



Assessing the Relationship Between Government Performance and Public Trust: A Cross-National Multilevel Analysis

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Abstract

Governments tempt to assume that increases in government performance guarantee functional levels of citizen trust. However, the levels of trust in government are steadily declining in the Western world. This master thesis demonstrates how the performance of national governments relates to citizen satisfaction and trust in government, and uses a combination of expert data on government performance, and citizen data on satisfaction and trust in a multilevel cross-country design. This research demonstrates how citizen satisfaction with the day-to-day output of governments mediates between government performance and citizen trust in national governments. This thesis found that the participatory and oversight competences of institutions and actors beyond the executive branch are decisive factors of government performance for explaining levels of citizen trust.

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Introduction and Research question

It seems to be a general trend that levels of trust in national governments are steadily declining in most countries (Chanley, Rudolph & Rahn, 2000; Dalton, 2005; Welch, Hinnant & Moon, 2004; Putnam, 2000). This is problematic, as citizen trust is detrimental for the legitimacy of government institutions, and as democratic governments are ultimately dependent on citizen trust for their survival (Lee, 2018; Christensen, 2015; Dalton, 1999; Bouckaert & Walle, 2003). Indeed, Dalton (1999) shows that high levels of trust in a country makes citizens more likely to voluntarily comply to laws and taxes, foster higher allegiance, make citizens express national pride, and foster willingness to provide information to the government. Citizens also participate more often in political parties and campaign activities in more trusting countries.

Moreover, citizen trust in government allows citizens to comply without additional government coercion, as political trust facilitates social cohesion, making citizens exert social control to also comply with the formal rules and regulations (Lee, 2018; Newton & Norris, 2000; Easton, 1965; Putnam, 2000). Obtaining citizen compliance is integral to the viability of governmental institutions (Dalton, 1999; OECD, 2013). Much of public administration research tries to understand the causes or predictors of this growing distrust in national governments (Lee, 2018; Bouckaert & Halligan, 2007). Government performance is regarded as a major factor in the declining trends of trust. Therefore, governments seek to improve their performance, as to inspire citizens with trust.

I define government performance as the capacity of governments and their institutions to respond quickly and resolutely, while taking into account the long-term consequences of actions (Schraad-Tischer & Seelkopf, 2018). Government performance can vertically be categorized into different dimensions: micro performance refers to interactions at the individual level, meso performance refers to the level of policy fields, and macro performance refers to government wide processes of public finance, institutional frameworks, and legislation (Bouckaert & Halligan, 2007). In this thesis, I will consider the macro level of government performance, as this is the conceptual dimension in which the national government processes take place. Consequently, I will link government performance at the country level with the micro-level value orientations of trust and satisfaction with national governments.

Performance theory considers government performance as crucial for understanding citizen trust in government, and it states that better government performance inspires more public trust (Newton & Norris, 2000). With respect to the direction of causality, Van de Walle and Bouckaert (2013) argue that while it is obvious that performance has some impact on trust, it is just as obvious that existing levels of public trust may have an impact on perceptions of government performance, i.e., trusting citizens allow governments to work more effectively. However, Lee (2018) demonstrated that the causal direction flows for a significant extend from government to trust, and not just as much the other way around, as is argued by Van de Walle and Bouckaert (2013). She demonstrates this by

taking the Great Recession that began in 2008 as a natural occurring factor to study causality. In this thesis, I will partially attend to the problem of causality by using expert data on government performance, instead of citizen perceptions of performance, and by operationalizing the change in government performance over time, which provides a time dimension in the analysis, in the absence of corresponding longitudinal data on trust.

The topic of government performance has received much interest by public administration, especially in relation with the more ‘objective’ quantitative outcomes of government performance that are easier to measure (Lee, 2018). Macroeconomic performance has been identified as the most important predictor of trust in government (Newton & Norris, 2000). However, the question of how levels of national government performance, taken as a more qualitative dimension of the capacity of governments and their institutions to respond quickly and resolutely, relate to citizen trust in government, has not received much empirical attention in the public administration literature. This makes the performance-trust link a relevant research topic, especially given the declining rates of citizen trust in governments, and the assumption of governments that increases in outcomes and effects result in increases in citizen trust in the public sector (Bouckaert & Halligan, 2007), as a means to combat this decline.

Public administration mainly used ‘hard indicators’ to research government performance (Bouckaert & Walle, 2003). However, recently there has been increased attention on accountability and issues around impacts and outcomes, which stimulated the introduction of ‘soft’ indicators that measure information on governance as a whole. The use of a combination of ‘hard’ expert macro data on government performance and ‘soft’ micro data on citizen attitudes about public institutions for analyzing the performance-trust link, has however not yet gained much attention by public administration research in conducting cross-country analyses. Lee (2018) does combine aggregate variables of unemployment rate and other economic impacts of the great recession, with aggregate levels of trust in government, in a DD-model, which allows to analyze how macroeconomic policy influences key aggregate economic variables. But she does not combine the microdata on citizen value orientations with institutional properties of government performance, such as the capacity of governments and their institutions to respond quickly and resolutely to societal problems.

Researching the government performance-trust relationship is of high societal relevance, and should be seen in the context of the crisis of citizen trust that is experienced in Western nation states, with stable declining trends of trust in government over multiple decennia (OECD, 2013). This thesis tries to examine to what extent national government performance affects the levels of trust in a nation, and to what extent this is mediated by citizen satisfaction with government performance. Knowing when a healthy dissatisfaction with the government starts to turn into distrust, is highly relevant practical information for national governments to know, and to make effective efforts to remain legitimate institutions. Studying the performance-trust link by combining ‘objective’ expert data on governments with value orientations of trust in government and satisfaction with national

governments, is also is of high scientific relevance, as this has not yet been researched with a multilevel model. Therefore, the research question that I cover in this thesis is: how does the performance of national governments relate to levels of public satisfaction and trust in these systems?

Theory

Relevance of trust in government

Increasing the trust of citizens and organizations in the public sector, was a major reason for governments to reform their public sector after the shift to new public management (Bouckaert, 2012). Political support allows government systems to function normally, it assures rule stability, and it fosters political community cohesion, making trust in government a relevant topic to study (Easton, 1965). Trust in government is identified by Fukayama (1995) as one of the most important pillars of government legitimacy and the sustainability of political systems. Crucial for well-being and social cohesion, it influences the government capacity to effectively rule, and allows to act without coercion. Raising trust thus diminishes transaction costs, and increases the effectiveness and efficiency with which governments can act.

Trust in government

Trust in a general sense refers to holding a positive perception about the actions of an organizations or individual (OECD, 2013). This phenomenon is the subjective experience through the eyes of the beholder, that is of special relevance to the extend it shapes actions. Scholars in the public administration discipline use a variety of terms overlapping in meaning when talking about the concept of trust in government: public trust in government; citizen trust in government; confidence in government; political trust; civic trust; institutional trust; beliefs in government; trustworthiness; and presidential or congressional approval (Lee, 2017). In this multitude of definitions and operationalizations of trust in government, Lee provides the following definition: “a generalized expectancy held by citizens that the word, promise, oral or written statement of government can be relied upon”. Thereby, citizens believe their governments to act competently and fulfill the public interests to keep or increase the public trust.

Trust can thus be seen as a feature of relationships of individuals, organizations, and institutions that affect their relations and interactions in supporting ways (Bouckaert, 2012). To understand how trust regimes in countries and policy areas impact interactions, he distinguishes three clusters of trust: from citizens and organizations in the public sector, from the public sector in citizens and organizations, and within government and the public sector. The majority of public administration literature is about citizen trust in the public sector. This is also how Easton (1965) defines trust in government: the trust of citizens in the policy outcomes of a government that is right and fair. Trust in government is the product of the amount of congruence between what citizens perceive to be right and fair, and the degree to which the government is perceived to be right and fair (Bouckaert & Van de Walle, 2003). Citizen evaluations of government performance are based on a variety of differing criteria as citizen preferences are diverse and not necessarily similar. As citizens might not agree with each other what is considered right and fair, it is important to identify the common drivers of their

perception of governmental trustworthiness. However, it is challenging to empirically assess the notion of political trust from political approval, as these concepts are often perceived as highly similar by citizens (Chanley, Rudolph & Rahn, 2000).

Trust in government consists of social trust and political trust, in which social trust refers to citizens' trust in their social community, whereas political trust refers to citizens' macro-level diffuse system based trust, and institution based trust (Putnam, 2000). Easton (1965) makes an influential distinction within the concept of political trust between regime and authority support. Citizen attitudes toward outcomes at the highest polity level refer to diffuse support, and satisfaction with government institution outcomes refers to specific support. This distinction fueled a debate whether trust in government is an attitude to the policies of the current government (Citrin, 1974), or an orientation toward the performance of the general public administration (Miller, 1974). The debate articulates two sides of the coin of what citizen trust in government can refer to.

