Less or more control to build trust?
Exploring the relationship between institutionalised control and administrational trust in a cultural framework.

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Abstract

This paper explores whether the relationship between formal control and inter-organisational trust within public administration (administrational trust) differs across organisational cultures. It develops a set of hypotheses based on the proposition that organisational cultures moderate the relationship between formal control and administrational trust because of the divergent focus of different cultures on the institutions of inter-organisational interactions. Our hypotheses are empirically tested using 2012 Korean Civil Service Survey data. The results indicate that formal control does relate differently to administrational trust in different organisational cultures. While it might obstruct trust under an egalitarian culture, we cannot exclude that it might be a basis for trust under more hierarchical organisational cultures. While this conclusion suggests an valuable orientation for research, further development of measures, methods and data is required to test these hypotheses more adequately.

Keywords: organisational culture, institutionalised control, administrational trust, public administration
1. Introduction

About thirty years ago, Niklas Luhmann wrote about the “regrettably sparse literature which has trust as its main theme” (Luhmann 1979: 8). However, by the end of the 1990’s, the social, political and economic realities of an increasingly interdependent and global world (Cook 2001) seemed to have inspired a surge in publications regarding trust (Kramer 1999). Although trust is now one of the most frequently used social science concepts (Das and Teng 2004), the research field is still characterised by ideas that remain vague, unspecified, and vary widely within and between disciplines (Choudhury 2008; Rousseau et al. 1998). Research on trust has been argued to be “a conceptual morass” (Carnevale and Wechsler 1992: 473) which two decades of trust research has not been able to overcome (McEvily and Tortoriello 2011; Nooteboom 2006).

In this paper, we focus on a seemingly paradoxical notion surrounding the debate on trust in interorganisational settings, namely the relationship between trust and formal control. It is argued that the relation between these elements is complex, giving rise to contradictory interpretations of how trust and control are related. Arguments suggesting that trust and control are substitutes seem to conflict with claims that they are actually complementary mechanisms (Costa and Bijlsma-Frankema 2007). Our research aims to contribute to the empirical study of this relationship in the specific context of the public sector, and provides a perspective on the role of organisational culture for the nexus between interorganisational trust and formal control in public administration.

In the next section we present a brief conceptual overview of ‘administrational trust’ and institutionalised formal control. Next, we introduce after which we introduce our theoretical framework and the central hypotheses of this study. The methodological section describes the data, the method, and the measures we have used to test these hypotheses in empirical reality. Next, we present the results of our inquiry on the basis of the Korean Civil Service (KCC) survey and discuss these findings. Finally, we will conclude the paper and propose a number of questions for further research.

2. Conceptual overview

Researchers in public administration and organisational sciences have examined trust in many relations and from multiple perspectives (Offe 1999; Bouckaert 2012). In this paper, our focus lies specifically on inter-organisational trust within public administration, which we will refer to as ‘administrational trust’.

To date, research on inter-organisational trust remains scarce in the public sector (Choudhury 2008; Klijn, Edelenbos, and Steijn 2010). Peculiarly enough, this lack of academic interest is in stark contrast with the increasing attention given to trust by professionals in public management and the public sector. Recently, the topic also started to attract more attention in public sector reform discourse. In their research regarding government-wide coordination initiatives in the Flemish government, Buttiens
and Verhoest (2011) note that inter-organisational trust was very often mentioned by senior civil servants as a central factor for the success or failure of such initiatives. Citizens and reformers alike have started to consider trust to be both a necessary goal as well as a means for effective administration (Choudhury 2008).

Although trust appears to make a valid claim on a position in the limelight of public administration research, public administration scholars treat it critically as a principle of organisation in the public sector (see for instance Bouckaert 2012; Van Montfort 2010). Van Montfort (2010) argues that the focus on trust obstructs any serious debate of issues at the centre of public management scholarship, such as oversight, regulation and control. However, academic attention for trust seems warranted if one takes into account both seminal literature and recent public sector developments (Bouckaert, 2012). According to Simon (1997), the rationality of individual actors is bounded, leading them to organise collectively in order to achieve desired objectives in a context characterised by multiple alternative options. As such, organisation allows action in a complex and contingent environment. However, as external complexity grows, single organisations start reaching the boundaries of their rationality due to bureaucratic inflation, inhibiting their capacity to cope with the complexity of modern society (Waldo 1980). Contemporary scholars argue that this exactly is what is happening today. Growing internal organisational complexity renders bureaucratic organisations cumbersome (Edelenbos and Klijn 2007). To deal with this problem public administration has experimented with market-inspired NPM and ‘governance’ (Pierre and Ingraham 2010), in which coordination and control make use of a mix of hierarchical, market and network-type coordination mechanisms (Bouckaert, Peters and Verhoest 2010). Misztal (1996) has argued that the additional complexity associated with such governance necessitates increased attention for trust as a governance mechanism. It can therefore be argued that the increasing attention for trust-based management in public administration is motivated in part by the search for pragmatic and efficient solutions to cope with the increasing complexity of contemporary society, and in part by unsatisfactory results of incentive-based (NPM) instruments, which might be argued to enforce attitudes of distrust within government (Van de Walle, 2011). Whereas trust has been increasingly recognised as an important factor in inter- and intra-organisational relationships in the private sector (Bijlsma-Frankema and Costa 2005), central attention for inter-organisational trust is a relatively recent phenomenon in public sector research.

