Multilevel Governance and Accountability:

Does Decentralization Promote Good Governance?

by

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Thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts in the Department of Political Science in the Graduate School of Duke University

2016
ABSTRACT

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Abstract

Today, the trend towards decentralization is far-reaching. Proponents of decentralization have argued that decentralization promotes responsive and accountable local government by shortening the distance between local representatives and their constituency. However, in this paper, I focus on the countervailing effect of decentralization on the accountability mechanism and government effectiveness, arguing that decentralization, which increases the number of actors eligible for policy making and implementation in governance as a whole, may blur lines of responsibility, thus weakening citizens’ ability to sanction government in election. By using the ordinary least squares (OLS) interaction model based on historical panel data for 78 countries in the 2002 – 2010 period, I test the hypothesis that as the number of government tiers increases, there will be a negative interaction between the number of government tiers and decentralization policies. The regression results show empirical evidence that decentralization policies, having a positive impact on governance under a relatively simple form of multilevel governance, have no more statistically significant effects as the complexity of government structure exceeds a certain degree. In particular, this paper found that the presence of intergovernmental meeting with legally binding authority have a negative impact on governance when the complexity of government structure reaches to the highest level.
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1. Introduction

The question of how citizens can hold politicians accountable is one of the most significant topics in political science. In a representative democracy, sovereignty rests with the people, and politicians are supposed to represent the people’s will. However, not every politician does so sincerely. They often try to make or implement policies that are not congruent with citizens’ needs and preferences, and often do not sincerely invest their efforts in performing their role as representatives of the people, thereby merely wasting the tax. They sometimes focus their efforts more on pursuing their personal gain rather than common interests, and prefer aligning with people who are personally or professionally closer to them than people who are not, often in exchange for bribery. The results are obvious: a government with insincere politicians will not be as effective as people expect, and corrupt officials and their close allies may also be eager to extract rents at the expense of provision of public goods. Therefore, political accountability is very important.

Then, what makes politicians responsive and accountable to citizens? It has been argued that that, in democracies, elections create incentives for politicians to be responsive and accountable to citizens (Przeworski, Stokes, and Manin 1999). In general, politicians are assumed to be basically office-seeking (Mayhew 1974). Whatever the reason, incentives for politicians to hold the office give citizens a means to control politicians in democracies, because without approval of citizens in elections, politicians
will be prevented from a great deal of benefits that could be gained if they held the office. In that sense, Przeworski, Stokes, and Manin (1999) argued that elections induce governments to choose policies that will be positively assessed by citizens in the coming election, assuming that politicians anticipate the judgment of voters.

However, the existence of elections does not guarantee citizens’ ability to control politicians. To control politicians effectively, citizens should be able to assess who will be a good leader for their society. This can be achieved by using either prospective voting or retrospective voting (Strom 1996). In the former, to determine appropriate leaders for government, voters anticipate potential leaders’ ability and trustworthiness prospectively by looking at what is promised by candidates. In the latter, voters also attempt to reward or punish the incumbents retrospectively by evaluating what has been done by the politicians during their term(s) of office. In a world in which voters are fully informed about the incumbents’ performance, politicians who have been sufficiently responsive to citizens’ needs and preferences may be rewarded in the form of electoral victory, which may motivate politicians to be more responsive to the will of the people whom they serve. Conversely, politicians who are less concerned about citizen demand may be excluded from reelection by voters. In this way, more responsive and accountable government can be created.

However, elections do not guarantee such accountability mechanisms. Appropriate imposition of rewards and punishments requires accurate information that
enables voters to discern what has in fact been done by the incumbents. Without such information, a good leader can be ostracized by voters, while a bad leader can savor sweet fruits by holding office. However, in reality, the world of complete information is unrealistic. Thus, it has been assumed that there is a relationship of principal and agent (i.e., between citizens and politicians), known as the problem of delegation (Strom 1996).

What makes this more problematic is the growing trend of decentralization around the world. As Escobar-Lemmon and Ross (2013) noted, proponents of decentralization argue that decentralization can encourage local governments to be more responsive and accountable to their constituents. The World Bank pointed out that this may be because decentralization allows citizens and local politicians to be closer to each other. For example, if decision-making authorities are dispersed to the units of subnational government, people can easily observe what has been done by local representatives, which makes local governance more transparent. At the same time, as the distance between local government and its constituency decreases, local officeholders can react to citizen demand more sensitively, thus providing appropriate levels of public goods. Based on such beliefs, despite the costs of implementation of the reform, a lot of new democracies (or developing countries) have attempted to devolve political and fiscal authorities to subnational governments to get rid of government corruption and inefficiency as well as to encourage political participation of citizens (Bardhan and Mookherjee 2006; Marquez-Vazquez 2011).
Yet, it is questionable whether decentralization has really achieved those goals. First, the distribution of policy-making authority among different levels of government creates many actors responsible for policy decisions and outcomes in the same jurisdiction. In such a condition, lines of responsibility for policy problems will be diluted as the number of actors responsible for policy-making increases in the same area. In addition, as the number of players engaged in policy-making games increases, local politicians are given a means to conceal their responsibility for their policy decisions and outcomes, shifting blame to other levels of government (Papadopoulos 2010). It is obvious that such practices will significantly increase the information costs needed for effective voting, which will in turn cause the problem of rational ignorance, as suggested by Tullock (1967), in local elections. In this sense, I argue that decentralization, if it is combined with a complex structure of multilevel governance, may not have the alleged positive effects on government effectiveness, deteriorating accountability mechanisms.

