Chapter One
Introduction

The history of global economic philosophy can be divided into three different eras. The first era of economic philosophy is the classical liberalism in the 18th century, mostly in Europe and North America. The principle of liberalism is that individuals should be free from any restraint to express their egoistic drives (Hunt, 1981). This basic philosophy was translated into economic liberalism by Adam Smith when he published his book on The Wealth of Nations in 1776. Economic liberalism stems from a free-market mechanism where capitalists and laborers are free to express their self-interests to earn maximum monetary returns. Only by allowing them to do so, would the allocation of capital and labor be mostly efficient.

The principle of individual freedom is also adopted in the political sphere where the people are basically against the government in general. Under this notion, the role of government, according to economic liberalism, is limited to cover certain areas including security, national defense, and public works and institutions, such as hospitals, fire departments, and military and police forces that are unprofitable for private businesses to operate (Hunt, 1981, p.46). During this era, the role of government was welcomed as long as it benefited the capitalists, such as stabilizing economic conditions (Samuels, in Hunt, 1981).

The industrial revolution that took place between the late 18th and early 19th centuries strengthens the economic liberalism under free-market competition. It is argued that the principle of free-market competition where the forces of market demand and supply were guided by invisible hands to

serve the self-interested capitalists to earn maximum profit that led to efficient production activities. It is also argued that the industrial revolution that came later was the greatest achievement of these self-interested capitalists to maximize their profit by inventing technology and knowledge that produced the most efficient production operation to maximize profits (Hunt, 1981). Based on the classical liberalism principle, the United States enjoyed high economic growth contributed by several key industries such as textiles, chemicals and machinery between 1899 and 1927 (Hunt, 1981, p.153).

The liberalism principle applied to economic growth combined with limited government interventions led to a free-fight market competition that resembles the principle of Darwinian survival of the fittest. It is argued that since endowment factors such as knowledge, wealth and intellect are not equally distributed among individuals, the parties that own the most of these factors would likely win in the competition. It means unequal distribution of wealth when the winners will hold most of the wealth and assets in the economy. It is argued that this unequal distribution of wealth led to the Great Depression in 1929 as explained below.

The second era of economic philosophy is Keynesian economics. In 1929, an English economist, John Maynard Keynes, published a book, *The General Theory of Employment, Interest and Money*. Keynes proposed the concept of circular flow to explain the causes of the Depression (Peters, 2001). The basic principle of the concept is economic equilibrium where the total or aggregate spending of all economic units, namely households, businesses and government should be equal to the total or aggregate production to ensure the prosperity of the economy. This was not the case when the Depression occurred in 1929.

According to the concept of circular flow, the Great Depression was caused by a situation where the aggregate spending fell behind the aggregate production. This situation occurred since business spending or investment and household spending declined significantly. Unequal distribution of wealth and income in the economy leads to decreasing aggregate spending since it is argued that the rich generally save more than the poor. The savings are the leakage in the circular flow that causes the contraction of aggregate spending. The implication is the accumulation of business inventories and, hence, the decline in profits. This situation forces business retrenchment by cutting production and, hence, employment. High unemployment causes the household spending to decline. The end result of this repercussion effect was the Great Depression of 1929 in the United States when the stock market crashed and unemployment was high.

The basic principle of Keynesian economics is re-distribution of income by increasing government spending in the economy to maintain the equilibrium. However, in order to do that, the government needs revenues. Keynes proposed taxation to tab on the savings of the rich and use the proceeds to provide public works such as the constructions of airports, dams, post offices, courthouses, roads and bridges (Peters, 2001). It is argued that these works create employment and, hence, increase the household spending. This was one of many strategies of the New Deal policy package under President Roosevelt for economic recovery in the United States. The role of government in the economy became stronger as armament industries that created employment were established by the United States government as the Second World War began.

The role of government in the United States, as well as other developed countries, continued to increase significantly especially after the Second World War was over. Peters (2001) proposed some factors that contributed to the growing of the government role. This research highlights a factor proposed by Peters, namely the decline of late capitalism or the market failure argument which was relevant to the downfall of classical economic liberalism previously discussed. This concept rooted from Marxism that argues when the market fails to produce social goods for the people, the government has to step in by increasing spending, particularly on welfare programs.

While this argument is true for the Marxist, it is also valid from the point of view of the liberal government. The result is increasing public administration and bureaucrats to manage the programs during peacetime in the liberal countries. Peters (2001, p.11) argued that both Marxist and liberalist government agree that as the role of government continues to increase, the spending eventually overcrowds the productivity of the market system. The Armey curve explains this phenomenon (see Section 2.3, p. 88). By 1970s, developed countries such as the United States and England experienced inefficient government operation, highly regularized market and stagflation. However, the Marxist and liberalist government disagree in their proposal of remedy, while Marxist proposes the end of capitalism; the liberalist does the revival of market mechanism (Peters, 2001, p.12).

The revival of market mechanism in the 1970s marked the beginning of the neo-liberalism principle or the third era of economic and political history. By 1970s the role of government had become the source of market inefficiency due to their policies and regulations that hindered market

competition. In addition, the increasing government roles caused budget deficits that required more taxation that further distorted market mechanism[1]. England revived the market mechanism with, among others, privatization during the Thatcher administration and the United States proposed less corporate taxation during the Reagan presidency. These economic strategies are later known as Thatcherian economics in England and Reaganomics in the United States. The end results of the policies under the neo-liberalism principle are significant budget cuts to improve fiscal discipline, less government intervention in the economy and greater market mechanism.

The principle of neo-liberalism was later introduced to developing countries, particularly in response to the debt crisis in Latin America. In 1989, the Washington Consensus that described economic policies as a standard reform package to address the debt crisis was established. The consensus was prepared by three institutions, namely the International Monetary Fund (IMF), the World Bank and the Treasury Department of the United States. The package covered several general policies which were (Williamson J., 2002).

- stabilizing macroeconomic foundation including fiscal discipline by setting-up priorities in government spending and introducing tax reform;
- opening domestic market to international trade and investment by promoting trade and foreign direct investment policy reform, property rights protection;

[1] In market mechanism, price serves as a tool to direct resources allocation since the fluctuation of prices points out to scarcity. It is argued that, increasing the price of a particular goods indicates over-demand for the goods. If this situation occurs, available resources would be directed toward producing the goods to restore the price to its equilibrium level where its demand equals supply. Taxes imposed on businesses distort the actual price upward and this will give a false signal to allocate resources available in the market. The implication is that the market might produce goods that are not needed by the consumers. In other words, taxes could create market inefficiency.

- promoting market mechanism domestically by allowing the interest and exchange rates to be determined by market, privatization and deregulation.

These economic reforms spread to political reforms as the package demanded a more liberal type of government.

Even though the Washington Consensus was established in response to the debt crisis in Latin America, the principle of economic and political neo-liberalism introduced in the consensus was carried out to other developing countries. Within this context, it is argued that the principles of neo-liberalism is transferred by international organizations such as the IMF and World Bank to developing countries as part of the agreement in conjunction with aid or loans provided by these organizations. This is the case with Indonesia.

In 1997, Indonesia experienced an economic crisis. The crisis began when the domestic currency, IDR, depreciated significantly against the USD. The implications were a massive government budget deficit due to the increase in the interest and installment payments of foreign debt in the USD denominator and currency speculation that further depreciated the domestic currency. As government deficit increased, spending cuts became the only option for the government. These reductions occurred in the areas of infrastructure development such as roads and irrigation canals and welfare programs, particularly in health and education sectors. As welfare programs were severely reduced, the economic crisis spread into social and political unrest.

The currency depreciation also affected the costs of imported raw materials used by businesses. As imported materials were expensive, businesses had to increase prices. However, as prices increased, their sales

volumes declined. This caused the accumulation of business inventories and. forced the businesses to reduce production level and, hence, profits. As an attempt to minimize losses, business retrenchment that led to unemployment was unavoidable. Increasing unemployment reduced the household purchasing power.

As sales and revenues declined, many of the businesses could not pay their debts to the bank. Some even declared bankruptcy. This situation led to bank financial insolvency and, hence, people's confidence toward banks. As people's confidence declined, a bank rush occurred. In order to prevent financial insolvency and further rush, banks increased their interest rates on loans and deposits. However, these banks were unable to channel the funds on investment. This situation led to bank insolvency and a further decline in people's confidence toward banks.

In order to prevent banks from bankruptcy, the government injected some funds to improve their financial conditions. The decision put more pressure on the government's already deficit budget. However, some of these banks finally declared bankruptcy and, therefore, contributed to further increase in unemployment. As businesses collapsed, the stock market followed. By 1998, the economic crisis had triggered social and political unrest caused by the increase in unemployment and inflation combined with diminishing welfare programs.

On 31st of October 1997, a letter of intent between the Government of Indonesia and the IMF was signed as part of the IMF's economic recovery fund. The three main agendas of the letter were (International Monetary Fund, 1997, p.3):

- strengthening macroeconomic foundation including

- restructuring the financial sectors
- introducing structural reforms.

While the first and second agendas proposed economic reforms, the third agenda could also spread to political reforms, including a decentralization policy or regional autonomy as is explained below. The aims of the structural reforms were to promote greater transparency in policy making and competition to support economic restructuring programs necessary to promote growth and to implement measures on poverty alleviation programs (International Monetary Fund, 1997, p.10). In addition, the government of Indonesia should accelerate the reforms by promoting trade and investment reforms, privatization and deregulation reforms (International Monetary Fund, 1997, p.10). As such, it can be inferred that the letter of intent carried the mission of the neo-liberalism principle introduced by the Washington Consensus which promoted more market mechanism and reduced government intervention in the economy.

While the letter of intent did not include regional autonomy or a decentralization proposal as part of the agendas, the idea of neo-liberalism principle at the time when the people's trust in the government diminished had triggered regional autonomy or decentralization policy in Indonesia. The political rhetoric for decentralization arguments that are consistent with the neo-liberalism principles are:

- the role of the central government at the regional level will be less so that it promotes efficient government operation,
- regional proliferation that followed the decentralization policy will promote regional competition and, therefore, government efficiency at the local level,

- regional autonomy will put the center of the decision making closer to the people and, therefore, can better promote democracy and reduce poverty alleviation.

1.1 DECENTRALIZATION POLICY IN INDONESIA

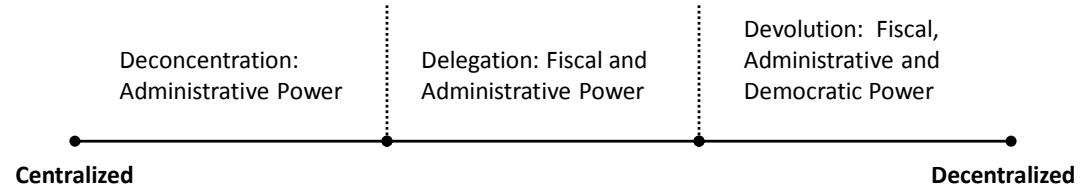
Decentralization can be understood as a process of power transfer from the central to sub-national government level. As such, decentralization encompasses three stages (Smith, 2002, p.389). The first stage is *deconcentration* stage. This stage refers to the transfer of functional or administrative authority to field officers of central government departments and agencies. Second is *delegation* stage. This process refers to the decentralization of executive authority to semi-autonomous agencies headed by appointees of the central government. Third is *devolution* stage that refers to transfer of political power, fiscal resources and quasi-legislative power to territorial governments. The three stages differ in terms of the authority level in decision making transferred by the central government to the sub-national governments[2].

As a process, decentralization moves along the centralized-decentralized continuum (Fesler, 1968). The process begins with deconcentration, or pseudo-decentralization at one end of the continuum, to devolution at the other end of the continuum. However, the process does not assert that in reality the decentralization process in all countries should start with deconcentration and end up with devolution. Rather, it describes the

[2] The basis of decentralization typologies is the delegation of governmental functions or the extent of discretionary authority granted by the central government to sub-nationals. While market decentralization might be another form of decentralization, it does not refer to the delegation of governmental functions or the extent of discretionary authority granted by the central government to sub-nationals as the other three forms of decentralization suggest. Since this thesis is about the delegation of governmental functions to sub-nationals, market decentralization was not considered relevant. The typology of decentralization in the thesis is a hybrid typology eg. devolution is a combination of administrative and fiscal decentralizations whereas devolution is administrative, fiscal and political decentralizations.

extent of discretionary authority granted by the central government to sub-nationals. Diagram 1 describes the process.

DIAGRAM 1 CENTRALIZED-DECENTRALIZED CONTINUUM[3]



Sources: Derived from Fesler (1968); Smith (2002); Morrison (2004)

Diagram 1 shows that the kind of power transferred to sub-nationals determines the degree of decentralization implemented by a particular political system. At the end of the spectrum, a full decentralization is accompanied by a transfer of administrative, fiscal and democratic power. The latter refers to a full political authority of sub-national government to make decisions suitable for its area. The authority includes the ability to elect members of a local government body that comprises the head of sub-national government and members of the local assembly.

Devolution could also be perceived as a process to improve public accountability. Since different regions will have different preferences and pattern of demands for public services, locating the decision making process in the hand of local governments will likely improve public service provisions (Smith, 2002). In addition, since decentralization breaks down the national area into smaller manageable regions (Fesler, 1968), it could improve representation and information circulation through the local network (Morisson, 2004, p.4). In other words, true decentralization could improve

[3] The continuum is not meant to describe a linear progression through which a country progresses. Rather, it describes the differing extent of discretionary authority granted by the central government to sub-nationals. Hence, the extent of discretion is at the highest in devolution since it includes administrative, fiscal and political authority.

public accountability by enhancing local governments' responsiveness to meet the needs of their constituents.

Indonesia has undergone various stages of decentralization since the Dutch colonial time (see Section 4.1.1). The decentralization policy during the Dutch colonial time resembles the deconcentration stage when the role of sub-national governments was limited to administrative functions such as managing agricultural areas and the supply of labor for the interest of the colonial rulers. It is argued that the *priyayi*-peasant relationship was established by the Dutch colonial ruler to sustain the flow of economic rents generated from these areas (see Section 4.2.2, p. 166).

The delegation stage in the decentralization process was implemented during both the Old and New Order regimes when the government transferred a limited sum of funds and administrative power to the region (see Section 4.1). Since the local people did not have the power to elect the head of local government, the political power remained in the hands of the central government. The differences of the delegation process between the two regimes are the Old Order regime government granted autonomy to the local government to develop their own development programs. This was not the case found during the New Order regime since the role of local government was to manage and implement development programs and the funds attached to the programs proposed by the central government. However, during the Old Order regime, the central government did not transfer sufficient amount of funds to the local government to implement the authority (see Section 4.1, p. 123). As a result, the implementation of local government initiative programs was limited.

Finally comes the devolution stage of decentralization policy. This is the case of decentralization policy that has been implemented since 2000 (see Section 4.1.1). The implementation of administrative decentralization is the authority of most governmental functions (except security, defense, international relations, religious affairs, judicial system, and fiscal and monetary policies) granted by the central government to the second-tier government level. The second-tier government level in Indonesia is *Kabupaten* or Municipalities and *Kota* or Districts. Law 22/1999 on Regional Government guided the transfer of governmental functions from the central to the local governments.

Five years later, the central government increased the democratic power to the local level by introducing Law 32/2004 to amend Law 22/1999. While the Law 22/1999 allowed the local assembly to elect the head of local government and the constituent to elect the members of local assembly, the Law 32/2004 initiates a direct voting mechanism to elect the head of local governments and members of local assembly (see Section 4.2.3). It is argued that the direct voting mechanism provides a political tool that can be used by local constituents to impose political sanction to improve the performance of the local government.

The central government grants the financial power to the local governments by transferring some funds to finance the local governments' expanded functions. The fund is known as Balance Fund that consists of a block grant, specific grants and revenue sharing from taxes and non-taxes. This fund is expected to cover the spending needs of the local governments. To support the fiscal transfer arrangements, the central government introduced Law 25/1999 on Balance Funds to guide the implementation of

inter-regional fiscal transfer arrangements in Indonesia. The law became effective in 2001. In 2004, the central government introduced Law 33/2004 to amend Law 25/1999. The new law modifies the transfer arrangements stated in the amended law (see Section 4.1.1, p. 135).

To improve fiscal capacity of the local governments the central government introduced Law 34/2000 on Local Taxes and Charges. The law provided some guidelines on the types of local taxes and charges that the local government can collect. By collecting local taxes and charges, the local governments could reduce their fiscal dependence on inter-regional fiscal transfer from the central government. As such, theoretically in the long-run, financial sources for public goods provisions at the local level should mostly be generated locally rather than depending on fiscal transfer. The sources include revenues from income tax, local taxes and charges including general sales tax and other revenue derived locally.

Since the enactment of the Law, local governments have introduced a range of new taxes and charges. Some of them are the reinstatement of those that had been cancelled by the central government due to tax inefficiency in the 1980s (Devas, 1988). Lewis found that by the end of fiscal year 2001, more than 1,000 local taxes and charges, mainly on primary goods and factors of production, had been issued by the local governments. These taxes and charges might harm the local economy since it is argued that they increase the cost of production (see Section 5.2, p. 220). He also found that only about 40 percent of the total is legal while the rest do not have the central government's approval as required by law (Lewis, 2003).

Lewis (2003) found in this study that despite the local governments' argument that increasing taxes and charges are required to cover their fiscal

needs, a nationwide study did not find any support for such an argument. In addition, a later report also suggests that the local governments in the ten highest taxes and charges group are not necessarily those that provide the best public services required by local businesses (Regional Autonomy Watch, 2008). It is argued that as the local governments keep creating new taxes and charges without significantly improving public services provision, Leviathan government behavior may arise (see Section 1.5).

One study demonstrated that many of these local taxes are costly to administer (Lewis, 2006)[4]. To constrain the local taxes and charges that are argued to harm local economy, the central government introduced Law 28/2009 on Local Taxes and Charges to amend Law 34/2000. The purposes of the new law are to improve guidelines and mechanism control in creating local taxes and charges (see Table 15, p. 225). This new law became effective on 1st January 2010. Section 5.3 also provides a brief analysis of the impact of the new law on disciplining the local government in creating local taxes and charges.

In summary, the year 2000 was not the first time that Indonesia implemented a decentralization policy. As previously explained, the country has always been managed under the decentralization principle. However, the stages and, hence, characteristics of the decentralization policy that was implemented in each governmental era differs. While it is not possible to accurately indicate the position of decentralization policy implementation in the centralized-decentralized continuum described in Diagram 1, it can be argued that the characteristics of decentralization policy in Indonesia are

[4] In his paper, tax administration includes identifying taxpayers, assessing tax liability, collecting taxes and enforcing tax payment (Lewis, 2006, p.213).

moving toward devolution as the central government granted more administrative, fiscal and political powers to the local government.

1.2 WHY THIS RESEARCH IS NEEDED

While there is a range of studies in the area of decentralization in Indonesia, study in Leviathan government behavior has been neglected. In general, studies on decentralization in Indonesia have followed two broad areas. The first area was the public finance, where the focus of analysis was on the government budget from both the revenues and expenditure sides and the way the budgeting policies affect equity. Some examples of studies in this area are a comparison study between the former and current inter-regional financial transfer (Silver, et al, 2001) the impact of the block grant on horizontal equity (Lewis, 2001) the impact of current inter-regional financial transfer arrangement on the local government fragmentation (Fane, 2003) and vertical equity (Lewis & Chakeri, 2004), and the creation of the local taxes and charges post-decentralization policy (Lewis, 2003). Overall, none of these studies addresses the way the inter-regional fiscal transfer affects the local government behavior.

The second area was the political aspects of decentralization policy to understand the political institutional structure of decentralization and its related consequences on the Indonesian political environment. Some examples of this area of study included the problems and prospects of decentralization policy (Alm, et al, 2001) and some reviews on political, fiscal and economic incentives for regional proliferation at municipal and district levels (Fitrani, et al, 2005).

While the study by Fitrani, et al (2005) covered wider areas than that found in the study by Alm, et. al (2001), both studies did not include the role

of social values in the analysis. In addition, both studies did not explain the role of regional proliferation on government efficiency or Leviathan government argument. Testing the efficiency argument is important since it is part of the decentralization political rhetoric of neo-liberalism. This thesis attempts to test this issue or to identify and establish the behavior among local governments in Indonesia post-decentralization era. As will be explained in Chapter Four, Leviathan government behavior is a concern since it leads to rent seeking activities and, hence government inefficiency (see Sections 4.2.1 and 4.3).

To address this issue, this research uses an institutional theory. According to the theory, individual behavior in general was the outcome of three institutional settings that included economic, social and political settings (North, D.C., 1991). As such, Leviathan government behavior could also be the result of a particular institutional setting. Since this research focuses on inter-regional fiscal transfer arrangements in Indonesia, it limits the analysis of economic institutional setting on fiscal transfer arrangements.

By using an institutional theory, this research proposes these following contributions. Firstly is to provide a holistic approach in understanding Leviathan government behavior by developing a model. The institutional model that was developed in this research provided information about the way social, political and fiscal institutional settings interact to influence local governments' behavior. It is argued that these settings consist of regional specific issues that might differ from the region where fiscal federalism framework is originally constructed. By understanding the setting, any proposal to improve regional fiscal policies should also consider other non-

economic factors such as the social values and the political structure where the policy is implemented.

Secondly is to propose an expanded analysis on the way Leviathan behavior should be understood. In other words, this research attempts to identify some regional specific issues that might contradict the assumptions attached to the original fiscal federalism framework (see Section 2.2.2). It is argued that the regional specific issues can shed some light to understand the reasons fiscal federalism policy might fail to deliver expected results which is efficient government operation. This becomes the research contribution to the theoretical level of public economics, particularly on fiscal federalism area.

1.3 OBJECTIVE OF RESEARCH

This research objective is to understand the way Leviathan government comes about and identifying some ways to constrain the behavior. This research defines Leviathan government behavior as the monopolistic behavior of local governments to exploit local businesses by collecting taxes and charges to finance rent-seeking activities. The analysis of Leviathan government behavior starts with understanding the way fiscal institution stimulates the behavior. The social and political settings become the external factors of the fiscal institutional setting that might intensify or moderate the behavior. The focus of this research is broken down into the following research questions:

1. To what extent and in what ways do the institutional settings contribute to the Leviathan government behavior?
2. How does the Leviathan government behavior affect local businesses?

1.4 LEVIATHAN GOVERNMENT BEHAVIOR

Thomas Hobbes introduced the term Leviathan government to describe the behavior of authoritarian government or rulers observed during his time. Brennan and Buchanan (1980) adopted the term and used it to refer to government behavior aimed to maximize revenues and, hence, rents by extracting taxes and charges beyond those needed to undertake basic responsibilities as public services provider. Using the term Leviathan behavior introduced by Hobbes, they referred the behavior as the natural government behavior or the government state of nature that arises if political and social controls were absent from the society.

Accepting this argument, Brennan and Buchanan (1980) further suggested that Leviathan behavior might intensify under certain conditions. Public services that were concentrated in particular areas resemble a monopolistic rather than a competitive market. The monopolistic market might constrain factors of production mobility such as capital mobility across jurisdictions. This condition might present an opportunity for the government to demonstrate Leviathan government behavior in those particular areas.

In this research, Leviathan government behavior is associated with revenue maximization by collecting more taxes and charges to accumulate rents. As such, this research defined rent-seeking as "… [a] behavior in institutional setting where individual efforts to maximize values generate social waste rather than social surplus" (Buchanan, 1980, p.4). In this definition, social waste was associated with the opportunity costs of transferring resources from one party to another. Since these resources (taxes and charges) could otherwise be used for productive activities, rent-seeking induces allocation inefficiency and hence lowers the welfare

condition of the society (Tullock, 1967). If the level of welfare is measured by the availability of output for the society, the reduction of production lowers the level.

Based on this explanation, social waste caused by rent-seeking emerges not because of the resources transfer but, because of the productions that are foregone because of the transfer. Corruption is one form of rent-seeking activity. However, the activities may take in various other forms such as bureaucratic inefficiency that might include managerial inefficiency, over-employment, excessive salaries and fringe benefits, technical and allocative inefficiency[5] (Conybeare, 1982). This research uses the Armey curve to measure government efficiency (Vedder & Gallaway, 1998). This research argues that rent-seeking emerges as the actual government size exceeds the optimum size. The discrepancy between these two sizes represents the rents or surpluses (see Section 2.3).

This research perceives Leviathan government behavior as a fiscal issue (Brennan & Buchanan, 1980). However, it also argues that social and political issues contribute to Leviathan government behavior (see Sections 4.2.2 & 4.2.3). To identify and establish the extent that these issues contribute to the behavior, this research develops a framework that draws on various theoretical positions outside public economics literature. As such, this research perceives Leviathan government behavior as a multifaceted issue.

This research uses an institutional analysis to understand economic, social and political factors that underpin the behavior. North defines institutions as rules of the game that constrain human interaction. In his

[5] Technical efficiency concerns the level of technology, eg. capital as opposed to labor intensive technology, employed in the production process whereas the allocative efficiency refers to the allocation of the factors of production uses in the process. Technical and allocative efficiencies are achieved when the technology uses and the allocative of resources correspond to the lowest total costs per unit of output.

definition, the institutions comprise economic, social and political institutions (North, D.C., 1991, p.97). Based on this argument it can be inferred that Leviathan behavior is the outcome of interactions among these three institutions. In this research the rules of the game are represented by the inter-regional fiscal transfer arrangements, the structure of the social value system and the political environment in Indonesia (see Sections 4.2.2 & 4.2.3).

This research draws on both institutional economics theory that encompasses the traditional institutional economics or the Veblenian approach and the new-institutional economics. The Veblenian approach introduces the sociological aspects of institutional theory. The aspects are represented by the value system and social wealth variables in the model. Traditionally, these variables are used within sociology. As such, this research uses a cross-disciplinary approach since it expands the boundary of economic analysis by introducing variables that are external to economics. However, the methodology applied in this research is economics methodology that stems from positivist research philosophy (see Section 1.5)[6].

The institutional theory used in this research adopts the paradigms of human action (praxeology) or purposeful actions and social rationality to understand the reasons some societies are unresponsive to the implementation of the mainstream economic policies (see Section 2.1)[7]. To establish the reasons, this research uses institutional theory. This theory follows a structural-functional analysis where the structure of institution

[6] My background in economics and time and money constraints are the reasons for selecting the methodology.
[7] Mainstream economics refers to new-classical economics and Keynesian. The former is also known as microeconomics whereas the latter as macroeconomics.

determines individual behavior[8]. The analysis aims to understand the capacity of political and social institutions in facilitating economic changes. The variations in the capacity across societies might become the reason the mainstream economic policy provides different results when implemented in different society.

1.5 PHILOSOPHY OF THE RESEARCH

This research draws on a general systems thinking (GST) method. The method consists of systems thinking and design thinking. As an application of systems thinking, the method provides boundaries of inquiry about the way of thinking applied in understanding and working with systems (Banathy, 1996, p.155). In other words, this research used GST as a way to organize thinking to understand systems. The term *organized thinking* refers to a way of thinking systematically to understand order and pattern of "…interacting units or elements that form an integrated whole intended to perform [a] *function*" (Skyttner, 2005, p.57). In this research, these interacting elements are the fiscal, social and political institutional settings that form an order and a pattern or an institutional design to establish Leviathan government behavior.

As design thinking, the concept of holism inherent in systems thinking accommodates various theoretical positions. The concept of holism in systems thinking refers to viewing and understanding a system based on its elements, perceiving the behavior of the system as a whole or the cause-effect relationship of its elements and explaining the functions and roles of the elements within the system boundary as a whole (Ackoff, 1981 in Banathy, 1996, p.159). The concept of holism that applies to various

[8] The structural-functional analysis that follows the modernization theory was developed in the United States of America after the Second World War (Leys, 1996).

theoretical positions is consistent with the cross-disciplinary approach used in this research.

In this research, the holism concept refers to the institutional setting of Leviathan government behavior. This setting comprises smaller institutional settings, namely fiscal, social and political institutions that make up the institution of Leviathan government behavior. Each setting represents a particular role that contributes to the behavior. The elements in each setting describe the function carried out by each setting. These elements explain the cause-effect relationship within each setting. However, to understand the reason Leviathan government behavior arises, all institutional settings have to be understood as parts of the whole Leviathan government behavior. In other words, Leviathan government behavior is the outcome of interconnecting, interdependent and interacting of three institutional settings.

In developing the design, different disciplines are required to understand the complex nature of cause-effects relationships within and across each institutional setting within pertinent Leviathan government behavior institution. In this research, these positions include public economics, public policy and management, political science and sociology. These theoretical positions were used to explain the inter-relationship of fiscal, social and political institutions to explain and establish Leviathan government behavior.

The outcome of systems design thinking is a model. This model can be used to identify a problem situation and a design solution as a system or a network of phenomena (Banathy, 1996, pp.18-19). In this research, the model is used to demonstrate relationships of variables that contribute to Leviathan government behavior and explain some aspects that encourage

local governments in Indonesia to demonstrate the behavior. The former refers to identify a problem situation and the latter leads to a design solution or policy proposals on constraining Leviathan government behavior in Indonesia.

This research used positivist research philosophy as the primary philosophy to develop and test the model. This philosophy is consistent with the economic methodology applied on this research. Positivist philosophy stems from the perception that reality is represented by a generally excepted construct known as theory or framework. The philosophy applies a positive-deductive process that tests the extent the theory can explain the reality. In this process, the framework is represented by a system of equations or mathematical modeling.

In this research, modeling was used to establish the way the three institutions interact to explain Leviathan government behavior (see Section 2.2). Based on this model, this research proposed a set of hypotheses that were tested using Indonesian data. The purpose of the test was to identify the extent that the model could establish and explain Leviathan government behavior in Indonesia. This part of the research used a quantitative research approach (see Section 3.2). However, econometric modeling has some limitations including it requires aggregative data and ignores behavioral aspects at the micro-level (see Section 1.6).

However, there was other information that could not be obtained by using only the primary research philosophy. This information was the socially constructed environment on Leviathan government behavior from the perspective of local businesses in Indonesia. For this purpose, this research also used interpretative philosophy as a secondary research philosophy. This

philosophy applied inductive logic to understand local businesses' experiences on Leviathan government behavior. The information about local business experiences was used to support and complement the research findings gathered from the positivist research philosophy. This part of the research required a qualitative approach.

Based on the above arguments, this research used dual research philosophies as a simultaneous methodological triangulation (Morse, 1991). The philosophies comprise positivist and interpretative research philosophies. These two philosophies have different epistemology paradigms. The ontological view of the positive philosophy is a single objective reality based on a value-free framework. In this research, the framework is stated as a mathematical model and a set of hypotheses that should be tested on a large size data set or samples. The test uses a structured statistical method to ensure that the characteristics of samples represented those of the population.

On the contrary, the ontological view of interpretative philosophy is of multiple realities resulting from individual's construction of his or her reality. As such, understanding social reality cannot be value-free since the investigator and the object of study will be interactively linked to formulate a mutual inquiry (Sale et al, 2002). A purposeful sampling of articulated respondents is sufficient since the samples are not meant to represent a large population. As such, the term articulated respondents in this context referred to the ability of them to provide important or relevant information to the research goals.

Since the research phenomena of the approaches differ, these philosophies should not be used for cross-validation but more importantly to

enrich the research findings. For this reason, each philosophy will address different research questions of the same topic inquiry (see Section 1.2). The first question was addressed by using the positive research philosophy whereas the second question was addressed by the interpretative research philosophy. As such, the used of simultaneous methodology was not meant for cross-validation or duplication of results. Rather, it provides additional information that could not be obtained by using a single research philosophy.

Based on the argument above, this research had explanatory, descriptive and some degree of explorative inquiries. The explanatory inquiry established a causal relationship among variables across as well as within institutional setting of Leviathan government behavior. A system of equations or model developed in Chapter Two explained the causal relationship in the system. The model was tested on Indonesian data by using econometric technique. The technique applied inferential statistics or hypothesis testing (see Section 3.2). Explanatory inquiry was part of the quantitative research approach. The time frame used for this inquiry was a cross-section.

Descriptive inquiry established the institutional setting of Leviathan government behavior in Indonesia from different perspectives. The main purposes of using this inquiry were to support and complement the findings derived from the explanatory inquiry (see Chapter Five). Descriptive inquiry used, processed and analyzed government reports and publications, statistical data and studies to identify and establish the setting (see Chapter Four). Furthermore, the descriptive inquiry in this research applied to local government or districts and municipalities nationwide so that information obtained from this inquiry explained a nationwide situation. By gathering information from both explanatory and descriptive inquiries, this research

aimed to identify and establish whether the model developed also applied to the institutional setting of Leviathan local government behavior nationwide. As such, the descriptive inquiry cross validated the analysis obtained from the explanatory inquiry.

In addition, one of the complementary aspects was related to identifying whether the structure of local government revenue was consistent with the assumption of the structure according to the fiscal federalism theory developed in the United States (see Section 2.2.2). Figure 3 (p. 136) indicates that the structure was dominated by Balance Funds or the inter-regional fiscal transfer arrangements rather than local taxes and charges. This is not the case embedded in the assumption of fiscal federalism where the local or sub-national government spending equals the total local or sub-national government revenues from local taxes and charges. This assumption is also embedded in the Brennan-Buchanan hypothesis (see Section 2.2.2).

When the main source of local government revenues is the inter-regional fiscal transfer arrangements, identifying Leviathan government behavior should also account for the structure of total government revenues. As such, this research used an alternative hypothesis to test the Leviathan government behavior (see Section 5.1.4). The alternative hypothesis requires three steps of analysis, which are as follows.

The first step is analyzing the impact of inter-regional fiscal transfer arrangements on the structure of total local government revenues in the sense whether the arrangements encourage local governments to collect more taxes and/or charges. The second step is to indentify whether the additional local taxes and/or charges increase the government size. The third

step is to identify whether the increase in the government size exceeds the optimum level. It is hypothesized that Leviathan government behavior is confirmed when the inter-regional fiscal transfer arrangements encourage local government to collect additional taxes and/or charges, use the proceeds to increase the government size and the increase in the size exceeds the optimum level of government size (see Sections 5.1.3 & 5.1.4).

Exploratory inquiry was part of the qualitative approach. The purposes of using this inquiry were to understand the business environment constructed from the local businesses' point of view and to complement the research findings obtained from the explanatory inquiry (see Chapter Five). The complementary part referred to testing the factor of production mobility assumption that underpinned Leviathan government behavior as explained by fiscal federalism framework (see Section 2.2.2). The time frame used in this inquiry was a cross-section based on focus group discussion conducted on 20 January, 2010.

These three research inquiries provided a simultaneous methodological triangulation where the analysis obtained from the explanatory inquiry became the main reference for the other two inquiries. This triangulation technique was consistent with abductive ontological view on providing answers to a single research inquiry. As explained above, this research used explanatory, descriptive and a small part of explorative inquiry to address Leviathan government behavior in Indonesia (see Chapter Five).

1.6 LIMITATIONS OF THE RESEARCH

This research has some limitations. Firstly, the indicators used to measure the institutional setting are selected based on data availability considerations. While some data particularly on fiscal variables are readily

available and academic consensus to use indicators to measure these variables are also available, aggregative data for social and political variables are not (see Section 3.2). The implication is that even though the social and political proxies are selected in a way so that the fitness of each proxy to the setting would be maintained, these proxies might be contested. In addition there is a risk where the estimated results of the model might be biased in the case the proxies are not suitable measurements for the variables. The descriptive inquiry explained in Chapter Four is used to cross-validate the information obtained from the estimated results of the model.

Secondly, it is not the intention of this research to propose an optimal level of government size. Rather, the intention is to identify the magnitude of the rents in Indonesia. The optimal size is measured for this purpose so that the magnitude of the rents is derived by identifying the discrepancy between the actual and the optimal size. This research uses Armey curve to identify the discrepancy (see Section 2.3). In this research, the accumulation of the rents might be attributed to corruption, government failure or inefficient public policies and spending allocations (see Section 4.3).

Thirdly, due to data availability when the data were processed, this research used data published in 2007. As a result, the estimation results of the model in the quantitative part were a snap shot of what was happening in 2007 in 243 districts and municipalities. Since this research used cross-sectional data, it does not explain the process of institutional adjustment that is proposed by an institutional approach.

Furthermore, since this research used data published in 2007, the estimation results obtained from the model did not capture the changes proposed by Law 33/2004 since the changes were implemented after 2007.

However, this research discussed some changes in the institutional setting after 2007 by using secondary data and descriptive statistics. The aim is to give an overview to the extent that the institutional settings have been changed since 2007. In addition, the results that derived from the qualitative part are applicable in the areas under study only. This part provided illustrative examples of the impact of Leviathan government behavior in Indonesia.

Fourthly, this research does not discuss social consequences of policy proposals explained in Chapter Two (see Section 1.6). The focus of this research is to identify and establish the existence of Leviathan government behavior in Indonesia by using an economics methodology. However, the cross-disciplinary nature of this research introduces ideas that link economics to other disciplines, such as sociology, political science and public policy management. These links can be used to identify social consequences of policy proposals implementation. Identifying the consequences could become a topic for further studies.

1.7 SYSTEMATIC PRESENTATION OF THE THESIS

This report proceeds as follows. Chapter Two develops the framework to understand the institutional perspectives of Leviathan government behavior. By addressing each institutional setting and explaining the way the settings interact, the discussion gives some insights in understanding the institutional factors that underpin Leviathan government behavior. This framework becomes the basis to develop a model that represented the institutional setting that influences Leviathan government behavior.

At the end of Chapter Two, the framework is translated into a diagram or mind-map. The diagram is used to develop a system of equations or a model that describes the way the institutional settings shape Leviathan government behavior. Based on the model, this research proposes a set of hypotheses to test the extent the model can explain the institutional setting of Leviathan government behavior in Indonesia.

Chapter Three explains the research method. This chapter elaborates the way this research carried out the quantitative and qualitative approaches to answer the research questions. This chapter is divided into two sections. The first section explains the technicality of explanatory inquiry under a quantitative approach and the way statistical inference was applied to test the hypotheses. The technicality of the explorative inquiry is part of the second section. This section explains the way the qualitative data were collected.

Chapter Four explains the experience of Leviathan government behavior in Indonesia. The design of the inter-regional fiscal transfer arrangements and the implications of the arrangements on the local government fiscal structure are discussed. This chapter also explains the social and political context that might contribute to Leviathan government behavior in Indonesia. Some historical perspectives that shape contemporary Indonesia are also explained and discussed to understand the social and political background that intensify Leviathan government behavior in Indonesia.

For these purposes, this chapter uses, analyzes and discusses secondary data, studies and reports collected from various sources. Examples of the resources are government publications, statistics office publications and studies by NGOs and scholars in related areas. The

information derived from the publications include the extent the inter-regional fiscal transfer arrangements influence fiscal structure of the local governments and the level of capital mobility that could provide preliminary information on Leviathan government behavior in Indonesia. In addition, the role of social and political issues in Indonesia provides background information on the way these issues intensify Leviathan government behavior. This information verifies and complements the research findings on the institutional setting of Leviathan government behavior in Indonesia derived from the quantitative research part (see Chapter Five).

Chapter Five tests the model developed in Chapter Two to identify and establish Leviathan government behavior in Indonesia. As such, the system of equations or the model and hypotheses were tested on Indonesian data. The test used econometric technique which basically follows inferential statistics. Before using the estimated model to test the hypotheses, the model was tested for reliability and validity. The purpose of using these criteria was to ensure that the data derived from the samples used in this research represented those of the population. In other words, the estimated parameters in the model are relatively stable when tested by using different samples derived from a particular population. In this case, the population is all local governments comprised of districts and municipalities in Indonesia.

This chapter also presents the findings from the qualitative research part. The focus group discussion was conducted on 20 January, 2011 in the office of Chamber of Commerce, *Jawa Barat* Province chapter in *Bandung* Municipality. The participants were business owners and/or practitioners in *Bandung* Municipality, *Bandung* District and *Cimahi* Municipality. The analysis of this part used explorative inquiry technique to identify the impact

of Leviathan government behavior on local businesses. In addition, the information derived from the interview shed some light on some factors that constrain capital mobility across jurisdictions.

Chapter Five discusses the findings obtained from all three different types of research inquiries. The findings are presented and discussed by using a triangulation technique to identify and establish Leviathan government behavior in Indonesia. This chapter also presents some specific issues in Indonesia that might contradict the basic assumptions of fiscal federalism theory. The issues are related to the capital mobility across jurisdictions, the revenue structure of local governments, the prevailing social values system and the political issues in Indonesia. Finally, Chapter Six presents the conclusions and contributions of this research to public policy, public finance literature and identifies direction for further studies.

SUMMARY

Since the enactment of Law 34/2000 on Local Taxes and Charges, the local governments created various new taxes and charges. Despite the argument that these governments generated taxes to cover their spending needs, study on this issue did not support the argument. As such, there was an indication that rent-seeking could be the reason for generating local taxes and charges. This research argues that as the local government collects taxes for the purpose of generating rents or surplus, Leviathan government behavior arises. The argument is valid as long as the total government spending is fully financed by the total local taxes and/or charges. In this case, the Brennan-Buchanan hypothesis can be used to test the Leviathan government behavior. However, when the revenues are dominated by inter-regional fiscal transfers such as in the case of Indonesia, the Brennan-

Buchanan hypothesis is not valid. For this reason, this paper also develops an alternative hypothesis (Section 2.2.2).

The aims of this research are to identify and establish whether Leviathan government behavior had occurred among the local governments in Indonesia and why it did. In this research, the local governments refer to districts and municipalities. For this purpose, this research used institutional analysis and general systems thinking to understand the way social, political and fiscal institutions interact to shape Leviathan government behavior. As such, any policy to constrain the behavior should address economic as well as non-economic factors proposed by the model. These factors represent a country specific issue that might contradict the assumptions attached to fiscal federalism theory. Identifying and establishing these factors become the contribution of this research to understand Leviathan government behavior.

This research used a simultaneous triangulation methodology. This methodology stems from two research philosophies, namely positivist and interpretative philosophies. The ontological view of this philosophy is abductive. As such, this research used explanatory, descriptive and some degree of explorative research inquiries. However, since the main research philosophy was the positive philosophy, this research used explanatory inquiry as the main tool of inquiry.

In this research, descriptive and explorative inquiries supported and complemented the analysis on Leviathan government behavior in Indonesia obtained from the explanatory inquiry. The descriptive and explorative inquiries were particularly useful in identifying and establishing some regional specific issues that might work against the fiscal federalism framework. These issues might shed some light on the reasons fiscal federalism does

not always provide results when implemented in developing countries such as Indonesia.