We argue that while trust should indeed be treated critically, its relationship with regulation and control is complicated, and can and should be challenged. As both trust and control are often described in elusive definitions (Reed 2001), we discuss them both briefly in the subsequent paragraphs.

> 2.1. Administrative trust

Previous studies on inter-organisational trust have generated a wide array of definitions. This has often intensified rather than alleviated extant confusion about the concept. In this paragraph, we briefly discuss ‘administrational trust’ in order to secure our venture into the ‘conceptual morass’ of trust research (Carnevale and Wechsler, 1992).
While the trust literature is still characterised by widely varying definitions of its core concept, the core components of the concept have been summarised by a number of authors (Fulmer and Gelfand 2012; Kim 2005; Klijn, Edelenbos, and Steijn 2010; Kramer 2009; McEvily and Tortoriello 2011). Trust stems from both cognition and affection (McAllister 1995), is required in risky or contingent situations (Luhmann 1979; Das and Teng 2001), is characterised by a willingness to be vulnerable (Currall and Judge 1995), leads to risk-taking behaviour (Lewis and Weigert 1985) and is based on positive expectations about a counterpart (Mayer, Davis and Schoorman 1995). This leads us to define trust as “the intentional and behavioural acceptance of vulnerability by a trustor on the basis of positive expectations about future actions of a trustee.”

The prefix ‘administrational’ is a contraction of ‘organisational’ and ‘administrative’, and delineates our research to these particular contexts. On the one hand, organisational trust is defined by Zaheer, McEvily and Perrone (1998: 142) as “the extent of trust placed in the partner organisation by the members of a focal organisation”. Interpersonal trust therefore becomes inter-organisational trust when the trustors and trustees in question are organisationally socialised boundary spanners (Aldrich and Herker 1977; Currall and Judge 1995; Perrone et al. 2003) that are formally or informally mandated to act on behalf of their organisation in an inter-organisational interaction. It is argued that civil servants with boundary spanning roles perform these roles on the basis of their subjective evaluations they make regarding their counterparts (Barnard 1938; Beccerra and Gupta 1999). These subjective evaluations are the foundations of inter-organisational trust, and are influenced by individual attitudinal predispositions (micro level), by calculative and relational considerations of the boundary spanners in particular interactions (meso level), and by formal and informal institutions that embed the inter-organisational interaction (macro level) (Beccerra and Gupta 2003; Rousseau et al. 1998).

On the other hand, it is crucial to specify the administrative context of our study. Operationalisations of trust can range from very specific to very diffuse. While some authors employ a diffuse definition in which trust relates to a general attitude of groups towards an abstract object (Bouckaert et al. 2002; Uslaner 2011), others argue that the subject, context and situation bear significant effects on trust and argue that these predicates are to be identified as clearly as possible. In this perspective, trust is “a four-place predicate in which a trustor (1) trusts a trustee (2) in some respect (3) under some conditions (4)” (Nooteboom 2002: 259).

Our study of administrational trust is therefore delineated as inter-organisational trust between public administration entities. We study this phenomenon specifically through boundary spanning civil servants in South-Korean public administration.

> 2.2. Institutionalised control

Control encompasses the “mechanisms and instruments used by government to intentionally influence the decisions and the behaviour of other governments or private partners in order to achieve government objectives” (Laegreid and Verhoest, 2010: 4).
Instruments of control are usually embedded in institutional arrangements. Beuselinck (2008: 46) identifies institutions as social phenomena that can consist of both formal (e.g. rules) and informal traits (e.g. customs), which interfere with individual behaviour and are relatively stable but not immutable.