The remainder of this paper is organized as follows. First, I will conceptualize decentralization and introduce existing literature on the consequences of decentralization. I then develop a theory linking multilevel governance to accountability mechanisms to the quality of government. Subsequently, I carry out an empirical analysis using ordinary least squares (OLS) regression with interaction terms based on historical panel data for 78 countries in the 2002 – 2010 period. Finally, I will conclude by observing the implications and limitations of this paper.
2. Extant Literature

2.1 Conceptualizing Decentralization

In general terms, “decentralization” refers to the devolution of autonomous political and fiscal powers from the central government to subnational government organizations (O’Neill, 2003). There are three components of decentralization: political, fiscal, and administrative. Political decentralization aims at distributing more power in public decision-making, such as the formulation and implementation of policies, to elected representatives in subnational units of government. In administrative decentralization, responsibilities for the planning and management of certain public services are transferred from central government to subnational government organizations. Lastly, fiscal decentralization refers to granting autonomy to make tax-raising, expenditure, and borrowing decisions to subnational units of government while maintaining financial responsibility. In this paper, I will cover political and fiscal decentralization that enables local officeholders to exert more influence on policy-making in political and fiscal issues.

2.2 Consequences of Decentralization

Today, the trend towards decentralization is far-reaching. In particular, a lot of newly democratizing countries (or developing countries) have taken advantage of
decentralization policies for a wide array of reforms to remove corruption, low effort, and inefficiency in service provision (Bardhan and Mookherjee 2006; Bird and Vaillancourt 2008; Martinez-Vasquez 2011). This trend has been related, in part, to dissatisfaction with previous centralized modes of governance under authoritarian governments. Since the flow of democratization in the 1980s and the 1990s, centralized governments have been perceived to be responsible for high levels of rent-seeking, corruption, and lack of accountability. Thus, reformers have implemented decentralization to prevent the abuse of power as well as to promote broader participation in democratic governance (Bardhan and Mookherjee 2006; Olowu 2000; Smoke 1994; Wunsch and Olowu 1990).

However, there is controversy over whether decentralization indeed resolved problems of corruption and inefficient service delivery as intended by reformers. Beginning with Oates (1972), a subsequent body of literature examined the consequences of decentralization based on the assumption of government as a benevolent agent. In theory, as the World Bank noted, it has been assumed that “decisions made with greater participation will be better informed and more relevant to diverse interests in society than those made only by national political authorities.” It has also been assumed that “the selection of representatives from local electoral jurisdictions allows citizens to know better their political representatives.” The reverse is also possible: once decentralized, local officeholders, being closer to people, can react more
sensitively to local residents’ needs and preferences, thus providing the appropriate level of public services (Enemu 2000; Rondinelli et al. 1989; Oates 1972). On the other hand, today, the literature on market-preserving federalism argues that decentralization offers incentives for government officials not to deviate from good behavior, assuming a political economy with selfish officials, as opposed to the benevolent agents assumed in the previous literature (Weingast 1995, McKinnon 1997).

Another line of research stresses the role of competition among local governments in local public finance. It focuses on the mobility of individuals in seeking their preferred package of services. The logic is that the mechanism of mobility of households (i.e., “voting with their feet”), stimulating competition among local governments, will lead to the efficient decentralized provision of local goods. This mechanism is said to have contributed to increased efficiency in the public sector in the United States. However, as household mobility across local jurisdictions is not common elsewhere, it does not necessarily verify the primacy of fiscal decentralization in the explanation of the efficient delivery of public services in other countries (Martinez-Vasquez 2011).

As discussed above, many decentralization scholars proposed a model that stresses the primacy of decentralization reform in improving the quality of government. However, many other scholars assess that decentralization has not produced its intended results (Fan, Lin, and Treisman 2009; Marquez-Vasquez 2011; Rodden and
Indeed, a substantial body of literature has warned of the perils of decentralization. First of all, it is argued that decentralization, if not properly designed and implemented, can cause macro instability (Prud’homme 1995, Tanzi 1995). It is also argued that there is a risk that diversion of funds in decentralized settings can be captured by local elites (Bardhan and Mookherjee 2000). Therefore, further questions can be raised regarding whether decentralization will bring about what is expected about efficient delivery of public service.
3. Argument

Political accountability is considered one of the most significant issues in political science. This is because, without political accountability, many politicians, who are supposed to represent citizens holding sovereignty, fail to follow the will of the people whom they serve, even in democracies. For instance, without political accountability, policies that are not congruent with citizens’ needs and preferences can be made and implemented by politicians. In addition, the problem of low efforts made by politicians as representatives of the people may arise from the absence of political accountability. Some of those politicians may invest their efforts more on pursuing their personal interests rather than public goods, even sometimes aligning with people who are closer to them than people who are not, often in return for bribery. If this is the case, it is obvious that a government with insincere politicians will not be as effective as people expect because they may focus their efforts on extracting rents rather than sufficient provision of public goods. Therefore, political accountability is very important.

In democracies, elections are used by citizens as a means to control politicians. The basic idea of this mechanism is based on the assumption of the desirability of reelection. Election is important to politicians who strive for power. For example, being elected allows ambitious politicians to exercise influence on a broad range of political and policy issues, making it possible for them to move policies in directions they favor. In some cases, being elected also opens up a channel to extract rents from public
finances. Furthermore, as Truex (2013) argues, being elected sometimes enables politicians to boost their reputation: for instance, holding office makes a positive impression on outsiders, thereby stimulating investment in the officeholders’ business. Thus, beginning with Mayhew (1974), politicians have been assumed to be motivated by a desire for reelection. In this sense, elections provide citizens with a means to control politicians, who want to continuously hold the office.

