority on both a regional and national scale. This index is built upon ten dimensions, of which *institutional depth* (administrative decentralization) and *representation* (political decentralization) will be used to measure the amount of decentralization. As discussed in the theoretical framework, these two dimensions are considered to be the same as administrative and political decentralization.

The RAI is based on an annual basis over the period 1950-2017. The RAI data is used for the years 1995, 2005, and 2017, in accordance with the first year of each WVS wave used in this study. This is done to combine the data on administrative and political decentralization with the data on trust in government-related institutions.

3.3 Analysis type

Within the RAI, the dimensions of institutional depth (scores are between 0 and 3) and representation (scores between 0 and 4) are interval variables. As trust in governmental-related institutions is measured as share, this variable is a ratio variable. Table 1 provides a clear overview of all measurement types and corresponding sources and calculations.

Type of measurement	Source	Calculation
Trust in government-related institution (ratio-dependent variable)	WVS (2021) ³ / EVS (2021)	('a great deal' + 'quite a lot') / total respondents
Administrative decentralization	RAI - <i>institutional depth</i> (2021) ⁴	"The extent to which a regional government is autonomous rather than deconcentrated." (Marks et al., 2008) <i>Scaled 0-3</i>
Political decentralization	RAI – <i>representation</i> (2021)	"The extent to which a regional government is endowed with an independent legislature and executive." (Marks et al., 2008) <i>Scaled 0-4</i>

Table 1: Overview of all measurements and calculations used.

³ This database is a result of the work of the following scholars: Inglehart et al. (2014) and Haerpfer et al. (2020).

⁴ When referring to the RAI database, the work of Marks et al. (2016) is meant.

The interval and ratio variables allow for a multiple linear regression analysis. A multiple linear regression model estimates the relationship between the dependent (trust) and the explanatory variables (decentralization). The test is used to predict the dependent variable using several explanatory variables. This makes the multiple linear regression analysis very suitable for this study. By executing a multiple linear regression analysis, the effects of administrative and political decentralization on trust in government-related institutions can be analysed both separately and combined. This will help in comparing the results with the existing literature discussed above.

To increase the accuracy of the regression model, a couple of control variables will be added. These control variables are based on data of the WVS and EVS databases and include 'gender' (percentage of males), 'age groups', 'education level', 'income level', 'interest in politics', and 'trust in other people'. All these control variables are measured as a share of the total respondents. These control variables are a selection of the control variables used in the paper of Ligthart and Van Oudheusden (2015). Since the datasets for this study do not have all variables available that Ligthart and Van Oudheusden (2015) use, only a selection of their control variables are used.

The use of multiple linear regression leads to the following equation:

$$y = a + \beta_1 \text{Institutional depth} + \beta_2 \text{Representation} + \beta_n x_n + \varepsilon,$$

in which:

y = dependent variables ('trust in government', 'trust in political parties', 'trust in parliament', 'trust in civil services'),

a = constant,

$\beta_1 \text{Institutional depth}$ = regression coefficient explanatory variable 'Institutional depth',

$\beta_2 \text{Representation}$ = regression coefficient explanatory variable 'Representation',

$\beta_n x_n$ = regression coefficients control variables ('gender', 'age group', 'education level', 'income level', 'political interest', 'trust in other people'),

ε = value of error.

In the next section, the results of the analyses will be showed and discussed within the scope of the above-discussed theory.

4. Results and Discussion

In this paragraph, the results of the linear regression analyses will be discussed in the context of the theory, expectations, and hypotheses.