Satisfaction

Citizen satisfaction with government outputs refers to a conceptually different public value than trust in government, while these two are also intimately related in that satisfaction refers to the short-term citizen perception of government outputs, which effects spill over in the long term oriented public value of trust (Easton, 1965). A given level of satisfaction depends on whether a citizen has sympathy for what a public agency does, and what good it does for society (Bouckaert & Van de Walle, 2003). Most surveys focus on *how* something is done, instead of *what* it is that is done. Satisfaction surveys usually presuppose a direct relationship between the quality of a public service delivery, and the satisfaction of its user. However, a single satisfaction indicator does not provide an explanation about the motivations for that level of satisfaction. Ideally, besides a measure for satisfaction, there is also an item that provides a weight of this effect by measuring the relative importance.

The relationship between trust, satisfaction, and government performance

To understand how trust and satisfaction relate to each other, and to government performance, it is important to consider the seminal work of Easton his *distinctions of political support* theory (1965). From his argument follows the causal chain of satisfaction with day-to-day outputs of authorities affecting trust in authorities, affecting trust in regime, affecting regime legitimacy (Curtice et al., 2003). When assessing the objects of support in terms of their relative importance for the survival of the political system, there is a causal hierarchy with objects of support higher up having a bigger impact on system preservation. From this argument, I will deduct my hypotheses, but first I will lay out the argument in more detail.

Easton (1965) makes a distinction between *types*, *objects*, and *sources* of political support (see figure 1). Types of support can be *specific* or *diffuse*. Specific support refers to the day-to-day

actions and performance of governments and political elites, while diffuse support refers to deep-seated attitudes toward the operation of the political system and politics, comparatively unaffected by change. This distinction is important for understanding the significance of public attitudes toward the political process (Dalton, 1999). All governments occasionally experience failures to meet citizen expectations, yet a total erosion of diffuse regime support does not need to be a direct consequence of this. Political regimes require a reservoir of diffuse support largely independent of day-to-day policy performance, to survive short term periods of citizen support shortages. Objects of support can be *regimes* or *authorities* (Easton, 1965) (political communities are another object of support, which serves no function in my argument). Support for political authorities refers to the holders of political office, or more generally the political elites that government leaders depend upon. Regime support refers to citizen attitudes toward processes, institutions, and principles of governance. Sources of support can be subdivided in *instrumental orientations*, which can be short-term or general, and *moral orientations*, referring to the set of norms and values on which judgments of legitimacy are made. The objects of support should be understood as the product of a combination of the aforementioned concepts (see table 1).

Satisfaction with daily political output is a specific type of political support, and refers to short term citizen evaluations of governmental policy performance (Easton, 1965). Rather than a threat to the political system, dissatisfaction with policy output should be perceived as symptomatic of a healthy functioning democracy, as it enables citizens to dissolve growing political incongruities by voting in the political representatives, expected to deliver more satisfying day-to-day policy output. Poor policy performance thus does not immediately need to result in lower levels of diffuse political support higher up in the hierarchy. Reservoirs of diffuse support foster favorable citizen attitudes that allow them to temporarily tolerate unwanted policy outputs, enabling governmental systems to remain legitimate during periods in which policy outputs are not meeting input demands. Therefore, I expect that better government performance results in higher levels of citizen satisfaction with authorities and regime (*hypothesis 1*).

Table 1. Types, sources, and objects of political support (Curtice et al., 2003).

Types	Sources	Objects	
		<i>Regime</i>	<i>Authorities</i>
Diffuse	Norms and values	Regime legitimacy	Authority legitimacy
	Generalized utility	Trust in regime	Trust in authorities
Specific	Short term utility		Satisfaction with day-to-day output of authorities

To understand how trust relates to performance in a different way than satisfaction, it is important to consider political scenarios for different types, sources and objects of support. Easton (1965) distinguishes two types of diffuse types of political support. On the one hand, it can be based on an instrumental assessment of the political regime and authorities over a longer period of time. This generalized utility based trust in the different objects of governance helps the political system to remain its legitimacy under periods of poor policy performance. It is through citizen trust in the general capabilities of the political system that that short-term failures pose no immediate threat to the system. Diffuse objects of generalized utility are trust in the political authorities that hold office, and trust in the political regime, referring to the processes, institutions, and principles of governance. A dissatisfaction with day-to-day output of authorities might compromise the trust in authorities when policy output failure persists for a longer period of time. In this scenario, the persisting dissatisfaction spills over to the reservoirs of trust: it is no longer the politicians, political parties or coalitions that lost the citizen trust, but there is a general distrust in politicians and political institutions as a whole. Therefore, I expect that worse government performance results in lower levels of citizen trust in authorities and regime, or formulated in the positive, that better government performance results in higher levels of citizen trust in authorities and regime (*hypothesis 2*). A persisting output failure can result in regime distrust, and a call for institutional change, i.e. to replace a parliamentary system with a presidential system. However, the conceptual distinction between authorities and regime is harder to make empirically, as citizens do not inform their attitudes by political theories and usually fail to make this sharp distinction (Citrin & Muste, 1999).

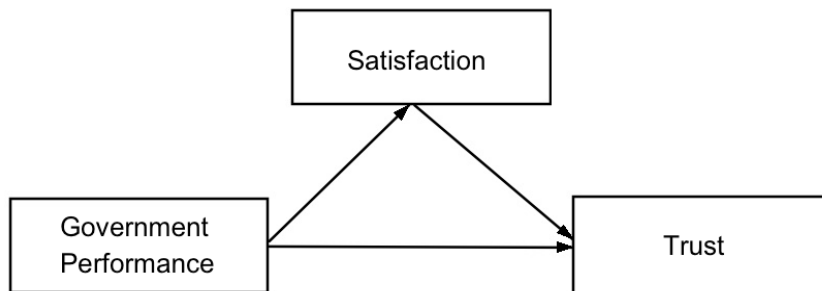
This reasoning assumes causal relationships between government performance and citizen attitudes of satisfaction and trust. However, much research on this topic assumes that there is reverse causality between government performance and trust (Van de Walle & Bouckaert, 2003), challenging performance theory and the causal claims by Citrin & Muste, (1999). Lee (2018) sheds some light on this causal mechanism by using a difference-in-difference methodology. She demonstrates that the causal direction goes for a significant extent from government performance to trust (and not just as much the other way around as Van de Walle & Bouckaert argue), by taking the Great Recession that began in 2008 as a natural occurring factor.

Citizen dissatisfaction about the policy performance of political institutions and the working of the democratic system does not automatically imply a dismissal of the democratic idea, as this embodies a moral ideology, which is the other type of diffuse political support that Easton (1965) distinguishes. The moral legitimacy of regimes and authorities is not obviously dependent on institutional performance, but on the underlying norms and values. In other words, there is no obvious logical relationship between the effectiveness of a political system, and the legitimacy of the democratic ideology. However, utility based legitimacy of political and administrative institutions can be considered an outcome of well performing government institutions (Easton, 1965).

Citizen dissatisfaction with day-to-day policy output does not immediately result in lower levels of trust in regime and authorities, as reservoirs of diffuse support foster favorable citizen attitudes that allow them to temporarily tolerate unwanted policy outputs. However, when policy output failure persists over a long time, the dissatisfaction with day-to-day output might compromise the trust in authorities and regime, generating a general distrust in politicians and political institutions as a whole. Therefore, I expect that citizen satisfaction with day-to-day policy output mediates between the relationship of government performance and citizen trust in authorities and regime (*hypothesis 3*).

When considering utility based bureaucratic legitimacy, a distinction can be made between in- and output-oriented legitimacy (Scharpf, 2009). Input legitimacy refers to the ability of governments to effectively govern and address problems through laws and regulations *for* its people. Output legitimacy refers to political participation *by* its people: the participatory mechanism of electoral representation that results in rules and regulations. Schmidt (2013) argues for a third dimension of throughput legitimacy, which refers to the interaction between in- and output-legitimacy, materializing into inclusiveness, openness, transparency, accountability and efficacy. She argues that increases in throughput legitimacy will likely remain unnoticed in the public perception, while a decrease might result in a collapse of government institutions. It is this legitimacy that most resembles the utility based legitimacy concept of Easton (1965), taking its place in the top of the hierarchy argument by Curtice et al. (2003), earlier described.

Figure 1: Conceptual Model



Government Performance

There is a range of definitions of performance in the psychological, social, managerial, and political sciences, for whose use is mainly dependent on individual, societal, organizational, or system performance levels of analysis (Bouckaert & Halligan, 2007). Performance as such, far from being a unitary concept, rather must be viewed as achievements whose significance depends on the stakeholders in question.

Much of the Public Administration literature argues that variances in government performance explain differences in public trust (Lee, 2018). A difference should be made between

performance as concept, and performance as agenda of change and improvement (Van Dooren et al., 2015). As a concept, performance can be a means (quality of actions) or an end (quality of achievements), giving rise to a matrix of four possible perspectives on government performance: performance as production, competence/capacity, good result, and sustainable result. Performance as an agenda expresses programs of change and improvement, promoted by like-minded and loosely coupled actors. Four strategies to improve performance as agenda, identified by Pollitt and Bouckaert (2004), are to minimize (privatize), marketize (applying private sector values and techniques), maintain (make better use of old techniques), and to modernize (changing public sector values and techniques).