Due to their universal application and their relative stability, institutionalised formal or informal control can be considered to be ‘depersonalised’ as opposed to non-institutionalised control which is seen to possess a personal nature (Luhmann 1979). According to Luhmann (1979), distrust becomes depersonalised when it is institutionalised, giving room to enable the development of trust. While non-institutionalised control can be perceived as an expression of personal distrust, institutionalised control ‘depersonalises’ such distrust into non-personal systems that can become macro-level sources of trust. The consideration that institutions might generate trust is widely debated in the literature regarding institution-based trust (Zucker 1986; Rousseau et al 1998; Bachmann and Inkpen 2011).

Institutionalised control is therefore an interesting topic for students of administrational trust. An interesting question can be raised in this field: when is institutionalised control a foundation for trust, and when is it not? Are trust and control a dualism or rather a duality (Möllering 2005)? In the following paragraph, we present two different theoretical perspectives regarding this question, and introduce a third one.

3. Theoretical framework and hypotheses

> 3.1. Institutionalised control and trust: two contradictory perspectives

A first perspective on the relationship between institutionalised forms of control and trust is that they are substitutes. Under the substitution perspective, trust and control are considered to be alternative routes for arriving at stable orders to which social actors can orient their behaviour (Gulati, 1995). The higher the level of trust in a relationship, the lower the need for formal control. Christ et. al (2008) argue that in choosing the most appropriate formal controls, organisations must consider the psychological cost of trust deterioration. Brennan and Buchanan argue that “the notion that rules may substitute for morals has been familiar to economists and philosophers at least since Adam Smith” (Brennan and Buchanan 1985: xvi). Costa and Bijlsma-Frankema (2007) consider this perspective to be mainly present in economic theory. However, they find no consistent empirical evidence which proves that trust and formal control actually do substitute for each other. Along the same lines, Van Thiel and Yesilkagit (2011) did not find the negative relationship between agencies’ trust in their ministries and the extent of control in the relationship which they hypothesised on the basis of principal-agent theory.

The second perspective can be considered as the complementarity perspective. Under this perspective, it is argued that trust and control are mutually reinforcing and both contribute to cooperation in a relationship. Luhmann (1979: 89) argues that “trust
depends on the inclination towards risk being kept under control (...) a system of higher complexity, which needs more trust, also needs at the same time more distrust, and therefore must institutionalize distrust, for example in the form of supervision”.

Scholars of institution-based trust argue that roles, rules, routines and norms shape expectations along institutionally defined lines (Zucker 1986; Shapiro 1987; Bachman 2001; Perrone et al. 2003; Bachman and Inkpen 2011; Lane and Bachmann 1996; Lane and Bachmann 1998; Rousseau et al. 1998; Sydow 2006; Sztompka 1998). The subjective evaluation inspiring trust in a trustee can take into account these institutions, which permit stable expectations to be formed by each member of a group concerning the behaviour of others under specified conditions (Simon 1997). Unfortunately, despite extensive theoretical discussions that draw on neo-institutional theory, (neo)-functionalism and structuration theory (Reed 2001), empirical work on institution-based trust is not often found in interorganisational trust research in the public sector.

> 3.2. A third perspective: organisational culture as a moderator

Both perspectives sketch contradicting expectations regarding the relationship between institutionalised control and adminstrational trust. However, we argue that the central question is not whether, but when control substitutes or complements administrative trust. Many scholars have argued that context is critical to understand trust. Deakin and Wilkinson (1998) argue that different institutional environments give rise to distinct relationships between trust and formalisation (Rus and Iglic 2005). Others have found empirical evidence for the presence of moderating variables in the control-trust relationship (Beccerra and Gupta 2003). Recently, culture has been suggested as a potentially important moderator for the effect of different factors on trust (Reiche et al. 2013, Grimmelikhuijsen et al. 2013). In this paper, we posit that the relationship between institutional constraints and administrative trust is moderated by the dominant organisational culture.

Sztompka (1998) argues that institutional frameworks generate institution-based trust (trust developed through institutions) when they possess certain substantial and operational characteristics in a certain cultural context. He argues that in democracies, it is important that the subjected actors positively appreciate these institutions. Giddens similarly refers to the importance of “a faith in the correctness of abstract principles” (Giddens 1990: 34). Institution-based trust therefore requires faith in the correctness of institutional arrangements, which is considered as “meta-trust as the ultimate insurance of other kinds of trust they might venture” (Sztompka 1998: 28). Different organisational cultures possess such trust in institutions to different extents, as we will show. Therefore, it follows that different organisational cultures have different capacities to produce institution-based trust. Our proposition can be formulated as follows:

Central proposition: Organisational cultures that are characterised by high faith in the correctness of institutional arrangements will positively moderate the relationship between institutionalised control and administrative trust, while organisational cultures that are characterised by low faith in institutional arrangements will negatively moderate the relationship between institutionalised control and administrative trust.
This proposition leads us to define the following central hypothesis.