4.1 Descriptive statistics and comparison over time

	N	Minimum	Maximum	Mean	Std. Deviation
Trust in government	64	0,096	0,677	0,333	0,131
Trust in political parties	65	0,042	0,437	0,180	0,086
Trust in parliament	75	0,072	0,699	0,337	0,147
Trust in civil services	75	0,143	0,705	0,435	0,131
<i>Institutional depth</i> (administrative decentralization)	81	0,00	5,82	2,29	1,64
<i>Representation</i> (political decentralization)	81	0,00	8,42	3,16	2,48
Male	75	0,353	0,519	0,465	0,035
Age group 0-29	75	0,081	0,431	0,205	0,058
Age group 30-49	75	0,220	0,485	0,358	0,039
Age group 50+	75	0,175	0,689	0,435	0,076
Education (lower)	75	0,089	0,758	0,327	0,155
Education (medium)	75	0,096	0,744	0,444	0,142
Education (higher)	75	0,088	0,497	0,225	0,094
Income (lower)	74	0,154	0,819	0,327	0,099
Income (medium)	74	0,123	0,718	0,374	0,109
Income (higher)	74	0,031	0,480	0,258	0,107
Political interest	74	0,266	0,770	0,456	0,115
Trust in other people	75	0,066	0,760	0,304	0,161
Valid N	63				

Table 2: Descriptive statistics.

Table 2 provides the descriptive statistics of the four dependent variables. Based on the mean of the four government-related institutions, citizens in countries of the European Union tend to trust the *civil services* the most (share mean=0,435), and the *political parties* are trusted the least (share mean=0,180). Of the 81 cases (3 measurements for 27 countries) included in the sample, 63 cases are valid. Other cases have missing data on at least one variable.

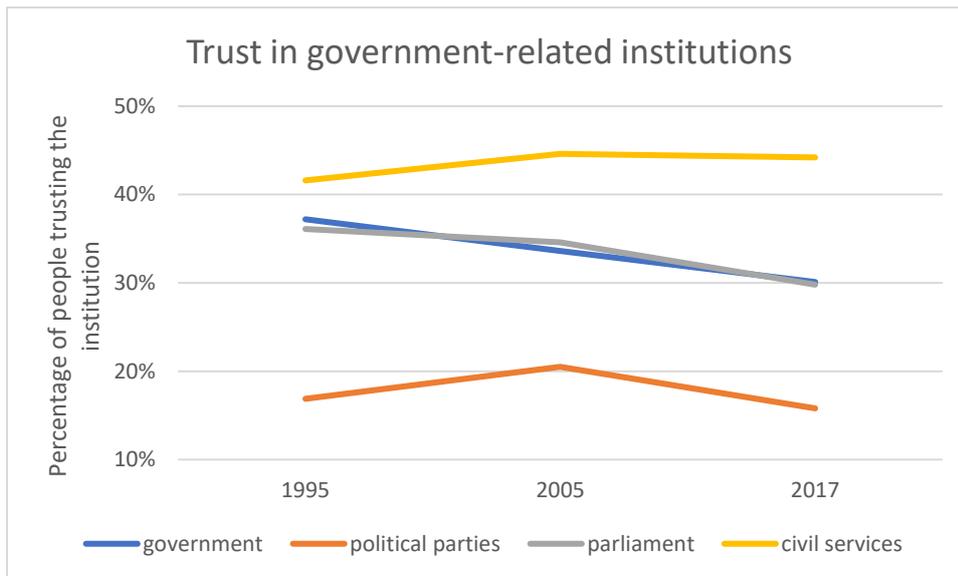


Figure 2: Mean trust in government-related institutions over time. Based on: WVS database (2021)⁵/EVS database (2021).

Looking at Figure 2, some interesting notions can be made. First, supporting Table 2, trust in the *civil services* tends to be the highest among European Union citizens. On the other hand, *political parties* are trusted the least. Another noticeable observation is the decline in trust over the years in the *government* and the *parliament*. Their trust levels are almost equivalent but are decreasing over time. On the other hand, trust levels in the *civil services* are not only relatively high, but they are also increasing. *Political parties* have gained trust in the period 1995-2005, but in 2017 these trust levels are low again.