These strategies cannot be presenting without also making mention of the seminal work of Hood (1991) who introduced the school of new public management (NPM) with several different doctrinal components that combine managerialism with economic rationalism, such as hands-on professional management, explicit standards and measures of performance, greater emphasis on output control, disaggregation of units, greater competition, private sector styles of management, and discipline and parsimony in resource utilization (in Lægreid, 2015). In the NPM rationale, administrative reforms are based on the premise that effective vertical managerial accountability translates into performance improvements.

The orthodox thinking about public management was challenged by Moore (1995) in his book *Creating Public Value*, on three topics. Moore saw the role of government in society not merely as a rule-setter, service-provider, and social safety net, but also as providing public value and a proactive contributor of the public sphere in a cultural, social, economic, and political sense. Secondly, Moore did not see the roles of government managers as ‘inward-looking, bureaucratic clerks, and passive servants to their political masters, but as stewards of public assets with ‘restless value-seeking imaginations’, who have important roles to play in helping governments to discover what could be done with the assets entrusted to their offices, as well as ensuring responsive services to users and citizens’ (Benington & Moore, 2010). The third key issue that Moore addressed, is that he saw techniques needed by public managers as means to help governments becoming more adaptable to shifting social and material conditions, and changing political aspirations and needs, instead of only regarding these public manager techniques as procedures to assure reliability and consistency of routines in government organizations. Moore emphasizes the entrepreneurial role of public managers in orchestrating public policy development, together with other managers and stakeholders, in which the public interest is served by improved outcomes for the public in legitimate way.

The variety of definitions of governance performance can be classified in two general models (Lee, 2018). The *input-output-outcome* model explains the fundamental layers of governance performance. Inputs refer to the amount of resources that are actually used, outputs refer the delivered services and products, and outcomes refer to manifestation of progressions toward achieving the program objectives (Hatry, 2006). While outputs and outcomes are intimately associated, the

outcomes should represent the attainment of the intended policy goals. The *economy-efficiency-effectiveness* model is the second method of explaining government performance (Frederickson, 2010). In this model, economy refers to the strategic government management of scarce resources, efficiency refers to the maximizing of public services given the availability of resources, effectiveness refers to the success in fulfilling the desired set of policy goals.

However, these general models can also be integrated into a single framework: Bouckaert & Halligan (2007) provide another causal framework for analyzing public sector performance. From a horizontal systemic point of view, which they name *the span of performance model*, they incorporate the assumed relationships between inputs, activity, output, effect/outcome, trust, needs, objectives, and environment. In their model, they assume a disconnection between outputs on the one side, and outcomes/effects on the other side. This can be due to various reasons: the absence of appropriate market mechanisms, or politicians that inaccurately analyze past outcomes. While outcomes and effects are no end on its own, they are the primary criterion for assessing public sector performance. A major government ambition is to guarantee functional levels of citizen trust in public institutions and organizations, by making the assumption that increases in outcomes and effects lead to increases in citizen trust in the public sector. Bouckaert and Halligan (2007) also make a vertical distinction which they call the *depth of performance*, including a micro, meso, and macro dimension. Micro performance is the direct interface between an individual public sector organization, and citizens or organizations. Meso performance refers to the level of policy fields (e.g., education, health, environment, and security policies). Macro performance is government or governance wide, and is estimated along the dimensions of public finance, fiscal policy, institutional framework, business, legislation, and societal framework. Schraad-Tischer and Seelkopf (2018) integrate the macro and meso dimensions of public sector performance by combining quantitative data on countries with qualitative expert data, to estimate the governmental and democratic quality, and the policy success that governments have in different policy fields.

The institutional performance model considers government performance as key to understanding citizen trust in government (Newton & Norris, 2000). They argue that citizen trust in political institutions is likely to be randomly distributed among the various personality, culture and social types, and thus can be regarded as a function of governance performance at the aggregate level. While not all individuals are equally affected by government performance, it can be argued that macro level effects of inflation, economic growth, government corruption, or foreign policy failure are randomly distributed over citizens. This would explain why political trust tends to be randomly distributed over religion, education, income, age and gender.

Well performing government institutions are expected to elicit citizen trust, and ineffective performing institutions to elicit lower degrees of trust (Newton & Norris, 2000). This model thus assumes the ability of citizens to accurately assess government performance. The institutional performance model assumes an indirect relationship between satisfaction in government institutions

and social trust. They observe a strong relationship between satisfaction and trust in institutions at the aggregate level of society, as satisfaction is the product of the directly experienced utilities of government performance, and as trust is based on experiences of returns by government institutions over a longer period of time. The institutional performance model is a systemic model that can be empirically tested with aggregate data on nation-states. Measuring government performance in order to improve the output is a typical NPM strategy, touching on several doctrinal components that combine economic rationalism and managerialism, such as explicit standards and measures of performance and a greater emphasis on output control (Hood 1991). One of these outputs is the creation of public value (Moore, 1995), in which the government provides values such as trust in government and satisfaction with their day-to-day output, instead of governments only having a role as rule-setter, service- and safety net provider.

Schraad-Tischer & Seelkopf (2018) make a conceptual distinction between three pillars of government quality: policy performance, democratic performance, and government performance. Policy performance is the first pillar, and includes economic, social, and environmental policies. Economic policies that encourage market principles and encourage competition remain the primary drivers of growth (Schraad-Tischer & Seelkopf, 2018). Such policies will however be of the greatest utility for the largest number of people when accompanied by redistributive tax and labor-market policies, as well as social policies that allocate the benefits of economic growth. Social policies involve the maintaining or increasing individuals' opportunities to live and act in resonance with their own systems of value, which ensures higher degrees of participation in society (Schraad-Tischer & Seelkopf, 2018). Ensuring social participation involves more than implementing classical welfare policies, such as providing a safety net against the risks of unemployment, disability, age, accidents, and illness. They should also empower community members to participate in public affairs. To ensure a long-term viability of social-welfare systems, no citizen should be excluded from feeling safe, having good health, employment, political participation, a healthy social network, and participation in cultural life. Environmental conditions have far-reaching consequences for the quality of life, which is why environmental policies compound a significant policy category (Schraad-Tischer & Seelkopf, 2018). Besides the natural conditions, they are also dependent on human social systems – particularly to the extent to which governments observe principles of environment sustainability. Environmental sustainability refers to using regenerative resources, but also involves ensuring that nonrenewable resources are only used to the extent that renewable alternatives can be developed, and that they can be absorbed by natural systems. The goal of environmental policies is securing a healthy natural ecosystem for this and future generations.

Democracy is the second pillar of the SGI, in which the state of democracy and the rule of law is assessed, which ensure good government performance and long-term stability (Schraad-Tischer & Seelkopf, 2018, p. 8). The system must facility opportunities for political participation for a society to achieve high levels of participatory justice. The quality of democracy must be high to sustain

pluralism of the underlying processes that shape public will and opinions (input legitimacy), and in the formal policy formulation and decision-making processes that match the interests of society's stakeholders (throughput legitimacy), while transforming these processes into concrete actions (output legitimacy). Democratic participation and rigorous oversight of the rule of law are essential for learning and adaptation processes, and to develop a capacity for change.

Governance is the third pillar of the SGI, which captures the capacity of governments and their institutions to respond quickly and resolutely, while taking into account the long-term consequences of actions (Schraad-Tischer & Seelkopf, 2018, p. 10). Therefore, it not only considers policy outcomes or democratic quality and rule of law, but also at the capacity of political leaders to successfully steer public processes. I.e., the extent to which governments, that work together with other institutions and social groups in democratic decision making, are able to identify issues, develop solutions, and implement them efficiently and efficaciously. Within this pillar, Schraad-Tischer & Seelkopf distinguishes between the capacity of governments to deliver sustainable policies (executive capacity), and the participatory and oversight competences of institutions and actors beyond the executive branch (executive accountability).

It is this pillar that most resembles what Bouckaert & Halligan (2007) call 'activities', which is the stage between the initial inputs and the outcomes, and to which Frederickson (2010) refers to as strategic government management and the maximization of resources, given the availability of resources in his *economy-efficiency-effectiveness* model, and Van Dooren et al. (2015) as a concept of quality of action.

Consequences of citizen trust for government performance

The importance of the public value of trust can be demonstrated by considering the consequences of citizen trust (or a lack of trust) in government. Consequences can be categorized into five outcomes (Dalton, 2004). Firstly, evaluative outcomes refer to citizens being more likely to voluntarily comply to laws and taxes. Secondly, affective outcomes refer to allegiance, and make citizens express national pride and foster willingness to cooperate and provide information to the government. Thirdly, cognitive outcomes refer to information heuristics. Fourthly, participative outcomes refer to a greater participation in political parties and campaign activities. Fifthly, institutional outcomes refer to structural changes in government institutions.

The OECD (2013) list a similar combination of consequences of citizen trust in government for government. Trust is necessary for the fair and effective functioning of government institutions, influences individual behavior in ways desirable for policy outcomes, helps with implementing structural reforms with long term benefits, improves compliance with rules and regulations and reduces enforcement costs, helps to increase trust in the economy by facilitating economic decisions, and is critical in crisis situations.