Since this research used explanatory inquiry as the main inquiry, a model was developed and tested to provide a comprehensive systemic approach in understanding the way the setting stimulated Leviathan government behavior. The model described causal relationships within and across the three institutions. Based on the model, this research proposed a set of hypotheses on Leviathan government behavior. The model and hypotheses were tested on Indonesian data to identify and establish Leviathan government behavior in Indonesia.

Chapter Two
The Institutional Approach to Leviathan Government Behavior

Chapter One provided the epistemology of the research. As explained in the chapter, this research uses an abductive ontological view to address a single research inquiry which is to understand the way Leviathan government behavior arises from an institutional perspective that encompasses fiscal, social and political institutions. The research uses both quantitative and some degree of qualitative approaches, however, the quantitative aspect is the main approach.

In this research, an economic model is developed to address the research inquiry by using a quantitative approach. The model explains the way the three institutional settings are inter-related. However, to develop the model, this research needs a framework to explain the institutional behavior of Leviathan government. The framework will be drawn on the institutional theory proposed by the traditional approach and the new-institutional economics approach.

The aim of Chapter Two is to develop a framework for institutional analysis on Leviathan government behavior. For this purpose, this chapter is presented as follows: Section 2.1 explains institutional analysis from three different perspectives, including new-institutional economics, institutional analysis drawn from sociology and traditional institutional economics. The latter is also known as the Veblenian approach. The perspectives are compared and contrasted to explain the reasons this research uses a Veblenian approach and the new-institutional economics approaches.

Section 2.2 uses this framework as the foundation to develop a econometric model that describes the inter-relationships of fiscal, social and political institutional settings. In the model, each setting is represented by an indicator developed from pertinent theory including decentralization and fiscal federalism theory for fiscal institution, Hirschman exit-voice rights for political institution and Veblenian institutional theory for social institution. At the end of this section, this research proposes some hypotheses derived from the frameworks. The hypotheses explain the conditions found in the three settings that would be expected to underpin Leviathan government behavior.

2.1 INSTITUTIONAL ANALYSIS

Economic studies on fiscal federalism have developed into two branches, namely the First Generation Fiscal Federalism or FGFF and the Second Generation Fiscal Federalism or SGFF (Qian & Weingast, 1997). These branches have similarities as well as differences. The focuses of FGFF are the impact of intergovernmental grants and revenue sharing on vertical equity (Oates, 1999), the economies of scale in fiscal federalism and a condition where jurisdictional coordination is preferable to competition (Musgrave, 1997). However, the application of FGFF in developing countries does not always deliver expected results, such as efficient government, since the assumptions that underpinned FGFF might not be relevant to these countries.

SGFF expands the analysis to acknowledge different assumptions in the developing countries by introducing the institutional role in the analysis and, therefore, the extent it affects individual behavior. An argument for fiscal federalism is demand efficiency across jurisdictions, since the rationale for demand efficiency is heterogeneous preferences of local people

(Prud'homme, 1994, p.207). As a result, transferring funds to the local government allows the government to meet the needs of the people. This assumption is inherent in the factors of production mobility, such as people, Heterogeneity preferences encourage people to look for areas that can better provide the type of public services suited to their preferences. Demand efficiency is achieved when people stop moving around looking for areas that provide better public services than the present ones these people have already received[9].

However, the actual issue in developing countries is argued to be supply inefficiency (Prud'homme, 1994, p.207). Supply inefficiency of public services is related to the capacity of the local government institution as a public service provider to produce public services efficiently. When local government uses the fund mostly to cover government employees' expenditures in the form of salaries and fringe benefits instead of public services, such as in the case of Indonesia (see Figure 5, p.227), there is an indication of inefficiency in public services provision.

In addition, cultural values and political culture in developing countries might also differ from the countries where FGFF was initially introduced (Guess, 2005). The cultural values include the universal norms and rules relevant to local cultural practices which may include nepotism and patronage that might not be relevant according to the FGFF framework. These values will likely affect individual decision making behavior that might contradict the assumptions attached to FGFF. Since the values affect individual behavior, they will also influence the design of an institutional setting.

[9] In economics term, the demand efficiency is obtained when the additional utility received from using as addition unit of a basket of public services in another area is equal to that received in the current area.

As such, introducing the institutional analysis into the framework can shed some light to understand the institutional context of each country that implements fiscal federalism. In addition, it provides a way to understand some of the mixed results of the economic performances in countries that have adopted the FGFF fiscal federalism or fiscal decentralization policy (Adamovich & Hosp, 2003; Blanchard & Shleifer, 2001; Prud'homme, 1994; Thiessen, 2004).

This chapter attempts to elaborate an institutional analysis that encompasses two intellectual streams. The first one is a sociological approach of institutional analysis. In sociology, institutions have been used to explain the link between the individual and its society particularly on the way society influences individual behavior. This link has been described as a twofold process, namely the internalization of the norms and the desire of individuals to conform to the expectations of the society as a favorable way to develop a self-image (Wrong, 1961). The internalization process occurs when individuals absorb social norms as their values and use the values to form a habit. Within this context, individual interest in developing self-image is represented by the ability of the individual to conform to the norms assigned by the society. As such, the function of institutions is to create order in an otherwise chaotic society.

The second one is the institutional economics which developed in the United States. This branch stems from the Austrian school that perceives economics as the general theory of human action or praxeology (Mises, 1949). Under this perception, human action is purposeful since it is guided by logic. As such, a selected path of conduct or human action stems from a reason rather than an instinct. In other words, rationality in praxeology exists

within the expression of human purposes or rationality to understand the consistency between selected means and a given ends (Kirzner, 1960, p.166)[10].

Based on the argument above, the rationality factor in the praxeology of the Austrian School separates the institutional economics from its sociological approach counterpart. The rationality assumption has made individual active behavior a central focus to institutional analysis. The behavior is demonstrated by the ability of individuals to choose a particular means to meet their ends or purposes as opposed to passively conforming to the social values within the environment where the individual operates. This central focus on individual active behavior in an institutional setting has become the characteristic of institutional economics.

Economics and sociology perceive the functionality of institution differently. While the sociological approach perceives it as a set of values or rules of the game to which individuals conform their conduct, economics provides a device or tools to meet individual ends. Peters (1999) refers to the logic of sociological institution as the Parsonian functionalist logic whereas that of the economic institution as the structural functionalist. As a device, rational individuals will change the rules of the game and look for the most efficient form of the rules to meet their ends. As a result, even though both institutional approaches focus on the analysis of the rules of the game, the functionality of these rules according to these approaches differs. In the sociological approach the rules function as a tool to set order among

[10] It is interesting to note that within this notion of rationality, impulsive action could still be considered rational since in this action, the ends are changed and the means will follow suit. The change in ends is known as an economic error (Croce in Kirzner, 1960, p.169). Impulsive behavior, which can still be considered as rational behavior under the Austrian school, separates the scope of rationality meaning according to the neo-classical economics.

individuals whereas in the economics they function as a tool to obtain individual ends.

There are two institutional approaches which render to institutional economics, namely the new-institutional economics and traditional institutional economics. The second approach is also known as the Veblenian approach. The new-institutional economics stems from the new-classical economics. As such, this stream maintains the individual rationality assumption, market competition and scarcity of resources. Furthermore, similar to the new-classical economics, price theory is essential in the analysis (North, D.C., 1992, p.5). According to this approach, transaction costs link institutions to production costs and, therefore, price. Some scholars who follow the stream include North, D. (1990), Ostrom (1999) and Williamson (1981)

The new-institutional economics defines institutions as a device to achieve individual goals. As a device, the institutions consist of the rules of the game that take the form of formal and informal constraints. The constraints include constitutions, laws and bylaws issued by government as well as social and cultural values that structure human interaction. According to this approach these rules constrain individual behavior (North, D. 1990). Transaction costs, introduced by Coase (1937), represent the extent that these constraints contribute to production costs of the institution's operations.

The new-institutional economics differs from the new-classical economics in the sense that the new-classical economics perspective does not recognize the role of institutions and, hence, the transaction costs in the analysis. Since recognizing the institutions and the corresponding transaction costs increase production costs, the institution contributes to inefficient

market. This inefficiency separates the new-institutional economics from the new-classical economics. As such, institutional analysis operates within the concept of inefficiency or the second best condition.

However, the new-institutional economics retains the rationality and competition assumptions of new-classical economics. The rationality assumption in the new-institutional economics occurs when individuals change the rules to maximize their utility. While informal rules might be more difficult to change than formal rules, the more flexible formal rules in an institution provide opportunity for powerful members to change the rules of the game to their advantage (North, D.C., 1992). As such, the competition between members to gain power will shape the economic institution in the long-run. In other words, the continuous interactions between institutions and the individuals in pertinent institution are the key factors to institutional changes or adjustment in the long-run.

Both the sociological and economic approaches to institutions have been criticized on many accounts (Coleman, 1988; Granovetter 1985; Wrong, 1961). Firstly, the way the two streams introduce the social conception of man or the way men perceive their environment. The sociological approach is argued to apply an over-socially conception of men in the society which means individuals' behavior is shaped by social norms, networks and social context prescribed by their environment (Wrong, 1961; Granovetter, 1985). As such, these individuals lack *the engine of action* or the ability to control the environment where this individual operates (Coleman, 1988; Granovetter, 1985; Wrong, 1961). The implication is that this analysis has failed to explain the way societies can set up order to resolve conflicts.

In contrast, the rationality that underpinned the new-institutional economics has left the role of rules in constraining individual behavior unclear. When individuals perceive institutions as a device to achieve goals and have the ability to shape the institution where they operate, social constraints within the institution become secondary. This situation indicates that this stream disengages the individual from its social context. In other words, it applies an under-socialized conception of man in society (Granovetter, 1985). The implication is that this institution might be prone to chaos, particularly when its members are competing to gain power.

Secondly, while both streams agree on the need to bring both social relations and rationality into the analysis, there is a lack of operationalization or methodological approach at the empirical level. The theory of action proposed by Parsons has introduced the individual as the engine of action to promote institutional changes. Likewise, the new-institutional economics introduced the concept of bounded rationality introduced by Simon (1972) to acknowledge the role of informal constraints in limiting individual behavior and rationality. However, similar to the sociological approach, it does not have the methodology to operationalize the concept of bounded rationality at the empirical level. As a result, it is difficult to measure the impact of bounded rationality on the institutional setting.

In a later development, the new-institutional economics has further divided into Transaction–Information Costs and Collective Action approaches (Nabli & Nugent, 1989). The difference between the two areas is the decision-making unit. According to Transaction–Information Costs, the unit is the individual agent whereas according to Collective Action it is the collectivity of individuals who achieve collective or social goals as opposed to

individual ones. As a result, decision rules are important in the collective action. Since individual rationality does not necessarily correspond to social rationality, these rules could create uncertainty (Buchanan, 1962, pp.31-36).

Furthermore, each area has its own focus of analysis. The primary concerns of Transaction–Information Costs is the boundary of a firm or organization based on the organization economies of scale and economies of scope (Coase, 1937)[11]. The boundary gives the information on whether to diversify output, to form a backward or forward integration or to outsource instead of using in-house production (Demzets, 1972; Williamson, O.E., 1981). Collective Action attempts to understand the way individual rationality links to social rationality. In the collective action, the links between individual and social rationality are the institution. This institution represents the decision rules or the rules of the game as stated by North, D. C (1991).

Several themes have emerged from Collective Action approach. Each of them focuses on a specific issue (Nabli & Nugent, 1989, pp.1337-1339). The first theme is the political entrepreneur (Hardin G., 1968). This theme is concerned with organizing latent groups in a society to achieve a particular organizational goal (Hardin R., 1982, pp.35-37). The second theme is the common pool resources that explained the impact of free-access on resources sustainability in a growing population situation (Hardin G., 1968). The third theme is the exit-voice mechanism that focused on sanctioning mechanism and public accountability issues (Hirschman, 1970). The fourth theme is the interest group – the state or rent-seeking activities which

[11] The economies of scale and economies of scope address the issue of production efficiency or reducing the cost per unit of production. The difference is that in the economies of scale, efficiency is achieved by increasing the level of homogenous production, whereas in the economies of scope by producing heterogeneous or diversified output. The opportunity to reduce cost per unit of output by producing homogenous and/or heterogeneous output determines the extent that a firm or organization can expand the operation or the boundary of the organization. The expansion could take in the form of vertical and/or horizontal integration.

identifies the extent to which interest groups can use the state to collect rents (Brennan & Buchanan, 1980). This research adds a new theme which is voting behavior (Brennan & Hamlin, 1998). This theme sheds light on the role of the public as an effective political control agent.

The second institutional approach is the traditional institutional theory (the Veblenian approach) introduced by Thorstein Veblen (1892) followed by, among others, Clarence Ayres, Wesley Mitchell and Fagg Foster. Unlike the new-institutional economics approach, the Veblenian approach is considered as anti-theory for the following several reasons. It lacks the tool kit of economic theory such as demand-supply schedule or any equation that represent behavioral aspect of individuals or firms (Koopmans, 1947). It also fails to develop the exact foundations of modern psychology, theories of social norms, technological change, transactions, legislative and judicial decision-making and forms of business enterprise that underpin the approach (Rutherford, 2001, p.183).

Another critique on the Veblenian approach is the technique of analysis used in understanding economic phenomena. The Veblenian approach uses descriptive inquiry and descriptive statistics, instead of explanatory inquiry and inferential statistics, to explain economic phenomena such as the business cycle. The work of Mitchell on analyzing the business cycle limits “the value to economic science” and, therefore, policy proposal (Koopmans, 1947, p.172). Since it does not follow economics methodology or economics toolkit, the policy proposal correspond to Mitchell’s analysis might lose the foundation for argumentation. In other words, from the economics perspectives, the policy proposal becomes arguable.

However, Mitchell's methodological problem for using low level "inferential statistics" as "modern method" (Koopmans, 1947, p.172) represents his institutional views and critics on orthodox economics[12] that overstates "the rational element"[13] of humans (Rutherford, 1987, p. 63). The rational element has meant the orthodox economics failed to understand human behavior as an institutional product (Rutherford, 1987, p.64). As such, Veblenian contribution to the institutional analysis is that it provides the logic of a social value system to shape the pattern of behavior that might have "unintended and unforeseen consequences on economic analysis" (Rutherford, 1987, p.65).

The use of descriptive analysis should not be considered as a way to test a well-developed theoretical model but it attempts to uncover new information, generate new or modified theories (Hirsch, 1976 in Rutherford, 1987). Included in these attempts is its capacity to test the basic assumption(s) of the model and reject uncritical verification or verification without empirical investigation. The purpose of the investigation is to find incomplete theory or contrary evidence (Rutherford, 1987, pp.64-67). As such, traditional institutional economics perceives empirical evidence as not only limited to quantitative and statistical method, but possibly including case studies, documentary evidence and the study of judicial opinions and court decisions (Rutherford, 2001, pp.177-178)[14]. By so doing, the analysis can capture the regional specific issues that might be used to explain some anomalies that the orthodox economics fails to explain.

[12] Orthodox economics refers to neo-classical and Keynesian economics.
[13] Mitchell (1910, p. 110) refers the rational element as the hedonic calculus or the mechanics of self-interest that underpinned human nature in mainstream economics.
[14] This research draws from this idea. Information that provided in Chapter Four and the qualitative part of the research attempt to verify and complement the empirical investigation derived from the quantitative research part.

The Veblenian approach adopts a value system, which differentiates this approach from the new-institutional economics. In a dynamic analysis, the system can be used to explain the process of institutional adjustment. According to the Veblenian approach, the value system of an institution determines the extent and direction of the adjustment. The role of the value system has become the most important contribution of Veblenian approach in the institutional analysis. In the approach, the system is represented by the index of ceremonial dominance (Bush, 1983). By introducing the index, the Veblenian approach proposes a methodology to operationalize bounded rationality into the analysis. The methodology can explain the process of institutional adjustment that emerges from rational behavior and social norms or the concept of bounded rationality. This methodology becomes another Veblenian approach contribution to the institutional analysis.

The Veblenian approach describes a two-way effect of social relations, namely the way the structure influences behavior and the extent individuals influence the social structure within a cultural domain (Bush, 1983 & 1989). The first effect is part of the sociological context of institutional analysis and the second part represents the bounded rationality behavior derived from the new-institutional economics. These two-way effects will form a new habit within the society. Based on the argument above, the Veblenian approach accepts bounded rationality but rejects utility or profit maximization as the ultimate goal of individual behavior. On the contrary, it puts survival as the goal that does not necessarily correspond to utility or profit maximization.

This research applies both the new-institutional economics and Veblenian approach as the foundation for developing a framework of Leviathan government behavior institutional settings for several reasons. The

first reason to apply both institutional approaches is the common pool theme, exit-voice mechanism, rent-seeking activities and voting behavior of the Collective Action theme in the new-institutional economics these are relevant to develop the framework in this research (see Sections 2.1.1 & 2.1.2.2). This research argues that the non-formula component of the block grant that comprises the hold-harmless provision and the transfer of funds from the central government for paying the salaries of the local government might create free-riders behavior particularly among the local governments that have limited fiscal capacity (see Section 4.1.1).

In addition, in this research the exit-voice mechanism in the Collective Action theme is represented by the direct voting mechanism and the voting behavior of the constituents during election time. It is argued that the mechanism affects the performance of the local government in the political institutional setting (see Section 4.2.3). As a measurement of the political institutional performance, this research uses the local government performance as an indicator of accountable government produced by the political institution.

The second reason for applying both approaches is that the new-institutional economics introduces the concept of bounded rationality as previously explained. However, the Veblenian approach explains the operationalization of the rationality that the new-institutional economics seems to fail to explain. In this research, these features become the characteristics of the social institutional setting (see Section 2.1.2.1). The setting is represented by the index of ceremonial dominance to represent the concept of bounded rationality. This concept is similar to the cultural domain used in the Veblenian approach (see p. 57).

The next three sub-sections describe the way the institutional setting works to influence individual behavior, in this case the Leviathan government behavior. The institutional setting in this research comprises social, political and fiscal settings. While the term Leviathan government behavior was first introduced by Thomas Hobbes (see Section 1.4), this research perceives Leviathan government behavior as a fiscal phenomenon. As such, it argues that the social and political institutional settings can either indirectly intensify or moderate the behavior. The indirect effects refer to the contribution of the effects to stimulating the Leviathan government behavior. This research argues that the Leviathan government behavior creates government inefficiency as indicated by rents extracted from the economy (see Section 2.3).

This research uses the size of government as an identification of government economic intervention in the form of government spending (Musgrave & Musgrave 1989). Measuring the size of government is not that simple, especially when the organization of government and private sectors overlaps such as in the case of public-private partnership in providing public goods (Peters, 2001, pp.5-7). However, a proxy can be used to measure the size. This proxy is a ratio between the revenue from tax to the gross national product or the value of products produced in a given year or a ratio between the total government spending to the value of products produced in a given year provided that the total government spending is fully funded by tax revenue (Peters, 2001, pp.5-7). This research uses the ratio of the total government spending to the value of products produced in a given year as the proxy to measure the government size. This proxy is selected since there is an indication that the local government spending in Indonesia is funded by

other sources as the inter-regional fiscal transfer (see Figure 3, p. 136). As a result, using only the tax revenue in measuring the size will not represent the total government spending and, hence, size.

The role of government to economics was first discussed by Keynes. The role is represented by income taxation and government expenditures on public goods under fiscal policy in macro-economics. The aim of fiscal policy is to manage the fluctuation of the business cycle that corresponds to inflation, employment and economic growth. These factors are used as the basic measurements of economic performance. Based on this argument, Barro (1990) introduced government spending as a factor of production along with labor, capital and land in a production function or the function that represented the correlation between the factors of production to output. By so doing, Barro (1990) argued that government intervention in the economy affects the economic growth.

However, since government spending takes out some fraction of output from the economy, government size has an optimal level. The fraction of output in the form of taxes that has been taken out reduces the capacity of the production sector to multiply its productivity. As such, government size has its limits. This level corresponds to a maximum level of output growth for a given government size. Since proposing a particular size of government as a benchmark of efficient government size might be contestable, this research uses the Armey curve. This curve explains the link between the size of government and the maximum level of economic growth (see Section 2.3). This level of size of government is the optimum level. As such any size of government that is higher than its optimum level indicates inefficient government intervention in the economy. It is argued that the discrepancy

between the actual and the optimum size is the rents that represent the inefficiency level of government intervention in the economy.

However, the Armey curve has a drawback (De Witte & Moesen, 2010, Prud'homme, 1995). The curve assumes heterogeneous preferences of local people across regions (De Witte & Moesen, 2010, p.43; Prud'homme, 1995, p.208). As a result, Prud'homme (1995) argued that the pattern of public goods demanded might differ across regions. He further argued that the differences in preferences and public services provided by local government provide the rationale for labor and capital to move. In many developing countries the main difference across regions is in household or individual income instead of preferences (Prud'homme, 1995, p.208). To overcome the difference in assumption, this research introduces income per capita of each region as a control variable in the model (see Equation 9 and Section 3.2, p. 97).

2.1.1 Fiscal Institutional Setting

This research defines the fiscal institutional setting as the inter-regional fiscal transfer arrangements from the central to the sub-national governments (see Section 4.1.1). As such, it argues that the inter-regional fiscal transfer arrangements affect the fiscal capacity and, therefore, the amount of the sub-national revenues collected from local taxes and/or charges as explained below. The amount of these revenues determines the structure of the local own-source revenues or the contribution of each source of local revenue to the total local-own source revenues (see Figure 3, p. 136).

The inter-regional fiscal transfer arrangements also determine the sub-nationals' fiscal dependence on the central government financing and the

fiscal capacity of the sub-nationals. When sub-nationals' dependence on fiscal transfer is high, a flypaper effect might arise (West & Winer, 1980). The effect might induce sub-nationals to behave as free-riders especially those with limited potential own-source revenues[15]. This situation is similar to the free-access of the common pool case explained by Hardin (1962). In this research, the common pool is the central government fiscal pool that sub-nationals can access through the fiscal transfer arrangements. As a result sub-nationals' spending is not necessarily in-line with their fiscal capacity. In other words, sub-nationals may tend to over-spend their own fiscal capacity or behave as free-riders. This situation might lead to increasing government size.

The impact of the inter-regional fiscal transfer arrangements on the local government budget can be explained by analyzing the structure of the local own-source revenues. This research uses the Hirschman-Hirfindahl index (HHI) which explains the extent of revenue diversifications, where $0 < HHI < 1$ to measure the structure. If the HHI is closer to one, the revenues are less diversified. On the other hand, the closer the value to zero, the more diversified the revenues are. In this research, HHI will be closer to one as the government relies more on taxes and/or charges. On the contrary, when HHI is closer to zero, the government tends to move away from taxes and/or charges or diversifies the revenue bases (see Section 4.1.2). This research used HHI to identify the impact of the inter-regional fiscal transfer arrangements or the fiscal institutional setting on the size of government. It is argued that dependency on the inter-regional fiscal transfer arrangements

[15] Chapter Four explains that there is an indication that poor areas in Indonesia are benefited by current inter-regional fiscal transfer arrangements. The benefits particularly come from the full amount of transfer to cover the local government salaries, the hold-harmless provision (see Diagram 7, p. 142 & Diagram 8, p.150) and a small part of revenue sharing that distributed equally among the areas where the resources of the revenues located (see Table 3, p. 145 & Table 5, p. 152).

tend to reduce HHI. This research also argues that free-rider behavior arises when higher HHI corresponds to increasing government spending and, therefore, the size of government.

However, there are other factors besides the inter-regional fiscal transfer arrangements that also affect the structure of local own-source revenues and, therefore, the size of government. These factors are:

Firstly, regional proliferation affects HHI by stimulating jurisdictional competition as explained by the Brennan-Buchanan decentralization hypothesis (Mello, 2001). The jurisdictional competition concept was first introduced by Tiebout (1956). In his article, he argued that, given assumption on factors of production mobility, mobile resources (both human and capital) will choose a location that provides public goods suited to their preferences. Empirical studies in the United States support the premise that public services and tax policies have some degree of influence in the choice of new areas for residents who decide to relocate (Percy, et al, 1995; Ashby, 2007). The intensity of regional competition will increase as the number of jurisdictions increases. Based on the Tiebout argument, regional competition will bring about less taxation, hence, decreasing size of government provided that factors of production are mobile.

The implication is that Leviathan government behavior can be constrained by creating jurisdictional competition which is the foundation of the Brennan-Buchannan hypothesis of Leviathan government behavior. In an econometric model, the hypothesis is confirmed if the increased number of jurisdiction decreases the size of government. By using an econometric model, Zax (1989), Percy, et al (1995) and Ashby (2007), among others,

used this hypothesis to confirm the Leviathan government behavior in the United States.

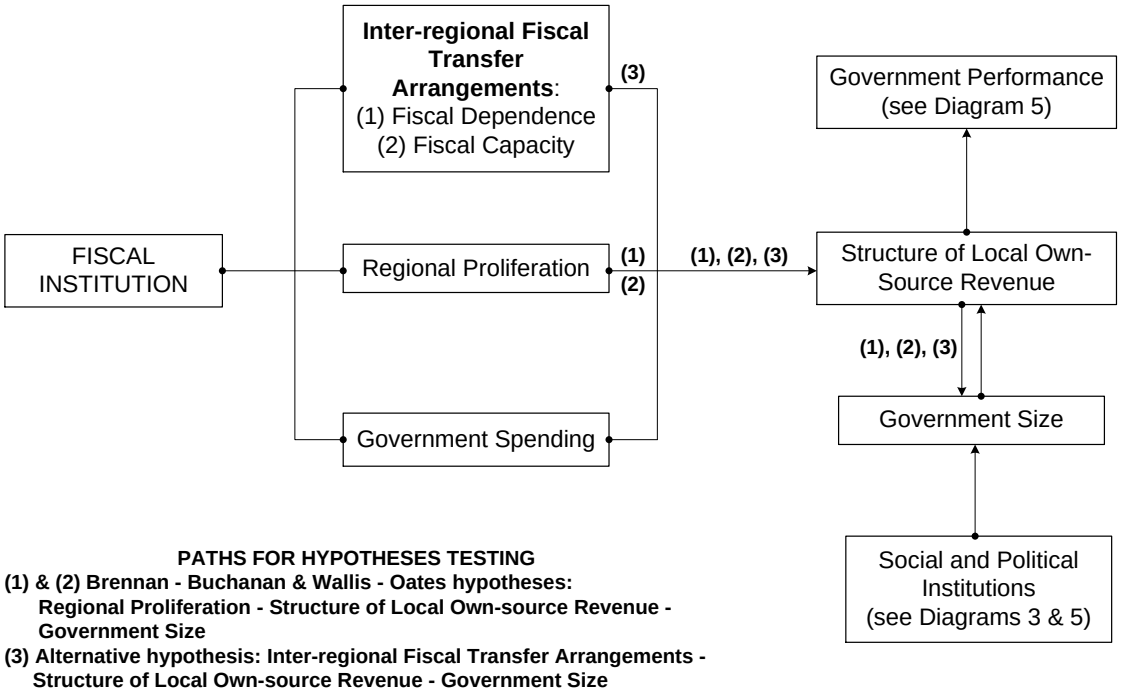
Secondly, the fiscal needs of the sub-nationals affects the structure of local own-source revenues and, hence, the size of government. The Wallis-Oates hypothesis explains that new sub-nationals require some funds to establish the governmental operation in the areas (Mello, 2001). As a result, these sub-nationals might increase taxation to meet their spending needs. As the spending increases, the size of government will follow suit. As such, this situation would be temporary.

However, this situation could have been found in a long-term arrangement. Government performance could increase the government size. Craw (2008) argued that in a democratic society where fulfilling the needs of the constituents are crucial in maintaining political power, improving government performance could increase government size. The increase is mainly due to the government attempts to improve public services provisions demanded by the constituents. However, the provisions require additional revenues. This could become the reason for the sub-national governments to collect more tax revenues to fund the spending needs. If the increase in the spending is not followed by the economic growth, then the size of government will increase.

As previously explained, the structure of local own-source revenues affects the level of government size. Since factors including inter-regional fiscal transfer arrangements, fiscal needs and regional competition determine the structure of local own-source revenues, these factors will indirectly influence size of government through the structure of local own-source revenues. Diagram 2 depicts the fiscal institutional setting derived from the

above framework. In this research, fiscal dependence and fiscal capacity represent the inter-regional fiscal transfer arrangements on the fiscal institutional setting.

DIAGRAM 2 FISCAL INSTITUTIONAL SETTING



2.1.2 SOCIAL AND POLITICAL INSTITUTIONAL SETTINGS

The section sets out the argument that the social and political settings could either encourage or discourage Leviathan government behavior. Section 2.1.2.1 explores the social institutional setting and elaborates on the way social value structure is developed, the extent that social capital affects the structure and the way the structure can either intensify or moderate the behavior. This section uses the Veblenian approach to develop the framework of social value structure. Section 2.1.2.1 discusses the political institutional setting, explaining the political system that could stimulate Leviathan government behavior. In this research, the system relates to the way voters exercise their political rights, the effectiveness of direct voting system and the extent the systems can promote accountable government.

This section also demonstrates the way the institutions use social capital to link these two institutional settings together.

2.1.2.1 Social Institutional Setting

The Veblenian approach proposes a framework and methodology to incorporate social relations and rationality or bounded rationality introduced by Simon (1972) into the institutional analysis. This is important since the approach addresses the weaknesses of both the sociological and economics institutional approaches (see p. 41). Rationality, according to the Veblenian approach, includes social rationality where individuals will *internalize* their environment to form habits and at the same time develop a new mode of behavior to survive when they are confronted by a changing environment (Yilmaz, 2007). This is the principle of over-socially conception of man that arises when individuals' actions aim to conform to social values within social relations (see p. 41). In a way, this social rationality is similar to the Parsonian functionalist logic of institutional adjustment as previously explained (see p. 39).

However, Veblenian rationality also encompasses the economic rationality besides the social rationality. The economic rationality emerges as individuals attempt to influence their environment by using their creativity. In the era of the industrial revolution when Veblen lived, individual creativity was demonstrated in the emergence of new technology, production processes and knowledge that *changed the environment* within which these individuals operated. New habits would follow as these individuals internalized the changes. Such creativity demonstrates the ability of pertinent individuals to influence their environment by using their rationality. This rationality is the notion of under-socially conception of man that underpinned the new-

classical economics. Based on the above argument, creativity (Yilmaz, 2007) serves as the engine of action as explained by Coleman (1988). In this research, creativity is demonstrated by the capacity of the local government head to manage his or her jurisdiction.

However, creativity is bounded by cultural values or is culturally conditioned (Tool, 1977). The Veblenian approach defines institutions as "socially prescribed patterns of correlated behavior" (Foster, 1981, p.908). The correlated behavior refers to continuous inter-correlated behavior amongst social members within a social organization or network. The behavior is prescribed by social values that consist of ceremonially and instrumentally warranted values within the network. Based on this argument, an institution is a socially structured organization or network where its members perform continuous correlated behavior prescribed by the structure. The values or norms apply to the organization to create the social structure. The politico-bureaucrat-business symbiosis that has been found in Indonesia since the Soeharto era is an example of the way individuals are inter-connected in a network guided by a pattern (see Diagram 9, p. 172). The pattern is designed around the reward-sanction mechanism applied to all individuals within the network that has been established to extract rents.

The ceremonially warranted values are rooted from cultural values where "hierarchies and invidious distinctions" such as organizational positions, inheritance and social status justify the exercise of power and coercion (Bush, 1983, p.37). This situation might correspond to a clientele relationship. A patron-client relation that arises by using a bureaucratic system is known as patrimonialism system. The system may take the form of a traditionalist patrimonialism system based on heredity and succession or a

personal rulership patrimonialism system that relies on public and private bureaucracies, material incentives and rewards to maintain loyalty (Roth, 1968, p.196). As such, the extent that a society accepts the practice of these traditional values determines the boundary of an institutional adjustment.

On the other hand, instrumentally warranted values are underpinned by "the systematic application of knowledge …" for problem-solving to achieve long-term survival (Bush, 1983, p.37). The advancement of knowledge, science and technology as well as government policies to address social issues are examples of such application. The composition of these values determines the structure of institutions and social relations. This structure could be inferred by identifying the index of ceremonial dominance or the degree of institutional permissiveness toward knowledge and technological progress. Bush finally concludes that the higher (lower) the index, the more (less) permissive the institution toward progressive changes[16]. Based on this argument, the magnitude of the index will serve as the boundary of creativity or the extent a society could adapt to new changes for long-term survival.

Culturally conditioned creativity will form an "institutional domain" that serves as "[a] limiting condition" (Foster in Bush, 1989, p.457) for the pertinent institution to adjust. As such, any adjustment that moves beyond these conditions could create a "structural dislocation" (Foster, 1981). This is a situation where individuals fail to form a new habit required by the changing institution and, therefore, demonstrate resistance toward the changes or an unexpected new habit that contradicts the changes. The dislocation could

[16] Refer to Bush (1983) for further explanation on two analytical phases of institutional changes, namely ceremonial encapsulation phase where an institutional change is possible as long as the change is consistent with existing cultural values and progressive institutional change phase where the ceremonially warranted values replaced by the instrumentally warranted values (p. 38). Instead of Index of ceremonial dominance, the structure of values could also be measured by using Index of Instrumental Dominant (see O'Hara, 1997). When the latter is used, the argument above is reversed.

provide some reasons decentralization policy initiatives provide mixed results when implemented in different countries and societies. As an example the patrimonial value system as the limiting condition toward adjustment in Indonesia has made regional autonomy fail to promote democracy at the local level. Instead, the autonomy encourages new habits to extract rents for personal gains (see Section 4.2.2).

Based on this argument, applying the principle of minimal dislocation which encourages changes within the institutional domain is important because any proposal on public policy initiative should be based on what *could* be done in a given cultural context instead of what *should* be done regardless of the context. It is interesting to note that both the new-institutional economics and Veblenian approach follow the notion of a culture status quo where culture is perceived as a factor that impedes progress or in the Veblenian context becomes a boundary or constraint for progressive changes.

The Veblenian approach introduces the role of social wealth or capital that is essential in stimulating creativity and, hence, institutional changes. According to the Veblenian approach, social wealth could be partially embedded in the instrumentally warranted functions and partially encapsulated in the ceremonially warranted functions in the framework (O'Hara, 1997, p.118). As such, in an institutional structure dominated by ceremonial functions, the accumulation of the capital could be partially wasted on enhancing the ceremonially warranted functions. This phenomenon is known as the process of ceremonial encapsulation (Bush, 1983). Based on this argument, when Leviathan government behavior is part of the old habit, the encapsulation process will ensure that existing social

wealth will be partly wasted in maintaining the behavior. In other words, as the ceremonially warranted values dominate, Leviathan government behavior remains. This behavior tends to create inefficient government operations by increasing rents.

Bush also explained that progressive institutional change is possible if the social wealth that was previously encapsulated in the ceremonial function becomes embodied in the instrumental pattern of behavior (Bush, 1989, p.456). This process could be achieved by creating new habits or modes of action. Habit is perceived as a “propensity to act of a particular way rather than action of direct behavior” (Klimina, 2008, p.546). The possibility of creating new habits provides some room for policy interventions. An intervention is expected to create a new environment that requires individuals to adjust to the new social structure. According to the Veblenian approach, the change in the environment is demonstrated by decreasing the dominance of ceremonially warranted values.

The Veblenian approach perceives social wealth as a means to promote institutional adjustment. In this context, the capital comprises the qualitative stock of social skills that include the dynamic stock of scientific knowledge, creative arts, language, organization, communication, information and industrial arts. These elements of social wealth are grouped into institutional knowledge, organization and communication (O’hara, 1997, p.118). According to the Veblenian, these elements of social wealth induce institutional adjustment.

Based on this concept of social wealth, O’hara proposes the index of instrumental dominance to determine the domain or the institutional values structure (O’hara, 1997). He used the Instrumental and Ceremonial

Functions of Institutions (ICFI) approach to measure the index. The index of instrumental dominance comprises two dimensions. The dimensions are: (1) ´community and integration´ that relates to the degree of individuals' cooperation and harmony and (2) ´warranted knowledge´ that indicates the degree of the community's knowledge. These two dimensions represent ceremonially and instrumentally warranted values, respectively.

This research uses a ratio of the two dimensions to form the Index of Ceremonial Dominance (ICD) as proposed by Bush (1983). The index indicates the extent that ceremonially warranted values dominate the structure of pertinent institution and, hence, the degree of permissiveness of the institution toward any progressive changes. When social wealth is partially encapsulated in the ceremonially warranted values, the ICD is likely to be high. In other words, the process of ceremonial encapsulation will likely correspond with high ICD. As social wealth increases following the increase in ICD, as demonstrated by the causal relationship between the ICD and social capital in Equation 4 (p. 78), part of the wealth will likely be wasted to extract rents. This is the case found in Indonesia. When social capital is encapsulated by the personal rulership partrimonialism, the social capital will be partly wasted for extracting rents.

As previously explained, the concept of social wealth proposed by O'Hara (1997) comprised two dimensions. The first dimension in the concept of social wealth represents social capital. However, the second dimension implies that the social wealth encompasses elements other than social capital since it also encompasses the output of social interactions such as knowledge, technology and culture. As such, the concept of social wealth according to the Veblenian approach is broader than that of social capital.

This research focuses on the role of social capital in the social wealth as one of many factors that promotes institutional adjustment.

As part of social wealth, social capital is defined differently by scholars, with prominent authors Bourdieu, Coleman, and Putnam. The elements of social capital could include obligations, expectations, trustworthiness of social structures, information channels, norms and effective sanctions (Coleman, 1988), norms, trust and network (Putnam, 1993) and economic and cultural capital (Bourdieu in Winter, 2000 and White, 2002). Unlike Coleman and Putnam, Bourdieu emphasizes social capital as a means to access economic and cultural capital, whereas Putnam and Coleman emphasize its structural functionality to facilitate individual cooperation and to achieve individual interests. In addition, Putnam and Coleman put trust and social network as the central element of social capital.

Field (2008) explained the different concepts of social capital among the three scholars as follows. Bourdieu's concept of social capital was inspired by Marxism where social class and inequality underpinned his concept. As such, he perceived social capital as the resources of the privileged group to achieve individual goals. Coleman underpins his social capital concept on rational behavior of the new-classical economics (Field, 2008, p.28). Under the behavior, engagement in the network is perceived as the by-product of achieving individual interests. His concept introduced the role of institutions that link individual interests to social interests in a collective action. In his case, the institutions are schools and churches.

Coleman focused his study on individuals in a family and community environment, Putnam did so on a larger geographical scale, particularly on the extent that the capital could stimulate community participation that led to

democracy (Winter, 2000). This research uses the concept of social capital developed by Coleman since his definition recognizes the role of human capital as the engine of action. It is argued that leadership of the local government as the engine of action has the capacity to create and destroy social capital by designing and implementing public policies as put forward by Rothstein (2005). Equation 4 that describes the causal relationship between the local government leadership and social capital in the model is developed to accommodate this argument (see p. 78).

Putnam expanded the scope of social capital to the role of civic engagement to promote democracy in the societies. His concept was derived from his comparative research in North-South Italy. However, despite his argument on the role of social capital in promoting democracy Putnam did not clearly explain the way or mechanism that social capital carried out the institutional adjustment toward democracy (Putzel, 1997) nor the role of government or state as an institution that promoted democracy (Field, 2008). This research attempts to address this issue. It is argued that local government has the capacity to create the environment by introducing a credible governing system that is suitable for the growth of social capital and the social capital determines the way voters demonstrate their voting behavior.

Field (2008) summarized the concept of social capital derived from those three scholars as network, namely personal connection and inter-personal interaction that use shared values as the basis of the connections (Field, 2008, p.16). Within this concept, social capital exists within an institution or organization which is an element in the social wealth proposed by the Veblenian approach. In this research, the organization or network is

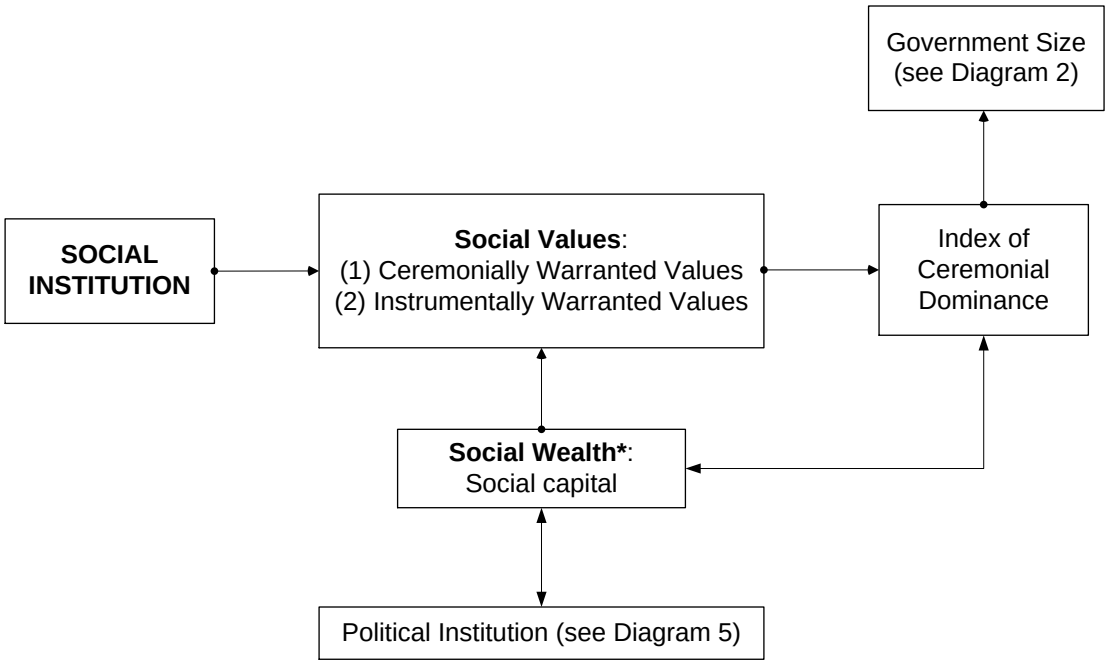
represented by the local government-business relationship underpinned by the personal rulership patrimonialism as the shared values between the two parties (see Diagram 9, p. 172).

The accumulation of social wealth is influenced by human capital. Coleman (1988) argued that the accumulation of human capital was determined by social capital existing within a family and the efforts of community to assist the creation of social capital[17]. Furthermore, by perceiving Veblenian creativity as the output of human capital, social capital becomes a means to influence the environment where individuals operate as well as to form a new habit that corresponds to the changing environment. As such, social capital is a necessary condition for individuals to act as the engine of action.