Then, how do people make use of elections to control politicians? On the election day, voters can exercise the right to vote to reward or punish the incumbents based on their past performance. To do so, voters may consider not only their personal wellbeing, but also the consequences of policy decisions made by their representatives at the district, municipal, and national level. Upon doing so, voters may evaluate whether the incumbents are suitable for office based on their own criteria on political and policy issues. In this way, the incumbents who did not perform well can be forced to leave the office (Key, 1966). In this regard, Riker pointed out that “voting permits the rejection of candidates or officials who have offended so many voters that they cannot win an election.” (Riker 1982, 242) In this sense, the literature on democratic government generally postulates that elections, allowing citizens to sanction governments, promote political accountability (Przeworski, Stokes, and Manin 1999).

In this paper, however, I will explore how decentralization, if it is combined with a complex multilevel system, can be ineffective on such electoral accountability
mechanisms, despite the presence of elections. As discussed in the previous section, it has often been argued that decentralization has some traits that promote accountability mechanisms, since it basically induces local officeholders to be closer to local constituents, making it easier for them to react more sensitively to the local residents’ needs and preferences. In addition, it is assumed that local residents, being closer to local officeholders, enjoy an informational advantage and react more sensitively to what has been done by local representatives. However, although decentralized governance indeed has some qualities that might be helpful to build a responsive and accountable government, the alleged effects can be offset by its own characteristics.

Admittedly, decentralization may have contributed, in part, to a closer linkage between local officials and constituents; however, at the same time, complex multilevel governance, which includes many agents with “many hands,” can complicate electoral attribution mechanisms as a whole, which has a significant implication for electoral accountability. I borrow the logic of this argument from the literature on multiparty government. The attribution of responsibility for past performance is “the chief mechanism through which individuals hold actors accountable for their conduct” (Rudolph 2003, 700). However, beginning with Downs (1957), a substantial body of literature on coalition government pointed out that the accountability mechanism can be sometimes hindered by the complex political context of coalition governments (Powell, 2000; Powell and Whitten, 1993; Whitten and Palmer, 1999). For example, Powell (2000,
51) pointed out that “if the resources necessary for policy making are dispersed into the control of numerous groups and individuals, citizens cannot identify who is responsible for policies.” In the case of multiparty governments, the problem of information may arise because the responsibility for welfare outcomes is generally distributed to the different partners within the coalition. The results of the subsequent blurred line of responsibility will be significant problems in delegation, such as moral hazard and adverse selection. For instance, regarding problems of moral hazard, without proper attributions of responsibility, incentives for government to behave in the interest of its citizens will be seriously weakened, and elected representatives may not work faithfully for their constituents. As for problems of adverse selection, the attribution problem may also enable politicians motivated primarily by prospects for personal gain to be re-elected by voters. In such a condition, it is obvious that the quality of government will be deteriorated.

A similar logic can be applied to multilevel governance. Multilevel governance is basically based on power sharing among different levels of government. If the abovementioned logic is applied here, power sharing among different levels of government can create serious obstacles for citizens to perfectly discerning responsibility for policy arguments. In other words, the connection between evaluations of government performance and vote choice will be significantly weakened. For example, under a decentralized system, multiple levels of governments, having their
own policy-making authorities, can simultaneously transmit signals to voters, and those who receive such multiple signals can be left uncertain about where the signals came from. In addition, the actual division of powers between different levels of governments is generally not clear under multilevel governance, to the extent that most citizens lack the ability to discern such ambiguous boundaries. As the complexity of policy-making procedures is intensified with the number of participants from different levels of government, it will be necessary for principals to collect more information about their agents to effectively sanction them. If this is the case, citizens can face greater information costs that make it difficult for voters to attribute responsibility to particular institutions for policy decisions and outcomes.

In addition, under complicated multilevel governance, the “blame-shifting game” among representatives of multiple levels of government can occur. Again, the literature on multiparty government offers a valuable insight here. In multiparty governments, not all parties that constitute a coalition government are necessarily blamed for poor performance. To incentivize government performance, voters can impose responsibility for the welfare outcome to one or a few parties within coalition governments. As a result, parties who could avoid this criticism may be able to re-enter the new coalition. In this regard, Tony Benn, former chairman of the Labor Party in the United Kingdom, pointed that “In countries that have proportional representation the electorate can only stir the mixture of political parties forming the governing coalition,
but can rarely get rid of the whole bunch and replace them with others” (1978). While playing coalition formation games with partners, some parties may survive in office, forming a new coalition with others, despite overall decline in support for the former multiparty government. In this case, coalition members, facing some sorts of political crisis, can have an incentive to focus on avoiding blame for poor performance rather than exerting themselves for the overall achievement of the group.