**H1**: Organisational cultures moderate the relationship between institutionalised control and administrational trust.

In the next paragraph, we discuss different organisational cultures and formulate specific hypotheses regarding the trust-control nexus.

> **3.3. Hypotheses: institutionalised control, administrational trust and organisational culture**

In his application of cultural theory to public management, Christopher Hood (2000: 3) argued that most ideas of public management actually relate to four polar ‘ways of life’. These four cultural orientations address the question of “how to manage public administration”, and are situated along two dimensions: “grid” (the degree to which our lives are circumscribed by conventions or rules) and “group” (the extent to which individual choice is constrained by group choice). We present the four cultural orientations in the following table.

**Table 1: Cultural grid-group theory: Four organisational cultures**

<table>
<thead>
<tr>
<th>Grid</th>
<th>High</th>
<th>The Fatalist Way</th>
<th>Characteristics: Low cooperation, strict rule-bound approaches to organisation</th>
<th>The Hierarchist Way</th>
<th>Characteristics: Rule-bound approaches to organisation, high importance of formal and informal institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td></td>
<td>The Individualist Way</td>
<td>Characteristics: Atomised approaches to organisation stressing negotiation and bargaining</td>
<td>The Egalitarian Way</td>
<td>Characteristics: High-participation structures in which every decision is ‘up for grabs’</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>High</td>
<td>Group: The extent to which public management involves coherent collectivities, institutionally differentiated from other spheres of society.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Grid: The extent to which public management is conducted according to well-understood general rules (Source: Hood, 2000: 9)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The hierarchical culture places a strong emphasis on formal authority to take decisions and is related to clearly defined roles, rules and procedures (Hood 2000). This culture is strongly reflected in Weberian bureaucracy (Maesschalck 2004), hierarchy-type coordination mechanisms (Bouckaert, Peters, and Verhoest 2010) and ‘procedural bureaucracy’ (Yang 2005). Authority and formal sources of power are central and focus on objective-setting, rule-making, allocation of tasks and responsibilities in roles and lines of control (Bouckaert, Peters, and Verhoest 2010). Taking into account our proposition, we consider this culture to be characterised by a high faith in the correctness of abstract principles, and hypothesise that hierarchical organisational cultures will positively moderate the relationship between institutionalised control and administrational trust.

**H2**: The hierarchist public management culture will positively moderate the relationship between institutionalised formal control and administrational trust.
The core logic in the individualist organisational culture is that “human beings, from the highest to the lowest, are inherently rational, calculative, opportunistic, and self-seeking” (Hood, 2000: 100). In terms of institutional organisation, this logic is clearly reflected in market-type coordination mechanisms (Bouckaert, Peters and Verhoest 2010), New Public Management (Pollitt and Bouckaert 2011), “re-inventing government” initiatives (Osborne and Gaebler 1992) or market bureaucracy (Yang 2005). This logic reflects faith in self-regulation rather than in an overabundance of centralised steering. However, this logic does not completely reject the importance of institutions and rules. Brennan and Buchanan (1985) argue that rational actors will look after themselves at the expense of others, unless rules are in place to align the pursuit of self-interest with the collective interest (Hood 2000). Therefore, individualist logics require some faith in the correctness of the “rules of the game”. Our central proposition leads us to hypothesise that formal control can be a source of administrational trust until it has passed a critical point of institutional saturation, after which it becomes detrimental to administrational trust. This perspective yields a non-linear relationship, which we present in the following figure.

Figure 1: Hypothesised non-linear relationship between institutionalised control and administrational trust in individualist organisational cultures

**H3:** Under an individualist organisational culture, the relationship between institutionalised formal control and administrational trust is likely to follow a nonlinear direction.

The egalitarian organisational culture emphasises boundaries of the group and aims at equality of power relations (Hood 2000). It is characterised by practices and procedures that aim to increase participation and cooperation, and focuses on role discretion in organisational decision-making (Maesschalck, 2004). As a mode of institutional organisation, it is reflected in New Public Governance (Pollitt and Bouckaert, 2011), network-type mechanisms of coordination (Bouckaert, Peters, and Verhoest 2010) or ‘network bureaucracy’ (Yang, 2005). Under this culture, the group is defined as the source of rationality while flexibility and responsiveness are seen as the primary virtues (Yang, 2005: 277). Teamwork and innovation are central rather than competition and rigid institutional compliance. Control is enacted through group processes and peer accountability, which implies ‘letting go’ of full control (Hood, 2000). For these reasons,
network scholars often argue that trust between actors is the basis of network organisation, as opposed to formal institutions (Edelenbos and Klijn, 2007; Klijn, Edelenbos and Steijn 2010). As this culture stresses individual autonomy and flexibility over institutional rigidity, we argue that it is characterised by a low faith in the correctness of institutional arrangements. Given our central proposition, this leads us to argue that institutionalised control will obstruct, rather than enable the development of administrational trust.