Diagram 3 presents the way social institutional setting works to influence the value structure or the index of ceremonial dominance and the relationship between the social capital and the structure.

DIAGRAM 3 SOCIAL INSTITUTIONAL SETTING

[17] Coleman (1988) measured the process of human capital accumulation by the percentage of high-school students' drop-out. Based on his research in the United States, Coleman concluded that the percentage of drop-outs was correlated with the level of parents' education and the willingness of the parents to be involved in the process of their children's formal education in the family. In addition, the percentage of drop-outs was also correlated with the degree of the adults' civic engagement in the society. To measure the engagement, Coleman (1988) found that the percentage of drop-outs in the Catholic private schools was lower than that of the independent private schools not because of the religious beliefs but because of the civic engagement of parents and teachers in the society which was found higher in the Catholic school than that in the independent private school.



*Besides social capital, social wealth encompasses other elements such as values, culture, knowledge, technology, arts, language etc.

Social capital stimulates institutional adjustment by influencing the cost of obtaining information (Jottier & Heyndels, 2010). A society with a high social capital demonstrates stronger social connections or bond between members of the society as opposed to that with weak social capital. Jottier and Heyndels (2010) argued that information that flows within this connection or network is accessible to everybody with relatively low cost. By so doing, it promotes information sharing among its members. The shared information makes individuals become more informed about public affairs and welfare issues. Jottier and Heyndels (2010) finally concluded that these individuals will use this information to give their vote during election time.

Social capital that promotes progressive changes is likely to be found in a society with a relatively low index of ceremonial dominance. Low value of the index indicates that the instrumentally warranted values dominate the value structure in a society. This situation implies that the pertinent society uses existing social wealth for problem solving faced by the society rather

than using it to achieve individual or group interests such as in the case where individual patrimonialism values are strong. The next section will explain the way government can create social capital in the political institution.

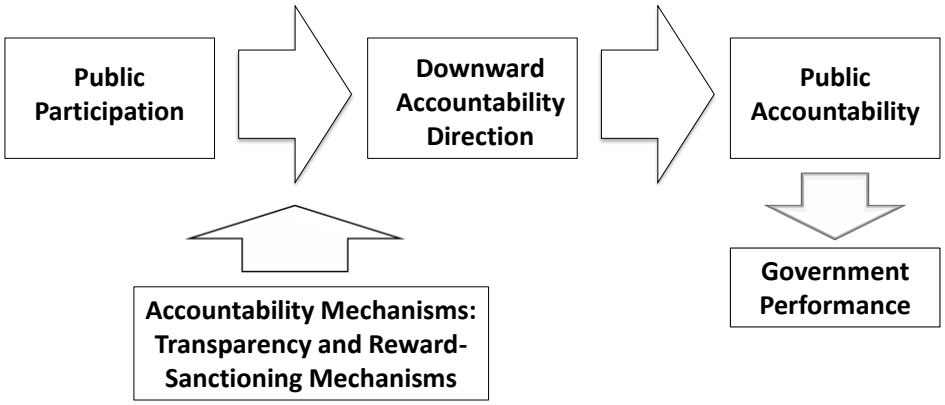
2.1.2.2 POLITICAL INSTITUTIONAL SETTING

Accountability is often referred to the degree of responsibility for the accountable agents (Agrawal & Ribot, 1999) or the agents who "… accept the blame or praise for a decision of action" they make (Hughes, 2003: p.241). Within this context, the meaning of accountability is associated with answerability, namely internal or external accountability (Friederich & Finer in Mulgan, 2000). The internal accountability refers to professional and organizational ethics adopted by accountable agents, whereas the external accountability refers to standards of performance imposed by the principals who give the account. In the organizational context, accountability measurements will include internal as well as external accountability practices.

Public accountability practices require consideration of four public accountability elements, namely direction of accountability, public participation, transparency mechanism and sanctioning mechanism (Mokoginta, 2006). The latter two elements are known as accountability mechanisms that serve as a means to improve public participation and clarify the direction of accountability.

Diagram 4 describes the way the elements interact to form an effective public accountability.

DIAGRAM 4 PUBLIC ACCOUNTABILITY PRACTICES



The first element of public accountability is public participation in the political system. The quality of public participation can be identified by understanding the extent that the public can exercise their exit-voice rights developed by Hirschman (1970). Exercising exit rights is similar to the situation where customers refuse to buy goods and services that have failed to satisfy their needs. By so doing, the customers have imposed a form of imperfect sanctioning mechanism or penalty against the organization that has failed them. In this research, the goods and services refer to the quality of public services provided by the local governments. In the case where a local government fails to provide the services, factors of production might move out or relocate to other area.

However, exercising the rights will work effectively in a situation where the substitute goods or services are relatively abundant which is not always the case in most public services (Jones, 1994). When exercising exit rights is constrained, voice mechanism will become the next option. Voice is defined as '… any attempt at changing, … rather than to escape from, an objectionable state of affairs …' (Hirschman, 1970, p.30). Within this context, voice rights are perceived as the residual of exit (Hirschman, 1970).

To improve the situation, exercising the rights as such is not sufficient without a sense of loyalty. Loyalty refers to staying with discontentment expecting that "… *something* will happen to improve matters" (Hirschman, 1970, p.78). Individuals are loyal to their organizations or communities for many reasons such as exercising exit rights is unthinkable or these individuals expect improvement will eventually take place. The former is very common in a primordial institutional setting such as families, tribes, state and religious groups.

Since loyalty prevails in the long-term, it could create social bonding, network, and trust and, therefore, social capital. In other words, loyalty is a necessary condition for creating social capital. Loyalty is found among individuals who actually care about the performance of their organization and will actively try to improve the performance from within the organization. Their efforts to improve the organization are implemented by exercising their voice rights. Voicing rights during election time can take in the form of either voting expressively or instrumentally (Brennan & Hamlin, 1998). Which of the two behaviors dominates during election time depends on the value structure of the social institutional setting and, hence, the way the social capital is utilized.

Social capital is argued to influence two aspects of voters' behavior, namely expressive or instrumental voting behavior[18]. The two behaviors are different in terms of their domain of the politics (Brennan & Hamlin, 1998). The expressive behavior tends to disengage the votes from "the consequence of voting for electoral outcome" (Brennan & Hamlin, 1998, p.150). In this situation, attributes such as moral character, good looks,

[18] In reality, voters demonstrate both voting behaviors with one tending to dominate the other. The key issue is to locate the equilibrium position of the two voting behaviors in a particular institutional setting (Brennan & Hamlin, 1998).

ethnic origin or the candidate's or party's general ideology, such as religious beliefs, are important for the voters. These attributes represent voters' individual preferences that do not necessarily contribute to the outcome. In the context of social structure, this behavior is likely to be found in the society with a high index of ceremonial dominance where patrimonialism is strong.

On the other hand, instrumental voting behavior refers to voting retrospectively, that is past performance of the incumbent or other candidates is the determinant factors to cast a vote (Jottier & Heyndels, 2010). When voters tend to vote in this manner, they will vote for the candidate that proposes public policy that can best improve the well-being of the constituents in general rather than a group of people. This voting behavior will likely correspond with a society where the ceremonially warranted values are less dominant than the instrumental ones.

Based on the above argument, public accountability is likely to improve in a situation where public participation is dominated by instrumental voting behavior during election time. Furthermore, instrumental voting behavior is likely to emerge in the case where social capital grows in a society where the ceremonially warranted values are lower than the instrumentally warranted values. As such, effective public accountability is likely to be found in a society with high instrumentally warranted values or low index of ceremonial dominance.

However, being loyal does not necessarily mean that these individuals will not exercise their exit rights. Rather they may postpone exercising their rights by actively voicing their interests in demanding changes. As long as exercising voice rights bring about positive changes, they will remain loyal. However, the individuals will eventually exercise exit rights provided that any

changes by exercising voice rights is not possible. Based on this argument, loyalty comprises voice and exit rights.

The second element of public accountability is the direction of accountability which can be divided into upward accountability or accountability toward superior, downward accountability or accountability toward clients, inward accountability or accountability toward values or practices in the organization and outward accountability or accountability toward external standards (Corbett, 1992). In a democratic system, the direction of accountability represents a downward relationship that is similar to principal-agent relation. In this context, the principal is the constituents and the agents are the politicians and bureaucrats.

It is argued that in the principal-agent relationship, social capital exists between constituent-government relationship or network. Since the government represents a system, trust that emerges in the network is applied to the system of governing (Rothstein, 2005). In other words, trust is applied to a credible system or political and administrative systems that follow universalism or “impartiality, objectivity and equal treatment” toward the constituents (Rothstein, 2005, p.129). Equitable treatment means utility treatment or a treatment that passed the need-test-case. Equitable treatment refers to some degree of customization in public policy provision. The policy is designed for the benefit of a specific group of people such as social safety net programs that are designed for the benefit of the low income group. Trust in the system rather than individuals is a factor that is absent from Putnam’s analysis on social capital and democratization.

Furthermore, there is an imbalanced relationship in the constituent-government network[19]. By law, the government has more power and authority than the constituent. The first implication of an imbalanced power position is the way the social capital is utilized to create the bonding and bridging process in the government-constituents' relationship. Hadiz (2004) acknowledged the imbalanced relationship of social capital within a social class context. He used the context to explain the roles of oligarchs in the political system in Indonesia post-Soeharto and the way the oligarchs designed the bridging and bonding processes by using a system that uses laws and regulations to collect rents (Hadiz, 2001).

The second implication of imbalanced power position is that trust within the constituents-government relationship arises as the government has the capacity to design a credible system (Rothstein, 2005). A credible system or political and administrative systems as explained above could prevent the government from taking advantage of the authority and power imbalances. This situation indicates that the government's leadership in developing the system and, therefore, trust is crucial. As such, trust in this context refers to trust in the system.

Within this context, government could indirectly create social capital by developing a trustworthy or credible system in an imbalanced power position. The term 'indirectly' refers to the environment or policies that the government can create to promote social capital. Social capital needs a particular social condition such as a variety of social places where individuals can interact and political condition such as sanctions imposed on opportunistic behavior to emerge (Rothstein, 2005). Such conditions would likely be found in societies

[19] Putnam (1993) did not recognize the imbalanced relationship in his social capital framework of democracy. The implication is that his framework does not consider the effect of bargaining power position in a political system that might lead to political captured (Hadiz, 2004).

where relatively equal income distribution and opportunity are found. This is the role of government leadership as a governing body to create a credible system to ensure equality is critical. In public policy literature, a government that could create a credible system or trustworthy government is likely to be an accountable government.

The third implication of imbalance in power position is that the process of creating social capital requires politics or a bargaining power position. In the political process, the electoral system in the form of direct or indirect voting mechanism to elect a government determines the quality relationship that arises in the principal-agent relationship between the political/ bureaucrats and their constituents. In this research, the quality of the relationship is measured by using the local government performance indicator to measure some form of contracts as public services providers.

The third and fourth elements of public accountability are sanctioning and transparency mechanisms. This research refers to these mechanisms as the accountability mechanism. Since the agents are rational individuals with their own interests, there is a possibility that a principal-agent problem arises that is when the agents pursue their own interests at the expense of the principal's. This is possible due to asymmetric information that arises when the agents have more information than the principal. In the perspective of the principals, asymmetric information will make the outcome of the contracts uncertain. By exercising their exit-voice rights, loyal individuals will have a powerful effect to impose sanctions.

Accountability mechanisms can be used to reduce uncertainty due to the principal-agent problem. The transparency mechanism ensures "…[the] existence of a two-way street in which … [public services] are responsive to

service users as well as answerable to them" (Stirton & Lodge, 2001, p.475). This channel encourages a two-way dialogue and availability of information to the public. Inherent in this definition is public accessibility to information for evaluating performance and the capability of the public to use it in the decision-making process. While the accessibility is necessary to improve transparency and, hence, reduce asymmetric information, overcoming the principal-agent problem also requires an effective sanctioning mechanism.

Sanctioning mechanisms serve as a means to overcome the principal-agent problem. In this case, the mechanism could take in the forms of imperfect and perfect enforcement mechanism (North, D.C., 1984 & North, D., 1990). Sanctioning is said to be imperfect if the sanctions imposed are not based on formal rules or laws enacted by states. This situation will make sanctioning mechanism debatable. On the contrary, perfect enforcement uses state laws as the reason to impose sanctions. As such, imposing sanctions based on perfect enforcement will not be debatable. The state law that governs the political rights of constituents is an example of formal law so that sanctions imposed on violations against the rights are perfect sanctioning mechanism.

While in reality both types of sanctioning should be in place, this research will focus on analyzing the effectiveness of the imperfect sanctioning mechanism described in the voting mechanism. In this research, the mechanism is represented by the direct voting mechanism where constituents can directly impose political sanction in a case where the head of local government demonstrates unsatisfactory performance. This mechanism is a representation of the constituents' voice rights. The reward-sanctioning mechanism works as follows: the voters will give their vote if the

government performs well during the office term. Otherwise, the voters will vote the government out of office at the next election. Likewise, the government will perform well provided that they understand the opportunity to be re-elected in the next office term as a form of reward.

This research uses the term of office of the local government head as an indicator for exercising the voice rights. It is also argued that the satisfactory government performance corresponds to longer office term of the local government head. The causal relationship between the government performance and the office term in Equation 8 (p. 78) represents this argument.

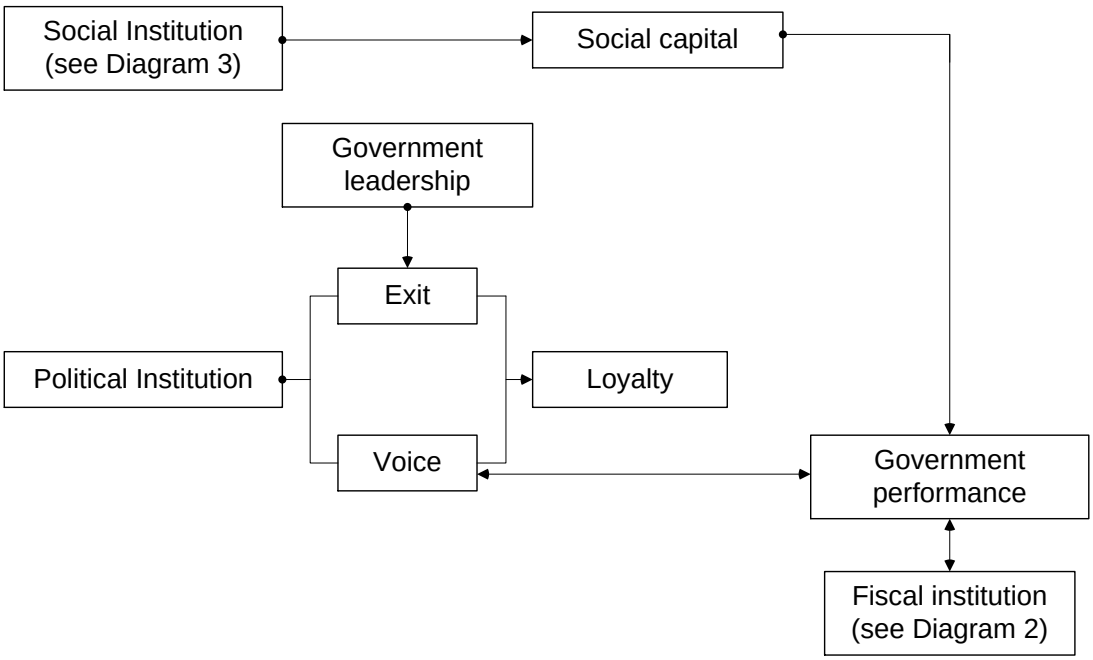
However, the likelihood of exercising voice rights depends on the availability of transparency mechanism to the public. The performance of the agents is measured by their ability to represent the interests of their constituents which usually takes in the form of political contract or political platform during a political campaign. On the part of the agents, this contract becomes the object for which the agents are accountable. During a political campaign, the ability of the principal to evaluate past performance of the incumbent local government head or the political platform of the candidate determines the extent that the agent can vote instrumentally. Imposing this will improve public participation (see Diagram 4, p. 66).

When the ability to evaluate performance and to impose sanctions are possible, people are encourged to vote instrumentally (Jottier & Heyndels, 2010) provided that the Index of Ceremonial Dominance is low. In the long-term, the voting behavior will make the government accountable to the constituents. An accountable government is likely to create an efficient government intervention that corresponds to low rent-seeking activities. This

situation indicates that political leadership that demonstrates satisfactory government performance or accountable government is crucial. It is argued that accountable government is critical in creating social capital that bonds the constituents to their government. This research uses the voting behavior to measure the effectiveness of a political institutional setting. It is expected that instrumental voting behavior improves government performance and, therefore, promotes accountable government. This argument is represented in Equation 7 (p. 78) as the causal relationship between the office term and government performance. As such, while the direct voting mechanism is necessary, it is not a sufficient condition to improve the political sanctioning mechanism if the constituents demonstrate expressive voting behavior. Diagram 5 (overleaf) describes the political institutional setting and the way the setting creates an accountable government.

In summary, this research argues that social institutions determine the value structure whereas the political institution reflects the government performance. These two institutions might intensify or moderate the Leviathan government behavior. This research further argues that if the ceremonially warranted values dominate the value system then the accumulation of social capital will be partly used to generate rents. As previously explained, social capital links both the social and political institutions.

DIAGRAM 5 POLITICAL INSTITUTIONAL SETTING



This research explains that the social capital affects the political institution via two different channels, namely the capacity of the local government to design and implement public policy to encourage the accumulation of social capital and the voting behavior of the constituents during a general election. Social capital in a society where the instrumentally warranted values dominate the ceremonially warranted values, tends to encourage the constituents to vote instrumentally. On the contrary, if the social capital is encapsulated by the ceremonially warranted values, the voters tend to demonstrate voting behavior. This behavior is likely to produce an unaccountable government even though the election uses direct voting mechanism.

2.2 DEVELOPING THE MODEL AND HYPOTHESES

Based on the above arguments, Diagram 6 below describes the mind-map of this research which combines all institutional settings depicted in Diagram 2, Diagram 3, and Diagram 5 above. Diagram 6 (overleaf) shows

the social capital is indirectly created by the constituents as well as the government. While the existence of social capital among the constituents encourage public awareness so that they tend to vote instrumentally, government performance as an indicator of its capability to indirectly create a credible system is also essential for creating the capital. As such, social capital is the product of both social as well as political interactions. Based on Diagram 6, this research proposed the following system of equations:

1. Fiscal institutional setting:

   (1) $F_i = \beta_1 + \beta_2 FP_i + \beta_3 FC_i + \beta_4 M_i + \beta_5 GY_i + \varepsilon^f$

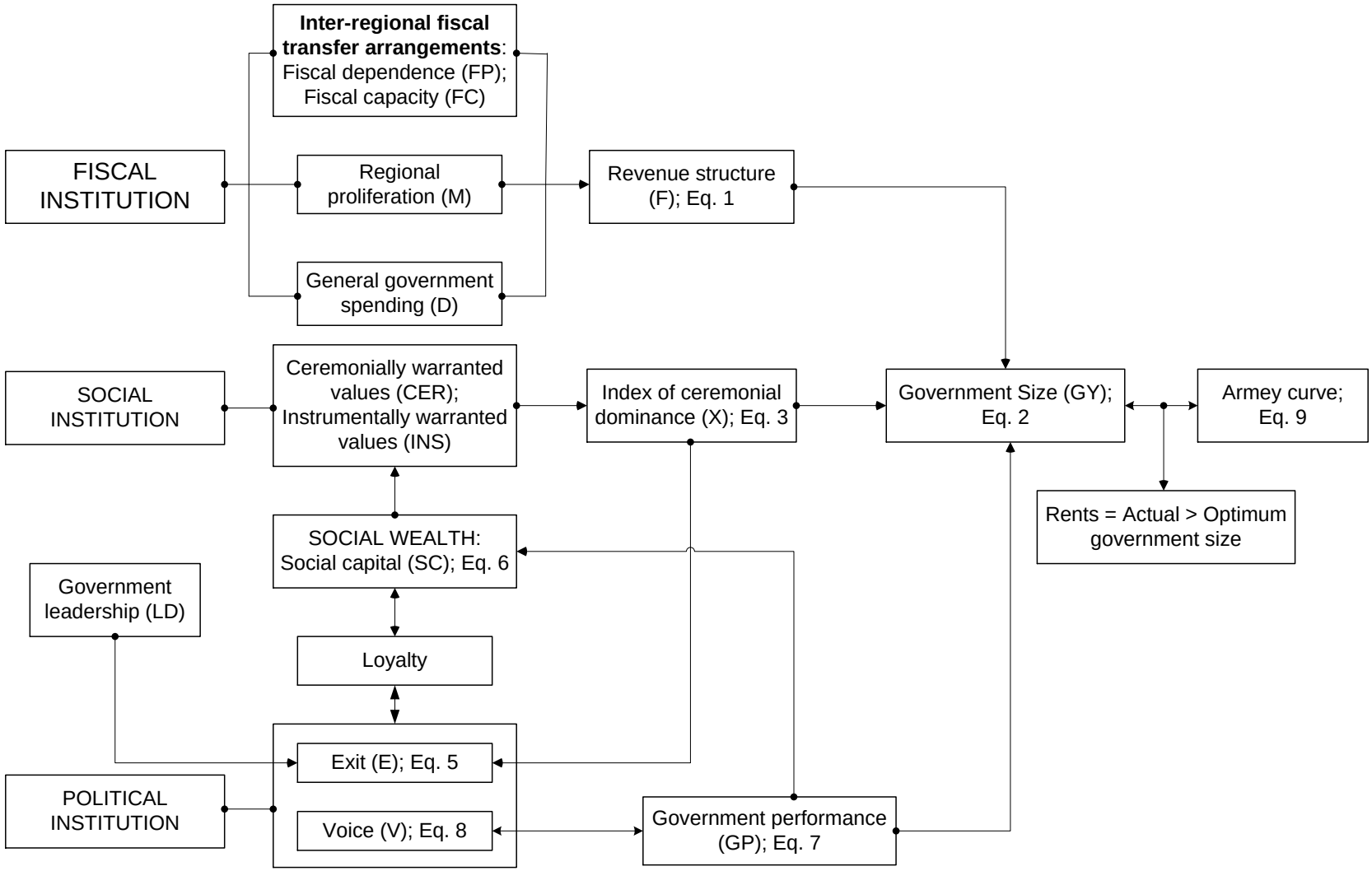
   (2) $GY_i = \beta_6 + \beta_7 F_i + \beta_8 X_i + \beta_9 GP_i + \beta_{10} D_i + \varepsilon^g$

   where:

   F represents fiscal structure; FP is the flypaper effect; FC is defined as the fiscal capacity; M is regional proliferation; GY corresponds to government size; X is the Index of Ceremonial dominance or the value system; GP is the government performance and D is the total government spending.

   Some studies on the Brennan-Buchanan hypothesis testing use a single equation that links regional proliferation to the size of government (Mello, 2001; Zax, 1989). It is hypothesized that regional proliferation reduces the size of government. However, a single equation testing does not allow the assumption that government spending is fully financed by tax revenues to be tested. As such, this research proposed a two-equation testing as stated above to test the Brennan-Buchanan Decentralization and Wallis-Oates hypotheses (see Section 3.2.1).

DIAGRAM 6 RESEARCH FRAMEWORK OF INSTITUTIONAL ANALYSIS



2. Social institutional setting:

(3) $X_i = \beta_{15} + \beta_{16} INS_i + \beta_{17} CER_i + \beta_{18} SC_i + \varepsilon^x$

(4) $SC_i = \gamma_0 + \gamma_1 V_i + \gamma_2 E_i + \varepsilon^L$

(5) $E_i = \mu_0 + \mu_1 X_i + \mu_2 LD_i + \varepsilon^E$

Substituting (5) into (4) to get (6):

(6) $SC_i = \beta_{19} + \beta_{20} X_i + \beta_{21} V_i + \beta_{22} LD_i + \varepsilon^L$

where: INS is Intrumentally Warranted Values; CER is Ceremonially Warranted Values; SC is social capital; V is voice; E is Exit and LD is local government leadership.

Equation (6) does not measure the extent factors of production can exercise their exit rights since the substitution process eliminates variable Exit (E) from the equation. However, the qualitative part of this research will explore this issue (see Research Question 3 in Section 1.3 and Section 5.2). The degree of correlation between leadership (LD) and social capital (SC) in Equation (6) represents the capability of the local government to accumulate social capital or to gain trust from the people as explained by Rothstein (2005). It is argued that good government leadership produces credible system and, hence, social capital.

3. Political institutional setting:

(7) $GP_i = \beta_{23} + \beta_{24} V_i + \beta_{25} SC_i + \beta_{26} F_i + \beta_k \sum_k PS_i + \varepsilon^Q$

(8) $V_i = \beta_{27} + \beta_{28} GP_i + \varepsilon^v$

where PS is public services provided by the local government

To identify the government spending efficiency, the optimum government size is calcultad based on Equation (9). The equation represents the Armey curve which is an inverted U-shape.

(9) $YG_i = \beta_{12} + \beta_{13} GY_i + \beta_{14} GY_i^2 + \beta_{14} POOR_i + \varepsilon^y$

A control variable is included in the model, namely the welfare level (POOR) in equation (9). The control variable measures the level of welfare in the regions. It is expected that the economic growth (YG) will decrease with the increase in the welfare level (POOR).

Descriptions of variables:

i = 1, …, n represents the districts or municipalities. *k* is public service variable. *All ε* are error terms which corrrespond to external variables that are not included in the model such as natural disaster and economic business cycle.

Structure of revenues (F): the complexity of local government revenues as measured by the contribution of each type of revenue sources to the total revenues. Operational Variable: Hirschman-Herfindahl Index (HHI) or

$$F = \sum_{k=1}^{n} IT_k^2$$

k is the type of revenue source, *IT* is the contributions of each type to the total revenue sources and *0 < F < 1*. The complexity of revenue structure is high as F is closer to zero or when the revenue is diversified. Otherwise, the complexity is low.

Size of government (GY): the extent of government intervention in the economy as an indicator for government efficiency.

Regional economic activity (YG): the growth of regional output.

Fiscal capacity (FC): the ability of the local governments to finance their own spending.

Flypaper effect (FP): the extent of the lower level governments' financial dependence on the higher level of government.

Regional proliferation (M): the number of lower level governments in the region.

Demand for public goods (D): the development programs of the local governments.

Index of ceremonial dominance (X): values structure of the social institution that demonstrates which value, that is ceremonially or instrumentally warranted, dominates the structure.

Instrumentally warranted values (INS): the application of knowledge based for problem-solving to stimulate business activities.

Ceremonially warranted values (CER): old values and habit, organizational positions, inheritance and social status that can justify the exercise of power and coercion in the social conduct.

Social capital (SC): the level of trust in government arises as people decide to be loyal. In this research, trust flows across groups, namely

between the constituents and government. Since government is an institution, trust in government refers to trust in the system or the rules of the game in a governing system. The system is the product of the government institution.

Leadership (LD): the capacity of the local government to understand its role as the formal local leader.

Exit (E): the easiness of local businesses to relocate to other areas as measured by the locational rents and preferences. This research used the social value (X) and the government leadership (LD) or the capacity of the government to understand local issues.

Voice (V): the act of the public to complain to the local governments. Since the enactment of the direct voting mechanism, complaining can take the form of voting the incumbent local government head out of office on the next election.

Government performances (GP): the capacity of the local governments to promote economic governance.

Public goods (PS): the goods include policies and/or services that are provided by the government.

This research classifies the above variables into endogenous, exogenous and control variables (see Section 3.2.1). The exogenous variables or the policy variables provide channels for policy interventions.

These variables include Instrumentally warranted values, Ceremonially warranted values, Fiscal capacity, Flypaper effect, Rent seeking activities, Regional proliferation, Demand for public goods, Local government leadership and Public services. As explained above, these exogenous variables consist of a wide range of disciplines that can be used to constrain Leviathan government behavior.

2.2.1 THE HYPOTHESES OF LEVIATHAN GOVERNMENT BEHAVIOR

INSTITUTIONAL SETTING

The following proposes the institutional setting hypotheses of Leviathan government behavior.

1. Fiscal institutional setting

(1) $F_i = \beta_1 + \beta_2 FP_i + \beta_3 FC_i + \beta_4 M_i + \beta_5 GY_i + \varepsilon^f$

(2) $GY_i = \beta_6 + \beta_7 F_i + \beta_8 X_i + \beta_9 GP_i + \beta_{10} D_i + \varepsilon^g$

Substituting Eq. (1) into (2) gives

(2A) $GY_i = \beta_{30} + \beta_{31} FP_i + \beta_{32} FC_i + \beta_{33} M_i + \beta_{34} X_i + \beta_9 GP_i + \beta_{10} D_i + \varepsilon^{gf}$

a. The inter-regional fiscal arrangement (FP) creates flypaper effect or *H_0: $\beta_{31} \leq 0$ and H_1: $\beta_{31} > 0$.* The increase in the effect corresponds to increasing fiscal dependence due to transfer arrangements. In addition, the transfer encourages over-spending that leads to high government size.

b. The inter-regional fiscal arrangement (FC) induces free-rider among the local governments or *H_0: $\beta_{32} \geq 0$ and H_1: $\beta_{32} < 0$.* As regions' dependence on transfer is high, the government size (GY) tends to increase even though the fiscal capacity (FC) decreases.

c. Regional proliferation does not discipline local government from creating excessive taxation. In other words, regional proliferation does not encourage regional competitions by imposing less taxation to attract mobile capital or $H_0: \beta_4 \leq 0$ *and* $H_1: \beta_4 > 0$.

2. Social institutional setting

   a. The old values remained or the ceremonially warranted values (CER) dominated the instrumentally warranted values (INS). Hypothetically, the statement was written as $H_0: \beta_{17} - \beta_{16} \leq 0$ *and* $H_1: \beta_{17} - \beta_{16} > 0$.

   b. The accumulation of social capital was encapsulated by a value system dominated by CER. The hypothesis was written as $H_0: \beta_{20} \leq 0$ *and* $H_1: \beta_{20} > 0$.

   c. The stronger the index of ceremonial dominance (X) in the value system, the higher the government size (GY) as increased or $H_0: \beta_8 \leq 0$ *and* $H_1: \beta_8 > 0$.

3. Political institutional setting

   a. The direct voting mechanism fails to impose political sanction or $H_0: \beta_{28} \geq 0$ *and* $H_1: \beta_{28} < 0$.

   b. People tend to demonstrate expressive voting behavior so that their voice (V) fails to improve government performance (GP) or $H_0: \beta_{24} \geq 0$ *and* $H_1: \beta_{24} < 0$.

2.2.2 IDENTIFYING LEVIATHAN GOVERNMENT BEHAVIOR

A way to identify Leviathan government behavior is by using decentralization or the Brennan-Buchanan Leviathan government behavior

hypothesis (Oates, 1985; Forbes The logic of the hypothesis to test Leviathan government behavior works as follows: regional proliferation encourages jurisdictional competition. As competition arises, local government tends to reduce revenues collected from local taxes and therefore local expenditure. In other words, a local governments will be more efficient in budget allocation as increased taxes could drive labor and capital out of their jurisdiction. More efficient government corresponds to lower government size. Based on this argument, the hypothesis identifies Leviathan government behavior by testing the correlation between regional proliferation and government size. If regional proliferation leads to declining government size, then there was Leviathan government behavior (before regional proliferation) and regional proliferation eliminates the behavior.

However, there is a possibility that overall government size could increase as regional proliferation continues. As the central government decentralizes many of the governmental functions to the sub-national levels, these new functions could put pressure on the sub-nationals' spending and revenue capacity. As such, decentralization will result in higher government spending financed by imposing higher taxation than before decentralization. This hypothesis is known as Wallis-Oates hypothesis (Mello, 2001) that stated as $\beta_{33} \leq 0$ *and* H_1: $\beta_{33} > 0$ (see p. 52). Based on the two hypotheses above, Leviathan government behavior arises as Brennan-Buchanan hypothesis holds.

However, Brennan-Buchanan hypothesis holds assuming that

- regional proliferation encourages regional competition so that it can discipline the local government from creating excessive local taxation

and/or charges or $H_0: \beta_4 \geq 0$ *and* $H_1: \beta_4 < 0$ in Equation (1) (see p. 82). This assumption is based on regional competition proposed by Tiebout (1956). It is argued that competition becomes stronger due to regional proliferation assuming that factors of production are mobile.

- local taxes and/or charges, instead of inter-regional fiscal transfer, dominate the revenue structure of the local government so that more taxation increases government size or H_0: $\beta_7 \leq 0$ *and* H_1: $\beta_7 > 0$. However, if the regional transfer dominates the revenue, then the fluctuation in the size will follow the transfer instead of the tax revenues.

If the case study does not fulfil the assumptions, the results of Brennan-Buchanan hypothesis testing might give mistaken conclusions[20]. As a contingency, this research proposes an alternative hypothesis to test Leviathan government behavior. The hypothesis is derived from the definition of Leviathan government behavior (see Section 1.4).

The alternative hypothesis accounts for the impact of inter-regional fiscal transfer arrangements on the HHI or the structure of local own-source revenue (see p. 50). The hypothesis is tested as follows:

Firstly, the inter-regional fiscal transfer arrangements (FP) discourage the local government to collect taxes and/or charges (F) or $H_0: \beta_2 \geq 0$ *and* $H_1: \beta_2 < 0$. In other words, the arrangements create a flypaper effect or the local government's fiscal dependency on the transfer arrangements. Secondly, despite the fact that the local government reduces the revenue from taxes and/or charges, the size of government increases or $H_0: \beta_7 \geq 0$ *and* $H_1: \beta_7 < 0$

[20] See Section 2.3.1, Equation (1) for Brennan-Buchannan assumption test and Equation (2) for Wallis-Oates assumption test in Indonesia case and Section. 2.3.2 (i) for the test results.

due to the flypaper effect. Thirdly, the increase in the government size is beyond the optimum level of government size. The discrepancy between the optimum and the actual size of the government is indicative of the rents or inefficiency in the government sector. This research uses the Armey curve to identify the rents. Equation (2) explains the way each institution contributes to the government size, hence, the rents[21].

In summary, the choice between using the Brennan-Buchanan decentralization hypothesis or the alternative hypothesis to test Leviathan government behavior is based on the local government revenue structure. If the revenue is derived from local taxes, then Leviathan government behavior can be tested by using the Brennan-Buchanan hypothesis. However, if the revenue is mostly a result of fiscal transfer, then Leviathan government behavior should be tested by using the alternative hypothesis. For both

[21] Based on the argument above, there are two reasons why this thesis proposed a simultaneous system of equations. Firstly, some authors (Zax, 1989; Mello, 2001) used the inverse correlation between M and GY in Equation (2A) to test Leviathan government behavior and the impact of regional fragmentation to restrain the behavior. The corresponding hypothesis is that regional fragmentation (M) reduces government size (GY). Hence, reduced local taxations (F) or F and GY in Equation (2) is positively correlated eg the lower the local tax revenues, the smaller the government size. Since government size is a proxy for government efficiency, it can be inferred that regional fragmentation promotes regional efficiency. However, there is a hidden assumption that underpinned the hypothesis. The assumption is the main source of revenue is local taxes. This is not the case in Indonesia since the main source of revenue is inter-regional fiscal transfer from the central government. As such, there is a possibility that low local tax revenues does not necessarily bring in small government size. To test the assumption, the estimation process of the equations should be based on Equations (1) & (2) rather than the reduced form represented by Equation (2A). This chapter proposed Equation (1) & (2) as well as Equation (2A) for the purposes of testing the assumption of the model and developing hypotheses.

Secondly, the main idea of the thesis is to look at Leviathan government behavior as an institutional phenomenon, which is a product of three different institutional settings, namely fiscal, social and political settings. This is the main reason why the thesis developed three groups of equations where each group represents a particular institutional setting stated above. All these equations made a system of equations. The simultaneity of the equations represents the dynamic of these three institutional settings in producing Leviathan government behavior. A reduced form of equation is not sufficient to explain the institutional perspective of Leviathan government behavior since a reduced form will only have a single equation that does not explain how these three institutional settings are inter-related. On the contrary, a system of simultaneous equations does. Hence, the use of SUR and 3SLS are necessary to estimate the system of equations.

hypotheses, the size of the rents caused by Leviathan government behavior is identified by using the Armey curve.

2.3 IDENTIFYING THE RENTS: THE ARMEY CURVE

Even though government intervention in the economy is necessary, there is a limit to the intervention that could induce economic growth. The limit could be measured by using the Armey curve. The inverted-U shape of the curve describes the relationship between increasing government size and economic growth (Vedder & Gallaway, 1998). The curve explains that at the early stage of economic growth, government role in the economy is crucial particularly in developing laws and order and, later, on infrastructures that are required to stimulate investments. However, since government intervention in the economy requires tax revenues, the higher the intervention the larger the tax revenues required. As taxes are increasing, investment could decrease (Lin, 2006), reducing the economic growth. Figure 1 below depicts the Armey curve.

FIGURE 1 THE ARMEY CURVE

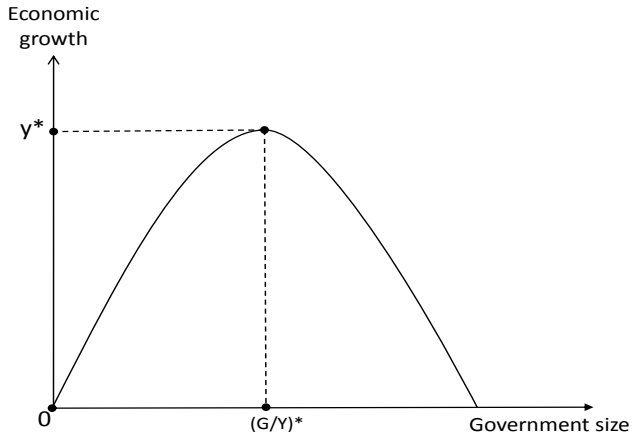


Figure 1 explains that the government size reaches its optimum level at (G/Y)* which corresponds to the economic growth at y*. Consequently, any increase in government size that moves beyond (G/Y)* will result in declining economic growth. Likewise, the government size below (G/Y)* indicates that government

intervention to increase economic growth is still required. Based on this framework, rent-seeking is confirmed provided that the optimum level of government size is less than the actual size.

CONCLUSIONS

This research uses institutional analysis to understand the way Leviathan government behavior arises. The analysis arises from the proposition that behavior is a product of a particular institutional setting, namely social, political and economic institutional settings. By understanding the way these settings interact to form the behavior, this research has proposed a holistic approach in understanding the reasons decentralization initiatives do not always deliver satisfactory outcomes for the countries that implement the initiatives.

This research draws on both the Veblenian approach and the new-institutional economics. The Veblenian institutional analysis is used since it provides a methodology to operationalize the way rational behavior and social relations interact within a particular institutional setting. The Veblenian approach refers to the outcome of the interaction as creativity. Within the creativity context, rationality has its boundary, namely social values that underpin social relations. The extent that creativity can be used to force progressive institutional change depends on the value structure of the institution. The methodology offers a way to measure the structure and, hence, the boundary of rationality that is used in constructing the social institutional setting. However, this approach does not provide sufficient concept to explain the way fiscal and political institutional settings work. This part is the domain of the new-institutional economics.

Based on the framework developed above, a model that describes the inter-relationship of the three institutional settings is developed to identify the impact of the settings on government efficiency level. To develop the model, each institutional setting is represented by a particular indicator, namely index of ceremonial dominance, the local government performance and the structure of local government revenues. These indicators represent social, political and fiscal institutional settings, respectively. Spending inefficiency or rent-seeking arises when the actual government size is larger than the optimal size. This information can be obtained by calculating the gap between the optimal size derived from the model and the average government size from the data.

Hypothetically, Leviathan government behavior corresponds to these following institutional settings: Firstly, the fiscal federalism and regional proliferation do not constrain regions from creating various taxes and/or charges. In fact, the inter-regional fiscal transfer tends to encourage a flypaper effect and free-rider behavior among local governments. Secondly, the social institutional setting implies a strong influence of personal rulership patrimonialism that results in accumulating social capital to obtain personal gain. Thirdly, the expressive voting behavior of the constituents weakens the direct voting mechanism of the political system. As a result, the system has failed to produce an accountable government. These structures might affect government efficiency and, hence, the size of rents as measured by the increase in the government size above the optimum level. Chapter Four will explain the research methodology to operationalize the variables in the model. By using the variables described in Chapter Four, Chapter Five will use the framework above to explain Leviathan government behavior in Indonesia.

Chapter Three
Research Methodology

Chapter Two explained the theoretical framework of Leviathan government behavior from the institutional perspectives. The framework was drawn from range of theoretical positions that include public economics, sociology and political science. The economic institution theory drawn from the new-institutional economics and Veblenian approach was used as a basis to integrate these theoretical positions to explain Leviathan government behavior.

Based on the perspectives, a system of simultaneous equations or mathematical model was developed in Chapter Two. The model explains the way the three institutions, namely fiscal, social and political, inter-relate in shaping the behavior. In the model, each institution is represented by an operational variable. The variables are HHI to measure the revenue structure, the index of ceremonial dominance and the local government performances, respectively. Based on the model, a set of hypotheses to explain Leviathan government behavior based on the institutional settings is constructed (see Section 2.2, p. 82).

This research argues that Leviathan government behavior creates government inefficiency as measured by the rents or surpluses extracted from the economy. In Chapter Two, the inefficiency is identified by using the Armey curve (see Section 2.3, p. 88). The curve explains the concept of optimum government size that corresponds with the level of government efficiency. The rents or surplus arises when the actual size exceeds the optimum government size. The model developed in Chapter Two explains

the extent Leviathan government institution affects government size and, therefore, rents.

Chapter Three explains the way this research was carried out to answer the research questions stated in Chapter One (see Section 1.3). As explained in Chapter One, this research used dual research approaches or a methodological triangulation that encompassed positivist and interpretative inquiries. However, this research used positivist inquiry as the primary inquiry since its paradigm is consistent with economic methodology. The ontological view of dual research inquiries is abductive (see Section 1.2). Based on the positions above, this research used a quantitative approach as the primary approach and some degree of qualitative research approach as the secondary approach.

As explained in Section 1.4, this research used descriptive, explanatory and some degree of exploratory inquiries. This chapter explains the way this research implemented descriptive, explanatory and some degree of exploratory inquiries to address the research topic. In this research, the latter two inquiries were part of quantitative and qualitative approaches, respectively. However, due to the economic nature of this research, it used explanatory inquiry as the primary and exploratory inquiry as the secondary tool. The exploratory inquiry was used to address some issues that could not be explained by using the primary inquiry (see Section 3.2).