Likewise, in multilevel governance in which several actors with different preferences are involved in decision-making, parties that share responsibility for a common region can play the “blame avoidance” game to avoid blame for poor performance. In multilevel governance, participation of more actors in decision-making often implies a smaller share of responsibility for individuals, and such conditions may provide a suitable environment to escape criticism for poor performance, making public and private actors more likely to engage in “blame-shift games” that are detrimental to accountability (Papadopoulos 2010; Benz 2007; Hood 2007; Flinders 2005). In addition, local officeholders can also make use of the ambiguous division of powers between multiple levels of governments to eschew their responsibility for political decisions and outcomes. In such a situation, for accurate attributions of responsibility, voters must make greater efforts to gain information about different levels of governments. Knowing that voters have such an informational disadvantage, elected officials in a complex multilevel system can loosely react to people’s needs and preferences, and deliberately
use blame-shifting and credit-taking to camouflage their responsibility for policy decisions and outcomes. Again, this may significantly increase the information costs necessary for voting, and exacerbate the problem of rational ignorance, as proposed by Tullock (1967). In this sense, I argue that such blame-shifting and credit-taking among different levels of governments may further obscure accountability, thus disturbing retrospective voting in election.

Thus far, I have examined some characteristics of complex multilevel governance, which may have negative impacts on accountability mechanisms. Considering that accountability plays an important role in improving the quality of government, it is obvious that decentralization under complex multilevel system may be detrimental to the quality of government. In the next sections, I will examine whether decentralization has a positive impact on accountability mechanisms and the quality of government as intended by reformers.

---

1 According to Tullock (1967)’s work on political ignorance, individuals decide whether to scrutinize political issues by comparing the likely effect of the ultimate governmental decision with the likely cost of getting enough information on the problem. If the cost of becoming informed exceeds the estimated effect of the governmental decision, then the individual will not seek information on political issues. This argument offers a crucial implication for the study of multilevel governance. As discussed previously, information costs that are incurred as a result of scrutinizing candidates’ performance and trustworthiness will rise as the complexity of government structure intensifies under multilevel governance. That is, making a “well-informed” vote under complex multilevel system is not rational for those voters. Thus, under complex multilevel governance, voters may give up collecting accurate information about their local officeholders, and even abstain from voting in local elections due to huge information costs. In that sense, decentralization, if combined with complex form of multilevel governance, may weaken political accountability and thereby deteriorate governance.
4. Research Design

To see whether decentralization is effective under complex form of multilevel system, I will analyze the impact of various decentralization indicators on the quality of government, using ordinary least square (OLS) regression model with interaction terms based on historical panel dataset for 78 countries in the 2002 – 2010 period. Prior to performing the empirical analysis, I believe it is necessary to justify why the interaction model is the appropriate method to carry out the empirical analysis in this paper. This model aims at examining how the complexity of multilevel system conditions the decentralization effects. As discussed earlier, I admit that decentralization has some traits that may be conducive to promote political accountability as decentralization can induce local governments and its constituency to be closer to each other. This might be true if there are a small number of actors responsible for policy making in multilevel governance; However, I expect that this would not be true anymore in complex form of governance in which a large number of actors are responsible for policy making in the same jurisdiction. Rather, in this case, local residents will be subject to problems of attribution, which may significantly reduce voters’ sanctioning power. Thus, I hypothesize that as the number of government tiers increases, there will be a negative interaction between the number of government tiers and decentralization policies. In that sense, I believe that interaction model is an appropriate method to capture the varying impact of decentralization on the quality of government in each different state.
of government structure complexity. Thus, by utilizing interaction model, I will explore how the impact of decentralization on governance will vary, conditional on the number of government tiers. To capture the comprehensive rationale for decentralization in this model, 78 target countries are selected across the regions, such as Europe, East Asia, and North and Latin America, irrespective of regime type, demographics, the level of economic development, and so on.

4.1 Data

In this section, I briefly introduce what variables are included and how these variables are built.

4.1.1 Dependent Variable

The dependent variable in this paper is “government effectiveness”. In measuring this variable, I will use government effectiveness data in the Worldwide Governance Indicators (WGI), which is proposed by the World Bank. Government effectiveness is measured by evaluating five components of good governance: the quality of public service provision, the competence of civil servants, the independence of civil service from political pressures, the quality of policy formulation and implementation, and the credibility of the government’s commitment to policies. These components are necessary for efficient delivery of public good provision and good
policy-making. This dataset indicates the governance estimates, normally distributed with a mean of zero (between -2.5 and 2.5). Better outcomes will be corresponded to higher scores.

### 4.1.2 Independent Variables

The first independent variable, “policy making power of regional executives”, measures the level of political decentralization, with emphasis on the range of policies for which a regional government is responsible. In measuring this variable, I will use the Regional Authority Index (RAI) dataset proposed by Hooghe et al. (2016). The scores range from 0 to 4, with higher scores corresponding to higher levels of authorities for regional governments over policy making and implementation. In measuring regional government’s authoritative competencies, a wide array of policy issues is considered: economic policy, cultural-educational policy, welfare policy, residual powers, police, own institutional set-up, local government, and authority over immigration or citizenship. If the number of policy jurisdictions for which a regional government is responsible increases, the country will get higher scores.

The second independent variable, “regional tax policy autonomy”, takes into account the intensity of fiscal decentralization in a country. Again utilizing the RAI dataset, I will measure how independently a regional government can tax its population.
The scores lie between 0 and 4, and higher scores will be corresponded to higher levels of tax decision autonomy held by regional governments.

The third independent variable, “intergovernmental policy coordination”, is the extent to which regional representatives coordinate national policies in intergovernmental meetings. I added this independent variable to capture the conditional effects of the integrated policy-making arena that involves multiple actors from different levels of government, including both central and regional governments. Again, the RAI dataset is used in measuring this variable. The scores range from 0 to 2; countries having regular meetings between central and regional governments with legally binding authority gets the highest score, 2, while those without regular meetings are assigned the lowest score, 0. The intermediate score, 1, will be assigned to those with regular intergovernmental meetings that are exempted from legally binding authority.