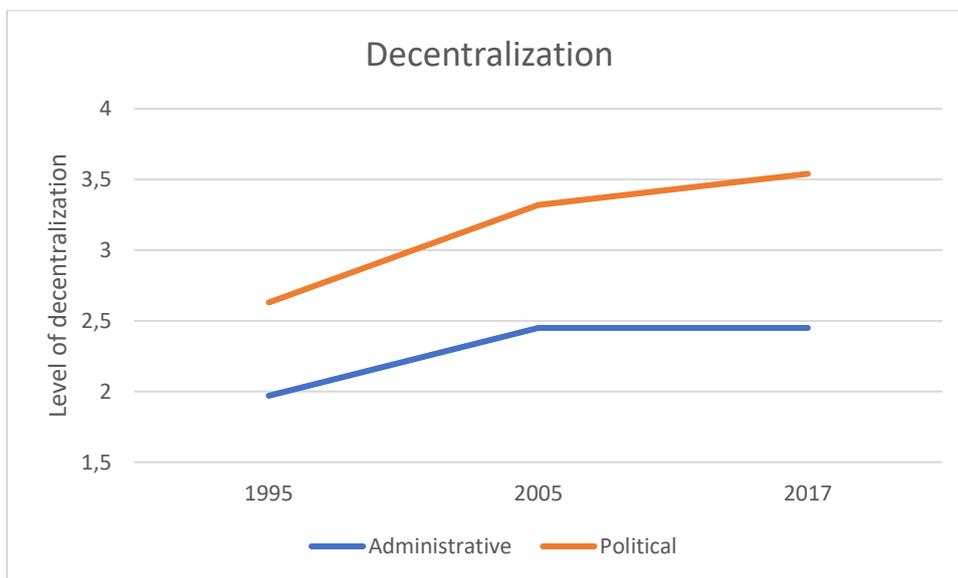


Figure 3: Mean decentralization level over time. Based on: RAI database (2021), created by Marks et al. (2016).

As also mentioned by Schneider (2003), decentralization levels are increasing. This is supported by Figure 3, which shows an increase in decentralization in Europe in the period 1995-2017. Where

⁵ As mentioned before, this database is a result of the work of Inglehart et al. (2014) and Haerpfer et al. (2020).

administrative decentralization has increased steeply in the period 1995-2005, the level of administrative decentralization has stabilized ever since. Meanwhile, the level of political decentralization has only increased even more.

Comparing the results of Figures 2 & 3, it becomes clear that despite increasing levels of decentralization, the level of trust in government-related institutions has not increased. In contrast, the levels of trust in government-related institutions have even decreased in some institutions. This provides the first evidence that the expectations of this paper are not being supported by this research.

4.2 Regression analyses

Using linear regression, the effects of decentralization on trust in government-related institutions are being tested. First, the single effects of both administrative and political decentralization on trust in government-related institutions are being tested. The results are shown in Tables 3 and 4.

Explanatory variables	Dependent variables							
	Trust in government		Trust in political parties		Trust in parliament		Trust in civil services	
Model Significance	0,018		0,413		0,713		0,334	
Model R Square	0,087		0,011		0,002		0,013	
Observations	63		64		74		74	
	B	Sign.	B	Sign.	B	Sign.	B	Sign.
(Constant)	0,388	0,000	0,193	0,000	0,347	0,000	0,456	0,000
Institutional depth (administrative decentralization)	-0,024	0,010*	-0,006	0,413	-0,004	0,713	-0,009	0,334

Table 3: Administrative decentralization and trust in government-related institutions. Notes: Model Significance indicates the significance of the regression models (significant if $p < 0,05$). Model R Square indicates the explained variance of the regression models. The table shows the Unstandardized B coefficient and the Significance of all explanatory variables. Coefficients are significant by $*$ ($p < 0,05$).

Looking at the single effects of administrative and political decentralization on trust in government-related institutions, a few results are striking. First, only one of the institutions is found to be significantly related to decentralization. Both administrative and political decentralization are found to have a significant effect on trust in government. However, contradicting the expectations drawn in the theoretical framework, these effects are found to be negative. This means that within the population, trust in government is expected to decrease if administrative or political decentralization levels increase. Looking at the B coefficient, this effect is only small (B= -0,024 for administrative decentralization; B= -0,017 for political decentralization) and the explained variance of the model is low as well (Model R Square= 0,087 for administrative decentralization; Model R Square= 0,097 for political decentralization). This means that the models on trust in government only explain 8,7% and 9,7% of the dependent variable for administrative and political decentralization respectively. This is a low level of explained variance, which makes it harder to draw conclusions based on these models.