Section 3.1 explains the way descriptive inquiry was conducted. This section explains the sources of data used in the inquiry. A descriptive statistic was also used to support arguments. Section 3.2 elaborates the way this research carried out the quantitative part of this research. This section

explains the operationalization of the variables in the model, the sources of data, the way this research processed the data to estimate the model and validate the estimation results and some limitations of using econometrics. Section 3.3 explains the technique of explorative inquiry used in the research to collect information from participants and the approach by which the information was analyzed.

3.1 DESCRIPTIVE INQUIRY

This inquiry aimed to provide information about the Leviathan government behavior in Indonesia. Descriptive inquiry complemented the information derived from the explanatory inquiry. This inquiry used various reports and publications including government publications issued by the Statistic Office, Ministry of Finance, Ministry of Home Affairs; other organizations including the World Bank and Regional Autonomy Watch and newspapers.

A descriptive statistic was also used to identify the effectiveness of the Balance Funds arrangements, namely revenue sharing or *DBH,* the specific purpose grant or *DAK* and the general purpose grant or *DAU*, to meet vertical and horizontal equities (see Section 4.1.1). The equities were identified by using Gini coefficient (G). The formula of the coefficient is (Borghers & Wessa, 2012):

$$G = \left(\frac{2}{n^2 \bar{X}} \right) \sum_{i=1}^{n} \left(\left(i - \frac{n+1}{2} \right) X_i \right); \text{ and } 0 \leq G \leq 1$$

$$\bar{x} = \frac{1}{n} \sum_{i=1}^{n} x_i ;$$

where *n* is the number of regions; *i* is region 1, 2, 3, … n; *X* is the value of variables to measure. The variables are: (1) Own-source

revenues or *PAD*; (2) PAD + *DBH*; (3) PAD + *DBH*+ *DAU* + *DAK;* $\bar{X}$ is the average value of the variables measured.

Value of G closer to zero indicates equity and closer to one indicates disparity.

3.2 QUANTITATIVE RESEARCH: EXPLANATORY INQUIRY

This quantitative part of this research aimed to address the first research question, which is the extent and the way fiscal, social and political institutional settings contribute to Leviathan government behavior in Indonesia. This issue was divided into these following research inquiries.

1. To establish the extent and the way the variables within each pertinent institutional setting (fiscal, social and political settings) influence the setting.
2. To identify and establish the way fiscal, social and political institutional settings interact to simultaneously influence the government size.

In this research, explanatory inquiry refers to the mode of inquiry by establishing a causal relationship of variables within and across the three institutional settings in the model. These relationships establish the institutional setting of Leviathan government behavior (see Section 2.2). The unit of analysis of the quantitative research part is institutional settings. The settings explain formal and informal rules which apply in fiscal, social and political institutions. In this research, these rules are represented by policies and values that encourage individuals to behave in a particular way. Since the explanatory-quantitative approach requires numerical data to test the hypotheses of Leviathan government behavior institutional setting, the following sub-sections explain the way this research conceptualized and

operationalized the framework of Leviathan government behavior institutional setting to estimate the parameters in the model.

3.2.1 Conceptualization and Operationalization of Variables in the Measurement Process

Measurement process in research is a process of connecting a conceptual idea or construct of a theoretical framework at the abstract level to the operational or empirical level of the research (Neuman, 2011, p.205). The measurement process is divided into conceptualization and operationalization processes (Neuman, 2011, pp.201-203). Conceptual-ization is a process to identify a *conceptual definition* for the construct, whereas operationalization is a process that developed an *operational definition* or indicator for the conceptual definition. Data are collected based on the indicators required to measure the variables in the model.

This research used the term conceptual definition as "a … definition of a construct …" (Neuman, 2011, p.201). A construct might have multiple conceptual definitions. Having multiple components of the definition might ensure that all aspects of a construct are included in the conceptual definition. As such, a multiple components definition of a construct might improve reliability and validity of the pertinent indicator used in a research (see Section 3.2.3). Some constructs of social and political institutional settings in this research are examples of such a construct. The multiple definitions for constructs were found in the way Regional Autonomy Watch *(KPPOD)* defined the variables in the survey (see Tables 1 & 2, pp. 105-105).

Based on the argument above, a measurement process uses a deductive logic where a general construct is used to explain the real world as represented by data. This research used data published by several organizations such as Regional Autonomy Watch *(KPPOD)*, Statistic Office

and Ministry of Finance. Regional Autonomy Watch was the only organization that published data on the institutional aspects of governance at the district and municipality levels in Indonesia. These made the options for indicators limited. This research used the data collected by the Regional Autonomy Watch as indicators for the social value structure in the social institutional setting and government performance in the political institutional setting.

Some of the indicators in this research applied either *face validity* or *convergent construct validity* measurement type (Neuman, 2011, pp.212-213). Face validity measurement was based on indicators that were considered valid by the scientific community. In this research, the indicators for pertinent constructs were found in economic textbooks, studies or academic articles. Convergent construct validity measurement applied to multiple indicators in a construct. These indicators within pertinent construct converge or support one another. Indices developed by *KPPOD* and the common pool (free-rider) indicators are examples of multiple indicators in convergent construct (see Table 1, p. 105).

The selection of some indicators to measure the variables in the model was based on face validity measurement. This is the case for indicators used to measure fiscal variables in the model. However, aggregative data of indicators for social and political variables are not available. As a result, proxies are used to measure these variables based on the availability of data. The implication is that the validity of the estimation results might be arguable. A descriptive analysis using descriptive statistics developed in Chapter Four aimed to minimize the validity issue of the results.

The variables in the model were grouped into endogenous, exogenous and control variables. Endogenous variables are those that are determined within the system while exogenous variables are determined outside of the system. In this research, the system refers to the model of equation system (see Section 2.2.4). The variables that belonged to these groups are derived from theoretical perspectives or framework. In this research, the framework constructed in Chapter Two explained the impact of the variables on the institutional setting of Leviathan government behavior.

However, there are variables that might affect the model but their inclusion in the model is not explained by pertinent theory. These variables are known as control variables (Neuman, 2011, p.406). The purpose of introducing the variable into the model is to identify whether a causal relationship between endogenous and exogenous variables existed under a certain condition that might differ across local governments. Failure to recognize the condition might undermine the performance of the model to explain pertinent phenomenon.

Since theory does not explain their impact on the model, these variables should be held constant. By so doing, the estimated model can capture the relative impact of independent variables to dependent variables as explained by theory. In the model, this variable was the level of economic welfare as measured by the income per capita. The welfare level affects economic growth since low economic welfare level is associated with increasing government spending on social security programs at the expense of government investment spending. As the investment decreases, economic growth might follow suit.

In the model, the endogenous variables were:

1. Index of ceremonially dominance (X)

   The index demonstrated the strength of ceremonially warranted values in the social institution. The construct for Index of ceremonial dominance is the value structure in a society as measured by the intensity of the ceremonially warranted values relative to the instrumentally warranted values. Based on this argument, the index is measured as a ratio of the ceremonially warranted values to the instrumentally warranted values or the ratio of Transaction cost index to Land Access and Security of Tenure index (see the Instrumentally warranted and Ceremonially warranted values).

2. Social capital (SC)

   The construct for social capital was the trust of local businesses to their local government. Trust emerges within a local businesses-government network where communication and feedback between parties flow freely and information is accessible to both parties. In the long-term, trust encourages local businesses to be loyal to their local governments. However, since secondary data for trust are not available, this research used secondary data on local government-businesses relation index as a proxy to social capital.

3. Voice (V)

   This research used the political system as a construct on voice. This research tested the effectiveness of the direct voting mechanism as a political voice mechanism or the effectiveness of political sanctioning mechanism. In this research, the effectiveness was measured by the extent that the constituents could vote the incumbent local government

head out of office on the next election in the case of unsatisfactory performance during the office term. Based on this argument, this research selected the term of office of the local government heads as the operational concept or indicator as the proxy of exercising the voice rights. This indicator has a drawback since it does not measure different means of expressing voices such as rallies against government policies, sign a petition and write a letter to the member of the local assembly. However, since information about different means of exercising voice rights are not currently available nationwide, this research used the proxy.

4. Performance of local government heads (GP)

   The construct for local government performance was economic governance. The governance explained the capacity of the local government to promote economic governance as represented by the extent local leaders manage the delivery of business services and take initiatives to improve local business climate. The ideal measurement for government performance is the extent that the government can meet the public services quality standard and per unit production cost of meeting the standard as a measure of efficiency. However, such information is not available in Indonesia. As such, a proxy for the construct was used. The proxy was Economic governance index. The implication is that while the economic government might improve, it does not necessarily mean that the improvement brings along efficiency.

5. Structure of revenue (F)

The construct for the revenue structure was the complexity of local government revenues. The complexity was measured by the contribution of each type of own-source revenue to the total own-source revenues. This research used Hirschman-Herfindahl Index or

$$F = \sum_{k=1}^{n} IT_k^2$$

k was the type of indirect taxes applied to local businness, *IT* was the contributions of each type to the total local government revenue sources and $0 < F < 1$. The complexity of the sources is high if F was closer to zero. Otherwise, the complexity is low. The use of this index to measure revenue structure of local government was introduced by Wagner (1976). He used the index to identify fiscal illusion. The revenue sources comprised three components (see Figure 4, p. 137). Based on these components and their contributions to total local owned-source revenues, F closer to one suggested that there were more revenues from taxes and levies than other forms of local owned-source revenues. On the contrary F closer to zero indicated more diversifed sources of local owned-source or revenues away from taxes and levies.

6. Government size (GY)

The construct of the size is the extent of government intervention in the economy particularly in providing public goods and services. Based on the Brennan-Buchanan hypothesis on Leviathan government behavior (see Section 1.4), the operational concept of the construct is the ratio of total government revenue from taxes to the total regional output, assuming that the government earns the

revenues from taxes. However, if this is not the case such as in the case of Indonesia, then the size obtained might be undervalued (see Figure 3, p. 136). As such, this research uses the ratio of the total local government spending to the total regional output. By so doing, all revenues outside the taxes will be captured since these revenues contribute to the government spending. The implication is that this research uses an alternative hypothesis in identifying the Leviathan government behavior (see Section 5.1.4, p. 85).

7. Income growth (YG)

   Income growth measures increasing productivity in a period of time. It can be measured by the rate of growth of the Gross Regional Product at year 2000 constant price.

The exogenous variables were:

1. Instrumentally warranted values (INS)

   The construct for INS is the availability of problem solving instruments in a society. In the context of local government and local businesses, this research used public services provided by local government to local businesses as the instrument. In economics, there are three main production factors required for doing business, namely labor, land and capital. Since government directly regulates property ownership by using permits, this research used the ease of obtaining a land and property ownership certificate issued by the local government as the conceptual definition of INS. Based on this argument, this research proposed Land access and security of tenure index as a proxy to measure the value.

2. Ceremonially warranted values (CER)

   The construct for CER is values related to old values and habit, organizational positions, inheritance and social status that justified the exercise of power and coercion in the social conduct. This research used personal patrimonial rulership patrimonial system to represent this value (see Section 2.1.2.1, p. 175). This system justifies rent-seeking activities. For this reason, this research used the accumulation of rents extracted from the society as a conceptualization of CER. As a proxy it used transaction costs index to measure the value.

3. Government leadership (LD)

   The construct for government leadership is the capacity and integrity of the local government head in stimulating business activities (Regional Autonomy Watch, 2008). As a proxy, this research used Capacity and integrity of the local government head index to measure government leadership.

4. Public goods in the form of public services (PS)

   The construct of public services is services that are provided by local government for local businesses. This research used several public services proxies obtained from Regional Autonomy Watch (2008). These proxies measure the quality of public services provided to local businesses. These public services and their definitions are:

   a. The capacity of the local government to provide security and to resolve businesses related conflicts. Operational variable (S): Security and conflict resolution index.

b. The capacity of the local government to provide adequate infrastructure. Operational variable (INF): Infrastructure index.

c. The quality of local government bylaws or *PERDA* relating to licensing, transportation and labor issues. Operational variable (BL): Local regulations index.

d. The availability of business development programs and the level of overall satisfaction demonstrated by businesses after participating in the programs. The programs include business management training, workforce training, trade promotion, connecting large and small firms, credit application training for SMEs and business matchmaking programs. Operational variable (BP): Business development programs index.

5. Fiscal capacity (FC)

   The definition of fiscal capacity is the ability of the local governments to finance their own spending. As an indicator, this research used the ratio of local government fiscal capacity (*PAD* or local owned-source revenue and *DBH* or revenue sharing) to the local government spending.

6. Flypaper effect (FP)

   The definition of flypaper effect is the extent of the lower level governments' financial dependence on the higher level of government. This research used total fiscal transfer received by local governments (*DAU*+*DAK*) divided by the local government potential revenue (*PAD*+*DBH*) as an indicator for flypaper effect. This indicator was adopted from Mello (2001) that measured the effect in the Moldova case.

7. Market structure of public services (M)

   Market structure of public services was defined as a structure whereby the availability of public services tends to concentrate in a limited jurisdiction (monopoly) or disperse in many jurisdictions (competitive). In other words, the structure corresponded with regional fragmentation. To identify the structure, this research used the number of sub-districts available in each district/municipality.

8. Demand for public goods (D)

   Demand for public goods was measured by spending on development programs conducted by local governments. This research used total government direct spending per capita to measure the demand.

The control variable in the model was:

Level of welfare (POOR)

In this research, level of welfare was measured by income per capita of each district/municipality.

Tables 1 and 2 provide descriptions of the operational variables, the description of the variables and the sources of data used in the quantitative approach.

TABLE 1 OPERATIONAL VARIABLES

Operational Variables	Conceptual Definitions	Sources
Transaction cost sub-index (CER)	User charges, donations or contributions, licensing, additional payments	Regional Autonomy Watch Report
Land Access and Security of Tenure Sub-index (INS)	Time taken to obtain a land certificate, perceived ease of obtaining land, frequency of evictions in the region, overall assessment of the significance of land problems	Regional Autonomy Watch Report
Voting outcome (V)	Head of local government office term	Local government websites, online newspapers
Local government-business relations index (SC)	the act of staying to accumulate social capital in the form of network or individual relations	Regional Autonomy Watch Report
Local economic Governance index (GP)	How well local leaders manage the delivery of business services and take initiatives to improve the business climate	Regional Autonomy Watch Report
Capacity and integrity of the local government heads sub-index (LD)	Extent to which firms agree that the local leader has a good understanding of the problems facing business, extent to which firms agree that the appointment of bureaucrats dealing with business issues in the local government is based on their experience and is appropriate for the section in which they work, extent to which firms agree that the local leader takes strong action against every instance of corruption by local government officials, extent to which firms agree that the local leader themselves undertakes corrupt actions for his/her own benefit, extent to which firms agree that the local leader is a strong leader, firms overall assessment of the extent to which issues associated with the capacity and integrity of the local leader constrain their business activities.	Regional Autonomy Watch Report
Local regulations sub-index (BL)	Local government bylaws or *Perda* relating to licensing, transportation and labor issues.	Regional Autonomy Watch Report
Security and conflict resolutions sub-index (S)	The ability of the police force in handling criminal issues, the frequency of theft and breaking in, the way policy force handles workers riots.	Regional Autonomy Watch Report

TABLE 2 OPERATIONAL VARIABLES

Operational Variables	Conceptual Definitions	Sources
Business development program sub-index (BP)	Average share of firms saying that six types of business development program exist (business management training; workforce training; trade promotion; connecting large and small firms; credit application training for SMEs; and business matchmaking programs), average share of firms saying that they participated in these six types of business development program, average level of satisfaction with these programs, overall assessment of the impact of these programs.	Regional Autonomy Watch Report
Business licensing sub-index (L)	The percentage of firms that have a business registration license (TDP), firms perceptions of how easy it is to obtain a TDP and the average number of days it takes to obtain a TDP, the cost of the TDP and the extent to which the cost bothers firms, the extent to which firms agree that the licensing process is efficient, and free from illegal charges and collusion, the percentage of firms that say that there is a complaint mechanism, overall assessment by firms of how much issues associated with licensing constraint their business activities.	Regional Autonomy Watch Report
Hirschman-Herfindahl Index (F)	Contributions of each indirect tax and fees to total local government own-revenues	Ministry of Finance, Statistic Office
Fiscal Capacity ratio (FC)	Ratio of potential revenues (total *PAD+DBH*) to total local government spendings	Ministry of Finance, Statistic Office
Government size (GY)	Ratio of total government spending to local income (Gross Regional Product)	Ministry of Finance, Statistic Office
Flypaper effect ratio (FP)	Ratio of fiscal transfer (*DAU+DAK*) to the local government owned-revenue source (*PAD+DBH*)	Ministry of Finance, Statistic Office
Government development spending per capita (D)	The ratio of total government direct spending to total population	Ministry of Finance, Statistic Office
Regional proliferation (M)	The number of *kecamatan* or sub-districts in each municipal and district.	Statistic Office
Growth of Gross Regional Product (YG)	[(GRP2007-GRP2006)/GRP2006] x 100%	Statistic Office
Welfare level (POOR)	Income per capita	Statistic Office

The target population was all districts and municipalities in Indonesia. In selecting the samples, this research used a convenience sampling technique based on data availability, particularly for social and political institutional aggregative data which were available for 2007. The sampling frame of this research was 434 districts and municipalities in 2007. However, due to the availability of the data previously explained, the size of the sample was 243 which give a sampling ratio of 55.99 percent. These local governments were located in fifteen provinces out of thirty three in Indonesia, namely *Sumatra Utara, Kepulauan Riau, Riau, Sumatra Selatan, Jawa Barat, Jawa Tengah, DI Jogjakarta, Jawa Timur, Bali, Nusa Tenggara Barat, Nusa Tenggara Timur, Sulawesi Utara, Gorontalo, Sulawesi Selatan* and *Kalimantan Timur*. The time frame of this research was a cross-section since this research captured a condition in 2007.

The implications of using convenience sampling technique are, firstly, the characteristics of the samples might not represent those of the population. In other words there might be an issue of representative reliability. This issue was overcome by having a nationwide descriptive inquiry presented in Chapter Four to test if the findings obtained from the explanatory inquiry were consistent with those obtained from the explanatory inquiry. The consistency indicates the characteristic of the institutional setting in the 243 districts and municipalities are also found nationally. Secondly, the data do not cover the impact of inter-regional fiscal transfer based on Law 33/2004 since the Law was effective beginning in 2008. As such, the estimation results represented the snap-shot of Leviathan government institutional setting based on Law 25/1999.

In addition, the inferential statistical test used in this research could also ensure that the estimation results obtained from using the samples represented those of the population. The level of statistical significance or alpha value indicates the probability level that the estimation results of the model might significantly differ from the parameters or the characteristics of the population. As such, a smaller alpha value is preferable. In the inferential statistics, an alpha value of 5 percent or less corresponds to strong test results. In other words, the characteristics of the samples represent those of the population.

3.2.2 PROCESSING THE DATA

To ensure reliability of the model, the estimation process used two different techniques, namely 3-Stage Least Square (3-SLS) and Seemingly Unrelated Regression (SUR). This research used the econometric computer package, Eviews6 Student Version, to process the data. In using the package, the model was entered as a system of equations. The following explains the way the data were processed and the model was tested for goodness of fit before using it to test the hypotheses.

SUR and 3-SLS techniques were used to estimate a system of equations while accounting for inter- equation correlations in the system. The difference between the two was the technique used to treat the correlations. SUR accounts for contemporaneous correlation or error correlation across equations in the system while assuming all explanatory variables were exogenous variables. In this research, contemporaneous correlation might take place for the following reason. Indonesia had been undergoing a transitional period since the downfall of the New Order regime. Since then

new political and economic systems and policies had been introduced and implemented simultaneously. The systems and policies changed the way the three institutional, namely fiscal, social and political, settings work. Therefore, there was an indication that the error terms for all equations, which represented social, political and fiscal institutions, were jointly correlated during the period of study.

3-SLS on the other hand considered the simultaneity of the equations by accounting that some of the explanatory variables were also endogenous variables. In the equations, these endogenous-explanatory variables were correlated with error terms. For example, the *SC* variable was an endogenous variable in Equation (4) and also an explanatory variable in Equation (5). As such, when *SC* in Equation (4) was substituted into Equation (5), it carried over the error term, ε^{L}, from Equation (4). In other words, there was an explanatory variable in Equation (5), *SC*, which was correlated with the error term. This research referred *SC* as the endogenous-explanatory variable. Ignoring these correlations in the system resulted in biased estimations.

As the name implies, 3-SLS was a three-stage estimation process. The first stage was looking for some Instrumental Variables. The variables were a set of new endogenous-explanatory variables that did not correlate with the error terms but at the same time could be used to explain the fluctuations in the endogenous variables in the model. These variables were used to estimate the equations in the second stage to obtain unbiased results. By removing the impact of the error and accounting for the simultaneity of the equations, the estimated parameters obtained were corrected.

The third stage was to account for heteroscedasticity (see p. 111) and contemporaneous error or the correlation of error terms across equations (ε) in the model. Failure to address these issues could result in misleading statistical results. By using the covariance matrix as a weighted average of the explanatory variables during the estimation process in this stage, heteroscedasticity could be corrected. However, to ensure validity of the model, a normality test should be carried out. Since this research used cross-section data, severe heteroscedasticity could result in biased estimation results. As such, this research tested the presence of heteroscedasticity separately by using the White and Park tests (see Table 11 & 12, pp. 201-202) to resolve the issue before using the estimation results for testing the hypotheses. Section 0 explains the way the normality test was carried out.

3.2.3 Normality Test

Inferential statistics requires the assumption of a normal distribution of data used in the estimation of the model to utilize the statistical significance test in hypothesis testing. This argument indicates that the data used should be tested for data normality. In econometrics, the normality test was conducted to identify autocorrelation and heteroscedasticity problems. Autocorrelation was defined as a serial correlation among the error terms that results in accepting the incorrect hypothesis, H_0. As with heteroscedasticity, autocorrelation caused inefficient estimation. However, it was different from the heteroscedasticity case since increasing the number of samples could not eliminate inefficiency. As a result, autocorrelation gave biased estimation. Autocorrelation was usually found in time series data whereas heteroscedasticity was in cross-section data.

This research focused on correction data for the heteroscedasticity problem since the data used were cross-section data. The problem referred to the correlation between the error term and the endogenous variables, or in other words the variance of the error term was changing following the changes in the endogenous variable(s). Heteroscedasticity arose due to the heterogeneity of the regions, such as regional endowment factors heterogeneity, under study. Ignoring this issue, resulted in inefficient estimations. As inefficiency arose, the t and F statistic that had been used to test the hypotheses of the model could be misleading and therefore resulted in erroneous conclusions.

Heteroscedasticity could be identified by graphing the e_i on the observations, *i*, to identify if the fluctuations in e_i fell more or less evenly within a particular range. This situation indicated that the variances of the error terms were more or less equal. In other words, heteroscedasticity was absent (Note: Eviews 6 will provide the plot). A formal approach to identify heteroscedasticity was by using a statistical test such as White general heteroscedasticity test. The test used a regression technique to identify if there was any significant correlation between the error terms and the exogenous variables in the equation. The test was carried out as follows:

1. Calculated the error terms (e_i) of the model which was equal to $e_i = y_i - \hat{y}_i$, where y_i and $\hat{y}_i$ are the observed and estimated values of the response (endogenous) variable for each observation, *i*, respectively[22].

[22] EViews6 calculated the residual or error terms

2. Regressed the squared values of the error terms *(e^2)* on the exogenous variables *(X_k)*, the squared values *(X_k)^2* and cross-terms *(X_kX_j)* where $X_k \neq X_j$ in the system of equations as shown in Equation (11):

$$(11)\ e_i^2 = \alpha_0 + \sum \alpha_{ki} X_{ki} + \sum \alpha_{ki} X_{ki}^2 + \sum \alpha_{ki} X_{ki} X_{ji}$$

where the independent variables *k, j = 1, 2, 3, … n*; *e* was the error term, *α* are the coefficients of the independent variables in the system of equations and α_0 was a constant.

3. Tested the hypothesis to identify heteroscedasticity by using the following procedures:
    1. Determined the critical value at alpha 5 percent. Since White test uses Chi-square distribution, the critical value (X^2) would be obtained by using Chi-square table with k equals to the number of independent variables excluding constant in Equation (11).
    2. Calculated the Observed R-squared by applying Equation (12):
    3. Obs* R-squared = nR^2, where n is the number of observations and R^2 is the correlation coefficient[23]. The decision rule was: the heteroscedasticity hypothesis was confirmed if Obs*R-squared > X^2.

Another test to identify heteroscedasticity was the Park test. The test was carried out as follows:

1. Followed the Step (1) above
2. Regressed the square root of the error terms obtained from step (1) on the independent variables. The equation should be written as a logarithmic form as shown in Equation (13).

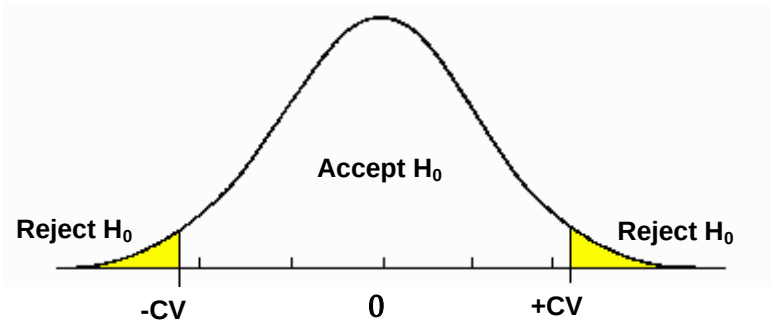
[23] Eviews6 calculated the value of R^2 for the equation

(13) $ln\, e_i^2 = c_0 + \mathrm{c_{ki}} \ln(X_{ki})$ where X_k are the independent variables

3. Determined the hypothesis testing for heteroscedasticity. The hypothesis is stated as: H_0: $C_k = 0$ and H_1: $C_k \neq 0$
4. Tested the hypothesis by using the t-statistic test. The test was carried out as follows.
    1. Determined the degree of confidence level or the value of alpha used in testing the hypotheses. The value determined the strength of the hypotheses testing. This research used alpha values of 5 and 10 percent to represent strong and weak test results, respectively.
    2. Translated the coefficients of the estimated parameters into the parameters of the population by following these steps:
        a. Used the alpha values 5 percent and 10 percent to determine the critical value (CV) under a normal distribution curve to accept H_0. The curve represents the characteristics of the population. In statistic, the characteristics were represented by its mean (μ) which is equal to zero and variance (δ^2) which is constant for all samples derived from the population or E(0,σ).
        b. Calculated the critical values (CV), with *n-k* degree of freedom, from the t-distribution table where the number of observation or *n = 243*, and the number of constants in each equation or *k*. The values corresponded to the interval of accepting H_0 under the normal distribution

curve. The critical values were stated as a "–" and "+" values in a two-tailed test under the curve (Figure 2, p. 114). The test applies when the hypothesis was stated by using the "=" or "≠" signs instead of inequality or "<, ≤, ≥ and >" signs. In the latter case, the test will be carried out by using a one-tailed test.

FIGURE 2 SAMPLING DISTRIBUTION



c. Calculated the t-statistic values of the estimated parameters or the coefficients of explanatory variables *(X)* obtained from the estimation results. The values were computed by using this following formula:

$$t_{statistic} = \frac{\bar{X} - m}{s}$$

where $\bar{X}$ was the estimated coefficient or mean value of *X*, *s* was the standard error of *X*, *m* was the parameter values in H_0 and *n* was the number of observations[24].

d. Tested the hypothesis H_1 by comparing the interval CV in a given alpha value with the t-statistic. Rejected H_0 if the t-

[24] EViews6 computed the t-statistic, probability of rejecting H_o hypotheses and standard error values, provided m = 0

statistic falls outside the interval CV. Otherwise, accepts the hypothesis[3].

This research used the three techniques. The techniques were applied to individual equations as well as the reduced form of the equation system whenever necessary.

To account for heteroscedasticity in the estimation process, this research used the Park technique (Ciscel & Caroll, 1980). The following steps described the way the technique was carried out.

1. Calculated the error terms from the reduced form of the equation system[25]. The reduced form was obtained by cross-equation substitution so that the system of equation was reduced to a single equation as follows:

   $yg_i = c_0 + \sum c_{ki} X_{ki}$, where *yg* was *growth of income* and X_k were exogenous variables in the system.
2. Regressed the squared error terms obtained in Step (1) on exogenous variables by using Park test explained above.
3. Identified the variable that had a significant effect on the error terms by using the hypothesis testing above (see p. 113). This variable was the deflator.
4. Square-rooted the deflator and divided all the data used in estimating the model by the value of the deflator.
5. Re-estimated the model by using the data after correcting for heteroscedasticity.

[25] EViews 6 calculated the error terms

This research selected 3-SLS to test the hypotheses of Leviathan behavior institutional settings. Compared to SUR, 3-SLS acknowledged the simultaneity of the equation.

Finally, econometrics has some limitations around the requirement where all variables must be measureable. As previously stated, some variables are not easily measureable, particularly those variables that are related to human behavior. As such, econometrics might not be applicable to measure the impact of Leviathan government behavior on individual regions. This area might be the domain of qualitative research. Another limitation is that this research uses proxies to measure the aggregative variables in social and political institutional settings based on the aggregative data availability. The implication is that the estimated model might be biased. To minimize this issue, this research uses multiple inquiries that can be applied as triangulation information to the estimated model (see Chapter Four).

3.3 Qualitative Research: Exploratory Inquiry

The qualitative part was conducted after the analysis of the quantitative confirmed Leviathan government behavior. The purpose of this research was to explore the local businesses' experiences on government behavior, the way the behavior affected businesses and to identify if businesses have taken any action to restrain the behavior. The perceptions were broken down into these following research questions:

1. What changes in the local taxes and charges were businesses aware of since decentralization policy became effective?
2. How did the changes affect local businesses?

3. In the case where taxes and charges had become excessive, what did the local business practitioners do to minimize the impact of the changes on their businesses?

Since the purpose of the research was exploratory, data were collected by using open-ended questions. As such, a FGD was used since clarification of responses to collect information was possible during the FGD.

3.3.1 SELECTING PARTICIPANTS

Business sectors provided employment to the community as well as tax revenues to the government. Yet, many local taxes and charges potentially constrained the ability for these businesses to create employment and to contribute to the local economic activities. The long-term impact of creating excessive taxation and charges will limit the ability of businesses to create jobs and, hence, the potential to improve welfare. As such, many of these taxes and charges had been cancelled by the central government since decentralization policy became effective (see Section 5.3.1).

This research selected local business practitioners in several *Kabupaten* and *Kota* in *Jawa Barat* Province as participants in the discussion. These participants were members of the Chamber of Commerce and Industry in *Jawa Barat* province. Since the organization represented the voice of local businesses in the province, the information provided by the members represented the general perception of local businesses in the areas. Since the qualitative part was conducted in the selected areas, the results were applicable only in these areas. In other words, the information derived from the FGD does not represent the nationwide condition.

3.3.2 Collecting and Analyzing the Data

The focus of the discussion was to identify the perspectives of participants on the government behavior and the way the behavior affects businesses. The following was the list of guided questions for the discussion.

1. How did the taxes and levies change since decentralization?
2. How did the changes impact your businesses?
3. Have you considered taking any action to prevent the local government from creating excessive new taxes and charges?
4. How did you describe the communication or the relationship between the government and businesses?

The ethics approval for conducting the FGD was granted on 4 February 2010 and was valid until 15 December 2011. The focus group discussion was conducted on 20 January 2011 at the office of the Chamber of Commerce and Industry, *Jawa Barat* Province in Bandung City with 15 participants. The small number of the participants should not be an issue in this research since this was a minor part of the research that aimed to gather some information regarding the participants' experience on the implementation of local taxes and charges and the way the implementations affected their businesses. The data were analyzed by identifying these experiences based on the summaries of responses pertaining to the questions.

Conclusions

This research uses institutional analysis to understand the way Leviathan government behavior arises. The analysis arises from the proposition that behavior is a product of a particular institutional setting, namely social, political and economic institutional settings. By understanding

the way these settings interact to form the behavior, this research has proposed a holistic approach in understanding the reasons decentralization initiatives do not always deliver satisfactory outcomes for the countries that implement the initiatives.

Veblenian institutional analysis is used since it provides a methodology to operationalize the way rational behavior and social relations interact within a particular institutional setting. The Veblenian approach refers to the outcome of the interaction as creativity. Within the creativity context, rationality has its boundary, namely social values that underpinned social relations. The extent that creativity can be used to force progressive institutional change depends on the value structure of the institution. The methodology offers the way to measure the structure and, hence, the boundary of rationality.

However, since this research perceives Leviathan government behavior as a fiscal institution phenomenon, this chapter has argued, institutional analysis also requires a collective action approach. The approach applies to understand the fiscal and political institutional settings of Leviathan government behavior. In addition, this research uses a Veblenian approach to operationalize the social value structure in the social institutional setting. Based on the framework developed above, a model that describes the inter-relationship of the three institutional settings is developed to identify the impact of the settings on government efficiency level. To develop the model, each institutional setting is represented by a particular indicator, namely index of ceremonial dominance, the local government performance and the structure of local government revenues. These indicators represent social, political and fiscal institutional settings, respectively. Spending inefficiency or rent-seeking

arises when the actual government size is larger than the optimal size. This information can be obtained by calculating the gap between the optimal size derived from the model and the average government size from the data.

Hypothetically, Leviathan government behavior corresponds to these following institutional settings: Firstly, the fiscal federalism and regional proliferation do not constrain regions from creating various taxes and levies. In fact, the inter-regional fiscal transfer tends to encourage a flypaper effect and free-rider behavior among local governments (see Section 3.3.1 (1)). Secondly, the social institutional setting implies a strong influence of personal rulership patrimonialism that results in accumulating social capital to obtain personal gain (see Section 3.3.1). Thirdly, the expressive voting behavior of the constituents has weakened the direct voting mechanism of the political system. As a result, the system has failed to produce an accountable government (see Section 3.3.1). These structures might affect government efficiency and, hence, the size of rents as measured by the increase in the government size above the optimum level. The next chapter will use the framework above to explain Leviathan government behavior in Indonesia.

Chapter Four
The Indonesian Experience of Leviathan Government Behavior

As explained in Chapter One, this research takes an abductive ontological view and uses descriptive, explanatory and some degree of exploratory inquiries (see Section 1.5). Chapter Four uses descriptive inquiry to look at the Leviathan government behavior. This inquiry serves two functions: firstly, it serves as triangulation information for that obtained from the explanatory inquiry and, secondly, it provides additional information that cannot be provided from the explanatory inquiry. This additional information includes Indonesia's historical background that contributes to the patrimonial system, the political dynamics of contemporary Indonesia and the evolution of inter-regional fiscal transfer in Indonesia. For this purpose, Chapter Four uses 2007 data and information published by the Statistics Office, the Indonesian Government Ministries, research centers such as Regional Autonomy Watch and newspapers to explain Leviathan government behavior.

The presentation of this chapter is as follows. Section 4.1 begins with the history of inter-regional fiscal transfer arrangements since the late 1940s to the present arrangements. The purpose of presenting the information is to demonstrate that the present inter-regional fiscal transfer arrangements that have been implemented since 2001 adopted the characteristics of those of the previous arrangements. As such, the latest inter-regional fiscal transfer

arrangements are somehow a reinstatement of previous arrangements that have been modified to better meet the needs of the current condition.

As shown in this section, the changes in the way the arrangements were implemented followed the philosophy of the constitution at the time. As the constitution changes from federalism to centralism and, finally, decentralization, the arrangements will follow suit[26]. This section compares and contrasts the design and implementations of each transfer arrangement under the Old and New Order regimes to show the extent that the latest arrangements adopt the characteristics of those applied during the regimes. As such, the present transfer arrangements are not a completely new concept.

In addition, this section also explains that the characteristics of the fiscal transfer arrangements follow the basic philosophy of the constitution implemented at the time. The philosophy of the present constitution or *Undang-undang Dasar* 1945 after amendment retains the concept of Unitary Republic of Indonesia while at the same time introduces a federal government system. However, the focus of the discussion is on the most recent arrangements that started after the Reformation era in 2001. As such, most of Section 4.1 is focused on explaining the designs of these arrangements and the way they affect fiscal structure of the local governments.

Section 4.2 describes the character of the social and political institutional settings in Indonesia. The explanations begin with the historical background of the social and political conditions since the Dutch colonial era

[26] The Indonesian political system differentiates the concept of federalism from decentralization in the sense that Indonesian decentralization applies the principles of federalism as explained in the public finance literature. However, it maintained a unitary Republic of Indonesia since the central government ensures that regional development programs do not contradict those of national programs. As a result, Indonesia positions herself as a Unitary Country of the Republic of Indonesia or *Negara Kesatuan Republik Indonesia* rather than a federal state.

and the way conditions in this era shaped and influenced the conditions in contemporary Indonesia. This section also explains the stages of decentralization policy that have been introduced since the Dutch colonial time.

Section 4.3 discusses some factors that cause rent-seeking activities in Indonesia. As this section shows the causes could be the results of corruption and government failure such as mismanagement of budget allocations. These factors contribute to government inefficiency that increases government size. Finally, a brief conclusion is provided.

4.1 Fiscal Institutional Setting

The first attempt to introduce inter-regional fiscal transfer arrangements post-colonial time was in the late 1940s during Soekarno's presidency, known as the Old Order Regime era. Law 22/1948 Article 37 stated that the local government would receive some transfer funds from tax revenues collected by the central government. However, the transfer arrangements did not occur until Law 32/1956 on Fiscal Balance between Central and Local Governments was issued. In the meantime, the implementation of the transfer arrangements was based on a system that was known as the *sluitpost systeem* or closing entry system (Gie, 1994, p.67). Under the system, the central government transferred some funds to cover the deficit or the difference between the revenues and expenditures of the local government budget. In the third transfer arrangements, the closing entry system is similar to the fiscal gap or the difference between the fiscal capacity and fiscal needs in the block grant allocation (see Section 4.1.1, p. 50).

However, in practice the central government during the Old Order regime era set up a maximum amount of the transfer that did not necessarily cover the full deficit. The amount was mostly determined by the financial condition of the central government. This is the area where the transfer arrangements in this era differs from the third arrangements based on Law 22/1999 amended by Law 33/2004. In the third arrangements the pool of revenue for the grant was determined by law rather than the financial condition of the central government. The implication is that the amount received by the local government under the first arrangement was unpredictable and that might disturb regional planning and development programs.

Under the first arrangements, this amount received by the local government was equal to that transferred in the previous fiscal year plus some additional amount determined by the central government. This transfer arrangement was known as the limit post system (Gie, 1994, p.81). The hold-harmless provision in the block grant under the Law 22/1999 transfer arrangements somehow adopted this principle. The provision ensured that the amount of block grant received by regional governments should not be less than that received in the previous fiscal year (see Section 4.1.1, p. 141). The implications of the provision are widening horizontal fiscal imbalance (see Table 7, p. 156) which was unlikely to occur under the first arrangements.

Even though this maximum amount was below the full deficit, it covered about 70 percent of the total local government expenditure and left the remaining 30 percent to be covered by local taxes and charges. For those local governments with limited own-source revenues capacity to collect

local taxes and charges, the transfer covered about 90 percent of the total expenditures (Gie, 1994, p.68). This suggests that the local government was highly dependent on the transfer from the central government or high fly-paper effect. The effect remains in the third fiscal transfer arrangements (see Section 4.1.2).

In 1956, the government issued Law 32/1956 on Regional Government to amend Law 22/1948. Under Law 32/1956, the central government would share three basic revenue elements that included a new taxing power, sharing of certain central government revenues and a grant system to cover local government budget deficits (Devas, 1989, p.11). The fiscal arrangements were designed to grant "as extensive autonomy as possible" to the sub-national governments (Matsui, 2003, p.7). This principle introduced the concept of fiscal federalism which is consistent with the Temporary Constitution of 1950 where the territory of Indonesia was divided into states or *Negara* (see p. 179). However, as explained below, the transfer system was never fully implemented (Devas, 1989, p.12).

Under the new taxing power, the central government transferred revenues collected from eight tax bases to the local government. These tax bases included land and property tax[27], household tax, road tax, motor vehicle tax, slaughter house tax, copra tax and sales taxes applied to restaurants and accommodation (Law 32/1956, Article 3). The purpose of the transfer was to increase the fiscal capacity of sub-national governments.

The central government also set up a form of revenue sharing from natural resources. The sharing arrangements were as follows. Firstly, half of the tax revenues collected from import duties, export duties and excises of

[27] There were two different laws applied to the taxes, namely the *Verpondingsordonnantie* 342/1928 and *Inlandsche Verpondingsordonnantie* 425/1923 inherited from the Dutch colonial administration but were amended by *Undang-undang verponding* 1957.

commodities were transferred to the local governments (Law 32/1956, Article 5(2)). Provinces received 25 percent whereas districts within provinces received 75 percent (Gie, 1994, p.84). Secondly, some additional shares from export tax and charges of natural resources, such as agriculture commodities and mining were also transferred to the local government from which the resources came (Law 32/1956, Article 5(3)). The additional amount from the natural resources received by each sub-national was determined by the contribution of the sub-national to the revenue pool. The total allocation of funds for the sharing arrangements was guided by a separate government regulation.

The principle of the revenue sharing system explained above is also shared by the transfer arrangements under both Law 25/1999 and Law 33/2004. Under both laws, the revenue sharing system is known as *DBH* (see Section 4.1.1). The different is that under the Law 53/1956 amended by Law 25/1999 transfer arrangements, income tax was not part of the revenue sharing whereas under the Law 33/2004 arrangements it is (see Table 3 & Table 5). The implication is that the arrangement under Law 33/2004 provides better vertical fiscal equity than the other two arrangements.

The sharing arrangements had created horizontal fiscal imbalance. Firstly, away from Java Island areas were relatively richer in natural resources compared to those in Java Island. As a result, the export duties and excises provided to the provinces and districts had benefitted out of Java provinces and, therefore, created a horizontal fiscal imbalance nationwide (Devas, 1989, p.12). Secondly, some areas outside of Java believed that most of their export taxes on commodities were used to buy imports for

Java[28]. As such, these areas demanded the right to trade directly with foreign traders rather than through Java (Matsui, 2003, pp.8-9). This situation created political unrest in outer Java areas and induced contraband trading with foreign traders.