It takes time for governments to gain citizen trust, but it can also easily be lost in a short period (OECD, 2013). To understand the consequences of citizen trust in government for government performance it is also necessary to consider the negative impacts. Likely negative consequences of governmental mistrust for the operating of public administrations are difficulties to reach the less fortunate in society with government programs, tax evasion, rises in criminality, public sector recruitment difficulties, and a growing need for law-enforcement (Bouckaert, Walle & Kampen, 2005). The OECD sums up similar phenomena: less willingness of citizens and businesses to obey the law, pay taxes, and make sacrifices during crises situations. This results in raising government costs, revenue eroding, institutional inefficiency, and makes it difficult to attract quality personnel for government institutions.

Comparisons across levels of political authority and regime support are important for understanding challenges for structures of governance (Dalton, 1999). Citizens are often dissatisfied with political authorities within the democratic system. Citizens act on this discontent by voting for other political stakeholders in the next elections. Authority dissatisfaction is usually not a signal of fundamental political change, this political office dissatisfaction can exist without compromising the support for the institutional structure encompassing this office. However, declining support for the general political regime might seriously challenge the constitutional structures, or suggest calls for government procedure reforms.

An implication of the institutional performance model by Newton and Norris (2000) for public policy is that this theory suggests that systems of governance that elicit little public trust, can act by either lowering public expectations of governance performance by promising less, or to deliver more by improving institutional effectiveness.

Research design

In this chapter, I will first present the sample that I will be using. Then I will describe what data I will use for my analysis. After that, I will justify the different variables with which I operationalize the concepts that I defined in the theoretical framework. I finish the chapter by describing how I operationalized the variables, and in which ways I transformed the datasets. All transformations of the data are also present in the SPSS syntax, which is appended at the end of this thesis.

Sample selection and corresponding data

This thesis seeks to empirically assess the relationships between different subjective objects of public support and objective measures of government performance by a cross-national analysis in a multilevel model. When comparing the governmental performance and the value orientations of citizens, it is important to diminish the chance on confounding variables as much as possible, in ends to diminish the chance of artificially disturbed data by methodological shortcomings. Therefore, I choose to confine the selection of cases to European countries, as these are all politically, economically, and socially integrated by the European Union, and are all spatially in close proximity of each other. Thereby, the extend of spurious variables is diminished as much as possible. Another reason for confining my data sample to European countries, is that Lee (2018) found evidence for European countries of causality mainly going from performance to trust. As this is the only study that shed some light on the causality of this complex relationship, I will regard it as another argument for confining the selection of cases to European countries. For these reasons, I will exclude Russia and Israel from the analysis, as these countries are politically, economically and culturally too different from EU countries to not expect any spurious effects as a consequence. The selection of EU countries has consequences for the interpretation of my results and research question, as results will mainly apply to European countries.

I will use micro data of the European Social Survey (ESS) and aggregate data of the Sustainable Government Indicators (SGI). To compare public trust and satisfaction, and government performance, I use data that is collected in 2014 and 2016, as these are the only years that the ESS and the SGI have in common. The ESS is a cross-national survey that is conducted in European countries every two years from 2001 (ESS, 2019). It is academically driven and directed by the City University in London. The survey measures behavior, beliefs, and attitudes of the variety of populations in more than 30 nations. Some of the main aims of the ESS are to achieve higher standards of rigor in cross-national research and to introduce soundly based indicators of national progress. The SGI is a platform that identifies the performance of governments in 41 OECD and EU countries with a cross-national comparative survey (SGI, 2018). The SGI relies on a combination of quantitative data drawn from official sources, and qualitative assessments by experts in a specific country, as both methods

have their own strengths. The SGI explores how governments perform on their policy performance index, democracy index, and governance index, on which I will elaborate in more detail below.

Justification of chosen variables

Schachter (2010) critically analyzed the dichotomy of objective measures by experts, and subjective citizen measures in the public-sector performance measurement literature, and argues that this distinction is outdated as all government performance measures are contextually subjective. She proposes to integrate the information gained by involving citizens, with the performance measures as proposed by researchers and administrators, in order to attain most accurately the conceptual goal. In combining expert data on government performance by the SGI and citizen data on trust and satisfaction in public institutions, I seek to breach and bridge the often-proclaimed objectivity-subjectivity dichotomy. Therefore, I combine expert data and citizen data in one model to empirically assess the relationships between government performance and the related citizen attitudes of trust and satisfaction with government.

The institutional performance model considers government performance to be fundamental in understanding citizen trust in government, which can be understood as a function of government performance at the aggregate level (Newton & Norris, 2000). This aggregate level corresponds to the macro dimension of the depth of government performance that Bouckaert & Halligan (2007) distinguish from a vertical point of view. The aggregate level thus includes both the performance of policy fields and the broader institutional, legislative, and societal frameworks of governments. On the horizontal level, Bouckaert & Halligan (2007) name outcomes and effects as the primary criterion for assessing public sector performance.

Bouckaert & Halligan distinguish ‘activities’ as an important stage between the initial inputs and the outcomes, to which Frederickson (2010) refers to as strategic government management and the maximization of resources, given the availability of resources in his *economy-efficiency-effectiveness* model, and Van Dooren et al. (2015) as a concept of quality of action. I choose the SGI variable of governance because of its strong theoretical and empirical relationship with this concept: the quality of government, refers to the activities and the strategic government management that takes place between inputs and outcomes.

The institutional performance model regards the actual government performance as the explanatory dimension of variances in citizen trust in government (Newton & Norris, 2000). To analyze the actual government performance, I use SGI’s Governance Index in my analysis (2018). Table 2 provides an overview of the descriptive statistics of the SGI variables. The quantitative data is drawn from official statistical sources, and the qualitative data is informed by experts on a specific country (such as economists and political scientists) and regional coordinators in a multiphase process of survey and validation. Each country is evaluated multiple times, with a minimum of at least two times for each round.

In much of Public Administration literature, it is argued that government performance explains variances in public trust (Lee, 2018). The distinction by Easton (1965) of regime support and political authority support, corresponds to attitudes to the policies of the current government (Citrin, 1974), and orientations toward the performance of national governments (Miller, 1974). As this conceptual distinction is difficult to measure empirically, as citizens usually fail to make these distinctions (Citrin & Muste, 1999), I will operationalize trust in regime and authority as a single variable. Performance theory (Newton & Norris, 2000), the span of performance model (Bouckaert & Halligan, 2007), and political support theory (Easton, 1965), argue that levels of trust in government in a country can be explained by that country its government performance and the levels of citizen satisfaction with government output in that country. To assess this, I use the micro-level criterion variable 'Trust', constructed by selecting three indicators at the individual level from the ESS that have a strong theoretical and empirical connection with trust in governance: trust in country's parliament, trust in political parties, trust in politicians. I will use the item 'satisfaction with the national government' from the ESS to operationalize the concept of satisfaction.

Operationalization of citizen trust and satisfaction in government

The broad availability of trust and satisfaction related variables, allows me to construct a multiple indicator index of trust, based on those indicators with the strongest theoretical connection, and the highest degree of common core. I constructed an index of trust for the 7th ESS round, which data was gathered during 2016. I transformed the micro data on trust on three indicators into a single variable that captures all these dimensions of trust in government, as the institutional performance model suggests that citizen trust in political institutions is randomly distributed over the population, and that these subjective attitudes can be regarded as a function of government performance at the aggregate level (Newton & Norris, 2000).

I constructed the 'Trust' index by taking the mean score of three variables for every respondent, ranging from 0 (no trust at all) to 10 (complete trust). They are based on the questions: 'How much do you personally trust the parliament in [respondent's country]?', 'How much do you personally trust politicians?', 'How much do you personally trust political parties?'. I operationalize satisfaction with the national government by using the ESS item 'stfgov', which is based on the question: 'Now thinking about the government, how satisfied are you with the way it is doing its job?', with scores ranging from 0 (extremely dissatisfied) to 10 (extremely satisfied).

Before proceeding with the construction of the index, I verified in the dataset if all items were measured in similar direction, and if there were any country specific distributional anomalies. Differences in standard deviations were not sufficient to standardize the items before computing the mean, allowing for a meaningful interpretation in the multivariate regression analysis. Respondents

that either refused, neglected or did not know the answer were excluded from the index. A reliability analysis for the trust index of 2016 provides a Cronbach's Alpha value of 0.91, suggesting a high level of internal consistency. The analysis shows that the removal of individual items from the scales would not lead to improvements in the Cronbach's Alpha. Table 2 shows the descriptive statistics of the indicators of the Trust index alongside the index itself, and the indicator of Satisfaction.

Operationalization of government performance

The Performance Index is based on policy outcomes in 16 individual policy fields, subdivided over the dimensions of economic policies, environmental policies, and social policies (Schraad-Tischer & Seelkopf, 2018). Each policy field is informed by a range of quantitative and qualitative indicators. This allows to measure aspects of good governance, such as sustainability, social progress, and quality of life. In doing so, the Policy Performance Index does not limit itself to conventional performance measures such as GDP growth and material prosperity.

Economic policy dimensions were qualitatively assessed by raising questions such as the following: "Are economic policies applied on the basis of a coherent institutional framework, thereby enhancing the country's international competitiveness?", "How successful are government strategies in addressing unemployment and increasing labor-market inclusion?" "To what extent do the country's tax policies promote equity, competition and positive long-term state-revenue prospects?" (Schraad-Tischer & Seelkopf, 2018, p. 5). Quantitative dimensions of economic policy outcomes involve the GDP, inflation, marginal tax burden for businesses, public debt, and public research and development spending.