Trust in the other government-related institutions is not found to be significantly affected by administrative or political decentralization.

Explanatory variables	Dependent variables							
	Trust in government		Trust in political parties		Trust in parliament		Trust in civil services	
Model Significance	0,012		0,512		0,825		0,451	
Model R Square	0,097		0,007		0,001		0,008	
Observations	63		64		74		74	
	B	Sign.	B	Sign.	B	Sign.	B	Sign.
(Constant)	0,385	0,000	0,190	0,000	0,342	0,000	0,450	0,000
Representation (political decentralization)	-0,017	0,012*	-0,003	0,512	-0,002	0,825	-0,005	0,451

Table 4: Political decentralization and trust in government-related institutions.

Notes: See Table 3 for additional notes.

If the combined effect of administrative and political decentralization on trust in government-related institutions is tested, the effect on trust in government is still significant (see Appendix 2). However, the significance of the individual effects of administrative and political decentralization disappear and the explained variance of the model is low (Model R Square= 0,097).

Additionally, time-fixed effects have been added to the models (see Appendix 3). However, these time-fixed effects do not add to the significance of the models. In contrast, the models are found to be insignificant if controlling for time-fixed effects.

If adding all control variables (excluding 'trust in other people'), 'political interest' is found to be positively and significantly affecting trust in government, political parties, and the parliament (see Appendix 4). The significant effects of administrative and political decentralization on trust in government disappear within these models.

Lastly, all explanatory and control variables discussed in the methodology section are included in the analyses. The results are shown in Table 5.

Explanatory variables	Dependent variables							
	Trust in government		Trust in political parties		Trust in parliament		Trust in civil services	
Model Significance	0,022		0,009		0,004		0,032	
Model R Square	0,391		0,416		0,398		0,327	
Observations	62		63		72		72	
	B	Sign.	B	Sign.	B	Sign.	B	Sign.
(Constant)	-0,446	0,use891	0,044	0,983	-0,996	0,776	-2,344	0,481
Institutional depth (administrative decentralization)	0,008	0,822	-0,012	0,587	0,009	0,776	-0,010	0,743
Representation (political decentralization)	-0,018	0,403	0,005	0,723	-0,006	0,757	0,003	0,867
Male	-0,037	0,944	-0,077	0,820	-0,040	0,940	-0,594	0,237
Age group 0-29	0,956	0,708	1,464	0,376	2,239	0,415	2,318	0,375
Age group 30-49	0,650	0,798	0,998	0,543	1,841	0,499	1,708	0,510
Age group 50+	0,506	0,844	1,180	0,479	1,877	0,496	2,245	0,393
Education (lower)	-0,089	0,976	-1,219	0,527	-0,831	0,790	1,045	0,725
Education (medium)	-0,304	0,919	-1,374	0,473	-1,122	0,718	0,846	0,775
Education (higher)	0,095	0,975	-1,183	0,546	-0,896	0,776	1,101	0,714
Income (lower)	0,244	0,343	0,156	0,348	0,117	0,664	-0,266	0,303
Income (medium)	0,106	0,652	0,185	0,226	0,211	0,397	-0,024	0,917
Income (higher)	0,256	0,387	0,193	0,311	0,341	0,262	-0,035	0,903
Political interest	0,218	0,210	0,121	0,266	0,136	0,437	0,106	0,522
Trust in other people	0,173	0,213	0,216	0,018*	0,389	0,007*	0,303	0,024*

Table 5: Decentralization and trust in government-related institutions.

Notes: See Table 3 for additional notes.

First, looking at the significance of the models in Table 5, it becomes clear that all analyses executed are significant. This means that, based on these models, there is indeed a relationship between trust in government-related institutions and the variables included in the models. Additionally, the Model R Square of all models variates from 0,327 (civil services) to 0,416 (political parties). This means that the models explain respectively 39,1% (government), 41,6% (political parties), 39,8% (parliament) and 32,7% (civil services) of the dependent variables. These are low to moderate effects since less than half of the variance of the dependent variables is explained by the models. Since the explained variance of

the models is showing low to moderate effects, it is harder to draw conclusions and make predictions based on these models.