The transfer arrangements, under Law 22/1999 amended by Law 33/2004, attempt to address these issues. Unlike the previous one, the arrangements exclude taxes and charges from commodities as the revenue sharing. Accordingly, revenues from these resources are pooled in the Domestic Revenues account in the central government budget. This pool is the source of funds for block and specific grants transferred to regions (see Section 4.1.1). By so doing, the transfer arrangement under Law 22/1999 amended by Law 33/2004 improve the horizontal equity across regions (see Table 7, p.156).

In addition, the Law also introduced a block grant system (Law 32/1956, Article 6). The sources of funds for the grant were income taxes, corporate taxes, land and property tax, transfer of land ownership tax and stamp duties. All of these tax revenues made up the pool from which block grants were allocated to the local governments. Based on the law, the central government would transfer a minimum of 75 percent to a maximum of 90 percent of tax revenues from income tax, transfer of property ownership tax, such as land, and stamp duty to cover the deficit of the local government's budget (Law 32/1956, Articles 4(1), 5 & 6). In addition to those three taxes, the central government also transferred a percentage of property tax and

[28] From January to September 1956, 71 percent of the national exports came from Sumatra. Yet, Sumatra enjoyed only 20.8 percent of the imported commodities through Java. On the other hand, in the same period, Java enjoyed about 75.2 percent of the total national import even though its contribution to the national export was only 16.7 percent (Gie, 1994, pp.231-232).

corporate taxes to the local government. The percentage was determined annually by the central government (Law 32/1956, Article 4(2)).

Each local government would receive a particular grant amount to cover its budget deficit. The amount of the grant was calculated based on a formula. The formula was determined by factors that included the area of the sub-national, size of population, education level of the population, economic potential such as natural resources availability, inflation, the length of the roads maintained by the local government, the length of irrigation canals maintained by the local government and the type of area such as islands as opposed to a wide area of dry land or a combination of both (Law 32/1956 Article 6). Each factor was weighted by an average determined by the central government and used to calculate the amounts of expenditure and revenue in the budget and, hence the deficit (Gie, 1994, pp.75-78). However, this formula was too complicated to implement, particularly since it required a range of statistical data that were not available at the time and the weighted average used in the formula was contentious.

The idea of using a formula to allocate the block grant is adopted in the block grant under the third fiscal transfer arrangements (see Section 4.1.1). The use of a formula is feasible since the statistical data required to use it are available. In addition, using the formula to calculate the block grant transferred to the regions is more transparent since the mechanism to calculate the amount of grant is stated in the laws. As such, using the formula will have political legitimacy as well as transparency.

The first fiscal transfer arrangements also introduced another source of funds to the local government. In the Law 32/1956 (Explanations of Articles 7 & 8), these funds were referred to as subsidies or grants. The

purposes of transferring the grant were to finance some governmental duties delegated by the central government. However, at the time of the delegation the local government did not have sufficient funds to fulfill the duties or the duties would burden existing budget (Law 32/1956, Explanation for Article 7).

In addition, the grant was also intended to cover programs that were necessary for the local government but could become a heavy financial burden to the local government budget or if the programs were attached to national rather than regional specific programs[29] (Law 32/1956, Explanation for Article 8). To obtain these grants or subsidies the sub-national governments had to submit a program proposal to the central government. As such, this grant was designed to fund a particular program agreed by both the sub-national and the central governments. This grant was similar to the specific purpose grants under the third fiscal arrangements (see Section 4.1.1, p. 145). The purpose of the grant is to maintain horizontal equity across local governments and to finance the national priority programs at the local level.

Despite the design of the transfer arrangements, the total transfer received by the local government from the new taxing power, revenue sharing and the grant system did not meet their budget deficit (Gie, 1994, pp.83-84). As a result, the central government had to look for alternative revenue sources to cover the deficit. However since in practice the central government could never meet the full amount of the deficit, the limit post system remained effective. The reason behind the failure of the central government to meet the deficit was the massive national budget deficit that

[29] The literal meaning written in the law is 'also benefited other areas'. This research interprets the meaning as 'part of national rather than a specific regional programs' since inherent in the literal meaning is the outreach of the programs which was beyond individual regional boundary.

was mostly financed by printing new money. The deficit took its toll when the inflation rate reached 600 percent in 1964 to 1965[30].

Based on the information above, the federal system and inter-regional fiscal transfer arrangements that follow the system was only a political rhetoric since the arrangements had never been fully implemented. The centralized system is known as the guided democracy. The decree marked the end of the federal system in Indonesia's political history. The Presidential Decree of 1959 that declared Indonesia to return to the *UUD 1945* and led Indonesia into a centralized system confirmed the rhetoric[31].

The second inter-regional financial transfer arrangements in Indonesia were introduced in the early 1970s during Soeharto's presidency known as the New Order Regime era. At the time, Indonesia followed the *Undang Undang Dasar 1945* (*UUD 1945*) or the Unitary Republic of Indonesia (see Section 4.2.3). The transfer arrangements in this era were guided by Law 5/1974 on the Basic Principles of the Local Governments. The arrangements took the form of Land and Property taxes, Autonomous Regional Subsidy or *Subsidi Daerah Otonom (SDO)* and Presidential Directive or *Instruksi Presiden (INPRES)* grants (*Departemen Keuangan*, 1992). The *SDO* and *INPRES* grants resemble specific and to some degree block grants, respectively (Silver, et al, 2001). These grants were the primary sources for the local governments' budget since the grants financed up to 65 percent of the total expenditure at the provincial level and 70 percent of the total expenditure at the district/municipal level (Shah, et al, 1994).

[30] During the Old Order Regime era, most of the budget was used to finance the government's political campaign rather than to improve the welfare of the people.

[31] The political unrest that was triggered by unfair transfer system became one of the reasons for President Soekarno to issue a presidential decree in 1959 to return to the Constitution of 1945. At the same time, the President introduced a guided democracy to restore political stability nationally (see Section 4.2.3).

SDO was different from *INPRES* since *SDO* was allocated for the government routine expenditures whereas *INPRES* was development program expenditures (*Departemen Keuangan Republik Indonesia*, 1997, p.126). Under these arrangements *SDO* was used to finance the operation of national and local sectoral offices at the local level, local government employees, retirement fund for the local government employees, teachers, and some specific development programs, such as roads, schools, public health centers and reforestation.

However, the allocation of *INPRES* funds for development programs was administered to some degree by the local government and mainly by the central government (Shah, et al, 1994; Silver, et al, 2001). The funds were grouped into, firstly, *bantuan umum* or General *INPRES* such as Villages development programs, Districts/Municipalities development programs and Provincial development programs. Secondly, *bantuan khusus* or Specific *INPRES* such as Primary School development programs, Health facilities development programs, Reforestation/greening programs and Roads development maintained by Provinces and Districts/Municipalities. Thirdly, *bantuan fasilitas* or Facilities *INPRES* such as traditional market development programs (*Departemen Keuangan*, 1992, pp.92-94).

The General *INPRES* was also known as the Block *INPRES* group whereas the Specific and Facilities *INPRES* were the Non-Block *INPRES* group (Goeltom, 2007, p.502). The difference was that in the Block *INPRES,* the local government had some block grant discretionary authority to allocate the funds whereas the Non-Block *INPRES* was administered by the central government to follow the national development programs (Silver, et al, 2001, p.348; Goeltom, 2007, p.503).

The Block *INPRES* programs started in 1969/1970 fiscal year and continued until 1978/1979 fiscal year (*Departemen Keuangan,* 1979, pp.10-11). The Non-Block *INPRES* programs were introduced in 1980s. The number of programs and, hence funds, for the Non-Block *INPRES* group continued to increase up to the point that the amount of funding out-weighted the Block *INPRES* fund. This had gradually removed the discretionary authority of the local government to allocate funds.

The discretionary authority of the *INPRES* program continued to diminish as the central government proposed additional specific programs. In 1994/1995 fiscal year, the government introduced new *INPRES Pembangunan Desa Tertinggal* or *INPRES* for Less Developed Villages. Another program *Bantuan Makanan Tambahan untuk Anak Sekolah* or Subsidy for Supplementary Nutrition for School Children was also introduced in 1997/1998 fiscal year. By late 1990s, the *INPRES* grants left little room for the local government discretionary fund to meet its spending needs. This information indicates that similar to the first inter-regional fiscal transfer arrangements, decentralization policy was a political rhetoric since the transfer arrangements did not provide discretionary funds to the local governments to allocate their budget to meet their regional development programs.

The year of 1998 marked the end of the New Order Regime and the beginning of the transition period to the Reformation era. During the transition period that existed from the final quarter of 1999/2000 fiscal year to the end of 2000 the central government introduced a number of changes in the transfer arrangements and spending allocations. The funds that were allocated under *INPRES* programs were grouped into *Dana Pembangunan*

Daerah (DPD) or Regional Development Funds. In 1999/2000 fiscal year the government introduced *Dana Jaring Pengaman Sosial dan Pemberdayaan Masyarakat or* Social Safety Net and Community Development Funds under *DPD* (*Departemen Keuangan*, 1999, Table II.9, p.83). The new funds were allocated for poverty alleviation programs in response to the increase in the incidence of poverty caused by the political and economic crisis of 1998.

In 2000, the fiscal transfer arrangements also included revenue collected from Change of Property Ownership taxes to the local government besides the Land and Property taxes (*Departemen Keuangan*, 2000, p.29). In addition to those taxes, the central government transferred some revenues from the forestry and general mining sectors to the local government. These components of revenue sharing were not included in the government budget. However, businesses in these sectors sent a portion of the revenues directly to the local treasury offices and pertinent ministries' accounts (*Departemen Keuangan*, 2000, p.29). The transition period ended at the end of 2000 and the third inter-regional fiscal transfer was introduced during the Reformation era.

The third inter-regional fiscal transfer arrangements took effect in 2001[32]. Guided by Law 25/1999 amended by Law 33/2004, the fund arrangements transferred to the local governments is known as *Dana Perimbangan* or the Balance Funds. Similar to the first arrangements, the third fiscal transfer arrangements were introduced to promote as extensive regional autonomy as possible which is the principle of fiscal federalism. This feature differentiates the first and third fiscal transfer arrangements from the second one.

[32] The decentralization policy of 2000 took place after the amending the *Undang Undang Dasar 1945.* The amendment process began in 1999 until 2002. The purpose of the amendment is to recognize the full authority of the local governments as decision-makers units at the local levels.

The Balance Funds are comprised of the General Allocation Fund (block grant) or *Dana Alokasi Umum (DAU*), the Specific Purpose Allocation Fund or *Dana Alokasi Khusus (DAK)* and the Revenue Sharing Fund or *Dana Bagi Hasil (DBH).* The first two grants under the third arrangements, *DAU* and *DAK,* are designed to achieve horizontal equity, whereas *DBH* is to advise vertical equity (Lewis, 2001; Fane, 2003). Except for *DAK*, which is allocated for specific purpose grants, the allocation of *DAU* and *DBH* in the region is at the discretion of local government (*Departemen Keuangan*, 2001, p.60). This level of authority has significantly differentiated the third inter-regional transfer arrangements from the second fiscal arrangements.

In addition to the above transfer allocations, the central government also transfers some funds for deconcentration and supervision duties. Deconcentration refers to the delegation of authority from the central to the provincial level governments where the latter act as the representatives of the central government in regional levels. Supervision duties are those that are delegated from the central government to the sub-national levels and villages, from the provincial levels to districts/municipalities and from districts/municipalities to villages. The transfer of supervision duties also includes transfer of human resources, facilities and infrastructure besides funds (Law 22/1999 Article 1(g)).

The third fiscal transfer arrangements were introduced after the amendment of the *UUD 1945* (see Section 4.2.3). The philosophy of the amended *UUD 1945* is to promote as extensive regional autonomy as possible, which follows the *UUDS 1950.* However, Indonesia does not operate under the federal system stated in *UUDS 1950.* On the contrary, it operates within the Unitary Republic of Indonesia which is consistent with the

UUD 1945 before and after the amendment. The implication is that the role of central government is stronger than in the case of the federal system while at the same time provides high level of discretionary authority to make decisions to the local governments than a centralistic system would have. This principle guides the design of Balance Funds as represented by the functions and proportions of *DAU, DBH* and *DAK* in the transfer arrangements. While the *DAK* allocation follows the national priority programs, the *DAU* and *DBH* allocations are discretionary funds for the local governments. Section 4.1.1 explains the way the third inter-regional fiscal transfer arrangements is carried out. As will be explained, the arrangements were initially introduced by Law 25/1999 which was later modified by Law 33/2004.

4.1.1 The third Inter-regional Fiscal Transfer Arrangements

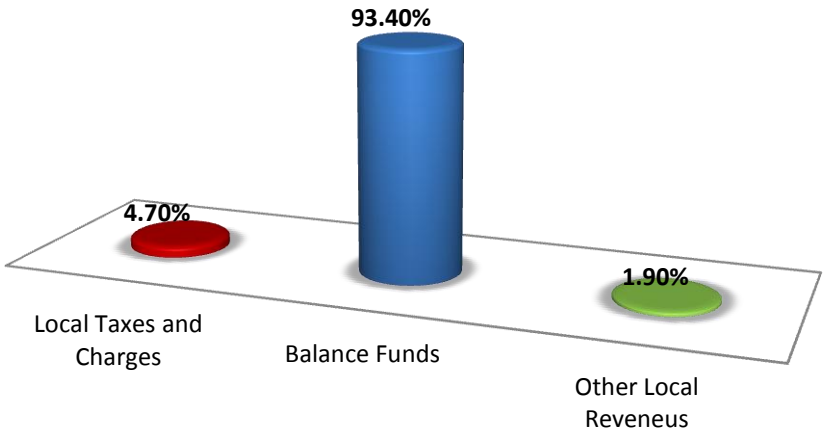
The third inter-regional fiscal transfer was guided by the Law 25/1999 on *Dana Perimbangan* or the Balance Funds and government regulation, PP 104/2000. The laws provided some guidelines on the *DAU, DBH* and *DAK* arrangements. The *DAU* is a block or general allocation grant, whereas *DBH* is the revenue sharing. These transfers are the discretionary funds provided to the local governments. These funds held about 91.6 percent of the total Balance Fund in 2007 (see Figure 4, p.137). The large proportion of the discretionary fund in the Balance Funds is consistent with the federal characteristic of the amended *UUD 1945*.

On the contrary, *DAK* is a specific purpose grant or a tied grant designed to meet regional specific programs that either cannot be predicted by using general allocation formula, where the programs would become a burden to the local government budget, or where the programs are part of

national priority programs (PP 104/1999, Article 19). The *DAU* and *DAK* are designed to maintain horizontal equity or equity across regions at the same level whereas *DBH* maintains vertical equity or equity between the central and local governments. A small proportion of the Balance Funds, 18.4 percent, was allocated to *DAK* grant in 2007. Since *DAK* is a tied grant, the central government interventions in the local development programs remain. This is in-line with the centralism or unitary principle in the amended *UUD 1945*.

Since its first implementation in 2001, the Balance Funds have become the major revenue source for sub-national governments nationwide. In 2001, the fund contributed about 80 percent of the total local government revenues. Thus local governments nationwide are heavily dependent on grants from the central government. By 2007, the sources of the funds had not changed. Figure 3 depicts the contributions of revenue sources.

FIGURE 3 SOURCES OF LOCAL GOVERNMENT REVENUES IN 2007

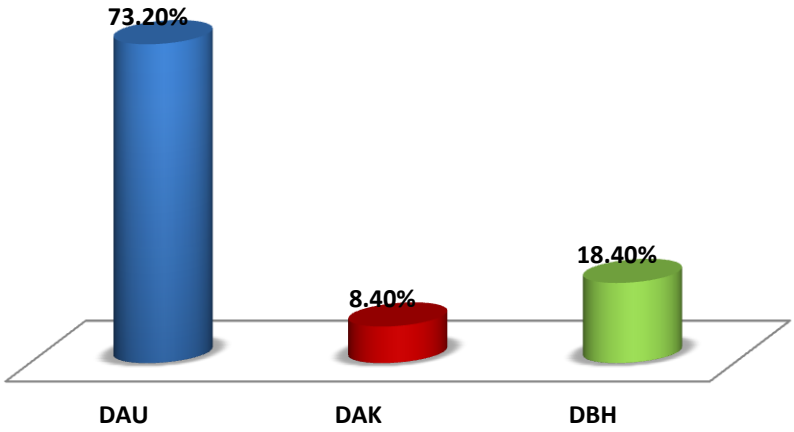


Source: *Kementrian Keuangan*, 2008

A closer look at the Balance Funds show that *DAU* dominates the fund, followed by *DBH* and *DAK* (Figure 4, p.137). The following sections explain

the way the central government distributed each component of Balance Fund to districts and municipalities in 2007.

FIGURE 4 THE COMPONENTS OF BALANCE FUNDS IN 2007



Source: *Kementrian Keuangan*, 2008

The first component in the Balance Funds is the *Dana Alokasi Umum (DAU)*. The *DAU* allocation is divided into two components. These are the non-formula or Minimum Allocation (MA) and the formula or Fiscal Gap (FG) components. Under the Minimum Allocation there are Lump-sum (LS) and Government Employee Salaries (GS) components. The Fiscal Gap components comprise of Fiscal Needs (FN) and Fiscal Capacity (FC). As such, it is expected that local governments with high fiscal needs and low local fiscal capacity will likely receive larger grant allocations than those in the opposite situation. The formula component of *DAU* mostly resembles the Non-block *INPRES* grant since it provides discretionary funds for the local governments.

However, the extent to which the *DAU* can act as a horizontal equalization instrument depends on the proportions of the Minimum Allocation and Fiscal Gap to the total *DAU* allocation. If the Minimum Allocation contribution is larger than the Fiscal Gap, the effectiveness of the

instrument is decreased and vice versa. As will be explained later, the *DAU* arrangements have been gradually modified to improve the horizontal equity function of the arrangements.

Law 25/1999 and PP 104/2000 also stated the percentage of *DAU* allocation from the central government domestic revenues. According to the law, the initial *DAU* allocation takes 25 percent of the domestic revenues, namely taxes and non-taxes, of the central government budget after deducting the amount for revenue sharing or *DBH* (UU 25/1999, Article 7). From this percentage, provincial governments receive 10 percent and districts/municipalities governments receive the remaining 90 percent. The following describes the *DAU* formula 2001 (PP 104/2000, Explanation of Article 17; Lewis, 2002, pp. 274-275).

1. DAU = BFA + FA + LSA;

   BFA or the Balancing Factor Amount is the Minimum Allocation.

   FA is the Formula Amounts or the Fiscal Gap or FG = Fiscal Needs – Fiscal Capacity; Fiscal Needs or FN = the Average Government Expenditures; Fiscal Capacity or FC = PAD + DBH, PAD is the local own-source revenues (see Figure 3, p. 134).

   LSA is the Lump-sum Amounts = DAU – FA – LSA. This variable is a residual variable that indicates DAU left over of DAU pool fund which is equal to the 25 percent of the net domestic revenue after subtracting BFA and FA from the pool. The residual, if any, is divided equally among all regions.

In 2001, the Minimum Allocation guarantees a minimum amount of *DAU* allocation which is equal to the previous *SDO* and *INPRES* grants (*Departemen Keuangan*, 2001, p.33). These funds made up the hold-harmless provision in the 2001 fiscal year *DAU*. The provision is set-up to ensure that the amount of DAU received in 2001 would not be less than that received in 2000. Since the inter-regional fiscal transfer arrangements became effective in 2001, the provision used the *SDO* and *INPRES* grants as

the proxy. This should not be an issue since the *SDO* and *INPRES* grants were the total Regional Development Funds since the transition period.

The allocation of BFA used some adjustment factors that eventually added up the hold-harmless provision (Lewis, 2002, pp.273-274). The factors for SDO and INPRES grants were 1.3 and 1.1, respectively, so that the new BFA = 1.3 SDO + 1.1 INPRES. The factors reflected an increase of 30 percent and 10 percent SDO and INPRES grants, respectively, from 2000 fiscal year. The factors were assigned to accommodate the new local government employees transferred from the central offices by the time the decentralization policy took effect in 2000.

However, these factors were adjusted for selected areas (Lewis 2002, p.274). There were 44 new *Kabupaten/Kota* created before 2000. For these new regions, the central government assigned a 1.2 adjustment factor for INPRES grants. In addition, the central government adjusted the SDO and INPRES grants adjustment factors for 52 *Kabupaten/Kota* to ensure that every *Kabupaten/Kota* received a 40 percent increase in the *DAU* allocation. All of these adjustments were overlooked in the calculation of additional hold-harmless provision in 2001. The implication is that the total hold-harmless becomes over-estimated and that would be carried over in the subsequent fiscal years. As such, the block grant under Law 25/1999 created fiscal inequity across local government (see Table 7, p. 156).

A weighted average applied in calculating the FA or the Fiscal Gap (PP 104/2000, Explanation of Article 17; Lewis, 2002, pp.274-275). The Fiscal Needs were the product of average local government expenditure and some weighted average factors. The factors comprised population, area,

poverty and costs. As a proxy for costs, the 2001 *DAU* formula used the Construction Index. The formula of the Fiscal Needs in 2001 is stated below.

2. $$FN_i = \left(\frac{\text{Expenditure}_T}{n}\right) * \left(\frac{\frac{\text{Population}_i}{\text{Population}_T / n} + \frac{\text{Area}_i}{\text{Area}_T / n} + \frac{\text{Poverty}_i}{\text{Poverty}_T / n} + \frac{\text{Cost}_i}{100}}{4}\right)$$

where *T* indicates the total of a particular variable; *n* is the number of regions at the same level, eg. *Kabupaten/Kota* or *Provinces*; *i* is a region.

In 2001, the components in the fiscal capacity exclude *DBH* which is different from that stated in the law. Instead the components were *Pendapatan Asli Daerah (PAD)* or the Local-own source revenues, Land and Property tax and Change of Property Ownership tax (Lewis 2002, p.286). Since revenues from natural resources such as mining were not included the fiscal capacity was underestimated. An adjustment factor or a weighted average was used to calculate the fiscal capacity of each area. The weighted average was composed from several indices that included Gross Regional Domestic Product from the non-natural resources sectors ($GRDP_{NONSDA}$), Gross Regional Domestic Product from the natural resources sectors ($GRDP_{SDA}$), and the labor force (LF) or the population from the age of 15 to 64. The fiscal capacity is defined as the average sum of PAD, PBB and BPHTB times the weighted average. The formula to calculate the fiscal capacity in 2001 was:

3. $$FC_i = \left(\frac{PAD_T + PBB_T + BPHTB_T}{n}\right) * \left(\frac{\frac{GRDP_{NONSDA_i}/GRDP_i}{GRDP_{NONSDA_T}/GRDP_T} + \frac{GRDP_{SDA_i}/GRDP_i}{GRDP_{SDA_T}/GRDP_T} + \frac{LF_i/\text{Population}_i}{LF_T/\text{Population}_T}}{3}\right)$$

where *T* indicates the total of a particular variable; *n* is the number of regions at the same level, eg. *Kabupaten/Kota* or *Provinces*; *i* is a particular region, *PAD* or *Pendapatan Asli Daerah* is the local government own-source revenues such as local taxes, charges, revenues from local government enterprises; *PBB* or *Pajak Bumi Bangunan* is the Land and Property taxes; BPHTB *or Biaya Perolehan Hak atas Tanah dan Bangunan* is taxes on Change of Property Ownership

In 2001, the allocations of *DAU* for the non-formula and formula amounts were 80 percent and 20 percent (Lewis, 2002, p.276).

The laws determined the DAU allocation for each region as

4. $DAU_i = DAU_T * \frac{FG_i}{FG_T}$ where $\frac{FG_i}{FG_T}$ is the regional weighted average.

The calculation of the fiscal capacity in 2001 had a major drawback (see Equation 3). As the average revenues excluded the revenue sharing from natural resources, the fiscal capacity components tended to be underestimated and, hence, the fiscal gap would be overestimated. Since the *DAU* was allocated based on the fiscal gap, the allocation was biased toward the natural resource rich areas. This situation indicated that the *DAU* formula allocation used in 2001 fiscal year sacrificed the horizontal equity function of *DAU* allocation by benefitting the natural resource rich areas.

In 2002, the Fiscal Capacity components in the *DAU* arrangements were modified to match those stated in the laws by including all *DBH* components in the average revenue to improve the representation of the revenue sources of regions. Formula (5) shows the modification.

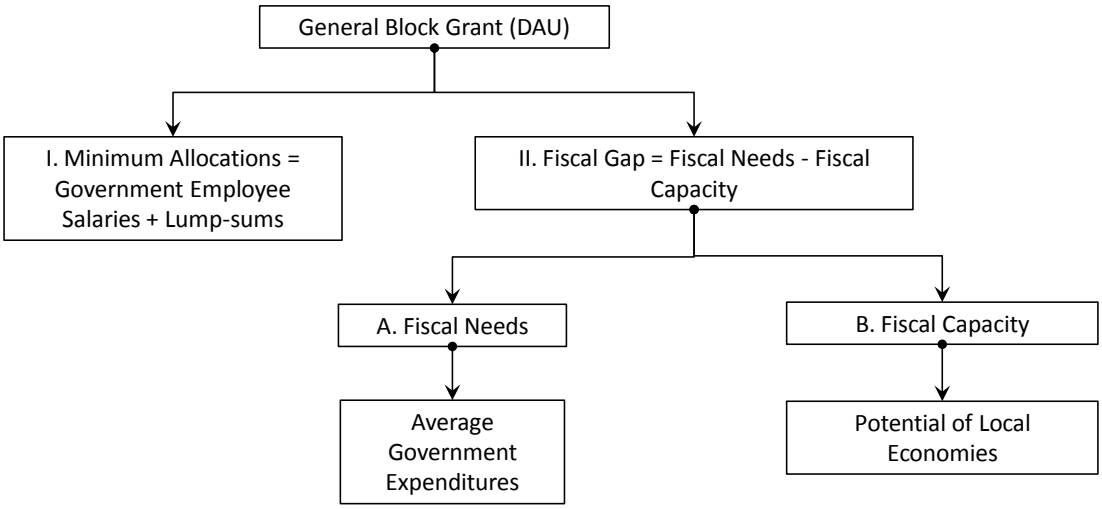
5. $$FC_i = \left(\frac{PAD_T + DBH_T}{n}\right) * \left(\frac{\frac{GRDP_{NONSDA_i}/GRDP_i}{GRDP_{NONSDA_T}/GRDP_T} + \frac{GRDP_{SDA_i}/GRDP_i}{GRDP_{SDA_T}/GRDP_T} + \frac{LF_i/Population_i}{LF_T/Population_T}}{3}\right)$$

The Minimum Allocation components were also changed. The *SDO* and *INPRES* grants were removed and the local government salary and hold-harmless provision were added to the allocation. Furthermore, the hold-harmless provision was set-up to ensure that the amount of *DAU* received in the current fiscal year would not be less than in the previous year. As will be explained later, the hold-harmless provision is problematic since it reduces

the effect of the *DAU* formula on the total *DAU* allocation, and, therefore, the effectiveness of *DAU* allocation as a horizontal fiscal equity.

Diagram 7 describes the structure of *DAU* allocation based on Law 25/1999 and PP 104/2000.

DIAGRAM 7 STRUCTURE OF THE BLOCK GRANT BASED ON LAW 25/1999



Source: Peraturan Pemerintah 104/2000 (Government Regulation 104/2000)

The initial Balance Funds of 1999 had some drawbacks including:

- The Minimum Allocation in the *DAU* arrangement which served as a guaranteed fund received by local governments regardless of their fiscal capacity (Fane, 2003). As such, this allocation had the potential to create a free-rider issue that was usually found in a common pool resource situation. The free-riders are the regions that do not have the potential and/or the capacity to collect their own revenues. As such, these free-riders would likely receive more funds from *DBH* and *DAU* than from generating their own-source revenues. This could explain the reason for regional proliferation particularly amongst those that do not have sufficient fiscal capacity. The free-rider issue is demonstrated by decreasing

fiscal capacity as regional proliferation continues (see Section 4.2.1 & Table 8, p. 158).

- The guaranteeing salaries for all local government employees are likely to encourage overstaffing in the regions. Since 2002, the *DAU* allocation also includes the salaries of all local government employees instead of those who were initially transferred from the central offices. As a result, only a small percentage of the fund has been allocated for development purposes. This change seems to suggest that the term block grant attached to *DAU* is somehow misled.
- The weighted average used in the *DAU* formula used to calculate fiscal needs in Equation (4) and fiscal capacity in Equation (6) (Lewis, 2001) reduced the effectiveness of *DAU's* function. Since each index was weighted equally, the weighted average used in the calculation might not represent the real conditions of fiscal gap in each region (Lewis, 2001). For example, equal weight on Regional Index and Poverty Index might result in over funding for one region with a wider geographic area and low poverty level. This situation further reduced the effectiveness of horizontal equity function of the *DAU* allocation as many of the regions with wider geographic area are also rich in natural resources (Lewis, 2001). As such, the homogenous weighted average has biased the *DAU* arrangements towards the rich areas.
- The hold-harmless provision or the lump-sums component in the Minimum Allocation had further reduced the effectiveness of the *DAU* allocation (Lewis, 2001). Given the aim of the hold-harmless

provision and that the *DAU* arrangements tend to benefit the natural resource rich areas, the amount of *DAU* allocation will not decline even after the fiscal capacity of these regions has significantly improved. As a result, the horizontal equity function of *DAU* becomes ineffective. Also, the hold-harmless provision puts pressure on the central government budget since the provision has been made outside of the *DAU* pool.

The second component in the Balance Funds is *Dana Bagi Hasil (DBH). DBH* consists of taxes (land and property tax, and income taxes) and non-taxes (revenue sharing from natural resources that include oil, gas, general mining, forestry, fishery, and ocean-based resources). The main purpose of *DBH* is to improve vertical equity between the central and local governments, namely provinces, districts/municipalities. This nature is similar to that of the first inter-regional fiscal transfer arrangements.

The revenue sharing or *DBH* arrangements under Law 25/1999 are provided in Table 3. Table 3 shows that the central government retained most of the major tax revenues including all tax revenues from income and most of tax revenues from oil and natural gas. As a result, the arrangements created vertical fiscal imbalance, particularly for the areas from where the sources of revenue came. Since these resources reside in certain areas, the equity should have been improved if the central government transfers more of the revenue sharing to these areas. However, retaining the majority of the minerals does not necessarily contradict the amended Constitution of 1945[33].

[33] The authority is stated in the original and amended *UUD 1945* Article 33(3) which explains that (translated) '[The] soil and water and natural resources … are controlled by the state and should be used for the welfare of the people'.

TABLE 3 REVENUE SHARING SYSTEM (LAW 25/1999)

Revenue Sharing Fund	Sharing (%)			
	Central	Local Governments		
		Total	Provinces	Districts/ Municipalities
Revenue from Taxes and Fees				
Income Taxes	100	-	-	-
Land and Property Taxes	10#	90	16.2	64.8*
Fees on Land and Property Change of Ownership	20#	80	16	64
Revenue from Natural Resources				
Forestry				
Concession fee	20	80	16	64
Production sharing	20	80	16	64**
General Mining	20	80	16	64**
Fishery	20	80	-	80
Oil	85	15	3	12***
Natural Gas	70	30	6	24****

Notes:

#These shares are distributed equally to all districits and municipalites nationwide

*9 percent is retained by the central government as collecting fees

**32 percent is distributed among districts/municipalities producers and 32 percent to other districts/municipalities in the same province

***6 percent is distributed among districts/municipalities producers and 6 percent to other distrcits/municipalities in the sama province

****12 percent is distributed among districts/municipalities producers and 12 percent to other distrcits/municipalities in the sama province

Sources: UU 25/1999 (Law 25/1999) and KEPMEN 82/KMK.04/2000 (Minister of Finance Decision no. 82/KMK.04/2000)

The third component in the Balance Funds is *Dana Alokasi Khusus (DAK)* or the special purpose grant. Compared with the previous inter-regional fiscal transfer arrangements, *DAK* most resembles the Presidential Directive Funds (*INPRES*) in the sense that there is some degree of central government intervention in the regional development programs. However, the two are different in the sense that *DAK* has given the local government some degree of discretionary authority to select the programs based on their regional priority programs as long as they are in-line with the national priority programs.

The initial *DAK* arrangements in 2001 provided a reforestation and greening fund for selected regions. For this purpose, the central government allocated 40 percent of the forest concession fees to these regions (PP 104/2000, Article 19). In a later development, the number of programs that

are eligible for *DAK* financing has been gradually expanded to further improve the equalization function of *DAK*.

Since 2003, *DAK* has also been allocated for non-reforestation activities fund or *non-dana reboisasi (Non-DR).* In 2003, five sectors were eligible for DAK financing, namely education, health, roads, irrigation and infrastructure for local government operations (*Kementrian Keuangan*, 2004, Table IV.5, p.92). The *Non-DR DAK* is a matching grant aiming to fund specific regional programs selected by regions which are consistent with development priorities of national planning. Since it is a matching grant, the recipient local governments are required by law to provide at least 10 percent of the total project cost as part of the local government commitment toward the program(s). Table 4 explains the programs financed by *DAK.*

TABLE 4 SECTORS OF *DAK* FINANCING 2003-2007

No	PROGRAMS	2003	2004	2005	2006	2007
1	Education	√	√	√	√	√
2	Health	√	√	√	√	√
3	Roads	√	√	√	√	√
4	Irrigations	√	√	√	√	√
5	Drinking water and sanitation	-	-	√	√	√
6	Infrastructure for government operations	√	√	√	√	√
7	Oceanary and fishery	-	-	√	√	√
8	Agriculture	-	-	√	√	√
9	Forestation	-	-	-	√	√

Sources: Kementerian Keuangan, 2009, Chapter III, p. 81 & 2011, Chapter III, pp. 106-107.

In addition to the Balance Funds, the central government has been transferring *Dana Otonomi Khusus (OTSUS) dan Penyeimbang* or Special Autonomous and Balancing Fund to the local governments since 2002 (*Kementrian Keuangan*, 2001, Table IV.3, p.57). *OTSUS* fund is designed to provide additional funding for provinces that have been left behind in their development level. The amount of *OTSUS* fund allocated is 2 percent of the

DAU received by the *OTSUS* recipient province(s)[34]. *Dana Penyeimbang (DP)* or the Balancing Fund is the hold-harmless provision (*Departemen Keuangan*, 2002, p.54). This situation shows that the fund for the hold-harmless provision comes from outside of the *DAU* allocation in the central government budget.

Since 2003, the Balancing Fund in the Special Autonomous and Balancing Fund account has also been allocated to finance some *ad-hoc* programs besides the hold-harmless provision. At the time, the *ad-hoc* programs aimed to improve the salary of teachers, doctors, paramedics and new government employees and retirees at local government level (*Kementrian Keuangan* 2004, p.52). As explained later, the programs are changing to meet the current needs of regional development programs.

In 2004, the name Balancing Fund was changed into *Dana Penyesuaian* or the Adjustment Funds to recognize the funds for the *ad-hoc* programs. The fund for the ad-hoc programs was known as *Dana Penyesuaian Kebijakan* or the policy adjustment funds whereas the hold-harmless provision was *Dana Penyesuaian Murni* or the pure adjustment funds (*Kementrian Keuangan*, 2005, p.55). The *ad-hoc* program funds serve to finance the central government national program(s) that might burden the local government budget. The program(s) runs for a short period of time (*Kementrian Keuangan*, 2008, p.II-42; 2010, p.V-13). As such, the *ad-hoc* program(s) are changing throughout the year[35].

[34] Since 2002, the funds were allocated to *Papua* province (*Departemen Keuangan*, 2001, p.54) and beginning in 2008 also to *NAD* province (*Kementrian Keuangan*, 2009, p.V-8).

[35] In 2004, the *ad-hoc* fund was allocated to improve the welfare level of all local government employees and retirees by providing the 13th month salary (*Departemen Keuangan* 2004, p.93). From 2005 to 2006, the *ad-hoc* fund was allocated to assist new proliferated regions to set up and run new governmental organizations and operations (*Kementrian Keuangan*, 2005, p.55; 2006, p.58). In 2007, the fund was allocated to accelerate infrastructure development programs (*Kementrian Keuangan,* 2008, p.II-42). In 2008, to provide additional fringe benefits to teachers and academics as amended by Law 14/2005 on Teachers and Academics (*Kementrian Keuangan, 2008,* p.V-68). In 2009, the fund was provided for strengthening fiscal decentralization implementation and regional acceleration

In 2004, the Law 25/1999 and PP 104/2000 were amended by the Law 33/2004 and PP 55/2005, respectively. The aim of the amendments was to improve both the vertical and horizontal equity performance of the Balance Fund arrangements. For this purpose, the new law modified the *DAU, DBH* and *DAK* arrangements. Following the modification, the programs under the *DAK* allocation have been continuously expanded.

In accordance with the government regulation, PP 55/2005, the central government implemented the new *DAU* arrangement by 2008 (Government Regulation 55/2005, Article 69(2)). The main purpose of the modification was to improve the horizontal equity function of the *DAU.* The modifications are explained as follows:

- Increasing the *DAU* pool. Based on the new laws, the percentage of *DAU* allocation is at least 26 percent of the central government domestic revenues after deducting the *DBH* transferred to the local governments (*Undang-undang 33/2004*, Article 27.1). This is an increase of one percent of total *DAU* allocation from the amended law. Similar to the previous arrangement, provinces and districts/ municipalities receive 10 percent and 90 percent of the total *DAU* pool, respectively. During the transition period in 2007 fiscal year, the minimum *DAU* allocation was 25.5 percent of the central government domestic revenues (Government Regulation 55/2005, Article 69(1)). By 2008, the allocation reached the full percentage as stated in the laws.

development programs. The 2009 *ad-hoc* programs were part of the fiscal stimulus package of 2009. The package was designed as a recovery program from the economic crisis in 2008 (*Kementrian Keuangan*, 2009, p.III-37). In 2010, the fund was allocated to accelerate the development of education infrastructure and facilities (*Kementrian Keuangan, 2010,* p.V-79). In 2011, *ad-hoc* fund was allocated for financing additional compensation for teachers (*Kementrian Keuangan*, 2011a, p.V-40).

- Modifying the Fiscal Needs (FN) and Fiscal Capacity (FC) formulas (PP 55/2005). The new FN formula is stated as follows.

6. $$FN_i = \frac{\text{Expenditure}_i}{n} * \left(\alpha_1 \frac{\text{Population}_i}{\text{Population}_T / n} + \alpha_2 \frac{\text{Area}_i}{\text{Area}_T / n} + \alpha_3 \frac{\text{Cost}_i}{\text{Cost}_T / n} + \alpha_4 \frac{\text{HDI}_i}{\text{HDI}_T / n} + \alpha_5 \frac{\text{GDRPCap}_i}{\text{GDRPCap}_T / n} \right)$$

As shown in Equation (6), the poverty index has been removed from the formula and replaced by the Human Development Index (HDI) and Gross Domestic Regional Product per capita (GDRPCap) which resolved the double counting issue[36].

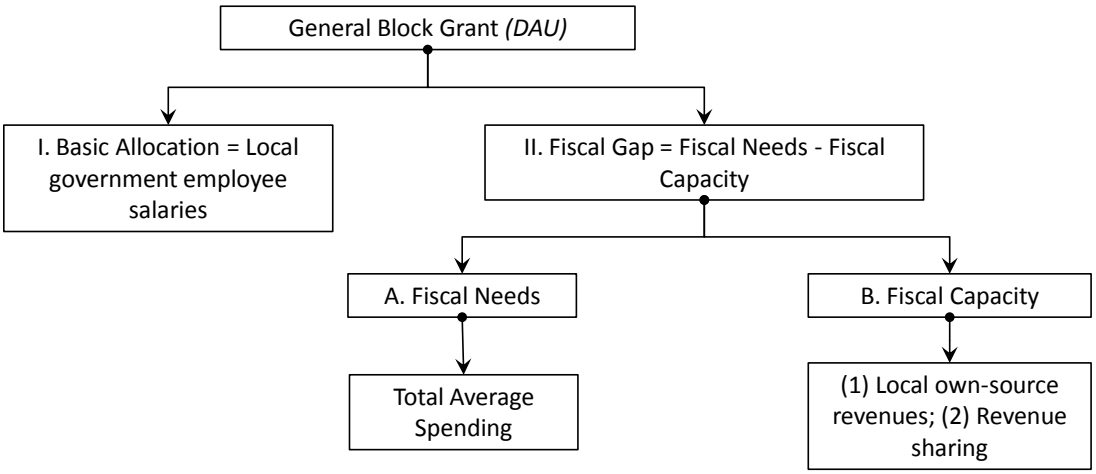
- Using the HDI to measure poverty level. HDI measures the level of welfare from both non-economic variables that include education and the life expectancy rate and economic variables such as income per capita. Furthermore, each index (α) is set-up with a different weighted average to represent the level of importance in the fiscal capacity calculation. The weighted averages are determined statistically.
- Adjusting the *DBH* calculation by the amount of Reforestation Fee to calculate the Fiscal Capacity. This fee is actually part of the Specific Purpose Grants that are provided to selected areas (see Table 4, p. 146). As such, deducting the fee from the calculation prevents double counting. In addition, to further improve horizontal equity, outliers have been excluded from the calculation of the total average regional spending (PP 55/2005, Article 44). As such, the average spending represents that of most local governments nationwide.
- Reducing the impact of the non-formula part on the *DAU* allocation, by gradually removing the hold-harmless provision. In 2006, the amount of hold-harmless provision received by local governments was

[36] In the initial formula, the number of poor people was used. This was a double counting since the number of population also included the number of poor people (Lewis, 2002, p. 273-274).

determined by the central government financial condition. In 2008, the central government allocated a minimum of 25 percent from the 2007 fiscal year *DAU* after excluding the hold-harmless provision, to cover the provision in 2008 fiscal year. Furthermore, the provision was only given to those regions that experienced a decrease of a minimum 75 percent of the *DAU* in 2008. However, if the decrease was less than 75 percent, then the amount of *DAU* received in 2008 would be determined by the *DAU* formula (*Kementrian Keuangan,* 2008, p.V-65). By so doing, the proportion of the formula component in the *DAU* allocation is gradually increasing.

Based on the modification, the structure of the new *DAU* allocation is now expected to follow that described in Diagram 8 below.