The fourth independent variable, “intergovernmental tax coordination”, is the extent to which a regional government takes part in the process in which representatives coordinate the distribution of national tax revenues. With the RAI dataset, this independent variable will capture how the effects of the increased role of regional governments in the distribution of national tax revenue can be conditioned by multilevel governance. The score lies between 0 and 2, with the lowest score, 0, assigned to regional governments having no role in the consultation of national tax revenue distribution, and the highest score, 2, assigned to regional governments having veto power over the
distribution of tax revenue. Countries having regional governments, with negotiation power over tax decision in a national legislature, but without veto power, are assigned to the intermediate score, 1.

### 4.1.3 Conditioning Variable

As noted above, this paper explores how the level of decentralization interacts with the complexity of government structure. To measure the complexity of government structure, I measured the number of government tiers, using the decentralization database proposed in Treisman (2002). In measuring the number of government tiers, the sum of the number of levels of central and regional governments in each country is counted; I interpreted that the more tiers there are within a particular country, the stronger the complexity of its government structure. The results range from 1 (very simple structure) to 5 (very complicated structure).

### 4.1.4 Controls

This paper includes a set of controls that were used by previous literature on the quality of government (Treisman 2002; La Porta et al. 1999). I also added a set of controls that might be relevant to the quality of government, such as party and institutional factors.
I included a set of geographic and demographic variables: land area, ethnic fractionalization, education, and religiosity. For ethnic fractionalization, I use Alesina et al. (2003)’s dataset on ethnic fractionalization. As for education, I utilize Barro and Lee (2013)’s data on average schooling years for females and males over 25 years old. Regarding religiosity, I take advantage of La Porta et al. (1999)’s dataset on the proportion of Protestants in the population. Lastly, I measured the logged land area of countries using the World Development Indicators (WDI) dataset of the World Bank.

In addition, a set of economic and administrative variables are included: GDP per capita, government debt, and size of government. First of all, I measured logged GDP per capita, utilizing the WDI dataset. For government debt, I use the International Monetary Fund (IMF)’s dataset for government debt. Regarding size of government, Gwartney et al. (2014)’s dataset for size of government is utilized to capture the role of government expenditure, taxes, and state enterprises in the quality of government. The score ranges from 0 (large general government consumption) to 10 (small general government consumption).

Lastly, I also included a laundry list of controls pertaining to party and institutional factors. For starters, I included party variables, such as the age, ideology, and vote share of the largest government party, using the Database of Political Institutions (DPI). For institutional-level variables, I also included British legal heritage, plurality system, parliamentary system, effective number of parties (ENP), and age of
democracy. For starters, I controlled for British legal heritage, using the database provided by La Porta et al. (1999). To capture the presence of plurality systems, I used DPI’s binary indicator for plurality systems. Regarding the indicator of parliamentary system, I assigned 1 if the country is classified as a parliamentary system in DPI dataset, and otherwise 0. For the ENP variable, I acquired the data from Bormann and Golder (2013) and Gallagher (2015)’s ENP dataset, and filled out missing variables by calculating the formula generally used for measuring ENP. Finally, for the age of democracy, I calculated consecutive years of uninterrupted democracy, using Boix and Rosato (2012)’s dataset for dichotomous democracy measure and consecutive years of current regime type.

4.2 Methods

In this paper, I carry out empirical analysis using the OLS regression model with interaction terms based on historical panel data for 78 countries in the 2002 – 2010 period. I use the OLS regression because it is considered a suitable method to predict non-binary dependent variables. Also, as discussed previously, I utilize interaction model to examine the conditional effects of decentralization indicators on the quality of

\[ N = 1 / \sum_{i=1}^{n} p_i^2 \], where \( n \) is the number of parties with at least one vote/seat and \( p_i^2 \) the square of each party’s proportion of all votes or seats (Laakso and Taagepera 1979).
government, with the variation in the number of government tiers. The models take the following form:

Model 1 – 4:

\[
\text{Government effectiveness} = \beta_0 + \beta_1 \text{ decentralization indicator} + \beta_2 \text{ the number of government tiers} + \beta_3 \text{ decentralization indicator} \times \text{ the number of government tiers} + \beta_j \text{ controls} + e
\]

where \(\beta_0\) is the constant term and \(e\) is the error term. In this equation, I attempt to interact the conditioning variable (i.e. the number of government tiers) with various decentralization indicators, separately in each model.

By using the interaction model, I will discuss how decentralization interacts with the complex form of government structures. According to Brambor et al. (2006), given interaction terms, the effects of the main independent variables on the dependent variable depend on the intensity of the conditioning variable. To see how multilevel governance conditions decentralization effects, I will present the regression result tables in the next section.

Meanwhile, there are some important points that should not be neglected when using interaction model. As Brambor et al. (2006) pointed out, the typical regression table does not clarify whether the main independent variables have a meaningful effect
when the level of the conditioning variable is not zero. In addition, it pointed out that there is no way of capturing whether the main independent variable has a significant conditional effect on the dependent variable by looking at the significance of the coefficient on the interaction term. Thus, it stresses the importance of visualization efforts to clarify the conditional effects in the interaction model. Therefore, in the next section, along with the regression tables, I will also attempt to present simulation results to illustrate how complex form of multilevel governance conditioned the decentralization effects on the quality of government.
5. Results

This section discusses the main findings of this paper. Table 1 presents the regression results of the models that capture how regional governments’ strong autonomy on policymaking and tax decisions affects government effectiveness as the complexity of government structure (i.e. the number of government tiers) increases.