**H4**: The egalitarian culture will negatively moderate the relationship between institutionalised formal control and administrational trust.

Whereas hierarchist, individualist, and egalitarian cultures are widely recognised as “ideologies” of institutional design, the fatalist culture poses some challenges. Fatalist institutional organisation can be considered as “organised anarchy” (Cohen, March and Olsen 1972), and it is sometimes seen as a contradiction in terms (Maesschalck 2004) as it is primarily an anti-organisational, ‘passive’ attitude (Hood 2000). As such we will leave fatalism out of the picture at this stage of our research and focus on the three ‘active’ organisational cultures.

Hood (2000) argues it is unlikely to find these cultural orientations as ‘pure types’ in public administration, as most organisations are characterised by a mix of the four ideal types. However, one culture can be stronger or weaker than another in different organisations and we argue that the relative dominance of one organisational culture over the other will moderate the relationship between administrational culture and institutionalised control for the reasons presented above.

In the remainder of this paper, we conduct an exploratory empirical test of the hypotheses postulated here.

**4. Data, measures and methods**

> **4.1. Data**

This research uses the 2012 Korean Civil Service Survey (KCSS), which was conducted by the Knowledge Center for Public Administration & Policy at Seoul National University. The survey was administered between the dates of July 2 and July 27th, 2012 and was distributed to civil servants working in 16 metropolitan and 228 local government offices throughout South Korea. The total number of survey respondents was 1407. Descriptive statistics for the main variables used in this study are presented and discussed in section 5.

> **4.2. Measures**

The constructs of interest to this research are not directly measured in the KCSS survey. Therefore, we use composite variables that are measured using multiple survey items. We used confirmatory factor analysis with varimax rotation to determine the suitability of the items used to measure the construct of interest. Items with factor loadings above
the conventional threshold of 0.4 were retained as indicators to measure that specific construct, while items with factor loading below this threshold were excluded.

The appendix contains a list of the items used in this research. In this section, we discuss the measures used for the variables at the core of our interest.

> **4.2.1. Institutionalised control**

To measure institutionalised control, we use a composite variable. Initially, ten items from the survey were considered to be plausible indicators for this construct. Our confirmatory factor analysis led us to discard seven items and retain the remaining three. All three measures consist of a scale ranging from one (not at all) to five (very much so). The cronbach’s alpha for these three items was 0.739, which suggests a satisfactory degree of internal reliability of this composite measure considering the conventional threshold of 0.70 (Hair et al. 1998). Due to limitations of the survey, only formal institutional controls are considered in this empirical analysis.

> **4.2.2. Hierarchical culture**

Here we considered a five-item composite variable measuring hierarchical culture on a scale of one (not at all) to five (very much so). We considered that the selected items tapped into the construct of hierarchical culture at face value. However, after our confirmatory factor analysis, three items where retained, with a cronbach’s alpha for these three items of 0.493, suggesting rather low internal reliability.

> **4.2.3. Individualist culture**

We performed a confirmatory factor analysis on five items that we considered to tap into individualist culture at face value. Four items where retained, again measuring individualist culture on a scale of one to five. The cronbach’s alpha of this composite variable was 0.712, suggesting adequate internal reliability.

> **4.2.4. Egalitarian culture**

Seven items were proposed to measure egalitarian culture at face value. Our confirmatory factor analysis led us to discard four, leading us to measure the composite variable of egalitarian culture using three items. Again, items were measured on a scale of one to five, with a cronbach’s alpha of 0.743, suggesting satisfactory internal reliability of the constructed measure.

> **4.2.5. Administrative trust**

Finally, we considered six items to tap into administrative trust at face value. Our confirmatory factor analysis suggested to retain four of these items, again all consisting of a scale of one (not at all) to five (very much so). The composite variable for administrative trust yielded a cronbach’s alpha of 0.708, indicating adequate internal reliability for our measure of inter-organisational trust in public administration.
4.3. Method

To examine the hypotheses laid out above, hierarchical OLS regressions are used, with the control variables entered in the first stage, independent variables entered in the second stage, and interaction terms entered in the third stage. Hierarchical regressions are often used in moderation analysis in order to avoid multicollinearity between interaction terms and independent variables. Additionally, as is common practice in moderation analysis, this study also employs standardised variables to further safeguard from multicollinearity (Aiken and West 1991).