Social policy dimensions of social policy outcomes were qualitatively addressed by asking questions such as: "To what extent do the country's education policies foster high-quality, inclusive and efficient education and training systems?", "To what extent do sociopolitical measures facilitate social inclusion, while effectively combating social exclusion and polarization?", "How successfully do policies secure quality, fairness and cost efficiency in the country's health care system?" (Schraad-Tischer & Seelkopf, 2018, p. 6). Quantitative dimensions of social policy outcomes involve education attainment, Gini-coefficient, life expectancy, and homicide rates.

Qualitative dimensions of environmental policy outcomes were measured by addressing questions such as: "How successful are the country's environmental policies in protecting natural resources and promoting livable environmental conditions?", and "How committed is the country to the advancement of binding global environmental protection regimes?" (Schraad-Tischer & Seelkopf, 2018, p. 7). Quantitative indicators involved the amount of greenhouse-gas emissions, renewable energies, particulate pollution, waste recycling, and multi-lateral environment agreements.

Democracy is the second pillar of the SGI, in which the state of democracy and the rule of law is assessed, which ensure good government performance and long-term stability (Schraad-Tischer

& Seelkopf, 2018, p. 8). These conditions are measured by the SGI measures through the Democracy Index, with an ideal representative democracy as normative reference point. The fabric of democracy is evaluated through 15 qualitative indicators that comprise four criterion variables: electoral processes, access to information, civil rights and political liberties, and rule of law.

Governance is the third pillar of the SGI, which captures the capacity of governments and their institutions to respond quickly and resolutely, while taking into account the long-term consequences of actions (Schraad-Tischer & Seelkopf, 2018, p. 10). The dimension of executive capacity is informed by 24 qualitative indicators, grouped by 8 concepts. Executive accountability is informed by 12 qualitative and 4 quantitative indicators, grouped by 4 concepts.

As I define government performance as the capacity of governments and their institutions to respond quickly and resolutely, while taking into account the long-term consequences of actions (Schraad-Tischer & Seelkopf, 2018), it is the quality of governance index of the SGI that relates most to these 'activities' as an important stage between the initial inputs and the outcomes, to which Frederickson (2010) refers to as strategic government management and the maximization of resources, in his *economy-efficiency-effectiveness* model, and Van Dooren et al. (2015) as a concept of quality of action.

Other reasons to operationalize government performance as SGI its governance index and not as the policy performance- or democracy index, is that the economic, social, and environmental policy indexes include many quantitative measures, such as GDP, inflation, unemployment, suicide, educational attainment, emissions, recycling, which cannot be fully ascribed or equated with government performance. Another issue with the inclusion of these quantitative measures is that even when they are the product of government performance, it is beyond the scope of this research to examine which policy measure introduced in which year was responsible for this effect. The data of the SGI does not allow to only use the qualitative measures, which are the expert assessments, as variables are weighted, and the formula is not available in the SGI documentation (SGI, 2018). Therefore I operationalize government performance as the government index.

The ESS data is measured on different moments in 2016. One of the assumptions of linearity is that the dependent variable is not measured at an earlier moment than the independent variable, or there is a methodological danger of reversed causality. The use of 2016 SGI data thus would violate this assumption, but by using the SGI data of 2014, I make sure that there is no such risk. Another reason to choose the SGI data points of 2014 is that Easton (1965) argues that trust relates to long term government performance evaluations, and that satisfaction refers to short term evaluations. However, he does not provide a time frame for empirical analysis, of what is the moment when (dis)satisfaction starts translating into (dis)trust. This is why I choose a moment in time that is temporally near enough to still be conceptually related to satisfaction, and also to trust. To help the model to distinguish these effects, I also included a time dimension in my analysis. I constructed new variables for executive capacity and executive accountability, by subtracting the scores of 2016 from

those of 2014. This calculation ensures that an increase over time translates into a positive number, and a decrease over time translates into a negative number. These variables represent the net-change between 2014 and 2016, and allow to simultaneously estimate a coefficient for a performance measure, and how much this measure will change in every country in the next two years.

Results

In this chapter I will present the analysis results. I will firstly present the descriptive statistics of ESS- and SGI variables. Afterwards, I will present the same descriptive statistics for every country included in the analysis. Then I will proceed with the multilevel regression analysis results. I start with presenting and interpreting three linear multilevel models of satisfaction. I continue with presenting and interpreting four multilevel models of trust.

Descriptive tables

Table 2 presents the mean scores on the ESS Trust items, and Satisfaction item, for every country in 2016, on a scale of 1 to 10. It also presents the means of SGI its Quality of Governance index from 2014, the sub-indexes of Executive Capacity and Executive Accountability from 2014, and the difference of the Executive Capacity and Accountability between 2014 and 2016. The mean trust in a country's parliament is 4.64 with a standard deviation of 2,54. The mean trust in politicians is 3,70 with a standard deviation of 2,41. The mean trust in political parties is 3.67, with a standard deviation of 2,37. The trust index that is built on these three items has a mean of 4, and a standard deviation of 2,25. The mean satisfaction with national government is 4,45 with a standard deviation of 2,39. The mean of the Quality of Governance index in 2014 is 6,67 with a standard deviation of 0,89. The mean of the Executive Capacity sub-index is 6,60 with a standard deviation of 1. The mean of the Executive Accountability sub-index is 6,76 with a standard deviation of 0,95. The mean difference between the Executive Capacity score of 2016 and that of 2014 is 0,01 with a standard deviation of 0,21. The mean difference between the Executive Accountability score of 2016 and that of 2014 is 0,01 with a standard deviation of 0,19.

Tabel 2. Description statistics of ESS- and SGI variables.

	N	Min.	Max.	Mean	SD
Trust in country's parliament	38678	0	10	4,64	2,54
Trust in politicians	38932	0	10	3,70	2,41
Trust in political parties	38761	0	10	3,67	2,37
trust_2016	38291	0	10	4,00	2,25
Satisfaction with National Government	38421	0	10	4,45	2,39
gov_2014	35894	5,02	8,45	6,67	0,89
EC_2014	35894	4,37	8,56	6,60	1,00
EA_2014	35894	5,15	8,76	6,76	0,95
EC_1416	35894	-0,42	0,38	0,01	0,21
EA_1416	35894	-0,30	0,52	0,01	0,19

Table 3 presents the mean level of trust in a country's parliament in 2016 by country on a scale of 1 to 10. When compared to the other countries, the citizens of Norway, Switzerland, and Sweden had the most trust in the parliament of their country in 2016 (6.78; 6.32; 5.95), and the citizens of Italy, Slovenia, and Poland the least (3.23; 3.33; 3.4). The citizens of Norway, Switzerland, and the Netherlands had the most trust in politicians in their country (5.39; 5.37; 5.02), while Italians, the Spanish, and Slovenians had little trust in their politicians (2.29; 2.4; 2.44). The people in Norway, Switzerland, and the Netherlands had the most trust in the political parties of their country (5.46; 5.32; 5.09), while the people in Italy, Spain, and Poland experienced the least (2.28; 2.42; 2.45). The index that is built on these three items shows that Norway, Switzerland, and the Netherlands experience the highest degree of trust (5.88; 5.65; 5.2), while Italy, Slovenia, and Poland experience the lowest degree of trust (2.59; 2.74; 2.78).

Table 3 also presents the mean levels of satisfaction with the national government in each of the countries in 2016, on a scale of 1 to 10. The citizens of Switzerland, Norway, and the Netherlands are the most satisfied with their national government (6.58; 5.55; 5.39), and the citizens from Italy, France, and Spain are the least satisfied (3.12; 3.14; 3.32).

Table 3 continues to presents the country level-scores of the Quality of Governance in 2014 on a scale of 1 to 10. Finland, Norway, and Sweden have the highest quality of governance (8.45; 8.42; 8.4), and Hungary, Slovenia, and Portugal have the lowest (5.02; 5.37; 5.59). The sub-index of Executive Capacity shows that Finland, Sweden, and Norway score the highest (8.56; 8.43; 8.09) and Slovenia, Czech Republic, and Hungary score the lowest (4.37; 5.11; 5.25). The second sub-index of Executive Accountability shows that Norway, Sweden, and Finland score the highest (8.76; 8.66; 8.37), and that Hungary, Portugal, and France score the lowest (5.15; 5.26; 5.42). The last two columns show the difference between the Executive Capacity and Accountability of 2016 and 2014. The biggest increases in Executive Capability were experience by Italy, the United Kingdom, and Slovenia (0.47; 0.38; 0.34). The biggest decreases in Executive Capability were experience by France, Portugal, and the Netherlands (-0.42; -0.28; -0.26). The biggest increases in Executive Accountability were experienced by the United Kingdom, Belgium, and Ireland (0.52; 0.33; 0.16). The biggest decreases were experienced by Hungary, Switzerland, and Slovenia (-0.3; -0.22; -0.2).

Table 3. Mean scores by country on Trust and Satisfaction in 2016, and government performance measures in 2014.