Looking at the coefficients of Table 5, the results are striking. First, it becomes clear that both political and administrative decentralization are not significantly related to trust in any of the government-related institutions. This means that it cannot be concluded that in the population, there is a relationship between decentralization and trust in government-related institutions.

The fact that the models of this study are not showing a positive significant relationship between decentralization and trust in government-related institutions is contradicting with the expectations. Based on the models, both administrative and political decentralization are not shown to be positively related to trust in government-related institutions. Therefore, based on the models, it cannot be concluded that administrative and political decentralization are positively affecting trust in government-related institutions in countries of the European Union. The results do not confirm the results of Dincer (2010), Ligthart and Van Oudheusden (2015), and De Mello (2004) that decentralization patterns would positively affect trust. The argument raised in the theoretical framework is that fiscal, administrative, and political decentralization are closely related. Therefore, administrative, and political decentralization were expected to positively influence trust in government-related institutions. In the end, this argument is not being supported by the models. Even contradicting the expectations, decentralization is found to be negatively related to trust in government, if looking at the single effects of administrative and political decentralization.

The one control variable that is shown to have a significant effect on trust in government-related institutions is the variable 'trust in other people'. Based on the models, trust in other people is found to be significantly related to trust in political parties, trust in parliament, and trust in civil services. Since these coefficients are above 0, this relationship is a positive one. In other words, it can be said that based on the models, people in Europe having trust in other people are tend to have more trust in the above-mentioned government-related institutions. This is in line with the results from Ligthart and Van Oudheusden (2015), as they also find a significant and positive relationship between trust in other people and trust in government-related institutions.

When looking for reasons for the differences in expectations and results, a few possible explanations can be given. First, the difference between the expectations and results might be explained by the geographical area. This study focuses on European Union countries, which are mostly developed democracies. This is different from the studies of Ligthart and Van Oudheusden (2015) and De Mello (2004), which focus on global cross-country comparison. Focussing on European Union countries might have led to a homogeneous population, which is a possible explanation of the difference in outcome and expectation. Another possible explanation might be the difference in dimension of decentralization. As mentioned earlier, little study has been conducted on administrative and political decentralization in relation to trust. It might be that contradicting the argument of Schneider (2003), the three dimensions of decentralization are less interrelated than expected. Finally, the difference in expectations and results might be found in the type of measurement. The concept of decentralization is still under discussion and there is no single definition or type of measurement for this concept. Different, sometimes even contradicting types of measurements can result in different outcomes. This paper used the measurements of decentralization set up by Marks et al. (2016). However, there are more types of measurements for administrative and political decentralization. Using these different types of measurements might point towards different outcomes. Additionally, administrative, and political decentralization tend to be harder to measure than the often-used fiscal decentralization.

Therefore, fiscal decentralization is easier to use for most scholars, and studies on administrative and political decentralization are limited. This makes it harder to build solid arguments for the latter concepts.

5. Conclusions

This paper studies to what extent decentralization affects trust in government-related institutions across countries in the European Union. More specifically, this paper focuses on the effect of administrative and political decentralization on trust in government-related institutions. It was expected that administrative and political decentralization would positively affect trust in government, political parties, parliament, and civil services. The expectations are based on the arguments that multiple scholars have pointed towards a positive relationship between fiscal decentralization and trust in government and other aspects of social capital. The expectations are further strengthened by the argument that fiscal, administrative, and political decentralization are distinct, yet very much interrelated dimensions. The expectations led to the hypotheses that both administrative and political decentralization would positively affect trust in government-related institutions.