5. Discussion of results

5.1. Descriptive statistics

Table 2 displays the descriptive statistics for the independent and dependent variables of this study.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inst. control</td>
<td>1407</td>
<td>1.00</td>
<td>5.00</td>
<td>3.73</td>
<td>0.75</td>
</tr>
<tr>
<td>Hier. culture</td>
<td>1407</td>
<td>1.00</td>
<td>5.00</td>
<td>3.18</td>
<td>0.58</td>
</tr>
<tr>
<td>Ind. culture</td>
<td>1407</td>
<td>1.00</td>
<td>5.00</td>
<td>2.74</td>
<td>0.64</td>
</tr>
<tr>
<td>Egal. culture</td>
<td>1407</td>
<td>1.00</td>
<td>5.00</td>
<td>3.49</td>
<td>0.65</td>
</tr>
<tr>
<td>Adm. trust</td>
<td>1407</td>
<td>1.00</td>
<td>5.00</td>
<td>3.29</td>
<td>0.62</td>
</tr>
</tbody>
</table>

As is shown, the mean value of administrational trust is well above the midpoint of 2.5 at 3.29. Furthermore, and seemingly contradictory to the substitution perspective, civil servant perceptions of institutional control are relatively high with a mean of 3.73. However, it is also interesting to note that the standard deviation is highest with respect to this item, suggesting that there is some degree of variation between different areas of government. Korean civil servants seem to perceive the culture of their organisations as hierarchical, with a score of 3.18, which is again well above the midpoint. Perception of individualist culture was the lowest value out of all of the key variables in this research, at 2.74. This is not surprising given that South Korean society is often considered to possess a collectivist orientation. To this end, the mean of egalitarian culture lies at 3.49, suggesting that employees view themselves as firmly integrated into their organisation and that their organisation values their input, no matter their place in the organisational hierarchy.

5.2. Findings

Table 3 presents the results of our analysis. The first model introduces the control variables used in this study as well as institutional control. As is shown from this model, perceived quality of leadership and public service motivation are found to be highly associated with civil servants’ levels of administrative trust. These observations are in
line with earlier research that found positive relationships between organisational citizenship behaviour (OCB), pro-social attitudes and trust in leaders (Dirks and Ferrin 2002, Fulmer and Gelfand 2012). Furthermore, we note that institutionalised control is found to have a strong negative association with respondents levels of administrational trust. Model 2, which introduced the independent variables, reveals that all of the independent variables are strongly associated with administrational trust, although the nature of the relationship differs. Institutional control was found to be negatively associated with levels of administrational trust. A more detailed discussion of the relationship between individualist culture and administrational trust will be provided in the simple slopes analysis further along in this text, which reveals how this relationship changes over different values of individualist culture. Egalitarian culture was also found to be positively associated with levels of administrational trust.

<table>
<thead>
<tr>
<th>Table 3: Regression Results</th>
</tr>
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<tbody>
<tr>
<td><strong>Main variables</strong></td>
</tr>
<tr>
<td>Institutional Control</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Individualist Culture</td>
</tr>
<tr>
<td>Egalitarian Culture</td>
</tr>
<tr>
<td>Hierarchical Culture</td>
</tr>
<tr>
<td>Inst ctrl X ind cult</td>
</tr>
<tr>
<td>Inst ctrl X egal cult</td>
</tr>
<tr>
<td>Inst ctrl X hier cult</td>
</tr>
<tr>
<td><strong>Control variables</strong></td>
</tr>
<tr>
<td>Area of work</td>
</tr>
<tr>
<td>Area of expertise</td>
</tr>
<tr>
<td>Civil Service Rank</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>Experience</td>
</tr>
<tr>
<td>Education</td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Level of government</td>
</tr>
<tr>
<td>Responsibility to society</td>
</tr>
<tr>
<td>Quality of Leadership</td>
</tr>
<tr>
<td>PSM</td>
</tr>
<tr>
<td>Constant</td>
</tr>
</tbody>
</table>

Dependent Variable: Zscore(administrational_trust)