Firstly, Model 1 shows how the impact of regional policymaking autonomy on government effectiveness varies depending on the complexity of government structure. In Model 1, the regression results suggest that, when the conditioning effect of the number of government tiers was zero, countries in which regional executives are responsible for a wide array of policies were more likely to have a good score in government effectiveness. That said, the coefficient estimates of the main independent variable have no significant meaning, as there are no countries with no government tiers. Thus, the more important part would be interaction terms in the model. Regarding interaction effects, a negative and statistically significant effect of the interaction between the number of government tiers and the policymaking autonomy of regional executives suggests that, as complexity of government structure intensifies, it countervails the positive impact of transfer of policymaking power to regional executives on government effectiveness as a whole. According to the coefficient of the interaction term, the positive impact of decentralized policymaking decreased by 0.05 units as the number of government tiers increases by one.
Table 1: A table indicating the conditional effect of decentralized policymaking and tax decision system on government effectiveness

<table>
<thead>
<tr>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policymaking Power of Regional Executives</td>
<td>0.220***</td>
</tr>
<tr>
<td>(0.072)</td>
<td>(0.079)</td>
</tr>
<tr>
<td>Regional Tax Policy Autonomy</td>
<td>0.114***</td>
</tr>
<tr>
<td>(0.019)</td>
<td>(0.022)</td>
</tr>
<tr>
<td>Tiers</td>
<td>-0.050***</td>
</tr>
<tr>
<td>(0.019)</td>
<td></td>
</tr>
<tr>
<td>P.P.R.E. * Tiers</td>
<td>0.037*</td>
</tr>
<tr>
<td>(0.021)</td>
<td></td>
</tr>
<tr>
<td>R.T.P.A * Tiers</td>
<td>-0.052***</td>
</tr>
<tr>
<td>(0.011)</td>
<td></td>
</tr>
<tr>
<td>Land Area (Logged)</td>
<td>-0.378***</td>
</tr>
<tr>
<td>(0.097)</td>
<td></td>
</tr>
<tr>
<td>Ethnic Fractionalization</td>
<td>0.542***</td>
</tr>
<tr>
<td>(0.027)</td>
<td></td>
</tr>
<tr>
<td>Average Year of Education</td>
<td>0.001</td>
</tr>
<tr>
<td>(0.011)</td>
<td></td>
</tr>
<tr>
<td>Proportion of Protestants</td>
<td>0.007***</td>
</tr>
<tr>
<td>(0.001)</td>
<td></td>
</tr>
<tr>
<td>GDP per capita (Logged)</td>
<td>0.341***</td>
</tr>
<tr>
<td>(0.027)</td>
<td></td>
</tr>
<tr>
<td>Government Debt</td>
<td>-0.0005</td>
</tr>
<tr>
<td>(0.001)</td>
<td></td>
</tr>
<tr>
<td>Size of Government</td>
<td>-0.054***</td>
</tr>
<tr>
<td>(0.015)</td>
<td></td>
</tr>
<tr>
<td>British Legal Heritage</td>
<td>0.331***</td>
</tr>
<tr>
<td>(0.015)</td>
<td></td>
</tr>
<tr>
<td>Age of the Largest Government Party</td>
<td>0.001</td>
</tr>
<tr>
<td>(0.004)</td>
<td></td>
</tr>
<tr>
<td>Ideology of the Largest Government Party</td>
<td>0.020</td>
</tr>
<tr>
<td>(0.015)</td>
<td></td>
</tr>
<tr>
<td>Vote Share of the Largest Government Party</td>
<td>0.005***</td>
</tr>
<tr>
<td>(0.002)</td>
<td></td>
</tr>
<tr>
<td>Plurality</td>
<td>0.001</td>
</tr>
<tr>
<td>(0.035)</td>
<td></td>
</tr>
<tr>
<td>Parliamentary System</td>
<td>-0.016</td>
</tr>
<tr>
<td>(0.017)</td>
<td></td>
</tr>
<tr>
<td>Effective Number of Parties</td>
<td>0.033***</td>
</tr>
<tr>
<td>(0.011)</td>
<td></td>
</tr>
<tr>
<td>Age of Democracy</td>
<td>0.001</td>
</tr>
<tr>
<td>(0.001)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-3.92***</td>
</tr>
<tr>
<td>(0.365)</td>
<td></td>
</tr>
</tbody>
</table>

Likewise, Model 2, examining how multilevel governance conditions the impact of fiscal decentralization on government effectiveness, shows a similar result. In Model 2, regional executives’ tax decision autonomy has a positive and statistically significant
effect on government effectiveness when it is not combined with multilevelness of
governance. However, as for the interactive effects between decentralized tax decision
and the complexity in government structure, similar to the case of regional
policymaking autonomy, as the number of government tiers increases, such positive and
statistically significant effects decrease. For example, the positive effects of regional
executives’ tax decision autonomy are diminished by 0.037 units per unit of government
structure complexity increase.