The expectations and hypotheses drawn in the theoretical framework are not supported by the models. The models show no significant positive relationship between either administrative or political decentralization and trust in any of the government-related institutions. In contrast, looking at the single effects of both decentralization types, administrative and political decentralization are found to be negatively related to trust in government. These relationships are found to be weak, and if controlling for multiple other variables, these relationships disappear. This means that based on the models, it cannot be concluded that administrative and political decentralization are positively and linearly related to trust in governmental institutions in countries of the European Union. The arguments of Ligthart and Van Oudheusden (2015), Dincer (2010), and De Mello (2004) that decentralization and trust are positively related are not supported by this study.

The outcomes of this study are contradicting with outcomes of similar studies. This calls for a reflection. As mentioned in the Results and Discussion section, there are multiple possible explanations for the difference in expectations and results. Possible explanations are given based on the studied geographical area, the decentralization dimensions used, and the types of measurement. Next studies could for example focus on a different geographical area to study the relationship between administrative and political decentralization and trust in government-related institutions. This could give more insight into how these concepts are related to one another.

The results of this study do not mean that this study is invalid. As Schneider (2003) also points out, fiscal, administrative, and political decentralization are interrelated and therefore one must also research the less-studied dimensions of decentralization. As stated in the theoretical framework, there is no clear consensus about the effects of decentralization. Therefore, there is still a need for further research on the concept of decentralization. Scholars should more often focus on the non-economic side of decentralization and the transfer of power and autonomy. This would further increase our knowledge on how decentralization might benefit, or disfavour society. More research is needed on the drivers of trust in government-related institutions, as this trust is needed for economic and political reasons. In the end, this would increase our knowledge on how society can best be shaped to improve our way of living.

Bibliography

Altunbaş, Y. and Thornton, J. (2012) 'Fiscal decentralization and governance', *Public Finance Review*, 40(1), pp. 66–85. DOI: 10.1177/1091142111424276.

Dincer, O. (2010) 'Fiscal decentralization and trust', *Public Finance Review*, 38(2), pp. 178–192. DOI: 10.1177/1091142109358706.

European Value Survey (2021). *Collaboration with WVS*. Retrieved on April 28, 2021, via <https://europeanvaluesstudy.eu/methodology-data-documentation/survey-2017/collaboration-with-wvs/>

EVS (2021): EVS Trend File 1981-2017: Integrated Dataset (EVS 1981-2017). GESIS Data Archive, Cologne. ZA7503 Data file Version 1.0.0, doi:10.4232/1.13093.

Fisman, R., Gatti, R. (2000) *Decentralization and Corruption: Evidence across Countries*. Policy Research Working Paper; No. 2290. World Bank, Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/19852> License: CC BY 3.0 IGO.

Geys, B. (2012) 'Association Membership and Generalized Trust: Are Connections between Associations Losing their Value?', *Journal of Civil Society*, 8(1), pp. 1–15. DOI: 10.1080/17448689.2012.665646

Haerpfer, C., Inglehart, R., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano J., M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (2020). World Values Survey: Round Seven - Country-Pooled Datafile. Madrid, Spain & Vienna, Austria: JD Systems Institute & WWSA Secretariat. doi.org/10.14281/18241.1

Inglehart, R., C. Haerpfer, A. Moreno, C. Welzel, K. Kizilova, J. Diez-Medrano, M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (2014). World Values Survey: All Rounds - Country-Pooled Datafile Version: <https://www.worldvaluessurvey.org/WVSDocumentationWVL.jsp>. Madrid: JD Systems Institute.

Jen, M. H. *et al.* (2010) 'Trustful societies, trustful individuals, and health: An analysis of self-rated health and social trust using the World Value Survey', *Health and Place*, 16(5), pp. 1022–1029. DOI: 10.1016/j.healthplace.2010.06.008.

Keele, L. (2007). Social Capital and the Dynamics of Trust in Government. *American Journal of Political Science*, 51(2), 241-254. Retrieved May 14, 2021, from <http://www.jstor.org/stable/4620063>

Knack, S. and Keefer, P. (1997) 'Does social capital have an economic payoff? A cross-country investigation', *Quarterly Journal of Economics*, 112(4), pp. 1251–1288. DOI: 10.1162/003355300555475.