	Trust in country's parliament	Trust in politicians	Trust in political parties	trust_2016	How satisfied with the national government	gov_2014	EC_2014	EA_2014	EC_1416	EA_1416
Austria	4,95	3,88	3,81	4,22	4,43	6,65	6,15	7,09	0,00	0,11
Belgium	4,79	4,13	4,04	4,31	4,60	6,35	5,67	6,92	-0,06	0,33
Czech Republic	4,31	3,59	3,53	3,82	4,66	6,08	5,11	6,83	0,22	0,02
Estonia	4,52	3,63	3,56	3,90	4,08	6,36	6,42	6,47	-0,17	-0,04
Finland	5,75	4,74	4,85	5,11	4,79	8,45	8,56	8,37	-0,09	-0,09
France	4,03	2,89	2,83	3,25	3,14	5,65	6,61	5,42	-0,42	0,08
Germany	5,22	4,09	4,11	4,47	4,95	7,26	6,87	7,59	-0,05	-0,17
Hungary	4,53	3,73	3,57	3,95	4,59	5,02	5,25	5,15	-0,18	-0,30
Ireland	4,49	3,69	3,68	3,95	4,64	6,69	6,35	6,56	0,31	0,16
Italy	3,23	2,29	2,28	2,59	3,12	5,95	5,82	6,08	0,47	-0,15
Lithuania	3,73	3,45	3,21	3,45	4,07	6,53	7,12	5,87	0,06	-0,08
Netherlands	5,48	5,02	5,09	5,20	5,39	6,50	6,31	6,64	-0,26	-0,08
Norway	6,78	5,39	5,46	5,88	5,55	8,42	8,09	8,76	0,00	-0,06
Poland	3,40	2,51	2,45	2,78	4,11	6,73	7,19	6,34	0,15	-0,16
Portugal	3,94	2,47	2,60	3,01	5,06	5,59	6,09	5,26	-0,28	0,00
Slovenia	3,33	2,44	2,47	2,74	3,40	5,37	4,37	6,39	0,34	-0,20
Spain	3,92	2,40	2,42	2,92	3,32	6,39	6,30	6,33	0,10	0,15
Sweden	5,95	4,73	4,78	5,15	4,82	8,40	8,43	8,66	-0,08	-0,04
Switzerland	6,32	5,37	5,23	5,65	6,58	6,96	7,16	6,79	0,00	-0,22
United Kingdom	4,63	3,70	3,78	4,03	4,67	7,01	7,22	6,65	0,38	0,52
Total	4,64	3,70	3,67	4,00	4,45	6,63	6,55	6,71	0,04	-0,01

Multilevel regression analyses

I now proceed with the presentation and interpretation of the results of the multilevel regression models, in which I use a 95% confidence interval for statistical significance.

Satisfaction

The linear multilevel models with Satisfaction as dependent variable are formulated as the following:

*Model 1. Satisfaction = $\beta_0 + \beta_1 * \text{Quality of Governance}$*

*Model 2. Satisfaction = $\beta_0 + \beta_1 * \text{Executive Capacity} + \beta_2 * \text{Executive Accountability}$*

*Model 3. Satisfaction = $\beta_0 + \beta_1 * \text{Executive Capacity} + \beta_2 * \text{Executive Accountability} + \beta_3 * \text{Executive Capacity (difference over 2014-2016)} + \beta_4 * \text{Executive Accountability (difference over 2014-2016)}$*

The effect of the Quality of Governance index in model 1 is almost significantly correlated with satisfaction with the national government (P= 6,7%), but fails to make the 95% confidence interval (see table 4 below). The regression does show a significant coefficient for Executive Accountability in model 3. This suggests that when a country its Executive Accountability increases with 1, Satisfaction will increase with 0.411, given the other variables. Executive Accountability is non-significant in model 2, which suggests that by controlling for a time dimension of differences in Executive Capacity and Accountability, the variable of Executive Accountability is better able to explain the variances in satisfaction with the national government, as Executive Accountability is significant in model 3. The Quality of Governance index in model 1 contains the variance of both the Executive Capacity index and the Executive Accountability index, but comes much closer to explaining the variance of the dependent variable than the separate sub-indexes of Executive Capacity and Executive Accountability. Only when a time-dimension is added in model 3, the effect reaches significance (P= 5%), with a coefficient and std. error highly similar to that of the Quality of Governance index in model 1. This suggests that for the variance in the Quality of Governance index, it is mainly Executive Accountability and not Executive Capacity that explains the variance in the satisfaction with the national government, controlled for the other variables.

I expected that better government performance results in higher levels of citizen satisfaction with authorities and regime (hypothesis 1). As the overall effect of the Quality of Governance index

on the Trust index is almost significant in model 1 (P= 6,7%), and as Executive Accountability significantly correlates with the Trust index (P= 5%) given the other variables in model 3, this hypothesis can be partially accepted. This also has a consequence for hypothesis 3, which states that citizen satisfaction with day-to-day policy output mediates in the relationship of government performance and citizen trust in authorities and regimes, as the partial acceptance of hypothesis 1 translates into the partial acceptance of the first condition of a statistical mediation, which in this case is a significant correlation between the independent variable of government performance, and the mediator, satisfaction.

Table 4. Multilevel fixed effects analysis with satisfaction as dependent variable, and Satisfaction and Government Performance as independent variables. N= 37605.

	Coef.	Std. Error	t	Sig.
<i>Model 1</i>				
Intercept	1,852	1,322	1,402	0,178
gov_2014	0,400	0,205	1,946	0,067
<i>Model 2</i>				
Intercept	1,682	1,417	1,187	0,252
EC_2014	0,233	0,198	1,173	0,257
EA_2014	0,193	0,238	0,814	0,427
<i>Model 3</i>				
Intercept	2,537	0,977	2,596	0,030
EC_2014	-0,131	0,205	-0,641	0,532
EA_2014	0,411	0,182	2,259	0,050
EC_1416	-0,978	0,949	-1,031	0,324
EA_1416	-1,708	1,331	-1,283	0,226

*Grouped by 20 EU countries.

Trust

The linear models with Trust as dependent variable are formulated as the following:

Model 1. Trust in Governance = $\beta_0 + \beta_1 * \text{Quality of Governance}$

Model 2. Trust in Governance = $\beta_0 + \beta_1 * \text{Quality of Governance} + \beta_2 * \text{Satisfaction}$

Model 3. Trust in Governance = $\beta_0 + \beta_1 * \text{Executive Capacity} + \beta_2 * \text{Executive Accountability} + \beta_3 * \text{Satisfaction}$

Model 4. Trust in Governance = $\beta_0 + \beta_1 * \text{Executive Capacity} + \beta_2 * \text{Executive Accountability} + \beta_3 * \text{Executive Capacity (difference over 2014-2016)} + \beta_4 * \text{Executive Accountability (difference over 2014-2016)} + \beta_5 * \text{Satisfaction}$

The regression in the first model shows the coefficient *gov_2014* to be significantly correlated to Trust (P= 0,2%), and should be interpreted as an increase of 0,674 on the Trust index when the Quality of Governance index in a country increases by 1, given the other variables. This has consequences for hypothesis 2, which states that better government performance results in higher levels of citizen trust in authorities and regime. The results of model 1 indeed show empirical support for this hypothesis, which allows me to accept hypothesis 2. This model also has consequences with regard to hypothesis 3, which states that citizen satisfaction with day-to-day policy output mediates in the relationship of government performance and citizen trust in authorities and regimes, as the significance of model 1 translates in the acceptance of the second condition of a statistical mediation, which in this case is a significant correlation between independent variable of government performance and the dependent variable of trust, or *gov_2014* and the Trust index.

The mediating variable of ‘Satisfaction with the national government’ is added in the second model, and shows to be significantly correlated with the Trust index (t= 24.88, or P= 0%), given variances in *gov_2014*. It should be interpreted as an increase of 0,561 on the Trust index when the satisfaction with the national government increases by 1 in a country. After the addition of *stfgov*, *gov_2014* is no longer significantly correlated with the Trust index (P= 9,6%). This relates to the third hypothesis, as model 2 suggests that the fourth condition of a statistical mediation is not met, as this analysis models the coefficients of the independent variable and the mediating variable for the dependent variable simultaneously. However, before dismissing hypothesis 3 altogether, let’s further dissect these effects by exchanging the Quality of Governance for its underlying sub-indexes.

Model 3 includes both sub-indexes of Executive Capacity and Executive Accountability, in place of the Quality of Governance Index (which is a combination of both). However, both indexes are non-significant. Satisfaction with the national government still shows the exact same coefficient, but with the introduction of an extra variable, the standardized error is multiplied twofold, but the correlation is still far beyond the 95% significance threshold (t= 12,08 or P= 0,0). This model shows that a substitution of the Quality of Governance index for its two constituting indexes is not enough to provide the empirical weight that hypothesis 3 is seeking, still suggesting a dismissal of this hypothesis altogether.