DIAGRAM 8 STRUCTURE OF THE BLOCK GRANT BASED ON LAW 33/2004



Source: Peraturan Pemerintah 55/2005 (Government Regulation 55/2005)

The structure of *DAU* consists of two components which is similar to the structure of the *DAU* allocation under the Law 25/1999. Those are the non-formula component known as *Alokasi Dasar* or the Basic Allocations (BA), and the formula component known as *Celah Fiskal* or the Fiscal Gap (FG). As shown in Diagram 8, the term Minimum Allocation has been changed to

the Basic Allocation as the central government removed the lump-sums or the hold-harmless provision component from the *DAU* arrangement.

As the hold-harmless provision has been removed, the role of the new *DAU* allocation as a horizontal equity instrument should be improved. When the fiscal gap of a region is negative or the amount of fiscal need is smaller than that of fiscal capacity and the negative amount is equal or larger than the Basic Allocation, the region will not receive *DAU* allocation. When the negative amount is smaller than the Basic Allocation, the allocation will be equal to the Basic Allocation minus the gap. When the gap is larger than zero, the allocation will be equal to the Basic allocation plus the gap. Finally, when the fiscal gap is zero, the allocation is equal to the Basic Allocation (PP 55/2005, Article 45). However, the hold-harmless provision was completely removed by 2009.

The central government has attempted to further reduce the non-formula component of the *DAU* allocation. Since 2005, the maximum share of the Basic Allocation has been below 50 percent and the remaining share is allocated for the Fiscal Gap components (*Kementrian Keuangan*, 2011a, p.V-9). In 2011, the maximum share of the Basic Allocation or the non-formula of *DAU* allocations was 48 percent for provinces and 45 percent of the total *DAU* for the *Kabupaten/Kota.* The remaining shares of more than 50 percent were allocated to cover the Fiscal Gap in the *DAU* allocation (*Kementrian Keuangan*, 2011b, Chapter III, pp.100-101).

Furthermore, in 2011, the allocation for the local government employee salaries under the Basic Allocation was also reduced. Instead of covering the total 100 percent of government spending on salaries, the new arrangement covers only 83.1 percent of the total salaries at the provincial

governments and 68.56 percent at the *Kabupaten/Kota* level (*Kementrian Keuangan*, 2011b, Chapter III, pp.100-101). The changes in the salaries coverage are expected to reduce over-staffing and/or over-payment of government employees. A 1/12 of the total annual *DAU* is transferred to the local governments every month. As the Basic Allocation is the Non-formula component in *DAU*, gradually reducing its allocation will improve the effectiveness of *DAU* function.

The new laws also propose some significant changes in the *DBH* allocations to improve the vertical equity function of the *DBH* allocation. Table 5 explains the new *DBH* arrangements.

TABLE 5 REVENUE SHARING SYSTEM (LAW 33/2004)

Revenue Sharing Fund	Sharing (%)			
	Central	Local Governments		
		Total	Provinces	Districts/ Municipalities
Revenue from Taxes and Fees				
Income Taxes	80	20	8	12
Land and Property Taxes[#]	10*	90	16.2	64.8
Fees on Land and Property Change of Ownership	20**	80	16	64
Revenue from Natural Resources				
Forestry				
Concession fee and production sharing	20	80	16	64
Reforestation Fees	60***	40	-	40
General Mining	20	80	16	64
Fishery	20	80	-	80
Oil	84.5	15.5	3	12
Natural Gas	69.5	30.5	6	24

Notes:

[#]9 percent of the total is retained by the central government as collecting fees.

*65 percent of the share is distributed equally among nation-wide districts and municipalities. Another 35 percent is distributed as incentives for the districts and municipalities that could reach their previous year targeted revenues of a particular sector selected by the local government.

**This share is distributed equally among nation-wide districts and municipalities.

***This share is allocated for nation-wide reforestation programs.

Source: *Undang-Undang No. 33/2004* (Law No. 33/2004)

The changes in the *DBH* are: firstly, the new *DBH* included the transfer of a proportional share of income tax, increased the share of tax revenues

from oil and natural gas for producer areas and returned all revenue from land and property tax to the sub-national governments (provincial, district and municipality). Until 2008, the revenue sharing from oil and gas followed the Law 25/1999. The additional 0.5 percent of revenue sharing from oil and natural gas was effective by 2009 fiscal year (PP 55/2005, Article 67(1)). The new revenue sharing should increase the local government authority in allocating the fund for the benefit the local people.

Secondly, the new *DBH* encourages local governments to improve their local-own source revenues by providing incentives for these local governments that could reach their targeted own-source revenues. A small percentage of the Property and Land taxes are set aside for this purpose (see Table 5, p. 152). This incentive should encourage the local governments to improve their fiscal capacity. However, allowing local governments to create new local taxes and levies is not without problems. As will be explained, some local governments created new taxes and charges which are argued to be excessive and which might disturb local economic activities (see Sections 5.2 and 5.3.1).

While the incentives could be seen to be the reason for local governments to create local taxes and charges that might be harmful to the local economy (see p. 165 & Section 5.3.1, p. 224), this could have been prevented provided that: firstly, the laws on creating local taxes and charges gave clear guidelines on creating these new local revenue sources. A closed list of local taxes and charges that local governments are allowed to create are a form of such guideline. Secondly, that a form of controlling mechanism was introduced to ensure that local governments followed the guidelines.

These features were absent from the Law 34/2000 on Local Taxes and Charges.

In accordance with UU 33/2004 on *Dana Perimbangan* or Balance Funds, the government issued PP 55/2005 to amend PP 104/2000. Under the new regulation, the distribution of *DAK* has followed set criteria, namely general, specific and technical criteria (PP 55/2005, Article 55). The general criteria follow the Net Fiscal Index. The index basically measures the fiscal capacity of a region compared with the national average. All regions that have an index below the national average are eligible to apply for *DAK* allocation.

The specific criteria depend on the government policy and regulation on the characteristics of regions including special regional autonomy, less developed regions, boarder regions, coastal regions, natural disaster regions, tourism regions and regions with food security issues are illegible to apply for *DAK* allocation. The technical criteria describe the condition of supra and/or infra structures in the regions. By introducing these criteria, the distribution of *DAK* should be more effective than before in that, as the fiscal capacity improves, the amount of the grant should decline. As such, similar to *DAU*, the equalization function of *DAK* is gradually improving.

Since then the equity impact of *DAK* was also improved by introducing new programs financed under this specific purpose grants. By 2011, the *DAK* allocation covered 19 programs or an increase of 10 programs since 2007. Table 6 shows the programs under the *DAK* grant since 2008. As the table shows, the new programs cover areas including housing, electricity, infrastructure and land transportation. Table 6 shows the additional programs since 2008.

TABLE 6 SECTORS OF *DAK* FINANCING IN 2008 - 2011

No	PROGRAMS	2008	2009	2010	2011
1	Education	√	√	√	√
2	Health	√	√	√	√
3	Roads	√	√	√	√
4	Irrigations	√	√	√	√
5	Drinking water	-	-	√	√
6	Sanitation	-	-	√	√
7	Infrastructure for government operations	√	√	√	√
8	Oceanary and fishery	√	√	√	√
9	Agriculture	√	√	√	√
10	Environment	-	√	√	√
11	Planned parenthood	√	√	√	√
12	Forestation	√	√	√	√
13	Trade	-	√	√	√
14	Infrastructure in backward regions	-	-	-	√
15	Electricity in rural areas	-	-	-	√
16	Housing and settlement	-	-	-	√
17	Land transportation safety	-	-	-	√
18	Infrastructure in rural areas	-	√	√	√
19	Infrastructure in boarder regions	-	-	-	√

Sources: Kementerian Keuangan, 2009, Chapter III, p. 81 & 2011, Chapter III, pp. 106-107.

As stated above, the purpose of *DAU* and *DAK* allocations are to improve horizontal equity. Section 4.1.1 explains the extent that the *DAU* and *DAK* allocations can improve the horizontal equity instruments.

4.1.2 The Impact of the Balance Funds Arrangements on the Fiscal Equity and Structure

As explained above, the Law 22/1999 was amended by Law 33/2004. The new law proposed some modifications on the Balance Funds arrangements. However, the hold-harmless provision was completely removed from the *DAU* formula by 2009. Also, the new revenue sharing stated by Law 33/2004 became effective in 2009. In addition, the central government introduced eligibility criteria for *DAK's* recipients and expanded the programs under *DAK* component since 2008. As such, to understand the

effectiveness of the modified Balance Funds arrangement on fiscal equity and structure, the data should be extended beyond 2007.

Table 7 below describes the effectiveness of the modified Balance Funds arrangements as the equity instruments. It uses Gini coefficient to measure the fund arrangements as the horizontal equity instruments (see Section 3.1). The coefficient uses fiscal capacity with and without the allocation of *DAU* and *DAK*. Equity is improving when the value of Gini coefficient is moving closer to zero. Otherwise, the equity is worsening.

TABLE 7 GINI COEFFICIENT OF FISCAL CAPACITY EQUALIZATION BEFORE AND AFTER INTER-REGIONAL FISCAL TRANSFER IN KABUPATEN/KOTA

Fiscal Capacity	1999	Law 25/1999		Law 33/2004	
		2003	2007	2010	2011
(1) Own-source revenues	0.6113	0.5136	0.5452	0.5746	0.5641
(2) Own-source revenues, *DBH*	0.4750	0.5431	0.5921	0.5184	0.5167
(3) Own-source revenues, *DBH, DAU, DAK*	0.2984	0.2797	0.6106	0.2714	0.2639

Source: calculated from Kementrian Keuangan, 1999, 2003, 2007
Calculated by using Free Statistics Software, ver. 1.1.23-r7 (Wessa, 2012)

Table 7 shows that the *DBH* arrangements widened the horizontal fiscal imbalance across regions as showed by the increase in the Gini Coefficient from 0.4750 in 1999 to 0.5431 in 2003 and to 0.5921 in 2007. This finding suggests that the distribution of natural resources, particularly oil and gas, across regions is highly unequal. As such, revenue sharing on oil and gas benefitted only the regions where the mining existed.

Since 2009, the central government has been transferring 20 percent of income tax revenue on top of an additional 0.5 percent increase in oil and gas shares to the regions (see Table 3, p. 145 & Table 5, p. 152). As the central government returned more revenues to the regions since 2009, the

fiscal capacity of these regions is improving. The impact of the transfers was a declining Gini coefficient to about 0.51 in 2010 and 2011. These findings show that reducing vertical fiscal imbalance by transferring more revenue shares to the regions can also reduce horizontal fiscal imbalance and, hence, improve the regional fiscal capacity. It is argued that as the fiscal capacity improves, the local government might not need to look for other sources of revenue such as creating new local taxes and charges.

Table 7 also shows the extent that *DAU* and *DAK* can narrow horizontal fiscal imbalance. For this purpose, the analysis of Table 7 was based on the values of Gini coefficient with and without *DAU* and *DAK* in the same year. The *DAU* and *DAK* narrow the horizontal fiscal imbalance when the Gini coefficient without *DAU* and *DAK* is larger than with *DAU* and *DAK* in the same year.

The initial arrangements of *DAU* and *DAK* allocations improved the horizontal equity. The decrease of Gini coefficient from 0.5136 to 0.2797 in 2003 confirmed this finding. However, including the *DAU* and *DAK* in the calculation increased the Gini coefficient from 0.5452 to 0.6106 in 2007. This suggests that *DAU* and *DAK* effectiveness as the horizontal equity instruments declined between 2003 and 2007. In other words, the allocation before the modification seems to favor rich areas. The hold-harmless provision or the lump-sums component of *DAU* could be responsible for this. As the provision was removed by 2009, the horizontal fiscal imbalance also declined as indicated by declining Gini coefficient from 0.5641 to 0.2639 in 2011.

The modification of the Balance Funds based on Law 33/2004 also affects the regional fiscal structure. This research uses a number of factors to

analyze the fiscal structure of the local government. These factors are the capacity of the local government to finance its own spending, the fiscal dependence on grants and the diversification of local government revenues. As indicators of these factors, this research uses fiscal capacity, the flypaper effect and Hirschman-Herfindahl Index (HHI), respectively (see Section 2.1.1). Table 8 shows the impact of the Balance Funds arrangements on the fiscal structure of the districts/municipalities.

TABLE 8 THE IMPACT OF BALANCE FUNDS ARRANGEMENTS ON THE FISCAL STRUCTURE

Fiscal Structure	1998/1999	Law 25/1999		Law 33/2004	
		2003	2007	2010	2011
Fiscal Capacity[1]	0.2208	0.2160	0.1566	0.1841	0.1684
Flypaper effect[2]	4.9762	4.9513	11.5139	6.7573	6.3852
HHI[3]	0.9585	0.7225	0.7282	0.8012	0.9487

Notes:

[1]Ratio of total local government potential revenues or local own-source revenue (*PAD)* and revenue sharing (*DBH)* or *(PAD+DBH*) to total government expenditures

[2]Ratio of grants *(DAU+DAK*) to total local government potential revenues *(PAD+DBH*)

[3]Hirschman-Herfindahl Index, i.e the sum square of ratio between each type of *PAD* to the total *PAD* where 0 < HHI < 1. If HHI is closer to one, then the complexity is low or more revenues from taxes/levies are collected. The total number of regions is 335 (based on 2003).

Calculated from *Kementrian Keuangan (1999, 2003, 2007, 2010, 2011)*

On aggregate, fiscal capacity between 1999/98 to 2007 had been declining from 0.2208 in 1998/1999 to 0.1566 in 2007. As new regions do not have sufficient own-source revenues to finance their own spending (see Section 4.2.1), regional proliferation that occurred until 2009 is likely to reduce the fiscal capacity nationwide (see Section 4.2.1 & Table 8). However, the decline in fiscal capacity between 1999/98 to 2007 was compensated by grants as shown by increasing the flypaper effect from 4.9762 in 1998/99 to 11.5139 in 2007.

Increasing the flypaper effect indicates vertical fiscal imbalance since it shows that local governments are becoming more dependent on transfer arrangements. These findings, namely decreasing fiscal capacity and increasing the flypaper effect, suggest that as regional proliferation continues, the inter-regional fiscal transfer arrangements might encourage new local governments, particularly those with low fiscal capacity, to behave as free-riders. In other words, inter-regional fiscal transfer arrangements provide fiscal incentive for regional proliferation[37]. It is argued that free-riders tend to have inefficient government operation since their total government expenditures tend to be higher than their own-source revenues.

The central government issued Law 34/2000 on Local Taxes and Charges amended by Law 28/2009 to encourage local governments to improve their fiscal capacity. Since then, the local government has been creating new taxes and charges some of which might harm the local economy. Since then, the contributions of local taxes and charges on own-source revenues of the local government increased as indicated by increasing HHI[38] from 0.7282 in 2007 to 0.9487 in 2011. It seemed that a declining flypaper effect from 11.5139 in 2007 to 6.3852 in 2011 was compensated by increasing revenues from local taxes and charges. However, if the proceeds were used to finance local government employees' salaries rather than the provision of public goods, Leviathan government behavior might arise.

In summary, Indonesia has been introducing inter-regional fiscal transfer arrangements since 1940s. However, during the Old and New Order

[37] Obtaining fiscal incentives or fiscal spoil has become a reason for proposing regional proliferation (Tarigan, 2010, p. 24).
[38] The average HHI in 2007 to 2011 used the total number of local governments in 2003 to isolate the impact of regional proliferation. By so doing, the values of HHI represent only the increase in the local taxes and/or charges.

regimes, the arrangements were only a political rhetoric since the arrangements had not been fully implemented. The third inter-regional fiscal transfer arrangements adopt some of the characteristics in the previous arrangements. As such, the latest inter-regional fiscal transfer arrangements can be perceived as the modifications of the previous arrangements. As Section 4.1 demonstrated, the design of inter-regional transfer arrangements implemented in different eras followed the form of government in the eras.

The third arrangements that was guided by Law 22/1999 amended by Law 33/2004 became effective in 2001. Unlike the previous arrangements, the third one transferred some funds to finance the expanding authority of the local government. The authority covered all government functions except security and defense, judiciary affairs, religious affairs, foreign affairs and fiscal and monetary policies. The design of the Balance Funds was further modified under the Law 33/2004. The purpose of the modifications is to improve the vertical and horizontal fiscal equity. As explained above, the modified Balance Funds managed to improve the equity functions of the arrangements.

However, the latest arrangements under the Law 33/2004 are not without flaws. It is argued that the design of the transfer could create a flypaper effect or vertical fiscal imbalance. Since the central government retains the majority proportion of major revenue sources, vertical fiscal imbalance arises as indicated by a high flypaper effect. High flypaper effect could also be the result of the *DAU* design. The inclusion of the local government employees' salaries in the general allocation formula *(DAU)* makes the non-formula component of *DAU* high and, therefore, reduces the effectiveness of *DAU* as a block grant.

In addition, vertical imbalance could encourage the local government to look for another revenue source such as collecting more local taxes and revenues. As they do this, the HHI tends to increase. Leviathan government behavior arises as they use these revenues to finance expenditures on non-public services provision. As a result, the size of government tends to increase above the optimum level. Based on the arguments, it is argued that Leviathan government behavior could be the result of the design of the Balance Funds arrangements.

4.2 Regional Fragmentation and the Social and Political Institutions in Indonesia

Section 4.1 explained the institutional design of fiscal transfer arrangement and the way the arrangement affects the fiscal behavior of the local government. As the chapter explained, the design of the transfer, particularly related to the revenue sharing *(DBH)* and the inclusion of the local government employees' salaries in the general allocation formula *(DAU)*, could encourage the local government to create excessive taxation that leads to Leviathan government behavior. However, it is argued that this could intensify under certain social and political conditions.

Section 4.2.2 identifies the historical background of Indonesia that shapes the value structure of contemporary Indonesia, namely the patrimonial system. It is argued that the system justifies rent-seeking activities in contemporary Indonesia. Section 4.2.3 explains the political system in Indonesia. It is argued that regional government performance remains problematic due to two aspects, namely the political party management system and the way the constituents express their voting behavior.

4.2.1 REGIONAL PROLIFERATION AND EXIT RIGHTS

The Law 5/1974 on Regional Government was amended by Law 22/1999. The new law became effective in 2000. Since then, the Ministry of Home Affairs approved the creation of a number of new regions. As a result, the total number of jurisdictions in Indonesia has increased significantly. Statistical data show that in 1999, there were 26 provinces, 268 districts, and 73 municipalities nationwide. By December 2007, these numbers had increased to 33 provinces, 370 districts, and 95 municipalities, respectively (*Badan Pusat Satistisk*, 2008, p.4).

However, most of the proliferation has occurred outside of Java Island[39] for these following reasons: The first reason is to get more revenue sharing from natural resources. Most of the rich natural resource areas are located outside of Java Island. By 2007, about 25.20 percent of the total regional proliferation took place in the nine natural resource rich provinces, namely *NAD, Riau, Bangka Belitung Islands, Riau Islands* that are located near *Sumatra* Island and *Kalimantan Barat, Kalimantan Tengah, Kalimantan Selatan* and *Kalimantan Timur* that are located in *Kalimantan* or Borneo Island (Calculated from *Kementrian Keuangan, 1999; Badan Pusat Statistik, 2008*)[40]. In 2007, these eight provinces held about 68.5 percent of revenue sharing from natural resources nationwide (Calculated from *Kementrian Keuangan*, 2007).

The second reason for regional proliferation is to get more funds from the general allocation fund arrangements (see Section 4.1.1). While the general allocation arrangements were likely to benefit rich areas due to the hold-harmless system applied until 2009, poor areas that granted regional

[39] By 2009, 85.7 percent of new provinces, 99.4 percent of new districts and 76.5 percent of new municipalities were established outside of Java Island (*KPPOD*, 2009).
[40] Before 2002, *Riau Islands* province was part of *Riau* province. Before 2000, *Bangka Belitung* Islands province was part of *Sumatra Selatan* province.

autonomy have also benefitted by obtaining grants under the fiscal transfer arrangements. This could be seen as free-rider behavior (see Section 2.2.1). *Nusa Tenggara Timur* Province is the poorest province nationwide. However, by 2009 the province had eight new districts, higher than the average number of new districts/municipalities per province as a result of regional proliferation (*KPPOD*, 2009)[41]. This situation indicates that the hold-harmless provision provides incentive for regional proliferation. It is argued that regional proliferation might fail to encourage regional competition as suggested by Tiebout (1956).

In addition, lower economic contribution of the new regions to the respective provincial regions and higher poverty level than the parent regions in the new regions support the arguments (BAPPENAS-UNDP, 2008). The economic contributions and poverty rate of the new regions are 6.6 percent and 21.4 percent as opposed to 10 percent and 16.7 percent in their parent regions after five years of becoming autonomous regions (*BAPPENAS*-UNDP, 2008, pp.13-14). These facts indicate that regional proliferation seems to ignore economic capacity of the new regions.

In theory, the increase in the number of districts/municipalities could have increased the alternatives for businesses to relocate or to select new business locations. As the alternatives increase, the local governments would compete in attracting new businesses by using more effective budget allocation to avoid having to levy excessive taxes and charges. This implies that alternative business locations combined with the ability of businesses to relocate (mobility factors of production) could have disciplined the local governments from creating excessive new taxes and fees. Based on this

[41] The average number of new districts/municipalities as a result of regional proliferation is about six per province (calculated from *KPPOD*, 2009).

argument the assumption of mobility factors of production under Tiebout jurisdictional competition frameworks is critical. However, since relocating could be costly, regional proliferation might not guarantee regional competition. Factors such as the availability of infrastructure, public services and the structure of the labor market, could make changing business location expensive. These factors become the barrier to exit.

Yet, comparing the availability and quality of infrastructure nationwide, areas in Java Island on average have better availability and quality of infrastructure than those outside of Java Island (Istiandari, 2009). As a result, investment activities tend to cluster in that region. In 1995, 63.70 percent of investment activities were located in Java Island whereas the rest (36.30 percent) were spread in other islands including *Sumatra, Bali, Kalimantan, Sulawesi* or Celebes, *Nusa Tenggara, Maluku* or Moluccas and Papua (Sarungu, 2008, p.67). By 2007, the figures did not significantly change since 63.68 percent of the investment activities remained in Java Island (Calculated from *Badan Pusat Statistik,* 2010, p.46*)*.

Furthermore, statistical data in 2007 showed that in Java Island, 67.38 percent of investment activities were in west Java area eg. Special District of Jakarta and *Banten* and *Jawa Barat* provinces, whereas the remaining 32.62 percent were spread in other areas in Java Island including central and east Java areas, namely Special District of *Jogjakarta* and *Jawa Tengah* and *Jawa Timur* provinces (Calculated from *Badan Pusat Statistik* 2010, p.46). These data confirm that development of business locations does not necessarily follow the increasing proliferation of regions. Section 5.2 on qualitative research partly provides additional information for the reason that factors of production are not mobile.

Since business tends to cluster in certain locations, it opens up an opportunity for the local governments to create excessive new local taxes and charges. As such, it is not surprising that since the enactment of Law 34/2000 on Local Taxes and Charges, the local governments have introduced various new taxes and charges (Lewis, 2003; *KPPOD*, n.d). By 2001, the local governments have created more than 1,000 new local taxes and charges (Lewis 2003). An additional 779 local taxes and charges were created from 2002 to 2007 (*KPPOD*, n.d).

However, most of these taxes and charges are poorly designed due to, among others: Firstly, equity issues since the burden of these taxes and charges are not in-proportion to individual wealth. Secondly, they have inefficient effects in the sense that it might harm local economic activities. Thirdly, these local taxes and charges are high in administrative costs of implementation (Simanjuntak & Mahi, 2004; *KPPOD*, 2012). Furthermore, the increase in these revenues does not significantly improve the quality of public service provisions (Smoke, 2004; Nugroho, 2010). In addition, there is an indication that these revenues are wasted on rents and, hence, creating Leviathan government behavior (see Section 4.3, p. 189).

This research argues that when regional competition is absent, the quality of public services might be low. When exercising exit rights is difficult due to limited alternative business areas, exercising voice rights become the option. However, the extent that exercising voice rights can constrain excessive taxation depends on factors such as the social and political institutional settings that underpinned the local government in decision-making. Sections 4.2.2 and 4.2.3 explain the way the social and political institutions contribute or constrain the exercising of voice rights. It is argued

that the value system, political party system and the way constituents demonstrate their voting behavior encourage the Leviathan government behavior.

4.2.2 Social Institutional Setting

The autocratic political power that has underpinned contemporary Indonesia's political system is deeply rooted in the complex intertwining between traditional values and colonial influences (Kingsbury, 2005). Kingsbury used the word 'empire' to describe various inter-related factors both inside and outside the culture that have made up the system, such as the *priyayi*-peasant relationship and the political system of the Dutch colonial ruler. As such, perceiving contemporary Indonesia's political system as purely Javanese culture is seriously misleading. However, since the center of political and economic power of contemporary Indonesia has been established in Java Island since the Dutch colonial time, political and cultural values in this island become dominant.

Java Island has always been the center of political and economic activities as early as the beginning of the 17th century. In this period the Dutch established a trading company known as *Verenigde Oost-Indische Compagnie* (*VOC)* in 1602 in Batavia (currently known as Jakarta), Java Island. In the period of colonization, the Dutch used the Javanese culture as a foundation in developing a political system to strengthen their colonial interests. In later development, the Dutch shaped the culture to meet their political needs as explained below.

Aspects of traditional and religious values as well as colonial influences in the history that have shaped the system according to Kingsbury (2005) include animism and Hinduism-Buddhism values. The value of *halus*

in *Bahasa Indonesia* which literally means smoothness, politeness or refinement, describes the Javanese behavior and emotions as to have personal control, appropriated responses, rigid etiquette, patience, detachment from the outside world, resignation and respect. The term *halus* implies focusing frustrations, anger or other negative emotions inwards that could sometimes lead to dissent (Kingsbury, 2005, p.20). The author further explains that animism or spirit worship, as a part of the cultural system, has syncretism or the ability to blend with other religious beliefs. This ability is shown in the form of tolerance or easy acceptance of difference. Animism also acknowledges power as a part of nature and, therefore, as something that cannot and should not be contested. In the history of the Javanese society, these values offered social stability.

Another influence that shaped the political system is the traditional livelihood of the Javanese, namely the wet-rice agriculture system in Java Island (Kingsbury, 2005). The dependence of the agricultural system on nature, where human intervention is very limited is argued to have created a mentality of total submission. This mentality perceived livelihood as given, and any fortune or misfortune occurring is considered as normal as nature itself and unable to be avoided. In the past, this mentality has made the Javanese vulnerable to dominance by the social elite. In contemporary Indonesia, the total submission mentality among the Javanese is known as *nrimo* (Koentjaraningrat, 1974).

Since the cultivation of rice requires terrace-like-wetland areas, the only option for the Javanese was to live inland. In the past, this option has somehow constrained people's mobility and, as such, made them vulnerable to military elite domination (Kingsbury, 2005). Furthermore, physical proximity

among the peasants in the history of the Javanese society has generated strong values of participation and mutual assistance, where individual desires should not precede social interests. In contemporary Indonesian culture, these factors have become the root of *gotong royong* value (Koentjaraningrat, 1974). In the past, this vulnerability and stable society combined with the need for an organization as more people depended for their livelihood on wet-rice cultivation resulting in a form of centralistic political system.

In the long-run, the system evolved into an autocratic leadership style where hereditary rulers, sometimes oppressive and unstable, were the characteristic of the system. Kingsbury described the nature of the leaders in the traditional Javanese culture as *kasekten* that refers to supernatural power, legitimacy and charismatic. Under such a tradition, he concluded that, in the past, there was an "abstract sense of relationship between cause, effect and ethical responsibility" that led to an understanding that the desires and interests of the subjects were secondary to those of the leaders (Kingsbury, 2005, p.23). This sense became the "cultural assumption of privilege" (Cribb, 2011, p.39) that had been utilized by the Dutch rulers to extract economic surplus or rents.

In addition, the separation of court–peasant lives in the history of Javanese traditions also shaped the political system. In the past, the court interventions on peasants were strictly limited. The interactions between the two groups took place only when the peasants had to pay taxes or tributes to the court to express loyalty (Kingsbury, 2005). While the courts maintained the political power, the peasants followed traditional values and beliefs for personal achievement. This was consistent with a total submission mentality

or *nrimo* as a reflection of animism believes that the power of the leaders could not be contested. Translating all aspects into the political system in the history of Javanese society, Kingsbury finally concluded that some believed that the states were entitled to impose their will at the expense of the subjects.

When religious influence spread in Java Island beginning in the 4th century BC, the state organizations evolved from the administratively disorganized political system into an organized religion-based structure (Kingsbury, 2005). At the time, the religious influence was predominantly Hindus. This was the era when monarchies such as Hindust-Buddhist *Majapahit* in East Java, Hindust-Buddhist *Mataram* in Central Java that later on relocated to East Java were growing. Islam influence began in the 15th century when *Demak* monarchy and, later, Islam *Mataram* in the 16th century both in Central Java were in ruled. The assimilation of religions in the statehood led to the introduction of a more structured traditional law that initiated a sense of states' responsibilities toward their subjects. These religion-based-monarchies became the political center of Javanese society until the Dutch colonial rulers came to power in the early 17th century. The colonial rulers then began reinstating the political system that was based on entitlements or the cultural assumption of privilege rather than obligations.

The Dutch influence during the colonial time restructured the elite power of the Javanese aristocracy or *priyayi* to fulfil the interests of the colonial authority. By assigning *priyayi* to supervise a forced cultivation system, the system detached them from their traditional Javanese culture. As a result, the system removed some constraints that had been imposed on them by traditional laws (Kingsbury, 2005). The introduction of a forced

cultivation system during the colonial time reinforced the power and rights of the *priyayi* to extract rents from the system.

Furthermore, since the colonial authority and *priyayi* retained most of the profits, the system separated laborers from their rightful rewards[42]. It is interesting to note that in the contemporary Indonesia state, exercising these rights later turned into a justification of corruption (Koentjaraningrat, 1974). However, this does not mean that the Indonesians can accept corruption. Rather the cultural assumption of privilege that was left intact after the Dutch colonial time has led to corruption (Cribb, 2011, p.39)[43].

Based on the argument above, social stability and vulnerability as the nature of Javanese culture combined with the elite domination of *priyayi* supported by the Dutch colonial bureaucracy became the basis of a patrimonial political system during the colonial time. The system is described as a political domination where organization machinery or bureaucratic administration is used to maintain power. Under the system the ruler's power depends on his ability to obtain and to maintain loyalty of the elite group or *priyayi* by providing rewards or benefits to the group in the form of rents (Crouch, 1979). In other words, the power is strongly dependent on personal relations rather than personal merits.

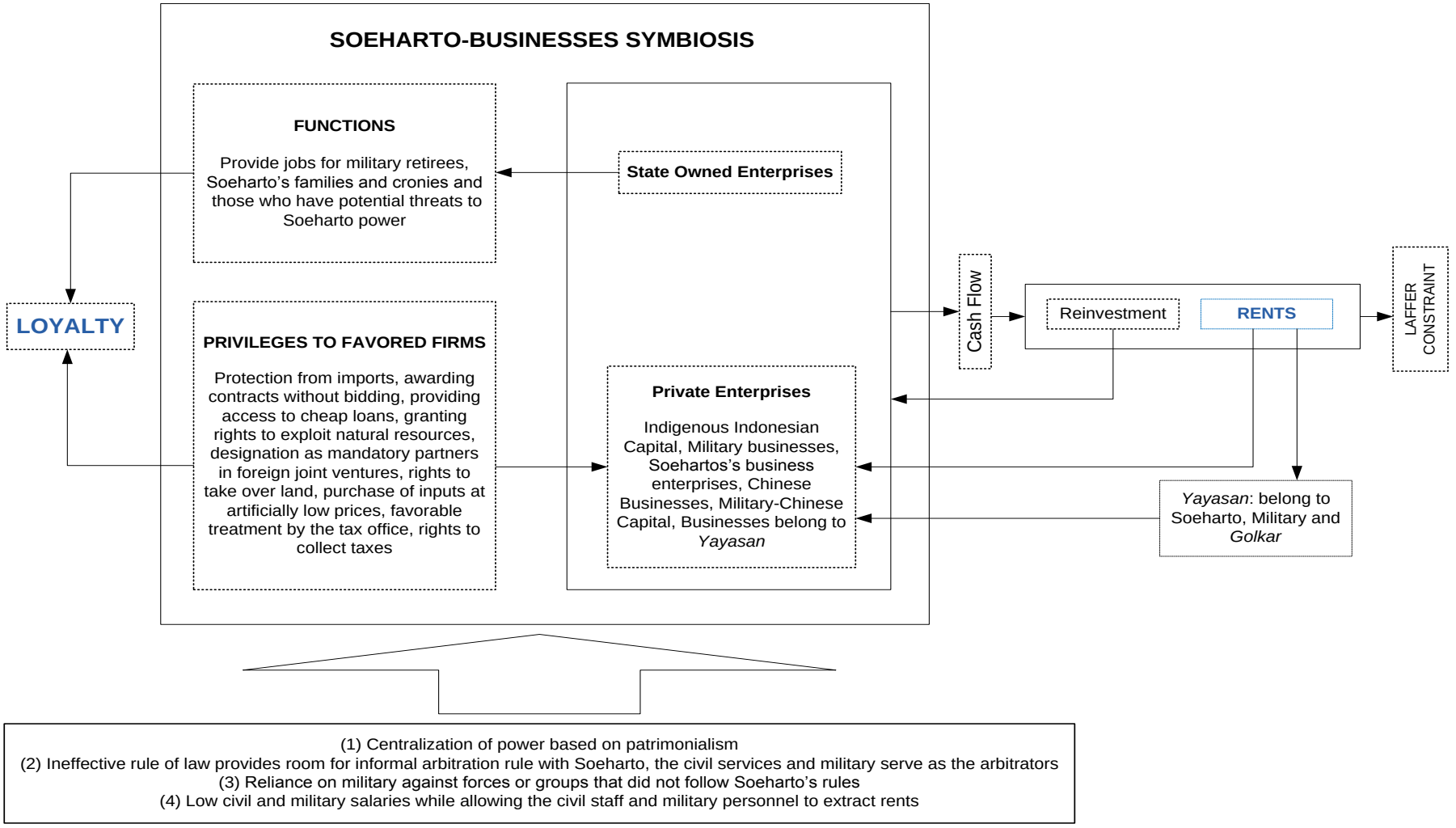
This system continued as the political nature of the contemporary Indonesia state found in both the Guided Democracy era under Soekarno Presidency and New Order Regime under Soeharto Presidency. During these eras, rent seeking increased as the system used states' resources to

[42] Koentjaraningrat (1990) refers to the mentality that springs from the separation as *budaya instan* (literary means instant mentality) to describe the mentality to obtain rewards without having the obligation to work to earn it.

[43] At the beginning of the 20th century, the Netherlands introduced the Ethical Policy that influenced the colony-colonizer relationship. However, the policy lacked the intellectual legacy and was short lived due to Depression of 1930. As such, by end of the colonization, the Indonesian was left in a transition between traditional patrimonial system and modern universal law (Cribb, 2011, p.39).

reward certain individuals or groups. The relation between the rulers and businesses that follows the patrimonial system described above is found in the government-business relations, during the New Order Regime era. McLeod (2000) refers to the system as the Soeharto business symbiosis or a mutually beneficial relationship that uses power and state machinery to extract rents and to build loyalty among Soeharto's cronies. Diagram 9 overleaf describes the symbiosis.

DIAGRAM 9 GOVERNMENT-BUSINESS RELATIONS DURING SOEHARTO ERA



Sources: derived from McLeod (2000)

The diagram demonstrates a closed system where Soeharto used the state-owned and private enterprises as cash cows. To build loyalty, he used the state owned enterprises to provide jobs for his cronies and political opponents and granted the private enterprises some business privileges. However, he ensured that the rents extracted from the enterprises left sufficient funds for reinvestment to maintain the growth of the enterprises and, hence, the flow of rents. In a way, this illustrates the principle of Laffer constraint that applies on taxes in public economics literature (McLeod, 2000), which states that there is a maximum amount of tax that can be extracted from the economy without diminishing investment and, eventually, the tax revenues.

The role of *Yayasan* or charitable organizations served as a cover to channel funds to the cronies' private enterprises and to assist in money laundering (Brown, 2006). These organizations collected rents from the state enterprises as well as private enterprises belonging to the cronies. Structures to audit *yayasan* until now were absent so that politicians and the military elite used them to generate wealth. Soeharto determined the way the rents were spent by the *yayasan* (Brown 2006; McLeod, 2000). By so doing, the y*ayasan* was an instrument used by Soeharto and his cronies to hide and move wealth and secure power (McLeod, 2000).

Soeharto used the bureaucracy to ensure that the clientage system remained. A patron-client relation that arises by using a bureaucratic system to give material reward and incentive to maintain loyalty is known as personal rulership patrimonialism (see Section 2.1.2.2). The rewards were given to anyone, civilians as well as military personnel, who were willing to support his

power. During his power, the military forces were used to suppress his opponents and secure electoral votes (Crouch, 1979; McLeod 2000). A high rank position in the bureaucracy, a manager in a state enterprise, a parliamentary seat and a business venture with administrative privileges such as gaining licenses, contracts and loans were some of the rewards (Crouch, 1979).

Personal rulership patrimonialism had created 'the system of exemptions' or a system of law that is discriminately imposed and applied only in some conditions (Cribb, 2011, p.33). Cribb (2011) provided a historical background to explain the system of exemptions that originated from the Dutch colonial time. At the time, the colonial rulers used the traditional patrimonialism relationship between *priyayi*-peasants and changed the relationship by encouraging *priyayi* as the traditional rulers to treat their subjects as their wish for the purpose of extracting rents or profits for the colonial rulers. Since the role of the traditional rulers in profit-taking was crucial, there was always discrimination of sanctioning imposed on the rulers and their subjects.

Under the patrimonialism, the concept of social contract that binds sovereign people to the government is missing. The binding is reflected in the condition whereby the sovereign people delegate their rights to the government in exchange for good government (Cribb, 2011, p.37). When the binding is missing the sense of responsibility of the rulers toward their people is absent.

The social contract in the patrimonialism government attaches to an economic dimension, namely profit for the rulers (Cribb, 2011). The system of

exemptions such as giving administrative privileges applied within the boundary of collecting profits. This situation led to ineffective rules and regulations that provided the opportunity for the bureaucrats to perform as arbitrators (McLeod, 2000). The arbitrators were likely to issue policies favorable to businesses belonging to Soeharto and his cronies in return for rents.

Another way to maintain loyalty and, hence, power is also demonstrated in the labor market for government employees. When salaries for government employees are barely above the market price and the supply of labor is above its demand, there will always be applicants who are willing to pay to have the opportunity to get any position in the government office in return for rents in the future (McLeod, 2000).): In fact, civil servant positions are opened to the highest bidder where the price depends on the accessibility to development budget and control (Blunt, et al, 2012). By allowing the bureaucrats to collect rents, Soeharto managed to retain loyalty at all bureaucratic levels[44].

The business symbiosis is also known as the politico-bureaucrat-business symbiosis that became the pillar of patrimonialism in contemporary Indonesia state (Hadiz & Robison, 2005). As explained above, the symbiosis leads to a network that consists of politicians, bureaucrats and entrepreneurs that make up the political oligarchs (Hadiz, 2001). These oligarchs have the access to collect economic rents. This system is a product of a cultural value that has been corrupted by individual as well as political interests. The

[44] Despite issues on governance and accountability caused by patronage system, it could have beneficial effects, including the willingness to accommodate different factions' interests which might be critical for political stability and economic growth (Blunt, et al, 2012).

outcome of the corrupted values is an institutionalized rent-seeking behavior that utilizes the political system and bureaucracy to reward such behavior to maintain stability and the status quo (Renoe, 2002).

The business symbiosis of bureaucrats, politician and businesses for the purpose of collecting rents remains even after the New Order regime ended in 1998 and spread out to the local level, particularly after the implementation of decentralization in 2000 (Hadiz & Robison, 2005). The symbiosis is also known as political oligarchy (Tarigan 2010, p.24; Hadiz, 2003) that worked as follows:

Kutai Kertanegara is a rich natural resources area that produces oil, natural gas, coals and timber. With income per capita of IDR139,263,000 or equivalent of AUD16,579 in 2007, the district has become one of the richest in Indonesia (*Badan Pusat Statistik 2008,* p.155). In accordance with Law 32/2004 and PP 5/2005, *Kutai Kertanegara* district was the first district in Indonesia to conduct a general election for the head of local government or *Bupati* in 2005*.* The elected *Bupati,* Syaukani was a former bureaucrat in the local government finance office and a former head of the *Golkar* political party office in the province who also managed to become the speaker of the local assembly.

Bupati Syaukani demonstrated the patrimonial system during his term of office (Evaquarta, 2010). By providing infrastructure projects and business licensing, the *Bupati* maintained loyalty among his cronies and the flow of rents. It is not surprising that during his office term, corruption on local development projects that involved some members of the local assembly, businesses, law enforcement and government officials was rampant. It is

alleged that mining licenses issued between 2001 and 2006, which increased significantly before the election in 2005, were used to secure his victory in the election (Evaquarta, 2010).

Examples of the symbiosis are also found in other areas, such as in East Indonesia. The symbiosis involves the bureaucrats at the Department of Public Works and contractors in a bidding process for government projects. A preferred contractor whose administrative documents were flawed could still beat other bidders provided that the contractor was willing to pay some amount of money to get insider services to provide the opportunity to fix the documents before entering the bidding process (Tidey, 2012). These examples indicate that the symbiosis has spread to the local level.

Based on the above arguments, while the setting is biased toward Javanese society, this setting has become dominant even among societies outside of Java. One contributing factor is the way Soeharto, who was a Javanese, used the state and bureaucracy to corrupt this value for the purpose of extracting rents for himself and his cronies as explained in Section 4.2.2. Once the state and bureaucracy became instruments to obtain personal gains, the corrupted practices spread all over Indonesia. The end result is a corrupted system known as the Soeharto business symbiosis (McLeod, 2000) or the politico-bureaucrat-business symbiosis (Hadiz & Robison, 2005). The latter consisted of political oligarchs found at the local level, particularly after decentralization became effective in 2000 (Hadiz, 2001). Equations (3) to (5) in page 78 described the above situation.

4.2.3 POLITICAL INSTITUTIONAL SETTING

The present political system of Indonesia cannot be understood without understanding the historical events that shaped it. The first decentralization initiative was introduced as far back as the Dutch colonial time. In 1905, the first municipality was established, followed by districts in the 1920s in Java Island (Hofman & Kaiser, 2002). However, the decentralization was set up mostly to meet the administrative purposes of the colonial ruler at the time. As such, it was far from political decentralization where regions have the autonomy to manage regional affairs.