Levi, M. (2003) 'A State of Trust * Margaret Levi', *Trust and Governance*, pp. 77–101.

Levi, M. & Laura, S. (2000). Political Trust and Trustworthiness. *Annual Review of Political Science - ANNU REV POLIT SCI*. 3. 475-507. 10.1146/annurev.polisci.3.1.475.

Ligthart, J. E. and Van Oudheusden, P. (2015) 'In government we trust: The role of fiscal decentralization', *European Journal of Political Economy*, 37, pp. 116–128. DOI:

10.1016/j.ejpoleco.2014.11.005.

Marks, G., Hooghe, L. and Schakel, A. H. (2008) 'Measuring regional authority', *Regional and Federal Studies*, 18(2–3), pp. 111–121. DOI: 10.1080/13597560801979464.

Marks, G., Hooghe, L., & Schakel, A. (2010). *The Rise of Regional Authority: A Comparative Study of 42 Democracies* (1st ed.). Routledge. <https://doi.org/10.4324/9780203852170>

Marks, G., Hooghe, L., Schakel, A., Chapman-Osterkatz, S., Niedzwiecki, S. & Shair-Rosenfield, S. (2016). *Measuring regional authority. Volume I: a postfunctionalist theory of governance*. Oxford: Oxford University Press. URL: <https://global.oup.com/academic/product/measuring-regional-authority-9780198728870?cc=us&lang=en&>.

De Mello, L. R. (2004) 'Can fiscal decentralization strengthen social capital?' *Public Finance Review*. DOI: 10.1177/1091142103260699.

Newton, K. (2012) 'Trust, Social Capital, Civil Society, and Democracy' *International Political Science Review*, 22(2), pp. 201–214. DOI: <https://doi-org.proxy-ub.rug.nl/10.1177%2F0192512101222004>.

Politico (2020). *Trust has increased in EU but dropped in national governments: Survey*. Retrieved on May 13, 2021, via <https://www.politico.eu/article/survey-trust-in-eu-has-increased-while-trust-in-national-government-has-dropped-coronavirus-pandemic/>

Prud'homme, R. (1995) 'The dangers of decentralization', *World Bank Research Observer*, 10(2), pp. 201–220. DOI: 10.1093/wbro/10.2.201.

Rodden, J. (2004) 'Comparative Federalism and Decentralization : On Meaning and Measurement Author (s): Jonathan Rodden Published by : Comparative Politics, Ph. D. Programs in Political Science, City University of New York Stable URL : <http://www.jstor.org/stable/4150>', *Comparative Politics*, 36(4), pp. 481–500.

Rodríguez-Pose, A. and Ezcurra, R. (2011) 'Is fiscal decentralization harmful for economic growth? Evidence from the OECD countries', *Journal of Economic Geography*, 11(4), pp. 619–643. DOI: 10.1093/jeg/lbq025.

Schneider, A. (2003) *Decentralization: Conceptualizing and measurement*. *Studies in Comparative International Development*, 38, pp. 32–56. DOI: <https://doi.org/10.1007/BF02686198>

Seabright, P. (1996) 'Accountability and decentralisation in government: An incomplete contracts model', *European Economic Review*, 40(1 SPEC. ISS.), pp. 61–89. DOI: 10.1016/0014-2921(95)00055-0.

Treisman, D. (2009) 'Conclusion: Rethinking Decentralization', *The Architecture of Government*, (May), pp. 270–294. DOI: 10.1017/cbo9780511619151.014.

Ubago Martínez, Y., Arzo, P. P. and Apezteguía, B. I. (2018) 'Does decentralization contribute to efficiency? Evidence from OECD countries', *Applied Economics*, 50(7), pp. 726–742. DOI: 10.1080/00036846.2017.1340572.

Zak, P., Knack, S. (2001) 'Trust and Growth', *The Economic Journal*, 111(470), pp. 295–321. DOI: <https://doi.org/10.1111/1468-0297.00609>

Appendix

Appendix 1: Countries in the sample.