Model 4 shows a magnification of the phenomenon also observed in the third model of table 4 when the time dimension is included. Executive Accountability now shows to be significantly correlated with the Trust index (t=3,6 or P= 0,3%), after the addition of the differences in Executive Capacity and Accountability between 2014 and 2016. The coefficient of Executive Accountability should be interpreted as an increase of 0,452 on the Trust index for every increase of 1 on the Executive Accountability index in a country, given the other variables. The Satisfaction with the national government significantly mediates with the performance measures (t=28,4 or P=0,0%), and should be interpreted as an increase of 0,561 on the Trust index when the satisfaction with the

national government increases with 1 in a country, given the other variables. *EC_1416* also shows to be significantly correlated with the Trust index ($P= 4,9\%$), which is the difference between the level of Executive Capacity in 2014 and 2016 in a country. This model suggests that when countries experience an absolute increase of 1 in Executive Capacity, which is kept constant for the height of Executive Capacity (and the other variables), and thus only captures the absolute change in Executive Capacity, the level of Trust decreases by 0.857. However, this coefficient should be put in context of the relative small pace of change that countries experience in the empirical world (table 3 shows that the mean change of Executive Capacity between 2014 and 2016 over 20 EU countries is 0,04).

This model provides empirical weight that hypothesis 3 was seeking. The hypothesis stated that citizen satisfaction with day-to-day policy output mediates between the relationship of government performance and citizen trust in authorities and regime. This model shows that the independent performance measure of Executive Accountability is significantly correlated with the dependent Trust index, together with the mediating variable of satisfaction with the national government, that is also significantly correlated with Trust. This model simultaneously suggests that not all performance measures are created equal in the face of citizen trust in their national governments: Executive Capacity still shows a non-significant government performance coefficient. This specification of variables suggests that hypothesis 3 can thus be partially accepted. It has to be noted that the statistical significance of the performance measures in model 4 was only made possible by the grace of the addition of the time-dimension variables. Without these variables, there were only non-significant performance measures (see table 3). Apparently, the time-dimension variables provide crucial information for the model on how to interpret the variances in trust.

A curious outcome of model 4 in table 5 is the negative coefficient for the significant time dimension of Executive Capacity. This negative relationship is of a very small magnitude, considering that the average change in the 20 European countries under analysis between 2014 and 2016 for Executive Capacity is only 0,04 on the Executive Capacity Index, which means that this coefficient has to be divided by 25 for an average country in the dataset, but it is nonetheless a significant effect. The coefficient should be interpreted as a decrease of 0.857 in trust when Executive Capacity increases with 1 over 2 years, given any level of Executive Capacity and Accountability in 2014, and controlled for the change of Executive Accountability between 2014 and 2016, and the levels of satisfaction. Future research should investigate if this effect is also a consistent finding in a longitudinal design.

Table 5. Multilevel analysis with fixed effects with Trust as dependent variable, and Satisfaction and Government Performance as independent variables.

	Coef.	Std. Error	t	Sig.
<i>Model 1</i>				
Intercept	-0,443	1,217	-0,364	0,720
gov_2014	0,674	0,189	3,560	0,002
<i>Model 2</i>				
Intercept	-1,533	0,835	-1,836	0,240
gov_2014	0,453	0,131	3,462	0,096
stfgov (M)	0,561	0,023	24,881	0,000
<i>Model 3</i>				
Intercept	-2,281	3,141	-0,726	0,468
EC_2014	0,209	0,470	0,446	0,656
EA_2014	0,361	0,523	0,689	0,491
stfgov (M)	0,561	0,046	12,079	0,000
<i>Model 4</i>				
Intercept	-2,180	0,722	-3,022	0,009
EC_2014	0,103	0,119	0,866	0,400
EA_2014	0,452	0,126	3,596	0,003
EC_1416	-0,857	0,400	-2,141	0,049
EA_1416	0,383	0,481	0,796	0,438
stfgov (M)	0,561	0,020	28,402	0,000

*N= between 36864 in model 1, and 37426 in model 4, grouped by 20 EU countries.

Discussion and Conclusion

In this chapter I will discuss the results and conclude this thesis. I will firstly summarize the results that were presented in the results section. Then I will discuss each hypothesis individually, and interpret the findings in light of the theory. I end this chapter by considering the limitations of this research, possible recommendations for future research, and by presenting practical policy recommendations.

Summary of results

This study extends the empirical research on the government performance-trust relationship. To summarize the results of the multilevel regression analyses with the extend of satisfaction in the national government as dependent variable, in the first model I tested the general government performance effect of Quality of Governance, which almost had a significant correlation with Satisfaction. The second model, in which satisfaction was modeled on Executive Capacity and Accountability, did not have significant results. The third model, in which I added the time-dimension of the country differences in Executive Capacity and Accountability between 2014 and 2016, showed a significant effect for Executive Accountability on Satisfaction, controlled for the other variables, with a coefficient and standardized error of a magnitude much like the model 1 variable of Quality of Governance.

To summarize the general results of the multilevel regression analyses with the Trust index as dependent variable, model 1 shows a significant correlation of the Quality of Governance Index with the Trust index. In model 2 the mediating variable of satisfaction with the national government is added, which shows to be highly significant effect, controlled for the Quality of Governance Index. The Quality of Governance Index effect is no longer significant in this model. The third model substitutes the Quality of Governance for its two constituting indexes, the Executive Capacity and Accountability Index, but the model has highly similar results: the performance variables are both non-significant, while the coefficient of Satisfaction is unchanged and still highly significant, given the performance variables. In the fourth model, I added the time-dimension of the performance measures, which enables to better model the variance of the Trust index. In this model, there are significant effects for both performance measures and the mediating satisfaction measure. This model shows a significant effect for Executive Accountability, for the Executive Capacity difference over 2014 until 2016, and for the mediating variable satisfaction with the national government, controlled for the other variables.

The hypotheses

Given these results, I can partially accept the first hypothesis, which states that better government performance results in higher levels of citizen satisfaction with authorities and regime. Higher levels of government performance seem to positively impact the levels of citizen satisfaction in national government, especially when considering Executive Accountability in combination with the time dimension variables of performance. The coefficient of Executive Accountability in model 3 (table 4) is much alike that of the Quality of Governance Index in the first model, and the third model suggests that only when also considering the time dimension measures of performance, it is possible to model the variance of satisfaction with authorities and regime, with the performance measure of Executive Accountability.

The first model in table 5 shows that the second hypothesis, stating that better governance performance results in higher levels of citizen trust in authorities and regime, can be confirmed. A higher score on the Quality of Governance Index is positively correlated with a higher degree of satisfaction with the national government, and is highly significant. This stands in contrast to the modeling of satisfaction with the same indicator, which did not result in a similar highly significant correlation.

This is no surprising finding, when understood in the context of the methodology and operationalization of the satisfaction and trust variables in the ESS. These variables are based on the theoretical concepts of Easton (1965), and thus satisfaction is a value orientation that is considered to primarily refer to the day-to-day output of governments, and trust is a value orientation that is considered to primarily refer to the longer-term evaluation of authorities and regime. As the government performance measures are from 2014, and the value orientation measures are from 2016, this can explain why the performance measure was not significantly correlated with satisfaction: apparently the time difference of one to two years is already too far removed to still refer to the day-to-day processes, which the satisfaction items in the ESS are meant to capture. Only when the variables are added that reveal how much these measures will change in the coming two years, the performance measure of Executive Accountability significantly correlates positively with Satisfaction. The fact that the Quality of Governance Index alone is significantly correlated to the Trust index, shows empirically that trust (in contrast to satisfaction) is a value orientation that refers to longer term government evaluations. This model shows the performance data from 2014 to be significantly correlated with the value orientations of trust in 2016, which leads me to accept the second hypothesis that governance performance is positively related to levels of citizen trust in authorities and regime.

When considering the mediation hypothesis (3), stating that citizen satisfaction with day-to-day policy output mediates between the relationship of government performance and citizen trust in authorities and regime, it is necessary to look at the relationships of the independent variable and the

dependent variable, the independent variable and the mediating variable, the mediating variable and the dependent variable, and all of these relationships simultaneously. When considering the effect of the 2014 performance variable on the levels of satisfaction in 2016, the same argument can be made as in the paragraph above: satisfaction is meant to capture the day-to-day government output, and therefore it is not surprising to only find a significant performance coefficient once the model takes a time dimension into account of how much the performance measures are going to change in the next two years. The Executive Accountability Index of 2014 thus only has a significant effect on satisfaction with the national government when controlled for the difference over time. However, as all the variables for which the Executive Accountability Index controls for are also performance measures, and as there is a theoretical reason why the performance measure only significantly predicts the levels of satisfaction (which I outlined in the paragraph above), the results suggest that the relationship between performance and the mediator is significant.

Continuing with the further requirement of the mediation hypothesis of a significant relationship between the independent performance measure, and the dependent value orientation variable of citizen trust, table 5 shows that the Quality of Government Index is significantly correlated in a positive direction with levels of trust in government, which led me to accept the second hypothesis, and which leads me now to conclude the fulfillment of the second mediation criterion.

The third mediation criterion is a significant relationship between the mediating variable of satisfaction and the dependent variable of trust. The second and third model show that this relationship is significant and of a positive direction when controlled for variances in the performance measure of either the Quality of Governance Index in model 2, or the Executive Quality and Accountability in model 3, leading me to conclude that the third mediation condition has been met.