The second decentralization initiative took place after Indonesia proclaimed her independence from the Dutch in 1945. The first constitution of the Republic of Indonesia was *Undang-undang Dasar 1945 (UUD 1945)* or the Constitution of 1945. Under the constitution, Indonesia is stated as a Unitary Republic of Indonesia or *Negara Kesatuan* and the head of the country is a President who was elected by the upper house known as *Majelis Permusyawaratan Rakyat (MPR)* or the People Council. The constitution at the time did not state regional autonomy.

The idea of decentralization was laid out in Law 1/1945. Under the law, the local governments were expected to manage their own regional affairs and assets and to collect their own revenues. As a result, the heads of local governments should be responsible for proposing and implementing regional policies and regulations as long as the policies and regulations remained consistent with those of the national government's or higher level priority. Since the law was the first law issued by the government after the declaration of independence, it could be inferred that Indonesia was envisioned as a decentralized country.

Law 22/1948 on Regional Government guided the organizational structure of regional governments. Under the law, the regions were divided into three levels of government including provinces, big cities or *Kabupaten* and small towns or *Desa* (Article 1). The head of provinces were appointed by the President, the head of the big cities by the Ministry of Domestic Affairs and the head of small cities by the head of provinces. However, the way the decentralization should have been carried out remains unclear until 1957 when the government issued the law on the Principles of Regional Government.

On 31 January 1950, the government issued *Konstituante Republik Indonesia Serikat* or the Constitution of Federal Republic of Indonesia. On 15 August 1950, the constitution was converted into *Undang-undang Dasar Sementara* 1950 (*UUDS 1950*) or Temporary Constitution of 1950 that was effective until 1959 (see Section 4.2.3) to amend the *UUD 1945*. *UUDS 1950* was expected to be amended by a permanent constitution, *Undang-undang Dasar* 1950 *(UUD 1950)*, as stated in the Constitution of Federation Republic of Indonesia 1950. Under *UUDS 1950*, Indonesia created a system of parliamentary cabinet.

According to the *UUDS 1950*, the territory of Indonesia was divided into several *negara* or states, namely *Negara Indonesia Timur, Negara Pasundan* including Federal District of Jakarta, *Negara Jawa Timur, Negara Madura, Negara Sumatra Timur, Negara Sumatra Selatan, Negara Jawa Tengah, Negara Bangka, Negara Belitung, Negara Riau, Special District of Kalimantan Barat, Negara Dayak Besar*, *Negara Banjar, Negara Kalimantan Tenggara* and *Negara Kalimantan Timur* (Constitution of Federal Republic of Indonesia

1950, Article 2). This constitution marked the beginning of a full political decentralization initiative in Indonesia.

However, on the 5th of July 1959, President Soekarno issued a Presidential Decree to dismiss *Konstituante*[45], a state body that was responsible for drafting and proposing constitutions, on the grounds that it had failed to produce a new constitution to amend *UUDS 1950*. Under the decree, the President also declared that the nation was to return to the Constitution of 1945. This event marked the end of the decentralization initiative during the Soekarno Presidency and the regional autonomy initiatives (see section 4.1).

The third decentralization initiative was introduced during the New Order Regime in 1974. The Law 5/1974 introduced the principles of decentralization. Following this law, the center of decentralization was the districts or *Kabupaten* and municipalities or *Kota.* The center of decentralization was selected on the basis that this second-tier government level had direct contact with local people and therefore better understanding for the people's aspirations.

Despite the law, power sharing between the central and local governments remained unclear. For example, regional offices or *Kantor Wilayah (KANWIL)* which served as extended offices of ministries at provincial level were still responsible for implementing national development programs drafted by the central government. Within this context, the responsibility of local government heads was limited to coordinating the activities of these offices to meet the need of their regions. Lack of clarity in shared

[45] The members of *Konstituante* were elected in the general election of 1955 during the first parliamentary election. The total number of the members was 550. At the time, the election used indirect voting mechanism where constituents voted for political parties. As such, the members of *Konstituante* were representatives of political parties that represented national or non-religious, religious and communism factions.

responsibilities could have resulted from the fact that the Constitution of 1945 did not accommodate regional autonomy or decentralization. As such, any law that attempts to introduce political decentralization could not be implemented without amending the Constitution of 1945.

Under strong political pressure that led to the downfall of the New Order Regime in 1998, the fourth decentralization initiative was implemented by the year 2000. Guided by Law 22/1999 on Local Government, the initiative was the first full political decentralization. In accordance with the law, local governments have been granted authority for most governmental functions except security and defense, judiciary affairs, religious affairs, foreign affairs and fiscal and monetary policies. In addition, policies on national planning and macro national development control, balancing fund, state administration and economic institutional systems, human resources development, natural resources utilization as well as strategic high technology, conservation and national standardization remain the responsibility of the central government (Law 22/1999, Article 7).

Similar to previous decentralization initiatives, the focus of decentralization is the second-tier local government level (Law 5/1974, Article 11) or *Kabupaten* and *Kota*. Also, similar to Law 5/1974, the heads of government are known as *Gubernur* or Governor for provinces, *Walikota* or Mayor for municipalities and *Bupati* or Regent for districts. In contrast to Law 5/1974, the new law clearly states that local governments that consist of provinces, districts and municipalities do not have hierarchical relations (Law 22/1999, Article 4). In other words, districts and municipalities are entitled to manage their own regional affairs. Together with the delegation of authority,

financial transfers from the central to the local governments have followed. The transfer of funds is guided by Law 25/1999[46].

The Law 5/1974 and Law 22/1999 differ significantly in several aspects. The first difference is the elements of the local government. According to Law 5/1974 (Article 13), the local government comprised the head of local government and the local assembly or *DPRD.* In addition, the regional apparatus was regional secretariat and regional government offices. The structure of local government according to Law 22/1999 was the head of local governments or the regional executive body and the regional government apparatus. The apparatus is basically referred to the local government organization machinery, including the Regional Secretary and regional government offices, that provides public services.

The second difference between the Law 5/1975 and Law 22/1999 is the separation of the local assembly or *DPRD* from the local government structure. According to Law 22/1999 the *DPRD* is the regional legislative body with some additional authority including selecting, proposing the appointment and dismissal of the heads (and vice heads) of local government and making regional government regulations together with the regional executive body, (Article 18). These new authorities significantly differentiate the role and responsibility of the *DPRD* from those stated in Law 5/1974. Since *DPRD* elects the head of local government, the latter was directly accountable to *DPRD* (Law 22/1999, Article 44). As such according to Law 22/1999 the political power of *DPRD* at the local level was significantly increased.

[46] However, the amendment of the Constitution of 1945 on regional autonomy was issued on 18th of August 2000 which is a few months after decentralization came into effect. As such, even though the political decentralization was effective on 1st of January 2000, the heads of local government were still elected by the local assembly. The change in the election mechanism took place after the central government amended Law 22/1999 with Law 32/2004 to accommodate the change of election mechanism as stated in the Constitution of 1945 after amendment.

Furthermore, Law 22/1999 introduces new regional government bodies in the regional government apparatus, namely regional technical offices in research and development, planning bureau, monitoring and training and development (Law 22/1999, Explanation on Article 65). The new regional government bodies together with the Regional Secretary and regional offices play a role in assisting the heads of local government in preparing and implementing regional planning development. This situation is in-line with the idea of regional autonomy and expanded regional authority as guided by the law.

The new decentralization policy under Law 22/1999 had some weaknesses in the area of public accountability issues. The issues arose in relation to the accountability relationship of the head of local government and local assembly due to the way the members of legislature and the head of local governments were elected. As explained above, the regional head, *Gubernur, Walikota* and *Bupati* were accountable to *DPRD* at its respective region. The reason behind this accountability arrangement was that *DPRD w*as the people's representative body. As such, the body could have been responsible for electing regional heads to secure the local government accountability to the people. This arrangement should not be an issue provided that the members of *DPRD* are accountable to their constituents. However, the law implied that this might not be the case.

Some members of *DPRD*, namely military personnel, were appointed by the central government instead of elected during the general election. These members held 10 percent of the total seats in *DPRD* (Law 4/1999, Article 25*).* Even though the rest of the members were elected from the

general election, the indirect voting mechanism used during the election did not guarantee effective accountability. Under this mechanism, the constituents would vote for political parties instead of individuals who represented the parties. This situation created the possibility for the members of *DPRD* to be more accountable to their political parties or organization than to their constituents. This suggests regional autonomy was less effective in positioning the local governments closer to the local people than it could have been.

However, improving the accountability issue of the head of local government to better serve the needs of the local people could not be achieved without amending the Constitution of 1945. As such, in 1999, *Majelis Permusyawaratan Rakyat (MPR)* or People's Consultative Assembly, which is similar to the upper house in western countries' political system, began the process of amending the constitution. The whole process, which consists of four stages, was completed on the 10th of August 2002.

The second stage of the amendment, which included regional autonomy and general election, was completed on the 18th of August 2000. The amended constitution states that the heads of local government are elected democratically and the members of *DPRD* are elected through general elections (Amended Constitution of 1945, Article 18). The amendment has pushed the political system toward a more democratic system and, hence, promotes better public accountability.

In accordance with the amended constitution, Law 12/2003 on General Election was issued to amend Law 3/1999. The new law is different from the previous one in that, it has completely removed the appointed members from

the local assembly. However, since the participants of the general election are political parties and the local assembly elects the head of local government as in the case of the previous law, public accountability of the local government might not be significantly improved. This accountability arrangement seems to suggest that the members of the local assembly remain accountable to their parties and the head of local government is accountable to the local assembly instead of their constituents. As such, public accountability of the head of local government remains an issue.

Furthermore, similar to the previous law, when the general election uses an indirect voting mechanism for the head of local government as explained above, the possibility that the local governance bodies, namely members of *DPRD* and the head of local government, will be involved in a form of collusion remain high. As such, the change of law does not necessarily improve public accountability. It is argued that when public accountability is weak, the likelihood that Leviathan behavior will occur is high. The behavior arises due to the inability of the constituents to vote the incumbent local government head out of office on the grounds of poor performance. In other words, the political sanctioning mechanism is weak.

Law 32/2004 amended Law 22/1999 on Local Government. Based on Law 32/2004, constituents can directly elect the heads of local government, namely *Gubernur, Walikota* and *Bupati* by using a direct voting mechanism in general election (Law 32/2004, Article 56). A government regulation, PP 6/2005, guides the election. Even though the candidates for the head of local government are endorsed by a (coalition or individual) political party, the direct voting mechanism employed during the election is expected to change the

direction of accountability of the heads of local government in favor of their constituents.

In response to the amendment, the central government issued Law 22/2007 to amend Law 12/2003 on General Election. The difference between the two laws is that Law 22/2007 also guides the election for heads of local government, namely *Gubernur*, *Bupati* and *Walikota.* According to Law 22/2007, the head of local governments are elected directly by the constituents instead of the local assembly. By 2008, more than half (52.04 percent) of districts and municipalities nationwide had directly elected the head of local government for the first time (*Badan Pusat Statistik,* 2008, p.29*)*. Changing the general election system to direct voting system is expected to improve political sanctioning mechanism.

Despite the changes in the laws, public accountability remains an issue. It is argued that the accountability issue could have been the result of the voters' voting behavior, namely expressive voting behavior (see Section 4.2.3). The behavior indicates the absence of positive correlation between the local government performance and the head of local government office terms. In other words, it is argued that the government performance does not necessarily contribute to the office term of the local government head.

Another factor that contributes to the accountability issue is the political party management system. Firstly the political coalition system at the regional level blurs the ideology of each political party (Pratikno, 2009, pp.61-68). For example, an Islam based party is willing to form a coalition with secular as well as Christian based parties. The coalition goes as far as supporting a common political candidate for the head of local government. The implication is that

voters do not necessarily have many options to cast their votes on candidates for the heads of local government.

Secondly the political party system is a centralized system (Pratikno, 2009, p.68). This situation is indicated by the intervention of the party leader at the national level regarding the selection of candidates for the head of local government during an election. In addition, there is a risk of marginalized grass-roots candidates during election time when conflict between local-national party leaders arises. Pratikno (2009) discussed several examples. Candidates supported by parties were rejected by constituents as in the cases found in *Sleman* District, Special District of *Jogjakarta* and *Ogan Komering Ulu Timur* District in *Sumatra Selatan* Province. Also, candidates supported by the district party leader were rejected by provincial party leader as in the case of *Bandar Lampung* City, *Lampung* Province and *Semarang* Municipality, *Jawa Tengah* Province.

Thirdly money politics or pork-barreling, included in the direct and indirect money politics, buy votes from the constituents. The differences between the two are the means to use the money politics by candidates, the target of the politics and the purpose of exercising money politics (Hidayat, 2009). In the direct money politics, the object is cash given to individuals to attract voters and/or political parties that will endorse the candidates. On the other hand, indirect money politics distributes goods such as nine basic necessity goods (rice, cooking oil, salt, eggs, salted fish, wheat flour, sugar, kerosene and detergent), door prizes (motor cycle, refrigerator) and free medical services, t-shirts, calendar and sports equipment during campaigning to attract voters (Hidayat, 2009, p.131).

The direct money politic pays to political parties is still evident since the New Order regime was still in office. The only difference is that after the downfall of the regime, money politics has come into the open. To become regional heads or members of local assembly is now open to anybody who has the chance and the ambition to become one, there is an opportunity for political parties to assist the candidates to reach the ambition in return for some money. During the New Order regime, the political broker is mainly the *Golkar* party and the clients are mostly former bureaucrats, retired military personnel or other members of Soeharto's cronies. Since decentralization, the brokers and the clients are not limited to those but include other political parties besides *Golkar*.

When political parties become political brokers at the local levels, there is a form of business proposition that attaches the local bodies to the parties (and vice versa). This situation leads to three major problems.

Firstly, introducing political platforms during campaigning becomes secondary compared with obtaining rents. This weakens the transparency mechanisms. Secondly, since the platform is unclear, political parties and their candidates will use religions and/or ethnic affiliation as the main theme in attracting voters during campaigning. This situation encourages voters to demonstrate expressive voting behavior (see Section 2.1.2.2). Thirdly, the obligations to fulfill the propositions become the reason for the elected members of the local bodies to engage in collusion and corruption. As such, it is not surprising that in June 2010, the President of the Republic of Indonesia gave his consent to investigate 150 local government heads who were allegedly involved in corruption (Jaweng, 2010a).

Indirect money politics will likely intensify expressive voting behavior. This behavior undermines the effectiveness of direct voting as a political sanctioning mechanism. This shows that even though the change from political voting mechanism to direct voting mechanism can promote accountable local government performance, it is argued that the political party system and the way the public vote for their political candidate undermine the effectiveness of the mechanism. As a result, the performance of the local governments might not be optimal even though the heads of the government are directly elected by constituents.

4.3 Government Size: Sources of Government Inefficiency and Rents

As Law 5/1974 was amended by Law 25/1999 in 2000, local government spending increased significantly due to the delegation of government functions from the central to the local governments. The delegation of authority not only results in increasing responsibility and, therefore, development spending but more importantly changes the structure of local government organization to accommodate the responsibility. In accordance with the delegation of government functions, *KANWIL* or the regional offices that formerly served as extended offices of ministries were merged into the local government offices.

Following the delegation and merging, government employees in these offices were also transferred to the local government. This situation has expanded the local government organization. As a result, the increase in the total local government spending is not only the result of increasing spending on development programs but also from expansion of the local government

organization. Similarly, new regions tend to have large government size since these regions will spend most of the budget on setting up government organizations and operations. As such, increasing government size at this stage cannot be avoided. However, when the increase in government size continues in the long-term, it suggests there might be inefficiency in spending.

This research identifies several different sources of inefficiency that results in increasing government size:

The first source of inefficiency is the design of Balance Funds that create fiscal incentive for regional proliferation (Jaweng, 2011a). This is the phenomenon of the free-riders (see Section 4.2.1). Balance Funds are provided to all new regions without affecting the amount of funds received by their parent regions. As regional proliferation continues, the parent regions have been relieved from their responsibilities for sharing the fund with these new regions since the latter receive the funds directly from the common pool of the national budget. As a result, regional proliferation could become a strategy to get funds from the central government and provide the opportunity for the political oligarch to extract rents rather than the instrument to improve the welfare of the local people (see Section 4.2.2).

The second source of government inefficiency is government failure or mismanagement and misallocation of budget. Regional Autonomy Watch found that about 75 percent, on average, of the budget is allocated for government employees and operational expenditures instead of development programs and provision of public services (*Mimbar Politik*, 28 June 2010). The mismanagement issue is strongly correlated to the quality of government personnel as indicated by the Government Personnel Performance Index. The

index of the new regions was below that of their parents' regions between the periods of 2003-2007 (*BAPPENAS*-UNDP, 2008, p.29).

In some areas, spending inefficiency has created fiscal problems. For example, *Pidie* Municipality in *Nanggroe Aceh Darussalam* Province has a budget deficit of IDR 34 billion due to over-staffing. About 83 percent of the municipality budget is spent on government employees and members of local assembly leaving less than 20 percent for development purposes. In addition almost all of the 18 municipalities and 5 districts in the province experience the same problem. As a result of the deficit, the local governments are unable to pay their employee salaries so that they have to ask the central and/or provincial government to bail them out or to borrow some money from banks (*Direktorat Aparatur Negara*, 2011).

A similar situation is also found in other regions such as *Timor Tengah Utara* Municipality in *Nusa Tenggara Timur* Province where the local government was unable to pay the salaries of their 5,000 employees on time in the months of January and February 2011 (Ama, 2011). Furthermore, there are 16 other areas that have the potential to experience the same problems since they spend more than 70 percent of the budget on employee expenditure. These areas include *Demak* Municipality in *Jawa Tengah* Province and *Lumajang* Municipality in *Jawa Timur* Province. These municipalities spent 89 percent and 83 percent of their budget, respectively, on employee expenditure (Jaweng, 2011b). These problems indicate mismanagement of budget since the central government has included total salary expenditures in the *DAU* allocations (see Diagram 7, p. 142 & Diagram 8, p. 150).

Furthermore, a study by *FITRA* and Asia Foundation found that even though the government expenditure for development programs such as education increased following the national priority program, most of the increase remains allocated for indirect expenditures such as salaries (*Kompas*, 2010). This finding was consistent with the World Bank survey in 2006. According to the report, spending on government employees took more than 95 percent of the total routine spending on education in 10 districts. On the other hand, maintenance and operational expenditures took less than 1 percent of the routine education expenditure which is not sufficient to improve education facilities and infrastructure (World Bank, 2009, p.27).

The study conducted by FITRA and Asia Foundation also revealed that about 10 to 34 percent of direct expenditures from local government grants were allocated to local civic organizations in 7 out of 41 local governments under study. Furthermore, these expenditures tended to increase during general elections of the heads of local governments. The latter finding seems to suggest some degree of money politics (*Kompas*, 2010).

The third source of government inefficiency is failure of local governments to follow some guidelines provided by the central government such as in the case of creating new local taxes and charges on local government taxes and levies. Since creating new local taxes and charges requires some funds, cancelled local taxes and charges contribute to government inefficiency. A district needs to spend at least between IDR 100 and 150 million per local taxes and charges on average to make a new

regional bylaw (Jaweng, 2010b)[47]. These funds are wasted once the central government cancels the local taxes and charges.

The fourth source of government inefficiency is corruption such as mark-up prices, using government funds for personal use, double counting of transportation expenses, fictitious procurement of goods and services and over-payment on government programs (*Badan Pemeriksaan Keuangan*, 2010). The situations described above suggest that while corruption remains an issue, budget mismanagement and government failure also contribute to government inefficiency.

CONCLUSIONS

This chapter provides a descriptive inquiry of the institutional aspects of Leviathan government behavior in Indonesia. As explained above, the behavior arises as a result of a complex interaction between three different institutions. Firstly is the fiscal institutional setting as represented by the inter-regional fiscal transfer arrangements. It is interesting to see that the local government dependence on transfer funds is high, so that the central government encourages the local government to collect more own-revenues. However, many of the local taxes and charges created by the local government do not follow the guidelines of taxation so that the central government has to cancel many of them. As such, the issue is not over taxation rather it is the local government's capacity to understand the correct forms of taxes and charges as guided by the law.

[47] The amount is equivalent to USD 11,000 to 15,000 per local tax or charge.

Second is the social value system that dominates the social institutional setting. In a society where personal rulership patrimonialism values remain strong, the accumulation of social capital will partly be wasted on pursuing personal interests such as collecting rents. In this case, collecting rents is the outcome of a corrupted value system. The term corrupted in this context refers to a cultural value that has been contaminated by political and personal interests. However, this chapter also explains that rent-seeking could be the result of government failure as demonstrated by mismanagement and misallocation of budget spending.

Thirdly is the political institutional setting to identify the effectiveness of political control in forming an accountable government. When exercising exit rights is difficult due to the high cost of exit such as in the case of relocation for businesses, voice mechanism will become the only option to change a situation. The extent that individuals can exercise their voice rights depends on the political institutional setting, particularly the effectiveness of a political sanctioning mechanism, namely the direct voting mechanism stated by the laws. However, the political party system and the way constituents demonstrate their voting behavior, namely expressive voting behavior, has undermined the political sanctioning mechanism proposed by direct voting mechanism. Chapter Five will use the explanatory-quantitative inquiry to establish the way the three institutional settings contribute to the Leviathan government behavior and identify whether the arguments previously explained are confirmed.

Chapter Five
The Institutional Setting of Leviathan Government Behavior in Indonesia

Chapter Four explained the context of Leviathan government behavior in Indonesia by using a descriptive inquiry approach which is a form of the quantitative research in the abductive ontological view (see Section 1.5). This approach used descriptive statistics and information collected from various publications (see Chapter Four). The analysis was structured around the three institutional settings, developed in Chapter Two, namely:

- Fiscal institutional setting, which explained the impact of the Balance Fund arrangement on the revenue structure (F) of the local government;
- Social institutional setting, which described the value structure system (X) that underpinned the local business-government relationship;
- Political institutional settings, which represented the political system and the extent that the system can produce an accountable government as measured by the local government performance (GP).

The focus of analysis was on, firstly, the fiscal structure that included the fiscal capacity, flypaper effect and structure of own-source revenues; secondly, the value system as characterized by personal patrimonial rulership; thirdly, the performance of the local government head as the outcome of the existing political system, namely the direct voting mechanism and fourthly, some factors that contributed to increasing government size and, therefore, government inefficiency.

Despite the information provided in Chapter Four, the *way* these three institutional settings simultaneously shape Leviathan government behavior remains unclear. Chapter Five aims to address this issue. For this purpose, this chapter uses the model developed in Chapter Two to test whether the institutional setting of Leviathan government behavior hypotheses hold in Indonesia. This test uses explanatory inquiry which is a form of the quantitative research in the abductive ontological view (see Section 1.5, p. 27). Chapter Three explained the way the test was carried out (see Section 3.2).

Since the quantitative part of this research uses samples derived from the population of local government in Indonesia, it used two different methods to test for the validity of the estimation model. Firstly, the information provided in Chapter Four is used as a benchmark. As such, the estimated model should give information that is more or less consistent with that provided in Chapter Four. Secondly, the normality test, particularly the heteroscedasticity test, to ensure that the characteristics of the samples represented that of the population (see Section 5.1.1).

However, there is some information that cannot be obtained from the estimation results of the model. This information, including some different forms of exercising voice rights and the direction of institutional adjustment related to the value system, was derived from the qualitative part (see Section 5.2). Due to the small number of participants in the FGD, this information does not represent that of the Indonesia population. However, it is sufficient to describe the Leviathan government experience from the perspective of business practitioners.

The presentation of this chapter is divided into three sections: quantitative research, qualitative research and the institutional setting after 2007. The first section explains the estimation results of the model proposed in Chapter Three. The estimation process used the technique previously explained. The second section provides the summaries of the FGD with businesses in *Bandung* and *Cimahi* municipalities and *Bandung* district. The third section analyzes and discusses the results by combining information obtained from Chapter Two, Chapter Four and the results derived from the quantitative and qualitative researches. This section also explains the Leviathan government institution after 2007. Finally, some brief conclusions are presented at the end of this chapter.

5.1 QUANTITATIVE RESEARCH

This section explains the estimating process, the results of estimations and the analysis and discussions of the model testing the hypotheses based on 2007 data that represent the inter-regional fiscal transfer according to Law 25/1999 (see p. 107).

5.1.1 ESTIMATING AND TESTING THE MODEL

The estimation of results by using SUR and 3-SLS techniques (see Section 3.2.2 p. 108) are presented in Table 9. Except for Equation (3), the regression used a semi-log-linearized model. The complete estimation results are provided in the Appendix (A-1). As Table 9 shows, Eviews calculated the coefficients, standard error (s), t-statistic at *m = 0* and the probability or alpha level for each coefficient that corresponded to rejecting the H_0 hypotheses. Coefficient values with probability higher than 10 percent indicate that the values were not significantly different from zero. In other

words, the variables that corresponded to these coefficients did not have a significant effect on the fluctuation of their respective dependent variables. In Table 9, these values are highlighted in red. The rest of the explanatory variables affected their corresponding dependent variables at alpha 10 percent or less.

As Table 9 shows, 3-SLS provided better or more efficient results than SUR as indicated by more estimated parameters are significantly different from zero at alpha 10 percent or less found in 3-SLS. However, a closer look at the goodness of fit indicators, Adjusted R-squared, provide unsatisfactory results as indicated by the low value of Adjusted R-squared (less than 10 percent) as highlighted in red. Table 10 provides the summary of goodness of fit derived from SUR and 3-SLS.

Table 10 indicates that the values of Adjusted R^2 for the equations were highly varied. The negative signs in some equations indicate a negative correlation between the dependent and independent variables in the equations. Table 10 shows that some of the equations, such as Equations (1) and (6), had very low Adjusted R^2 values. This fact seemed to suggest that overall the model might not be suitable to explain the institutional setting of Leviathan government behavior in Indonesia. For this reason, this research applied a normality test to identify the validity of the model.

TABLE 9 ESTIMATION RESULTS

	Seemingly Unrelated Regression				Three-Stage Least Squares			
	Coefficient	**Std. Error**	**t-Statistic**	**Prob.**	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
Fiscal Institution								
Equation (1): Dependent Variable: F								
Constant	-0.6930	0.0624	-11.1029	0.0000	-0.8771	0.0403	-21.7516	0.0000
FP	-0.0916	0.0168	-5.4692	0.0000	-0.1004	0.0155	-6.4901	0.0000
FC	-0.0078	0.0245	-0.3168	0.7514	-0.0862	0.0220	-3.9212	0.0001
M	-0.0195	0.0038	-5.1086	0.0000	-0.0364	0.0043	-8.3933	0.0000
GY	-0.0444	0.0216	-2.0577	0.0398	-0.0299	0.0102	-2.9208	0.0035
Equation (2): Dependent Variable: GY								
Constant	-23.3743	2.0381	-11.4689	0.0000	-26.4698	2.2026	-12.0176	0.0000
F	-1.6730	0.2127	-7.8657	0.0000	-7.9293	0.7302	-10.8593	0.0000
X	0.3272	0.1265	2.5859	0.0098	0.3510	0.0950	3.6953	0.0002
GP	1.3067	0.4743	2.7549	0.0059	1.3367	0.4133	3.2344	0.0012
D	0.9172	0.0133	69.2136	0.0000	0.7577	0.0275	27.6003	0.0000
Social Institution								
Equation (3): Dependent Variable: X								
Constant	-5.8444	0.6201	-9.4254	0.0000	-5.1432	0.6655	-7.7282	0.0000
INS	-0.7274	0.1293	-5.6281	0.0000	-0.7235	0.1315	-5.5007	0.0000
CER	1.2233	0.1072	11.4096	0.0000	1.1811	0.1106	10.6836	0.0000
SC	-0.4775	0.0986	-4.8402	0.0000	-0.6041	0.1233	-4.8997	0.0000
Equation (4): Dependent Variable: SC								
Constant	1.0608	0.1460	7.2660	0.0000	1.0830	0.1492	7.2597	0.0000
V	**0.0032**	**0.0217**	**0.1483**	**0.8821**	**0.0148**	**0.0992**	**0.1495**	**0.8812**
X	-0.0415	0.0191	-2.1760	0.0297	-0.0646	0.0236	-2.7346	0.0063
LD	0.7352	0.0364	20.2160	0.0000	0.7315	0.0383	19.0995	0.0000
Political Institution								
Equation (5): Dependent Variable: V								
Constant	-0.3610	0.8185	-0.4410	0.6593	-2.1296	0.8464	-2.5161	0.0120
GP	0.1825	0.1987	0.9187	0.3584	0.6120	0.2055	2.9788	0.0029
Equation (6): Dependent Variable: GP								
Constant	1.8487	0.1768	10.4546	0.0000	1.7391	0.2411	7.2137	0.0000
BL	**0.0165**	**0.0153**	**1.0772**	**0.2816**	0.0369	0.0195	1.8941	0.0584
S	0.2002	0.0294	6.8050	0.0000	0.2129	0.0366	5.8102	0.0000
INF	0.0432	0.0219	1.9711	0.0489	0.2690	0.0633	4.2484	0.0000
L	0.2292	0.0433	5.2956	0.0000	0.2612	0.0671	3.8916	0.0001
BP	**0.0008**	**0.0171**	**0.0439**	**0.9650**	0.0649	0.0214	3.0382	0.0024
V	**0.0069**	**0.0152**	**0.4537**	**0.6501**	**-0.1047**	**0.1006**	**-1.0401**	**0.2984**
F	-0.6930	0.0624	-11.1029	0.0000	-0.8771	0.0403	-21.7516	0.0000
SC	0.1199	0.0335	3.5831	0.0003	0.0823	0.0497	1.6567	0.0978
Armey Curve								
Equation (7): Dependent Variable: YG								
Constant	5.9099	0.1296	45.6019	0.0000	6.0256	0.1663	36.2402	0.0000
GY	0.0540	0.0306	1.7640	0.0779	**0.0602**	**0.0556**	**1.0835**	**0.2787**
GY^2	**0.0000**	**0.0001**	**-0.0896**	**0.9286**	**-0.0003**	**0.0002**	**-1.6096**	**0.1077**
POOR	0.0000	0.0000	-8.6844	0.0000	0.0000	0.0000	-7.8156	0.0000

Source: Estimation results (Appendix A1)

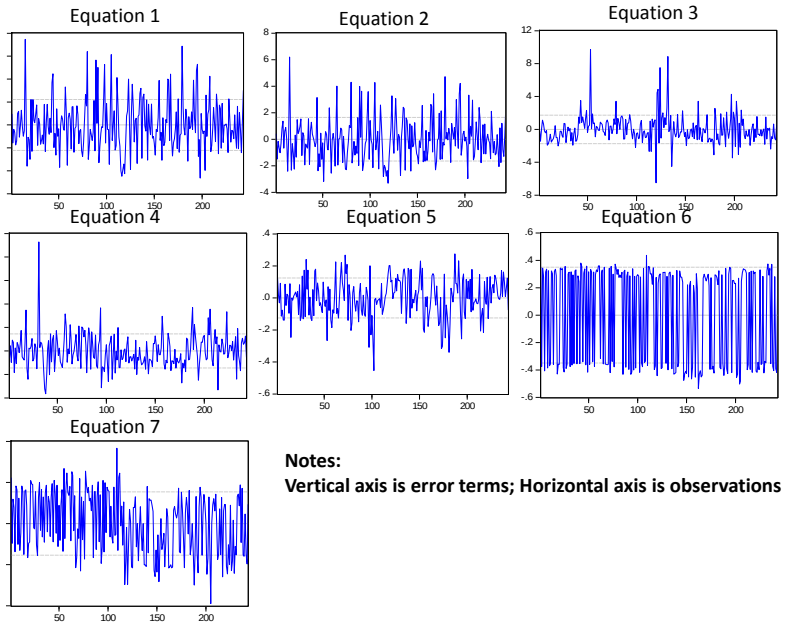
TABLE 10 GOODNESS OF FIT TEST

Equations	Adjusted R^2	
	SUR	3-SLS
1	**0.0836**	**-0.0525**
2	0.9515	0.7537
3	0.4691	0.4608
4	0.6109	0.6061
5	0.4365	0.1262
6	**-0.0020**	**-0.0241**
7	0.1573	0.1308

Source: Estimation results (Appendix A2)

Since the data were cross-sectioned, this research applied the heteroscedasticity test for each equation in the system. The first test used the graphical technique. The error terms were obtained by using 3-SLS technique. The test aimed to identify if the fluctuations in the error terms were relatively even within a certain range (Graph 1).

GRAPH 1 RESIDUAL DATA PLOTTING



As the graphs show, the fluctuations in some terms seemed exploded outside a certain range. In other words, the fluctuations seemed to be uneven across error terms in some equations. Uneven fluctuations indicated a heteroscedasticity problem in the data. The second test confirms whether the problem actually prevailed.

The second test is White's general heteroscedasticity test that is applied on all equations in the system (see p. 111). Appendices B1 to B4 provide the complete test result based on regression. The results of heteroscedasticity hypothesis testing at alpha 5 percent are shown in Table 11.

TABLE 11 WHITE'S HETEROSCEDASTICITY TEST

Equations	n	R^2	$Obs*R^2 = nR^2$	Regressors	Critical Values (χ^2)	Decisions
1	243	0.07308	17.7589	14	23.6848	$Obs*R^2 < \chi^2$, No heteroskedasticity
2	**243**	**0.73220**	**177.9253**	**13**	**22.3620**	**$Obs*R^2 > \chi^2$, Heteroskedasticity**
3	243	0.00518	1.2578	19	30.1435	$Obs*R^2 < \chi^2$, No heteroskedasticity
4	243	0.05960	14.4835	18	28.8693	$Obs*R^2 < \chi^2$, No heteroskedasticity
5	243	0.16226	39.4289	32	46.1942	$Obs*R^2 < \chi^2$, No heteroskedasticity
6	243	0.01699	4.1274	2	5.9915	$Obs*R^2 < \chi^2$, No heteroskedasticity
7	**243**	**0.14081**	**34.2171**	**8**	**15.5073**	**$Obs*R^2 > \chi^2$, Heteroskedasticity**
Reduced form	**243**	**0.55982**	**136.0363**	**90**	**113.1453**	**$Obs*R^2 > \chi^2$, Heteroskedasticity**

Sources: X^2 is obtained from Chi-square table (Gujarati, 1997); estimation results (Appendices B1 – B4)

Based on Table 11, a heteroscedasticity problem is found in several equations and the reduced form of the total system of equations system. The latter indicated that the problem is quite severe so that the performance of the equation system might be affected. Since the data are cross-sectional, heteroscedasticity could mislead the results of the hypotheses testing.

When a heteroscedasticity problem is found, the data should be corrected to account for the problem. One way to do this was to deflate the data by a deflator. This research used the Park test developed by Park

(1966) to select a variable that would become the deflator (see p. 115). The variable was selected by running two regressions. The first one was a regression on the reduced form of the equations system to obtain the error terms. Eviews 6 provided a feature to create and to save the error terms obtained from the regression. The second one was to use the error terms as the dependent variable and all exogenous variables in the equation system as the independent variables. The results of the second test are shown in Table 12.

TABLE 12 PARK TEST

Dependent Variable: LOG(RESID09^2) Sample: 1 243
Method: Least Squares Included observations: 243

Variables	Coefficients	Std. Error	t-Statistic	Prob.		
C	1.6618	7.6089	0.2184	0.8273	R-squared	0.1431
LOG(CER)	0.5239	0.9069	0.5777	0.5640	Adjusted R-squared	0.0904
LOG(BL)	-0.3080	0.4285	-0.7188	0.4730	S.E. of regression	2.1738
LOG(INS)	1.3942	1.1463	1.2162	0.2252	Sum squared resid	1077.3
LOG(BP)	0.8694	0.5319	1.6345	0.1035	Log likelihood	-525.7
LOG(S)	-0.6486	0.9510	-0.6820	0.4959	F-statistic	2.7186
LOG(LD)	1.1282	0.8489	1.3289	0.1852	Prob(F-statistic)	0.0010
LOG(INF)	-0.4108	0.5648	-0.7275	0.4677	Mean dependent var	-0.9002
LOG(M)	0.1377	0.2485	0.5540	0.5801	S.D. dependent var	2.2793
LOG(FP)	**-0.5973**	**0.2382**	**-2.5071**	**0.0129**	Akaike info criterion	4.4505
LOG(FC)	-0.2666	0.2645	-1.0080	0.3145	Schwarz criterion	4.6661
LOG(L)	-0.0017	1.2207	-0.0014	0.9989	Hannan-Quinn criter.	4.5374
LOG(F)	0.9129	0.6596	1.3841	0.1677	Durbin-Watson stat	1.8470
LOG(D)	-0.0609	0.0445	-1.3683	0.1726		
LOG(POOR)	0.1099	0.2836	0.3876	0.6987		

Source: Estimation results using EViews 6

Based on the Park test, FP variables were selected as the deflator since based on the t-statistic test it is strongly correlated with the error terms (see p. 114). The deflator is highlighted in red which indicated probability less than 1 percent or strong correlated to the error term. After correcting all data to account for the heteroscedasticity problem, the new data were used to estimate the model. Table 13 shows the new estimation results and Table 14 gives the goodness of fit after correcting for heteroscedasticity.

TABLE 13 ESTIMATION RESULTS AFTER CORRECTING FOR HETEROSCEDASTICITY

	Seemingly Unrelated Regression				Three-Stage Least Squares			
	Coefficient	**Std. Error**	**t-Statistic**	**Prob.**	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
Fiscal Institution								
Equation (1): Dependent Variable: F								
Constant	0.2269	0.0371	6.1081	0.0000	0.2129	0.0383	5.5610	0.0000
FP	-0.0442	0.0119	-3.7264	0.0002	-0.0446	0.0121	-3.6985	0.0002
FC	0.6418	0.0336	19.1160	0.0000	0.5688	0.0355	16.0412	0.0000
M	0.0007	0.0005	1.2760	0.2021	0.0023	0.0007	3.2811	0.0011
GY	**0.0020**	**0.0014**	**1.4062**	**0.1598**	0.0035	0.0014	2.4119	0.0160
Equation (2): Dependent Variable: GY								
Constant	-0.2455	0.3168	-0.7749	0.4385	-2.1340	0.5794	-3.6828	0.0002
F	-0.0723	0.1301	-0.5556	0.5786	-0.5196	0.2219	-2.3419	0.0193
X	0.1432	0.0992	1.4433	0.1491	0.2943	0.1570	1.8744	0.0611
GP	0.0069	0.0030	2.3454	0.0191	0.0084	0.0042	2.0045	0.0452
D	0.1062	0.0104	10.1813	0.0000	0.1740	0.0246	7.0761	0.0000
Social Institution								
Equation (3): Dependent Variable: X								
Constant	-5.6992	0.6339	-8.9904	0.0000	-5.5842	0.8403	-6.6457	0.0000
INS	-0.2435	0.0765	-3.1821	0.0015	-0.2235	0.1012	-2.2088	0.0273
CER	1.3967	0.0863	16.1870	0.0000	1.4771	0.1093	13.5112	0.0000
SC	-0.1885	0.0942	-2.0018	0.0455	-0.2791	0.1366	-2.0429	0.0412
Equation (4): Dependent Variable: SC								
Constant	-74.1727	9.5930	-7.7319	0.0000	-69.0503	16.3951	-4.2117	0.0000
V	9.0303	2.0763	4.3493	0.0000	13.6864	4.6205	2.9621	0.0031
X	7.8452	1.8661	4.2042	0.0000	5.5920	2.3387	2.3910	0.0169
LD	34.2662	2.6950	12.7147	0.0000	33.0430	4.5280	7.2975	0.0000
Political Institution								
Equation (5): Dependent Variable: V								
Constant	-3.7208	0.1384	-26.8939	0.0000	-3.7409	0.1390	-26.9122	0.0000
GP	0.9980	0.0404	24.7143	0.0000	1.0040	0.0406	24.7430	0.0000
Equation (6): Dependent Variable: GP								
Constant	-14.3438	3.3996	-4.2192	0.0000	-170.6349	37.1227	-4.5965	0.0000
BL	0.1457	0.0099	14.6475	0.0000	0.2252	0.0521	4.3211	0.0000
S	0.2865	0.0154	18.5860	0.0000	0.1680	0.0643	2.6141	0.0090
INF	0.4622	0.0167	27.6499	0.0000	0.6275	0.0468	13.4105	0.0000
L	**0.5697**	**1.1529**	**0.4941**	**0.6213**	32.8692	11.5747	2.8398	0.0046
BP	1.1305	0.5007	2.2577	0.0241	9.6884	2.8162	3.4403	0.0006
V	**-0.3270**	**0.4754**	**-0.6878**	**0.4917**	-66.7344	13.4351	-4.9672	0.0000
F	**-0.2706**	**0.6075**	**-0.4455**	**0.6560**	10.7126	4.7724	2.2447	0.0249
SC	3.1377	0.9510	3.2992	0.0010	**6.8123**	**5.7007**	**1.1950**	**0.2323**
Armey Curve								
Equation (7): Dependent Variable: YG								
Constant	1.5931	0.2198	7.2482	0.0000	0.7920	0.3092	2.5614	0.0105
GY	0.2289	0.0233	9.8430	0.0000	0.4677	0.0481	9.7279	0.0000
GY^2	-0.0022	0.0003	-6.3690	0.0000	-0.0068	0.0009	-7.9596	0.0000
POOR	-1.14E-05	0.0000	-5.1705	0.0000	-1.31E-05	0.0000	-4.5683	0.0000

Source: Estimation results (ref. Appendix C-1)

The Park test has a drawback that is the error terms that are used to determine the deflator might have a heteroscedasticity problem. If this is the case, then the test might give a wrong deflator. As such, the estimation results after correcting for heteroscedasticity might be biased. However, this should not be an issue provided that the model is developed based on a solid framework and the estimation results are triangulated by using a different research inquiry, which in this case is the descriptive inquiry explained in Chapter Four.

After correcting for heteroscedasticity in the estimation process, the Adjusted R-squared for all equations were significantly improved as shown in Table 14 (see also Table 10, p. 200 for comparison).

TABLE 14 GOODNESS OF FIT – AFTER CORRECTING FOR HETEROSCEDASTICITY

Equations	Adjusted R^2	
	SUR	**3-SLS**
1	0.8227	0.8207
2	0.4313	0.3102
3	0.8031	0.8033
4	0.8322	0.8248
5	0.7193	0.7194
6	0.9922	0.4588
7	0.2357	-0.3428

Source: Estimation results (Appendix C2)

Overall, the Adjusted R^2 values after correcting for heteroscedasticity ranged from 23.6 percent to 99.2 percent which is an improvement from the initial regression results. Furthermore, the Adjusted R^2 for Equations (1) and (6) are higher than that shown in Table 10. This indicates that the performance

of the model to explain Leviathan government behavior after correcting for heteroscedasticity is improving.