Figures 1 and 2 illustrate the conditional effects of the autonomies of regional
policymaking and regional tax decisions on government effectiveness. In each panel, the
X-axis represents the number of government levels in countries. As for the Y-axis, while
Figure 1 shows the marginal effects of regional policymaking autonomy on government
effectiveness, Figure 2 presents the marginal effects of regional tax decision autonomy
on government effectiveness. The solid line in each figure presents how autonomies of
regional policymaking and regional tax decision each affected government effectiveness,
conditional on the number of government tiers. In other words, the changing intensity in
those effects reflects the conditioning effect of the complexity in government structure.
The shaded areas refer to the 95% confidence interval of such conditioning effects of
government tiers. Whenever the upper and lower bounds of the confidence interval do
not intersect the zero line, conditional effects are considered statistically significant.
Figure 1. A figure illustrating how the marginal effect of regional policymaking autonomy on government effectiveness varies conditional on the number of government tiers.

Figure 2. A figure illustrating how the marginal effect of regional tax decision autonomy on government effectiveness varies conditional on the number of government tiers.
According to Figure 1, the marginal effects of regional policymaking autonomy on government effectiveness are positive and statistically significant when the number of government tiers does not exceed three. However, the solid line shows a clear decreasing pattern as the number of government tiers increases. The positive and statistically significant effect of regional policymaking autonomy becomes statistically insignificant when the number of government tiers is greater than three. Figure 2 also suggests a similar result. While regional tax decision autonomy has a positive and statistically significant marginal effect on government effectiveness in case government structure is relatively simple, such effects are no longer significant when the number of government tiers exceeds three.

In short, the results indicated in the coefficient table and two simulation figures suggest that decentralized regional policymaking and tax decision systems have a positive impact on government effectiveness under a relatively simple government system, but greater complexity of the multilevel system significantly countervails such effects as a whole. I interpret that, as discussed in the theory section, this is a consequence of the attribution problem that voters may encounter under complex multilevel systems, as a result of shared responsibility and blame-avoidance games among multiple actors from different levels of government.
Table 2. A table indicating the conditional effect of intergovernmental policy coordination system on government effectiveness

<table>
<thead>
<tr>
<th></th>
<th>Model13</th>
<th>Model14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intergovernmental Policy Coordination</td>
<td>0.974*** (0.105)</td>
<td></td>
</tr>
<tr>
<td>Intergovernmental Tax Coordination</td>
<td>0.609*** (0.171)</td>
<td></td>
</tr>
<tr>
<td>Tiers</td>
<td>0.127*** (0.032)</td>
<td>0.059*** (0.031)</td>
</tr>
<tr>
<td>L.P.C. * Tiers</td>
<td>−0.246*** (0.052)</td>
<td></td>
</tr>
<tr>
<td>L.T.C. * Tiers</td>
<td></td>
<td>−0.137*** (0.049)</td>
</tr>
<tr>
<td>Land Area (Logged)</td>
<td>−0.05*** (0.010)</td>
<td>−0.044*** (0.009)</td>
</tr>
<tr>
<td>Ethnic Fractionalization</td>
<td>−0.26*** (0.053)</td>
<td>−0.273*** (0.092)</td>
</tr>
<tr>
<td>Average Year of Education</td>
<td>0.000</td>
<td>0.003</td>
</tr>
<tr>
<td>(0.014)</td>
<td>(0.011)</td>
<td></td>
</tr>
<tr>
<td>Proportion of Protestants</td>
<td>0.007*** (0.001)</td>
<td>0.086*** (0.001)</td>
</tr>
<tr>
<td>GDP per capita (Logged)</td>
<td>0.345*** (0.026)</td>
<td>0.544*** (0.026)</td>
</tr>
<tr>
<td>Government Debt</td>
<td>−0.0001</td>
<td>−0.0004</td>
</tr>
<tr>
<td>(0.0004)</td>
<td>(0.0003)</td>
<td></td>
</tr>
<tr>
<td>Size of Government</td>
<td>−0.066*** (0.014)</td>
<td>−0.069*** (0.014)</td>
</tr>
<tr>
<td>British Legal Heritage</td>
<td>0.293*** (0.017)</td>
<td>0.317*** (0.017)</td>
</tr>
<tr>
<td>Age of the Largest Government Party</td>
<td>0.0005 (0.0004)</td>
<td>0.081** (0.004)</td>
</tr>
<tr>
<td>Ideology of the Largest Government Party</td>
<td>−0.019 (0.015)</td>
<td>−0.020 (0.015)</td>
</tr>
<tr>
<td>Vote Share of the Largest Government Party</td>
<td>0.001** (0.002)</td>
<td>0.005** (0.002)</td>
</tr>
<tr>
<td>Plurality</td>
<td>0.046</td>
<td>0.042</td>
</tr>
<tr>
<td>(0.037)</td>
<td>(0.036)</td>
<td></td>
</tr>
<tr>
<td>Parliamentary System</td>
<td>−0.018</td>
<td>−0.020</td>
</tr>
<tr>
<td>(0.017)</td>
<td>(0.017)</td>
<td></td>
</tr>
<tr>
<td>Effective Number of Parties</td>
<td>0.030*** (0.012)</td>
<td>0.040*** (0.011)</td>
</tr>
<tr>
<td>Age of Democracy</td>
<td>0.002</td>
<td>−0.0002</td>
</tr>
<tr>
<td>(0.001)</td>
<td>(0.001)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>−4.241*** (0.340)</td>
<td>−4.211*** (0.332)</td>
</tr>
</tbody>
</table>

Observations 550 550
Adjusted R² 0.855 0.856

To see how shared responsibility and blame avoidance negatively work under a multilevel system more clearly, in Table 2, I divert the scope to the intergovernmental policy codetermination process. In Model 3, I examine how the presence of regular
meetings for intergovernmental national policy coordination affects government effectiveness. According to the regression results indicated in Model 3, the conditional effects of the intergovernmental national policy codetermination process have a positive, and statistically significant effect on government effectiveness if the number of government tiers is zero. However, as expected, the regression results in Model 3 suggest that there is a negative, statistically significant interaction between intergovernmental national policy coordination and the complex form of multilevel governance. According to the coefficient estimates of the interaction term, the positive effect of intergovernmental national policy codetermination decreased by 0.240 units for each one-tier increase.