Standard errors in parentheses; p < 0.1*, p < 0.05**, p < 0.001***

Model 3 introduces the interaction terms, which offer insight into how the impact of institutional control on administrational trust varies according to different levels of the organisational cultures this study assesses. We find that, among the different organisational cultures included in our analysis, the only one found to affect the relationship between institutional control and administrational trust in a significant manner is egalitarian culture. More specifically, egalitarian culture is found to be negatively associated with the relationship between institutional control and administrational trust, as we predicted in hypothesis 4.
Table 4: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adj. R Square</th>
<th>Std. Error of Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.271</td>
<td>.073</td>
<td>.065</td>
<td>.96749588</td>
<td>.073</td>
<td>9.151</td>
<td>12</td>
<td>1394</td>
<td>.000</td>
</tr>
<tr>
<td>2</td>
<td>.320</td>
<td>.103</td>
<td>.092</td>
<td>.95313416</td>
<td>.029</td>
<td>15.032</td>
<td>3</td>
<td>1391</td>
<td>.000</td>
</tr>
<tr>
<td>3</td>
<td>.325</td>
<td>.106</td>
<td>.094</td>
<td>.95238264</td>
<td>.003</td>
<td>1.749</td>
<td>3</td>
<td>1388</td>
<td>5</td>
</tr>
</tbody>
</table>

In order to better understand the significant influence of egalitarian culture on the relationship between administrational trust and institutional control, we conducted a simple slopes analysis (Aiken and West 1991). We designated groups of low, medium and high egalitarian organisational cultures. The low group are all cases found one standard deviation below the mean, the medium group consists of all cases between one standard deviation below and above the mean, and the high group consists of all cases one standard deviation above the mean. In the low egalitarian culture group, we find no significant influence of egalitarian culture on the relationship between institutional trust and administrational trust ($\beta = -0.054, p < 0.227$). This finding is not surprising as it simply suggests that where egalitarian culture is less pronounced, it also has less of an impact upon the relationship of interest to this study. With respect to the medium group, we find a stronger negative relationship with the relationship of interest ($\beta = -0.103, p < 0.001$). In the high egalitarian culture group, we find the strongest influence upon the relationship between administrational trust and institutional control ($\beta = -0.152, p < 0.001$). Overall, what is implied by this post hoc analysis is that the perceived dominance of the egalitarian culture may serve to increase the magnitude of the negative relationship that exists between institutional control and administrational trust. This finding supports our argument that formal controls might be more detrimental to inter-organisational trust in organisational cultures that are more egalitarian. These relationships are illustrated in figure 2, which shows more negative relations between institutionalised control and administrational trust in for high egalitarian cultures.
The interaction term in table 3 showed a non-significant effect for the individualist culture. This does not come as a surprise, since we hypothesised a non-linear relationship between institutional control and administrational trust in this culture, and the OLS regression technique can only estimate linear relationships. We therefore also conducted a simple slopes analysis for the relationship between administrational trust and institutionalised control under different extents of individualist organisational cultures. However, none of the three regions of individualist culture were found to be significantly associated to the relationship between administrational trust and institutionalised control.

Given the hypothesised non-linear relationship and the inconclusive evidence generated by OLS analysis and simple slopes analyses, further investigation into the possibility of such a non-linear relationship between institutionalised control and administrational trust seems to be necessary under this organisational culture. The results of the simple slopes analysis are presented in the following figure.
6. Critical discussion

The results presented in this paper are interesting and act to light the path of further research. However, the results and the methods employed to obtain them are certainly fit for discussion.

First, we acknowledge that our theoretical framework is limited because we excluded the fatalist culture. However, doing so in further research might prove to show interesting results.

Second, our theoretical framework has focused only on a limited area of trust research. It focuses on the effect of one particular source of trust (institutionalised control) under different organisational cultures, whereas we should also aim to increase our understanding of whether and when other sources of trust might be more or less effective to generate administrative trust under different organisational cultures.

Third, the empirical validity of this research can be criticised on multiple accounts. While our theoretical framework emerged from grounded deduction based on recent and seminal relevant literature, the measures we used to test our hypotheses are exploratory and rather crude. This is for example shown in the cronbach’s alpha of 0.40 for the hierarchical culture, which reveals that we did not manage to construct a valid measure for this organisational culture. Therefore, the evidence regarding this organisational culture remains inconclusive and questions regarding the prevalence and potential...
impact of this culture on the control-trust relationship remain unsolved. Another obvious measure that could serve from improvement is the composite variable used to measure administrational trust. Our conceptual discussion is limited and foregoes existing discussions concerning the multi-dimensional nature of trust. As a rather pragmatic proxy, we used three rather general indicators of administrational trust. Although we find adequate construct validity, the question is whether we are actually measuring trust or are rather tapping into a broader “social mood” (Van de Walle 2004). A more elegant and sophisticated indicator of administrational trust would serve to improve the validity of our research in the future, and requires attention for further conceptualisation, measurement and analysis of administrational trust.