The fourth mediation criterion requires significant relationships for both the performance measure and the mediation measure of satisfaction with the national government in order to positively conclude that satisfaction indeed mediates between government performance and trust in government, for which these relationships have been estimated simultaneously. However, both model 2 and 3 do not find a significant effect for the performance measures, when controlling for the mediating variable of satisfaction. On first sight this should lead to a conclusion that the fourth criterion has not been met. However, when including the time dimension of both Executive Capacity and Executive Accountability in the analysis (model 4), the fourth condition of a significantly correlating performance measure together with the significantly correlating mediating variable of satisfaction, has been met. The addition of the time-dimension brings the significance level of the mediating variable at a much higher point than in the previous models, suggesting that it is even more certain that this effect can also be found in the population, when controlled for the other variables.

Why is the fourth mediation requirement only met after including the time-dimension variables in model 3, which represent the change in Executive Capacity and Accountability between 2014 and 2016? In model 2, 3 and 4, the coefficients of satisfaction are of exactly the same magnitude. After adding satisfaction to the performance measure, the satisfaction measure shows to be significant in every model onwards, but the performance measures stop being significantly correlated with Trust, only until the model in which the time horizon of the performance indexes is included. The performance measure of Executive Capacity now being significant does not change the coefficient of satisfaction with the national government, but it does make the significance level of satisfaction much higher. Apparently, the performance measures only add to the model its predictive powers when also considering a time dimension, allowing the model to estimate the coefficients of performance which now are also significant.

A similar effect was observed in modelling satisfaction by solely using performance measures, only this effect is different in that this model simultaneously estimates the coefficients of performance variables and of value orientation variables. The first model in table 5 suggests that a cross-sectional performance measure of government is an excellent way of modeling the value orientation of trust in government, but when also including another highly similar value orientation in the model, trust is only significantly modeled by the value orientation of satisfaction (model 2 & 3). Curtice et al. (2003) indeed suggest an intimate relationship between satisfaction and trust in government, and that accumulated levels of satisfaction spill over in the reservoirs of trust after a certain amount of time. Therefore, levels of satisfaction with government are more sensitive to the fluctuations of the short-term government performance, while trust should be conceived as the product of past levels of satisfaction, thus relating to the longer-term government performance. The inclusion of the time dimension, allows the fourth model in table 5 to distinguish the long-term effect relating to trust in the performance measures. As all conditions for a statistical mediation have been met, hypothesis 3, stating that citizen satisfaction with day-to-day policy output mediates between the relationship of government performance and citizen trust in authorities and regime, can be confirmed.

In the introduction of this thesis I raised the research question: ‘how does the actual performance of political and administrative systems relate to levels of public satisfaction and trust in these systems?’. The literature suggests a significant extend of causality between government performance and citizen value orientations of trust and satisfaction (Lee, 2018; Newton & Norris, 2000). This thesis lends empirical weight to the theoretical model of Easton (1965), by showing how citizen satisfaction with the day-to-day output of governments mediates between government performance and citizen trust in political authorities and administrative regimes. This thesis found that government performance is a decisive factor in explaining levels of citizen trust in countries, and that satisfaction mediates in this relationship. The sample was compounded of European countries, which means in this case that research findings are mainly applicable to these countries.

Most research to day examined the performance-trust link within a country, or across countries on country level. However, by using a multilevel model there is no need to aggregate the micro data, and thus keep the within country variances. This allows to conduct a more precise analysis. Thereby, this study contributes theoretically by demonstrating that the government performance indeed does influence the extent to which citizens trust their governments, and that the satisfaction of citizens with their national governments mediates in this relationship.

Limitations and research/policy recommendations

The performance data that was used for this research was collected in 2014 and 2016, and the ESS data in 2016, which might be a relative short period to fully understand how relationships between government performance and citizen attitudes of satisfaction and trust in their government develop over time. While this research was limited by the intersection of the ESS and SGI data of those years that had data available on trust, satisfaction, and performance, there will be a growing availability of data in the future which provides new opportunities of researching this relationship. The performance-trust link should be further investigated in a multilevel longitudinal model, which allows to build an inferential statistical model that simultaneously acknowledges the dimension of time, and the multilevel dimension of citizens with value orientations living in different countries. This also allows to address causality, which is only possible when individuals can be linked over time, which was not possible with the ESS data that was used for this research.

Governments make the assumption that increases in outcomes and effects lead to increases in citizen trust in the public sector (Bouckaert & Halligan, 2007), but this study shows that it is not only the policy outcomes of national governments, but also the capacity of governments and their institutions to respond quickly and resolutely, while taking into account the long-term consequences of actions (Schraad-Tischer & Seelkopf, 2018). This study shows that the activities that take place between the initial inputs and outcomes, inspire citizens with satisfaction and trust when governments do perform highly. Therefore, this study recommends that one method of restoring citizen trust in governments is for governments to improve the ways in which governments, working together with other institutions and social groups in democratic decision making, are able to identify issues, develop solutions, and implement them efficiently and efficaciously.

Another practical recommendation of this research relates to improving the capacity of governments to respond quickly and resolutely. Governments do well to focus specifically on the participatory and oversight competences of institutions and actors beyond the executive branch, as this study showed that executive accountability is specifically strongly related with citizen trust in government. By improvements in executive accountability, governments can first expect an increase in citizen satisfaction with the national government, which eventually spills over into the reservoirs of

trust in the national government, as this study showed that a great part of the government performance effect on citizen trust will be mediated by citizen satisfaction.

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Syntax

*country level variables of government performance.

*values are copied from the SGI dataset 2018, which contain the values from 2014-2018.

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IF (cntry = 'AT') gov_2014=6.6464243.  
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EXECUTE.

```

```

*computing the difference over 2014-2016.
compute gov_1416 = (gov_2016-gov_2014).
compute EC_1416 = (EC_2016-EC_2014).
compute EA_1416 = (EA_2016-EA_2014).
EXECUTE.

```

```

compute sat_gov1416 = (stfgov*gov_1416).
compute sat_EC1416 = (stfgov*EC_1416).
compute sat_EA1416 = (stfgov*EA_1416).

```

```

*exclusion of Israel and Russia.
SELECT IF NOT (cntry='IL').
SELECT IF NOT (cntry='RU').
EXECUTE.

```

RELIABILITY

```

/VARIABLES=trstprl trstplt trstprt

```

```

/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE SCALE CORR
/SUMMARY=TOTAL.

COMPUTE trust_2016=(trstp1 + trstp2 + trstp3) / 3.
EXECUTE.

means trstp1 trstp2 trstp3 trust_2016 stfgov gov_2014 EC_2014 EA_2014
EC_1416 EA_1416 by cntry/cells means
/STATISTICS=MEAN STDDEV MIN MAX.

des trstp1 trstp2 trstp3 trust_2016 stfgov gov_2014 EC_2014 EA_2014
EC_1416 EA_1416.

DESCRIPTIVES VARIABLES=trust_2016
/STATISTICS=MEAN STDDEV MIN MAX.

*Satisfaction.
MIXED stfgov WITH gov_2014
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
SINGULAR(0.000000000001) HCONVERGE(0,
ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=gov_2014 | SSTYPE(3)
/METHOD=REML
/PRINT=CPS CORB COVB DESCRIPTIVES G LMATRIX R SOLUTION TESTCOV
/RANDOM=gov_2014 | SUBJECT(cntry) COVTYPE(VC).

MIXED stfgov WITH EC_2014 EA_2014
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
SINGULAR(0.000000000001) HCONVERGE(0,
ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=EC_2014 EA_2014 | SSTYPE(3)
/METHOD=REML
/PRINT=CPS CORB COVB DESCRIPTIVES G LMATRIX R SOLUTION TESTCOV
/RANDOM=EC_2014 EA_2014 | SUBJECT(cntry) COVTYPE(VC).

MIXED stfgov WITH EC_2014 EA_2014 EC_1416 EA_1416
/CRITERIA=CIN(95) MXITER(100) MXSTEP(10) SCORING(1)
SINGULAR(0.000000000001) HCONVERGE(0,
ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
/FIXED=EC_2014 EA_2014 EC_1416 EA_1416 | SSTYPE(3)

```

```

/METHOD=REML
/PRINT=CPS CORB COVB DESCRIPTIVES G LMATRIX R SOLUTION TESTCOV
/RANDOM=EC_2014 EA_2014 EC_1416 EA_1416 | SUBJECT(cntry) COVTYPE(VC).

*trust.
MIXED trust_2016 WITH gov_2014
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    ABSOLUTE) LCONVERGE(0, ABSOLUTE) PCONVERGE(0.000001, ABSOLUTE)
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  /METHOD=REML
  /PRINT=CPS CORB COVB DESCRIPTIVES G LMATRIX R SOLUTION TESTCOV
  /RANDOM=gov_2014 | SUBJECT(cntry) COVTYPE(UN).

MIXED trust_2016 WITH gov_2014 stfgov
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  /RANDOM=INTERCEPT gov_2014 stfgov | SUBJECT(cntry) COVTYPE(UN).

MIXED trust_2016 WITH EC_2014 EA_2014 stfgov
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  /METHOD=REML
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MIXED trust_2016 WITH EC_2014 EA_2014 EC_1416 EA_1416 stfgov
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  /METHOD=REML
  /PRINT=CPS CORB COVB DESCRIPTIVES G LMATRIX R SOLUTION TESTCOV
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