On the other hand, in Model 4, I investigate how the coordination of national tax revenue distribution between the central government and the regional representatives acts on government effectiveness, conditional on the varying complexity in government structure. According to the coefficient results indicated in Model 4, while a positive, statistically significant effect of intergovernmental tax revenue distribution codetermination on government effectiveness is observed in the absence of government tiers, there is a negative and statistically significant interactive effect between government structure complexity and the process of intergovernmental tax revenue distribution coordination. For example, the positive effect of intergovernmental tax
revenue codetermination system decreased by 0.137 units as the intensity of multilevelness in governance increases by one unit.

To see how the multilevelness of governance conditioned intergovernmental coordination effects more precisely, the simulation results are shown in Figures 3 and 4. Figure 3 shows that the marginal effects of intergovernmental national policy codetermination on government effectiveness was positive and statistically significant when the number of government tiers is not greater than three. However, as the number of government tiers increases, such conditional effects gradually decrease. It is interesting that the conditional effects of intergovernmental national policy coordination become statistically insignificant when there are four layers of government in a country. Moreover, if the number of government tiers reaches five, the intergovernmental codetermination procedure negatively worked on government effectiveness.

On the other hand, in Figure 4, I present how the marginal effects of intergovernmental tax revenue distribution coordination varies conditional on the complexity of government structure. Again, the simulation results show that the marginal effects of intergovernmental tax distribution codetermination were positive and statistically significant when the number of government tiers were less than four. However, such effects decrease as the level of complexity of government structure intensifies, indicating that countries having complex forms of government tended not to benefit from an intergovernmental tax revenue distribution coordination system.
Figure 3. A figure illustrating how the marginal effect of intergovernmental national policy coordination on government effectiveness varies conditional on the number of government tiers.

Figure 4. A figure illustrating how the marginal effect of intergovernmental national tax revenue distribution coordination on government effectiveness varies conditional on the number of government tiers.
In short, as is found in the cases of decentralized authorities of policy making and tax decision, I could find a clear decreasing pattern regarding the conditional effect of intergovernmental policy codetermination systems under the complex forms of multilevel systems. In particular, in the case of intergovernmental national policy coordination, a clear reductive effect was observed when the complexity of government structure reached to the highest level. Considering that intergovernmental codetermination of national policies involves so many actors that represent different levels of government, I interpret that, along with complex forms of multilevel system, the problems of shared responsibility and blame avoidance among different levels of government may be maximized in the presence of a system that requires routine meetings for intergovernmental policy coordination.
6. Conclusion

In this paper, I have discussed how decentralization works on the quality of government under multilevel governance. Proponents of decentralization have argued that decentralization can enhance the quality of government because decentralization, shortening the distance between local residents and local officeholders, gives opportunities for citizens to observe thoroughly what has been done by local representatives. They have also asserted that this creates incentives for local representatives to be more responsive to local residents’ demand, thus maintaining an appropriate level of public service provision. However, the main argument in this paper is that decentralization can be ineffective in promoting the quality of government if it interacts with complex forms of multilevel governance. The logic of this argument is that shared responsibility for policy making in the same jurisdiction can cause the attribution problem (i.e., blurred lines of responsibility). I also argue that blurred lines of responsibility give opportunities for local representatives to conceal their responsibility by engaging in the blame-avoidance game. I postulate that all these factors will increase the information costs necessary for voting in local elections, thus weakening accountability mechanisms in governance. Thus, I assert that although decentralization contributes, in part, to improving local governance, such effects could be compensated for as a whole if it is combined with the complex political context of multilevel governance.
Using the OLS regression model with interaction terms based on historical data for 78 countries in the 2002 – 2010 period, this paper attempts to provide empirical evidence that decentralization is ineffective when it is combined with a complex multilevel system. It found that decentralization may work, as intended, under simple forms of governance, including a small number of autonomous actors eligible for policymaking. However, it also found that such positive effects decrease as the number of government tiers increases. Consequently, I concluded that decentralization would not be as effective as intended by reformers when combined with complex forms of multilevel governance.

For scholars interested in decentralization, those models can be useful, since it provides a new evaluation of decentralization in multilevel governance, using the conditional hypothesis. My model verifies the primacy of decentralization attributes in the explanation of efficient governance in simple forms of multilevel governance. However, my findings offer little support to the intuition of qualitative studies that have emphasized the role of decentralization in promoting the quality of government when it is combined with complex forms of government. However, the models presented in this paper, while based on valuable insights, are far from perfect. Most of all, it is not clear whether the ineffectiveness of decentralization under complex forms of governance is a byproduct of accountability problems. It is possible that decentralization under complex forms of governance can be ineffective simply because deadlock is caused by a number
of actors involved in the policy-making arena, with divergent preferences and interests.

To verify whether the ineffectiveness of decentralization is a consequence of accountability problem, it is important to examine regional residents’ individual perception on their representatives’ policy responsibility in the future, based on quasi-experimentation, such as the survey methods.
References