Fourth, the OLS analysis we conducted estimates linear relationships between institutional control and trust under different organisational cultures. While we have suggested that non-linear estimation techniques are more adequate to assess the relationship of interest in an individualist organisational culture, this goes beyond the scope of this contribution. However, future research should take this into account, for example by focusing on the direction and form of the relationship in different organisational cultures.

7. Conclusion

In this study we questioned the relationship between institutionalised control and administrational trust. Our central argument was that organisational cultures should be taken into account in research regarding the relationship between administrational trust and institutionalised control. We tested the hypothesised relationships between institutional control, organisational culture and administrational trust using KCC survey data.

Our exploratory results indicate that administrational trust and institutionalised control are negatively related. However, we also found that institutionalised control has varying effects on administrational trust in different organisational cultures. Organisational culture therefore seems to moderate the relationship between control and trust. We argued that this might be due to differences in the “faith in the correctness of abstract principles” that characterises different organisational cultures. Organisational cultures that are characterised by high faith in the institutional arrangements of control enable a larger extent of institution-based trust, reducing substitutive relationships between institutionalised control and administrational trust, while cultures that are characterised by a low faith in the correctness of abstract principles might see exacerbate the substitutive relationship between institutionalised control and administrational trust.

Although the evidence for a number our hypotheses was inconclusive, the central research hypothesis seems to be supported by our empirical analysis. Our presumption about the role of organisational culture for sources of trust was endorsed by our analysis,
warranting the need for further research into this subject. We therefore propose that H1 can be accepted.

Regarding the hypothesised moderating effect of organisational cultures on the trust-control relationship, our findings show that an egalitarian organisational culture moderates the relationship between institutionalised control and administrational trust in the expected direction. As illustrated by the simple slopes analysis, institutionalised control seem to be less compatible with administrational trust under stronger egalitarian cultures than under stronger hierarchical or individualist cultures. Hypothesis H4 could therefore not be rejected on the basis for our findings.

However, conclusive evidence was not found for the other cultures. While the moderating effect of hierarchical culture was in the hypothesised direction, the relationship proved to be empirically insignificant. Hypothesis H2 must therefore be rejected due to the inconclusive evidence. However, because the measurement results concerning hierarchical culture are not very reliable due to low construct validity, further investigation of this relationship does seem warranted.

Individualist cultures finally did not show any significant moderating effect on the relationship between institutionalised control and administrational trust either. While hypothesis H3 must therefore be rejected on the basis of inconclusive evidence, our theoretical hypothesis and the simple slopes analysis, suggest that further examination into the relation between institutionalised control and administrational trust seems warranted. Specifically, we suggest that non-linear estimation techniques would be appropriate to investigate the trust-control relationship in individualist organisational cultures.

Our research also suggests that it might be interesting to have more attention for the direct relationship between organisational culture and administrational trust. The results of our analysis showed that egalitarian cultures are positively correlated with administrational trust and hierarchical cultures are negatively correlated with administrational trust. Surprisingly, we found the most significant direct relationship to exist between individualist culture and administrational trust. Given the focus on competition and rational self-interested maximisation of individual utility in this organisational culture, this finding is unexpected and warrants further attention from organisational researchers.

The exploratory hypotheses presented in this article tap into our first ideas about the potential relation between institutionalised control and administrational trust under different administrational cultures through linear estimation techniques. These results provide valuable exploratory insights, arguing that organisational culture is a potential moderator for the effect of institutional control for administrational trust. Our analysis should be seen as opening the door to an interesting new avenue of research, in which different organisational cultures are taken into account for both scientific study and practical management of interorganisational trust in public administration.
References


Bouckaert, G. (2012). Trust and Public Administration. Administration, 60(1)


Annex: survey items

- Institutionalised control
  - Q4_1 control from central government(department) - authoritarian means
  - Q4_2 non-authoritarian means
  - Q4_3 financial means

- Hierarchical culture
  - Q25_1 obeying rules is very important
  - Q25_2 not obeying official rules or proceedings is acceptable in order to complete work (-)
  - Q25_5 some rules and proceedings can be neglected if superiors command

- Individualist culture
  - Q15_1 promotion depends on how well his or her performance is
  - Q15_2 wage is different depending on performance
  - Q15_5 employees get incentives for their high quality service for citizen
  - Q15_6 employees get incentives for their creative and innovative performance

- Egalitarian culture
  - Q26_2 all employees are encouraged to suggest new ideas to improve the organisation
  - Q18_4 they let members who impact employees participate in decision making
  - Q18_5 members participate to decide important changes

- Administrational Trust
  - Q31_1 degree of trust - central government organisations
  - Q31_2 degree of trust - upper level local government
  - Q31_3 other local governments
  - Q31_4 special local governments