Austria
Belgium
Bulgaria
Croatia
Cyprus
Czech Republic
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Ireland
Italy
Latvia
Lithuania
Luxembourg
Malta
Netherlands
Poland
Portugal
Romania
Slovakia
Slovenia
Spain
Sweden

Appendix 2: Combined effect administrative and political decentralization on trust in government-related institutions

Explanatory variables	Trust in government		Trust in political parties		Trust in parliament		Trust in civil services	
	B	Sign.	B	Sign.	B	Sign.	B	Sign.
Model Significance	0,045		0,670		0,867		0,556	
Model R Square	0,097		0,013		0,004		0,016	
Observations	63		64		74		74	
(Constant)	0,385	0,000	0,194	0,000	0,347	0,000	0,457	0,000
<i>Institutional depth</i> (administrative decentralization)	0,000	0,999	-0,013	0,542	-0,016	0,628	-0,023	0,436
<i>Representation</i> (political decentralization)	-0,017	0,413	0,005	0,713	0,008	0,698	0,010	0,622

Notes: See Table 3 for additional notes.

Appendix 3: Time-fixed effects analysis

Explanatory variables	Trust in government		Trust in political parties		Trust in parliament		Trust in civil services	
	B	Sign.	B	Sign.	B	Sign.	B	Sign.
Model Significance	0,118		0,298		0,632		0,688	
Model R Square	0,115		0,077		0,036		0,031	
Observations	63		64		74		74	
(Constant)	0,404	0,000	0,182	0,000	0,366	0,000	0,438	0,000
<i>Institutional depth</i> (administrative decentralization)	-0,003	0,931	-0,016	0,444	-0,018	0,586	-0,024	0,416
<i>Representation</i> (political decentralization)	-0,013	0,521	0,007	0,615	0,011	0,605	0,009	0,631
Year: 2005	-0,018	0,672	0,039	0,161	-0,014	0,735	0,036	0,336
Year: 2017	-0,047	0,291	-0,008	0,775	-0,063	0,150	0,032	0,417

Note: Time-fixed effects are included as dummy variables. The base category is 'Year: 1995'. See Table 3 for additional notes.

Appendix 4: Models including all control variables (except 'trust in other people')

<i>Explanatory variables</i>	<i>Dependent variables</i>							
	Trust in government		Trust in political parties		Trust in parliament		Trust in civil services	
Model Significance	0,023		0,038		0,028		0,100	
Model R Square	0,370		0,344		0,316		0,265	
Observations	62		63		72		72	
	B	<i>Sign.</i>	B	<i>Sign.</i>	B	<i>Sign.</i>	B	<i>Sign.</i>
(Constant)	-0,405	0,902	0,073	0,973	-0,781	0,832	-2,177	0,528
<i>Institutional depth</i> (administrative decentralization)	0,008	0,818	-0,012	0,602	0,005	0,892	-0,014	0,668
<i>Representation</i> (political decentralization)	-0,015	0,485	0,009	0,538	0,001	0,958	0,009	0,650
Male	0,111	0,830	0,112	0,745	0,407	0,442	-0,246	0,618
Age group 0-29	0,570	0,823	0,983	0,567	1,424	0,621	1,684	0,531
Age group 30-49	0,261	0,918	0,509	0,765	1,061	0,711	1,100	0,680
Age group 50+	0,094	0,971	0,667	0,700	1,091	0,706	1,633	0,546
Education (lower)	0,140	0,963	-0,913	0,650	-0,579	0,860	1,241	0,686
Education (medium)	-0,101	0,973	-1,100	0,583	-0,942	0,774	0,986	0,747
Education (higher)	0,447	0,975	-0,722	0,724	-0,429	0,897	1,465	0,637
Income (lower)	0,293	0,254	0,218	0,207	0,223	0,432	-0,184	0,486
Income (medium)	0,125	0,596	0,208	0,192	0,266	0,312	0,018	0,940
Income (higher)	0,331	0,257	0,286	0,146	0,495	0,118	0,085	0,771
Political interest	0,317	0,045*	0,241	0,020*	0,372	0,024*	0,291	0,057

Notes: See Table 3 for additional notes.