This research selects the model estimated by 3-SLS since it accounts for the simultaneity of the equation system (see p. 109). The representations of the estimation based on 3-SLS are stated as[48]

1. Fiscal institutional equations:

   (1) F = 0. 2129 - 0.0446FP + 0.5688FC+ 0.0023M + 0.0035GY

   (2) GY = - 2.1340 – 0.5196F + 0.2943X - 0.0084GP + 0.1740D

2. Social institutional equations:

   (3) X = - 5.5842 - 0.2235INS + 1.4771CER - 0.2791SC

   (4) SC = - 69.0503 + 13.6864V + 5.5920X + 33.0430LD

3. Political institutional equations:

   (5) GP = - 170.6349 + 0.2252BL + 0.1680S + 0.6275INF
   + 32.8692L + 9.6884BP – 66.7344V + 10.7126F
   + 6.8123SC

   (6) V = - 3.7409 + 1.0040GP

4. Armey equation:

   (7) $YG = 0.7920 + 0.4677GY – 0.0068GY^2 – 1.31e^{-05}POOR$

5.1.2 The Institutional Setting of Leviathan Government Behavior

Based on the results of hypotheses testing above, the following are the representations and the meaning of the estimation results based on 3-SLS technique derived from Table 13 (p. 203).

(1) F = 0. 2129 - 0.0446FP + 0.5688FC+ 0.0023M + 0.0035GY

[48] Values highlighted in red indicate those values do not have significant effects at alpha 5 percent and 10 percent on the equation. The meaning of these equations is discussed in Section 5.1.2.

This equation explained that the local government reliance on taxes and levies (F) was determined by the inter-regional fiscal transfer arrangement (FP), the local government fiscal capacity (FC), regional proliferation (M) and the government size (GY). Except for FP, increases in FC, M and GY seemed to stimulate the local government to collect more local taxes and charges. The increase in F as GY increases indicated that the increase in the government size (GY) was partly financed by collecting more local taxes and charges (F). In contrast, the increase in FP seemed to encourage the local government to move away from local taxes and charges at the expense of becoming dependent on interregional fiscal transfer.

However, the positive correlation between FC and F seemed to suggest that the increase in the fiscal capacity did not necessarily restrain the local governments from collecting more taxes and charges. In this research, FC was defined as a ratio of total potential revenues (*PAD* and *DBH*) to total local government spending. This finding seemed to suggest that the fiscal transfer arrangements of *DBH* could become the reason for the local governments to collect more taxes and levies since the central government retains the revenues from income tax collected and most revenue from oil and gas (see Table 3, p. 145).

Collecting more taxes and levies should not be an issue provided that the objects of taxes and levies followed the guidelines provided by the central government as stated in Law 34/2004 and the local government used the proceeds to finance development purposes. The contribution of Local taxes and charges to the total own-source revenues in 2007 was only 4.7 percent (see Figure 3, p. 136). This situation indicates that while increasing own-

source revenues is necessary, the types of local taxes and charges created by the local governments to collect these revenues remain an issue since it might harm local economy (see p. 76).

Since 2000, the local government has created a number of local taxes and charges to increase the revenue from *PAD* (see p. 165). However, there is a risk that these taxes and charges might harm local business activities since they create additional costs that do not directly relate to production activities (see p. 76). As such, these costs generate economic inefficiency that, in the end, will increase market price. Various charges such as lump-sum taxes and/or levies on chairs, bedrooms in hotel and restaurant businesses and factory space are examples of this type of charge[49]. Another charge is for the use of ground water charged by district/municipality governments instead of provincial government (see Section 5.2). These charges create double taxation since it is applied by both government levels (Law 28/2004, Article 1 (10 & 64)). As such, the central government has decided to cancel some of these charges. However, many local governments disregarded the cancellation and maintained collecting revenues from these charges (Lewis, 2003). This situation indicates that the control mechanism on taxation policy was weak.

The equation also explained that regional proliferation (M) encouraged local governments to collect more taxes and charges (F) as indicated by the increase in F as M increased. This finding contradicted Tiebout's regional competition theory that stated regions should tax less for the purpose of attracting mobile factors of production into the regions. The absence of

[49] A charge or levy should be attached to a particular service which is similar to consumers buying private goods in the market. For example: administration costs to get a business license from the local government office. These charges do not meet this criterion.

regional competition is due to immobile factors of production since exit costs are high as confirmed by the participants during the interview (see Section 5.2). In addition, this immobility of the factors of production violated the assumption of Tiebout jurisdiction competitions theory.

(2) GY = - 2.1340 – 0.5196F + 0.2943X - 0.0084GP + 0.1740D

The government size (GY) was determined by the revenue structure (F), the value structure or the index of ceremonial dominance (X), the local government performance (GP) and the government development spending per capita (D). Since the first three variables represented fiscal, social and political institutional settings, respectively, this equation confirms that the institutional setting determines the government size. However, the way these variables affect government size is different, as explained below.

As the government increased revenues from taxes and charges (F) the size (GY) seemed to decline as shown by the inverse correlation between F and GY. In other words, the increase in the revenue from taxes and/or charges does not necessarily increase the government spending and, therefore, size. The logic behind this finding can be understood by looking at the impact of the inter-regional fiscal transfer arrangements on the structure of local own-source revenue (F) as explained by Equation 1 (see p. 202).

As previously explained, the arrangements are represented by FP and FC variables in Equation 1 (see Diagram 6, p. 77). When the local government becomes financially dependent on transfer arrangement or when FP increases, the government tends to move away from collecting taxes and/or charges or F declines. As declining F corresponds to increasing government size (GY) as shown in Equation 2 above, it is argued that higher

FP tends to increase government size. This finding also confirms that the main source of local government spending is the transfer funds from the central government.

The increase in the fiscal capacity (FC) in Equation (1) (see p. 205) corresponds to increasing revenues collected from local taxes and/or charges (F). However, Equation (2) above shows the increase in the revenues does not increase government spending and, therefore, size. Since FC is defined as (PAD+DBH)/G or total local own-source revenue (PAD) plus revenue sharing (DBH) in the transfer arrangements divided by total government spending (G) and the contribution of DBH to the total local government revenue is high compared to that of PAD, it is argued that higher FC corresponds to lower government spending and, hence, size. This is a phenomenon of free-riders in the fiscal common pool where increasing fiscal capacity does not increase spending. Since FP and FC represented the inter-regional fiscal transfer arrangements, these findings also confirm that the inter-regional fiscal transfer arrangements tend to increase the government size and, therefore, inefficiency.

The positive correlation between X and GY in Equation 2 seems to suggest that part of the increase in government size is due to the practise of personal rulership patrimonialism in the value system that remains strong in the post-Soeharto era (see p. 175). In other words, the patrimonialism system contributes to the increase in the government size and, therefore, inefficiency. In contrast, the better the performance of government (GP) the more efficient the governments are as indicated by decreasing GY as GP increases. However, comparing the coefficients of X and GP in Equation 2,

the estimation seems to suggest that the impact of X on GY is larger than that of GP on GY or the practice of personal rulership patrimonialism value undermines the government performance[50]. This finding indicates that the impact of the patrimonialism practise on government inefficiency is dominant.

(3) X = - 5.5842 - 0.2235INS + 1.4771CER - 0.2791SC

Equation (3) confirms that the social value structure or the index of ceremonial dominance (X) was determined by instrumentally warranted values (INS), personal rulership patrimonialism value (CER) and social capital (SC). The estimation results suggest that instrumentally warranted values (INS) and social capital (SC) reduce the index of ceremonial dominance (X) whereas personal rulership patrimonialism (CER) appears to increase the index. As a result, increasing the accumulation of INS, SC and/or reducing CER are the ways to change the structure of the value system. These findings highlight the critical role of INS and SC in the change of value structure or the institutional adjustment in the long-term. While INS is an exogeneous variable that is determined by factors outside of the equation system the social capital is determined by factors within the system. As such, the issue of reducing the dominant effect of CER from within the system is determined by the creation of SC explained in Equation (4) below.

(4) SC = - 69.0503 + 13.6864V + 5.5920X + 33.0430LD

The estimation of Equation (4) indicated that the creation of social capital (SC) is determined by

[50] The hypothesis testing was written as $H_0: \beta_8 - \beta_9 \leq 0$ *and* $H_0: \beta_8 - \beta_9 > 0$. Substituting β_9 = 0.0074 gave $H_0: \beta_8 \leq 0.0084$ *and* $H_0: \beta_8 > 0.0084$. Give s = 0.1570, df = 238 and m = 0.0084, the t-statistic was equal to 1.821 which was above the critical value = 1.645 at alpha = 5 percent. The test accepted H_1 hypothesis which corresponded *to* $\beta_8 > \beta_9$.

- the political voice of constituents (V) as measured by the office term of the local government head. As the office term is longer, the period for the head of local government to maintain a social network with the constituents is also longer. Since trust emerges within a social network, the longer office term corresponds to higher social capital.
- the index of ceremonial dominance (X). Equation (4) shows that social capital increases as the index increases. This correlation seems to suggest that the social capital is encapsulated by patrimonialism. As such, it is argued that the increase in the social capital is partly wasted on extracting rents from the economy.
- the leadership of the local government heads (LD). The positive correlation between the leadership and social capital indicates that the role of government leadership is important for stimulating the creation of social capital as proposed by Rothstein (2005). In addition, this finding also confirms the role of human capital in social capital as proposed by Coleman (1988).

Referring to the impact of V and LD variables on the social capital as shown in Equation (4), it is argued that the impact was not sufficiently strong to change the value system (X) as shown in Equation 3 (see p. 210). The coefficient of CER in Equation (3), which was higher than that of SC is an indicative of this finding.

(5) GP = - 170.6349 + 0.2252BL + 0.1680S + 0.6275INF
+ 32.8692L + 9.6884BP – 66.7344V + 10.7126F
+ 6.8123SC

The estimation results showed that the government performance (GP) increased as all public goods and services (BL, S, INF, L and BP) increased. The correlation between F and GP represents the indirect impact of the Balance Funds transfer arrangements on the government performance. Even though the transfer seemed to restrain the local government's reliance on taxes and/or charges as shown by declining F as FP increases as shown by Equation (1), high dependence on transfer arrangements or FP seems to lower government performance (GP). This research seemed to suggest that the design of the transfer did not necessarily improve the local governments' performances. This might be caused by the mismanagement and misallocation of budget that was mostly used for spending other than public services provision. As more funds were allocated for government employees and operational expenditure rather than development programs and public services provision, the impact of the transfer on improving the performance was minimal (see Section 4.2.1).

In contrast, social capital (SC) appeared not to have a significant impact on the government performance (GP). Since the social capital was encapsulated by the patrimonialism value (X), it was partly wasted on collecting rents. As a result, it is argued that this capital could not contribute to improve government performance or government accountability (see Equation (4), p. 210). The social capital (SC) that did not affect the government performances (GP) as demonstrated by Equation (5) is indicative of this argument.

(6) V = - 3.7409 + 1.0040GP

Equation (6) suggested that government performance (GP) was important to cast votes during election time. This finding showed that the new general election system or the direct voting mechanism for the local government heads provided a way for constituents to impose political sanctioning during election time. In other words, direct voting mechanism encouraged voters to vote instrumentally.

While the political system has provided a form of political sanctioning mechanism, this research suggests that the mechanism is not sufficient to improve the performance of the local government heads. The negative correlation between GP and V seems to suggest that re-electing the incumbent corresponds to declining government performances (see Equation (5)). This might be attributed to the practice of centralized-coalition system, money politics, weak social capital and weak accountability as explained below.

Firstly, the practice of a centralized-coalition political system during campaigning that constrains opposition candidates to run for office. This system left the voters with limited options for viable or credible candidates (see Section 4.2.3, p. 186). As a result, the political system fails to produce an accountable government regardless of the voting behavior of the constituents.

Secondly, money politics in the form of cash targeted toward political parties might shift the direction of accountability of the elected heads of local governments away from their constituents. The shift occurs when the elected heads of local governments attempt to fulfil the political contract with political parties that have supported their candidacy during campaigning. As a result,

accountability remains an issue. Money politics including cash and goods targeted toward potential voters to attract voting during election time (see Section 4.2.3, p. 187). This situation encourages voters to demonstrate expressive voting behavior.

(7) $YG = 0.7920 + 0.4677GY - 0.0068GY^2 - 1.31e^{-05}POOR$

The extent that Leviathan government behavior in Indonesia creates rents can be identified by the Armey curve in Equation (7). The equation showed that Poverty (POOR) reduced the economic growth (YG). In addition, this estimation confirmed the inverted U-shape of the Armey curve. The shape suggested that the increase in the government size (GY) reduced economic growth (YG) after the size has reached the optimum level. In other words, the increase of government spending above the optimum level was wasted. The waste indicated the accumulation of surpluses or rents that were calculated based on the difference between the optimum and the actual government size.

5.1.3 Testing the Institutional Hypotheses of Leviathan Government Behavior

a. Fiscal institutional setting:

(1) $F = 0.2129 - 0.0446FP + 0.5688FC + 0.0023M + 0.0035GY$

(2) $GY = -2.1340 - 0.5196F + 0.2943X - 0.0084GP + 0.1740D$

Substituting Eq. (1) into Eq. (2) to get Eq. (2A)

(2A) $GY = -2.2460 + 0.0231FP - 0.2950FC - 0.0012M + 0.2938X - 0.0084GP + 0.1737D$

i. Hypothesis: The inter-regional fiscal arrangements (FP) create a flypaper effect or $H_0: \beta_{31} \leq 0$ *and* $H_1: \beta_{31} > 0$. The value β_{31} =

0.0231 or $\beta_{31} > 0$ confirmed the flypaper effect hypothesis or high local fiscal dependence on transfer arrangements. Table 6 (p. 153) also supports this finding. As a result, there is a possibility of over-spending that increases government size.

(2A) GY = – 2.2460 + 0.0231FP – 0.2950FC – 0.0012M + 0.2938X – 0.0084GP + 0.1737D

ii. Hypothesis: The Balance Fund arrangements (FC) induces regions to behave as free-riders or $H_0: \beta_{32} \geq 0$ *and* $H_1: \beta_{32} < 0$. The value of $\beta_{32} = -0.2950$ *or* $\beta_{32} < 0$ supports the hypothesis. The non-formula component in the block grant arrangements including the hold-harmless provision and the funds to pay the local government employees (see Diagram 7, p. 142) benefited the local governments with low fiscal capacity. As such, the government size (GY) tends to increase even though the fiscal capacity (FC) decreases. In other words, these local governments tend to be over-spending or behave as free-riders.

F = 0. 2129 - 0.0446FP + 0.5688FC+ 0.0023M + 0.0035GY

iii. Hypothesis: regional proliferation does not discipline local government from creating excessive taxation or $H_0: \beta_4 \leq 0$ *and* $H_1: \beta_4 > 0$. At $\beta_4 = 0.0023$ *or* $\beta_4 > 0$ confirms this hypothesis. The absence of factors of production or businesses mobility as confirmed by participants during the FGD might contribute to this finding (see Section 5.2, p. 220).

b. Social institutional setting:

X = - 5.5842 - 0.2235INS + 1.4771CER - 0.2791SC

i. Hypothesis: The ceremonially warranted values (CER) dominate the instrumentally warranted values (INS) or H_0: $\beta_{17} - \beta_{16} \leq 0$ *and* H_1: $\beta_{17} - \beta_{16} > 0$. The statistical testing confirmed the hypothesis at alpha 5 percent[51]. In other words, strong patrimonialism value remains an issue in post-Soeharto Indonesia. In a society where the value is strong, collecting rents has become an entitlement attached to a particular position in the society (see Section 2.1.2.2; Section 4.2.2). Equation (2) that indicates the positive correlation between X and GY supports this argument.

SC = - 69.0503 + 13.6864V + 5.5920X + 33.0430LD

ii. Hypothesis: The accumulation of social capital was dominated by personal rulership patrimonialism value or H_0: $\beta_{20} \leq 0$ *and* H_1: $\beta_{20} > 0$. The values of $\beta_{20} = 5.5920$ confirmed the hypothesis at alpha less than 1 percent (see Table 13, Equation 5). The positive correlation of X on SC indicated that the social capital was encapsulated by the personal rulership patrimonialism value since the capital is growing as the value system is stronger. As a result, the accumulation or the

[51] Substituting β_{16} with 0.2235 from the equation above and rearranged the hypothesis, the hypothesis was rewritten as H_0: $\beta_{17} \leq 0.2235$ *and* H_1: $\beta_{17} > 0.2235$. Calculating the t-statistic value for β_{17} by using the formula explained in Chapter 4 (p. 13). CER = 1.4771, m = 0. 2235, s = 0.1093 and df = 236 (Table 13) gave $t_{statistic} = \frac{1.4771-0.2235}{0.1093} = 11.4693$
The critical value at alpha 5 percent obtained from the t-distribution table was 1.653 which was below the calculated t-statistic or t-statistic > 1.653.

increase of the capital (SC) would be partly wasted on generating rents.

c. Political institutional setting:

V = - 3.7409 + 1.0040GP

i. Hypothesis: The political system failed to provide a form of political sanctioning mechanism or $\beta_{28} \geq 0$ *and* H_1*:* $\beta_{28} < 0$. The estimation results showed that $\beta_{28} = 1.0040$ or $\beta_{28} > 0$ which did not confirm the hypothesis (see Table 13 for the alpha value). In other words, the direct voting mechanism had provided a form of political sanctioning mechanism that allowed the constituents to vote instrumentally or to vote the incumbent out of office when his/her performance as the head of local government was unsatisfactory.

GP = - 170.6349 + 0.2252BL + 0.1680S + 0.6275INF
+ 32.8692L + 9.6884BP – 66.7344V + 10.7126F
+ 6.8123SC

ii. Hypothesis: People's voice (V) failed to improve government performance (GP) or H_0*:* $\beta_{24} \geq 0$ *and* H_1*:* $\beta_{24} < 0$. At $\beta_{24} = -66.7344$, the hypothesis testing support H_1 at alpha less than 1 percent (see Section 4.2; Table 13, p. 203 & Equation 6, p. 212). This might indicate a form of expressive voting behavior due to social capital that was encapsulated by strong ceremonially warranted values (see Section 2.1.2.2). As such, while the political system has provided a political sanction

mechanism, there is an indication that expressive voting behavior remains dominant.

5.1.4 IDENTIFYING LEVIATHAN GOVERNMENT BEHAVIOR

- The Brennan-Buchanan hypothesis states that Leviathan government behavior is confirmed when regional proliferation reduces government size (see p. 92) or $H_0: \beta_{33} \geq 0$ *and* $H_1: \beta_{33} < 0$ in Equation (2A) (see p. 215). the hypothesis is confirmed as indicated by $\beta_{33} = -0.0012$ in the Equation (2A). At the same time, it rules out the possibility that the Wallis-Oates hypothesis holds. However, there are assumptions that underpinned the Brennan-Buchanan hypothesis (see p. 84). These assumptions are:
- Regional proliferation can discipline the local government in creating local taxes and/or charges or $H_0: \beta_4 \geq 0$ *and* $H_1: \beta_4 < 0$ (see Equation 1). However, at $\beta_4 = 0.0023$ *or* $\beta_4 > 0$, this assumption does not hold.
- The local government spending is fully financed by collecting local taxes and/or charges. This assumption does not hold in Indonesia since the transfer funds dominate instead of taxes and/or charges the local government revenue (see Figure 3, p. 136).

While the hypothesis is confirmed as indicated by Equation 2A (p. 215), the assumptions are not. As a result, the hypothesis cannot be used to test for Leviathan government behavior. In other words, Decentralization Hypothesis proposed by Brennan-Buchanan (1980) to identify Leviathan government behavior gives a misleading conclusion. As such, this research uses the alternative hypothesis to identify the behavior in Indonesia.

The alternative hypothesis is used to test the Leviathan government behavior. The hypothesis differs from the Brennan-Buchanan hypothesis since it accounts for the assumptions explained in the testing. The alternative hypothesis testing uses Equations (1) & (2) below and proceeds along three steps (see p. 84):

(1) F = 0. 2129 - 0.0446FP + 0.5688FC+ 0.0023M + 0.0035GY

(2) GY = - 2.1340 – 0.5196F + 0.2943X - 0.0084GP + 0.1740D

- the inter-regional fiscal transfer arrangements (FP) makes the local government dependent on the transfer funds or it discourages the local government to collect taxes and/or charges (F) or $H_0: \beta_2 \geq 0$ *and* $H_1: \beta_2 < 0$. Equation (1) gives $\beta_2 = -0.0446$ which is $\beta_2 < 0$ confirming fiscal dependence of the local government from the transfer arrangements.
- despite the reduction in revenue from taxes and/or charges, the size of government increases or $H_0: \beta_7 \geq 0$ *and* $H_1: \beta_7 < 0$. The value of $\beta_7 = -0.5196$ confirms $\beta_7 < 0$.
- the size of government increases above its optimum level. The discrepancy between the optimum and the actual size of the government is the rents that indicate inefficiency in the government sector. The Armey curve below can identify the rents:

  $YG = 0.7920 + 0.4677GY – 0.0068GY^2 – 1.31e^{-05}POOR.$

  The optimal government size was obtained by differentiating the Armey equation to GY and then equating the result to zero. By so doing, the indicated optimum government size was

34.07 percent. The average size of 243 districts and municipalities in 2007 was 56.15 percent which was well above the optimum level. The discrepancy of 22.09 percent was the rents.

Based on the model, inefficiency or rents were contributed by the Balance Funds arrangements that create a flypaper effect and free-rider behavior, the practice of personal rulership patrimonialism and expressive voting behavior that contributed to weak government performances. As such, Leviathan government behavior was the outcome of the way fiscal, social and political institutions interacted.

5.2 QUALITATIVE RESEARCH: EXERCISING VOICE RIGHTS

The local government nationwide has introduced a significant number of new revenue bases (see Section 5.3.1, p. 224). Respondents in *Kabupaten Bandung, Kota Cimahi and Kota Bandung* during the FGD confirmed this. During the FGD, all respondents agreed that the creation of new revenue bases has become uncontrollable in their areas since decentralization policy became effective in 2000. However, none of these respondents could recall the exact number of new revenue bases imposed by the government on businesses. This information indicates that the new taxes and charges might not be as many as the respondents think.

The respondents explained that the amount and types of charges varied across regions. A respondent from *Kota Bandung* who owned a hotel and restaurant business gave an example of new charges on chairs and rooms applied on hotels and restaurants. A similar scheme was also confirmed by other hotel and restaurant owners from *Kota Cimahi*. Another

respondent who runs a factory in *Kabupaten Bandung* also explained that new charges apply to factory space in a way similar to renting an outlet that is based on per square meter charges.

This respondent also explained that multiple charges are imposed on commodities as they travel across jurisdictions. The charges are based on the weight of the commodities and applied on commodities loading-unloading services even though the commodities are not being unloaded until reaching a destination. Furthermore, the respondent explains that these charges are overlapping since they are imposed by both provincial and districts/municipalities governments. In many cases, villages also collect tolls even though they do not have any legal rights to do so. This information suggests that there are over taxes and charges of commodities that create inefficiency as the commodities are transported to the market. While new taxes and charges in the respondents' home areas might not be as many as they think, over taxes and charges occur as commodities travel across boundaries.

When confronted with a question of *how far the local government has improved public services*, all respondents agreed that the quality of public services has not been significantly improved. A respondent from *Kota Bandung* explained that while the local government has set up a one-roof service to simplify the line of bureaucracy for applying or renewing business licenses, the time taken to obtain the license remains long, about three months to renew an existing license. In some cases, businesses have to pay additional costs that are illegal to speed up the process. Respondents from *Kota Cimahi*, *Kota Bandung* and *Kabupaten Bandung* confirm this

information. This finding suggests that corruption acting against government activity can improve effectiveness. However, it creates inefficiency in the economy.

These new taxes and charges have significantly affected local businesses, particularly their cash flow management. A respondent from *Kota Bandung* who owned a car service station explained that more charges did not necessarily reduce the transaction costs since he still has to pay additional costs that are illegal to renew his business license. As such, it put pressures on his business' capacity to remunerate staff. He admits that his business is always behind schedule in adjusting the salary of the employees to meet the annual minimum wage rate required by the government and/or to pay the holiday fringe benefit or *Tunjangan Hari Raya (THR)* on time[52].

During the discussion, respondents explained that they have been taking some action to prevent local government from creating new taxes and charges and/or increasing existing tax rate that might harm local businesses. A respondent from *Kota Bandung* explained these actions include:

a. Submitting a petition and/or proposal to the Ministry of Home Affairs to eliminate a particular local tax and charge that is harmful to the economy or inconsistent with the central government guidelines on local taxes and charges. The Chamber of Commerce and Industry would serve as a facilitator to communicate with the central government. The respondents agreed that this action worked since the Ministry of Home Affairs used the information provided by business associations to examine existing local taxes

[52] As stated by Labor Law, *THR* must be paid to the employees two weeks prior to a religious holiday at the latest. The common practice is the Moslem holiday.

and charges before making decisions whether the taxes and charges should be cancelled.

b. Individually negotiating the amount of taxes and/or charges paid to the local government to reduce the amount the local businesses have to pay.
c. Some business practitioners had considered becoming members of the local assembly expecting that they could constrain the local government from creating excessive taxes and charges.
d. Organizing a rally as the last resort to oppose the implementation of new charges or local taxes that might harm their businesses.

While information on the effectiveness of exercising voice rights was limited, the FGD revealed that the Chamber of Commerce and Industry is an effective venue to communicate with the government regarding issues of local taxes and charges. Despite the taxation and charges issues, none of the respondents has considered relocating to other areas because of several reasons: potential loss of business contacts, expenses occurred in relocating albeit that relocating might not solve the issues and infrastructure in other areas might not be sufficient for conducting their businesses.

While the number of participants is too small to draw a general conclusion on the characteristics of the Indonesian population, the FGD reveals that this group of business practitioners shows some efforts to break the cycle of personal rulership partrimonialism by opposing the government policies, in this case local taxes and charges that might harm their businesses. However, this research does not address the extent that their efforts or behavior can force a progressive institutional change by voting

instrumentally during election time to increase the role of the instrumentally warranted values in the value system and, hence, lowering the Index of Ceremonial Dominance. This could become an area for further research.

5.3 THE INSTITUTIONAL SETTINGS AFTER 2007

This section explains the fiscal, social and political institutional settings after 2007. The discussion is divided into two sub-sections, namely Fiscal Institutional Setting and the Social and Political Institutional Settings. Since this is a descriptive inquiry, the analysis uses descriptive statistics.

5.3.1 THE FISCAL INSTITUTIONAL SETTING

This research found that the design of the Balance Funds indirectly contributed to Leviathan government behavior. The vertical fiscal imbalance as demonstrated by high flypaper effect encouraged the local governments to create new local taxes and charges as alternatives of revenue. By 2008, there were a total of 6,156 new local taxes and/or charges that were ratified by the central government whereas another 4,255 existing and/or proposal of local taxes and/or charges were either cancelled by the central government or must be revised by the local governments (*Kementrian Keuangan*, 2009b). These cancelled and/or revised local taxes and/or charges are mostly evident in the areas of communication and transportation (29.6 percent), industry and trade (26.1 percent), agriculture (24.1 percent) and forestry (20.2 percent). These problematic local taxes and charges were cancelled for the following reasons: harming the local economy due to high costs economy by constraining mobility of people and goods/services across jurisdictions, overlapping taxes and charges with those of the central government's and/or

the objects of tax or charges are against existing laws (*Kementrian Keuangan*, 2009b).

In 2009, the central government issued Law 28/2009 on Local Taxes and Charges to amend Law 34/2000. The new law became effective on 1st of January 2010. Table 15 explains the differences of these two laws.

TABLE 15 DESCRIPTIONS OF LAW ON LOCAL TAXES AND CHARGES

	Law 34/2000	Law 28/2009
Type of local taxes and levies	Opened-list: districts/municipalities have the authority to create types of local taxes and levies other than listed in the law (ref. Law 34/2004, Article 2)	Closed-list: local governments are allowed to create 16 types of local taxations where five are provincial local taxes and 11 are districts/municipalities local taxes; 30 types of levies
Control mechanism	(1) Preventive mechanism: N/A	(1) Preventive mechanism: local goverments are required to submit *RAPERDA* to the central government for evaluation. The central government can either ratifies or cancel the *RAPERDA* (Article 157).
	(2) Corrective mechanism: local governments are required to submit *PERDA* to the central government for evaluation. In the case the substance of *PERDA* conflicts with public interests and/or laws of higher order, the central government can cancel the *PERDA* by issuing a decree. The decree is issued by the Ministry of Home Affairs.	(2) Corrective mechanism: local governments are required to submit *PERDA* to the central government for evaluation. In the case the substance of *PERDA* conflicts with public interests and/or laws of higher order, the central government can cancel the *PERDA* by issuing a decree.The decree is issued by the President.
	(3) Sanctions: N/A	(3) Sanctions: The central government will postpone the transfer of *DAU* and/or *DBH* and/or reimbursement or deduct some amount from the transfer.

Source: Law 34/2000; Law 28/2009 & Law 32/2004, Kementrian Keuangan, 2011.

Compared to the amended law, the new one provides a closed-list of local taxes and levies that the local governments are allowed to create and introduce a control mechanism in the form of sanctions. The mechanism ensures that the local taxes and charges created by the local government follow the guidelines provided by the law. The purpose of providing the list, among others, is to improve the business climate in the regions by giving some degree of certainty in taxation and efficiency in administering taxation (*Kementrian Keuangan*, 2011, p.III-22).

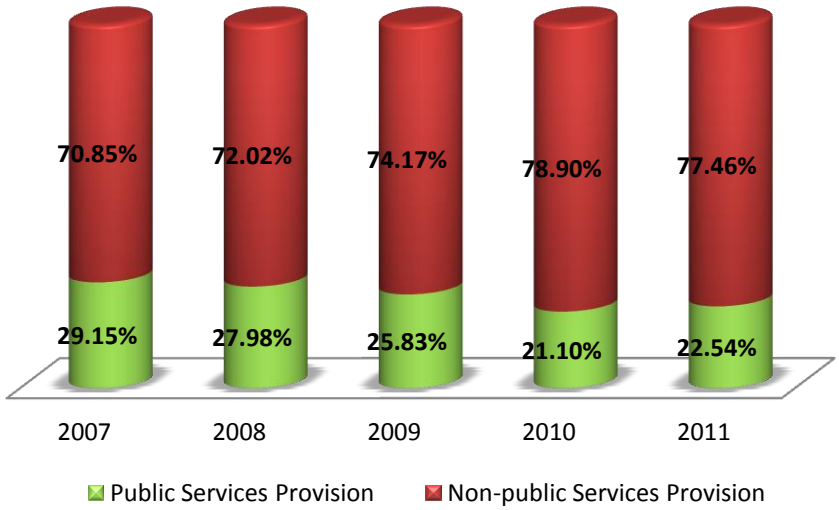
Furthermore, requiring the local government to submit the proposal of new local taxes and/or charges for evaluation ensures that the content of local taxes and levies imposed on businesses will not conflict the law. This preventive mechanism did not exist in the previous law since local taxes and charges have been stipulated before the local governments submit the local taxes and charges for evaluation. Sanctions imposed on the local governments that stipulated local taxes and/or charges without any consent from the central government will strengthen the mechanism.

Since the enactment of the law, there is an indication that the number of problematic local taxes and/or charges has been significantly declining since 2010. There were 1,039 problematic local taxes and/or charges from 2001 to 2006, 773 in 2007, 1,279 from 2008 to 2009 (Purwoko, 2010), 407 in 2010 and 351 in 2011 that had been revoked by the Ministry of Home Affairs (*Lampung Post*, 2012). This situation seems to suggest that the new law provided better guidelines on designing local taxes and/or charges than the amended one.

However, assigning the authorization to cancel problematic local taxes and charges to the President might weaken the control mechanism of the new law. Since it adds another bureaucratic layer in the mechanism, the layer is likely to create a bottleneck to cancel them. Since 2001, there are about 8,000 potentially problematic new local taxes and charges that have been issued by the local government nationwide (*Kementrian dalam Negeri* in *Lampung Post*, 2012). The extent that the new law can end the creation of these local taxes and charges and to cancel existing problematic ones in due time is yet to be seen. Leviathan government behavior arises as the local

government allocates the proceeds mostly for non-public services provision. After 2007, there is an indication of inefficiency in the government budget allocations.

FIGURE 5 THE ALLOCATION OF LOCAL GOVERNMENT SPENDING (2007-2011)



Source: Derived from *Kementrian Keuangan* (2007 – 2011)

As Figure 5 shows, most of the total government expenditures, or 70 percent or more, were allocated for expenditure on non-public services provision including salaries, goods and services and others. Furthermore, the proportion of non-public services expenditures from the total allocation tended to increase from 2007 to 2011 at the expense of the public-services expenditures. These statistical data seemed to suggest inefficient government spending. Since part of the spending was financed by revenues from local taxes and charges, there was an indication that Leviathan government behavior remained after 2007.

5.3.2 SOCIAL AND POLITICAL INSTITUTIONAL SETTINGS

This research also found that there is an indication the social value structure remains dominated by personal rulership patrimonialism after 2007.

This situation was confirmed by a significant increase in the Index of Ceremonial Dominance (X) from 0.8379 in 2007 to 1.0698 in 2011 (see Table 16, p. 229). Since X measures the strength of the Ceremonially Warranted Values or the personal rulership patrimonialism, the increase in the Index of Ceremonial Dominance represents a worsening situation. This research uses the ratio of the Transaction Costs Index to the Land Access & Security of Tenure index as a proxy to measure the index (see Section 3.2.1). Table 16 shows that the decline in the Index of Ceremonial Dominance was caused by:

- an increase in the Transaction Cost index to 81.1 by 2010. In this research, the index is the proxy to identify rent-seeking activities (see Section 3.2.1). These activities are the result of the personal rulership partrimonialism.
- a decline in the Instrumentally warranted values. In this research, the Land Access & Security Tenure index is used as a proxy to measure the values (see Section 3.2.1). As such, a decline in the Land Access & Security Tenure index to 76.5 by 2011 is an indicative of declining Instrumentally warranted values.

Increasing ICD suggested that rent-seeking activities as measured by the Transaction Costs Index were stronger in 2011 than 2007.

TABLE 16 SOCIAL AND POLITICAL INSTITUTIONAL SETTINGS IN 2007 & 2011[53]

INDICES	AVERAGES		STANDARD DEVIATION$_{2011}$	$Z^*_{statistic}$	STATES OF CHANGE
	2007	2011			
(1) Index of Ceremonially Dominance (ICD)	0.8379	1.0698	0.1558	53.1908	Stronger
(2) Government Performance	64.2783	66.1600	32.9136	0.4428	Constant
(3) Transaction Costs Index	76.0	81.1	-	-	-
(4) Land Access & Security of Tenure Index	77.4	76.5	-	-	-

Notes:
Positive changes indicate improvement except for the Transaction Costs and X, where positive changes indicate a set-back;
*Significant level at 5 percent for one-tailed test gives Z_{table} = 1.65. Texts highlighted in red indicate worsening condition.
Calculated from: KPPOD (2008 & 2011)

Statistical data also indicate that the performance of local government did not significantly change after 2007 (see Table 16, p. 229). The government performance indicator remained relatively constant by 2011. Since this research uses government performance as the outcome of the political institutional setting and the government performance is a proxy for accountable government, this finding seemed to suggest that the political system fails to produce an accountable government. This situation might be contributed by expressive voting behavior that undermines the effectiveness of direct voting mechanism to impose a political sanction (see Section 4.2.3).

Poor local government performance was found in the new proliferated regions. Based on the evaluation of 57 new local governments that have been established within one and two years, 13 new local governments or 22.8 percent were classified as having good performance, 27 or 47.4 percent new local governments were classified as having a medium performance, 13 or 22.8 percent were having unsatisfactory performance and 4 or 7.0 percent were having poor performance (*Direktorat Jendral Otonomi Daerah*, in

[53] Due to data availability for comparison purposes, the number of local governments used in the analysis is 60. The indices for these local governments are available for both 2007 and 2011.

Kompas 2011)[54]. This information explains that the performance of the new local governments varied across regions and about 30 percent of the evaluated new governments were classified as either unsatisfactory or poor performance. Based on the arguments, the social and political institutional settings of Leviathan government behavior seemed to remain after 2007.

CONCLUSIONS

This research confirms that there is Leviathan government behavior in Indonesia. In this research, the surplus is the difference between the optimum and the actual government size. However, this research cannot use the Brennan-Buchanan hypothesis to confirm the behavior since in the case of Indonesia most of the local government revenues come from the transfer arrangements. Therefore, this research proposes an alternative hypothesis to confirm Leviathan government behavior in Indonesia. As such, Leviathan government behavior is the way government allocates their spending regardless of the source of the spending. In the case of Indonesia the source of the spending is dominated by the inter-regional fiscal transfer arrangements.

This research further explains that Leviathan government behavior could be the result of a particular institutional setting, namely fiscal, social and political settings. As demonstrated by Equation (2), the setting in each institution determines the level of government size. Based on the values of the institutional variables, it can be inferred that while Leviathan government behavior is a fiscal phenomenon, the value structure in the social institutional

[54] There are 10 criteria of evaluation applied to determine the level of local government performance as stated by laws (see *PP 6/2008 and PERMEN 23/2010* for the criteria and classifications).

setting and the government performance in the political setting intensify the behavior.

Based on this research, the institutional settings are: first is the local government fiscal that highly depends on inter-regional fiscal arrangements. Second is the personal rulership patrimonial value that dominates the social value system. Third, the political system has failed to produce an accountable government due to the expressive voting behavior during election time. This behavior has made the direct voting mechanism a tool to impose a political sanction ineffective.

Finally, there is an indication that the institutional settings have not been improved after 2007. The analysis was based on some indicators that include the structure of regional own-source revenues (F), the social values structure (X) and the local government performance (GP). As the analysis demonstrated, there were some indications that the local governments continue to create new local taxes and charges, the practice of personal rulership patrimonialism remains strong and the performance of the local government did not significantly change until 2011. While it is not possible to determine exactly without re-estimating the model by using the latest published data, it can be inferred that Leviathan government behavior remains after 2007.

Chapter Six
Conclusions, Research Contributions and Further Studies

Based on the frameworks and model developed in Chapter Two, this research has demonstrated that Leviathan government behavior is the results of interactions among three different institutional settings, namely social, political and fiscal settings. As shown in Chapter Five, Leviathan government could arise as the fiscal institutional setting created flypaper effect or vertical fiscal imbalance and free-rider issues, personal rulership patrimonial value dominated the value structure in the social institutional setting and the political institution failed to produce accountable government. The implication is that addressing Leviathan government behavior required a holistic approach that covers all three institutional settings simultaneously.

Furthermore, regional proliferation has failed to discipline the government to demonstrate Leviathan government behavior. Since factors of production are not mobile, the proliferation fails to promote regional competitions and, hence, government efficiency. The absent of regional competitions combined with the institutional issues explained above lead to government inefficiency as demonstrated by increasing government size above the optimum level. Since part of the government spending comes from collecting taxes and/or charges and this research confirms that revenues collected from these sources tend to increase, Leviathan government behavior arises.

This research uses abductive ontological view where quantitative is the primary inquiry and a small part of qualitative research as the secondary inquiry. As such, it uses explanative inquiry by developing an econometric model to describe the interactions. A cross-sectional data on 243 local governments in 2007 were used to test the model. The contribution of this research is to propose an expanded analysis on the way Leviathan behavior should be understood. It is argued that the regional specific issues such as the absent of regional competition, the fiscal structure of the local governments, the social values and the political system can shed some light to understand the reasons fiscal federalism policy might fail to deliver expected results.

The contribution of this research is to propose an expanded analysis on the way Leviathan behavior should be understood. These regional specific issues include:

- the absence of regional competition that can be inferred by looking at the factors that might encourage regional proliferation. This factor is related to the design of the inter-regional fiscal transfer which provides fiscal incentive for regional proliferation. The incentive is attached to the hold-harmless provision and the transfer of funds to cover the salary of the local government employees.
- the regional proliferation that fails to promote regional competition due to the absent of mobility of factors of production. As a result, the proliferation cannot discipline regions to impose lower taxation

and/or charges but, at the same time, promote good quality public services provision.

- the fiscal structure of the local governments which is highly dependent on the inter-regional fiscal transfer from the central government. The non-formula component of the block grant or *DAU*, namely the hold-harmless provision and the funds transferred to cover the local government employees, encourages the local governments to be overstaffed and spending beyond their own fiscal capacity. This situation contributes to the increase in government size beyond the optimal level.
- the social values which are dominated by personal rulership partrimonialism also contribute to the increase in government size beyond the optimum level. In this research, the values are represented by the high transaction costs which tended to increase after 2007. At the local level, this value contributes to the practice of politico-bureaucrat-business symbiosis which remains post the New Order regime.
- the political system that fails to produce accountable government. This research confirms that direct voting mechanism is not sufficient to promote accountable government if the constituents do not demonstrate instrumental voting behavior or casting their votes based on the performance of the candidates during general election.

These institutional settings can shed some light to understand the reasons fiscal federalism policy might fail to deliver expected results.

6.1 LIMITATIONS OF THE RESEARCH

As explained in Chapter Three, aggregative data to measure the social and political institutional settings were not available at the time this research was conducted. As a result, this research used proxies to measure those variables based on the aggregative data available at the time the model was developed and estimated. This decision is not without any risk.

The selected proxies might not be suitable to measure those variables. When this situation arises, the estimated model might be biased. For these reasons, this research used multiple-research inquiries to minimize the risk. The descriptive inquiry presented in Chapter Four is used as a reference to cross-check the results obtained from the explanative inquiry in Chapter Five. While it is not possible to develop a model that can perfectly explain the phenomena under study, the risk will likely to be minimized when the results of analysis derived from both inquiries are not in contradictory and the model was developed on a solid theoretical frameworks.

Another risk is the used of econometrics in the analysis. As demonstrated in Chapter Five, econometrics requires aggregative data. As a result, the analysis derived from the estimated model does not explain individual regional behavior. The implication is that while designing a public policy usually based on aggregative data, some degree of customization is also necessary to increase the effectiveness of the policy. This situation indicates that the model should not be used as the only source of information in designing a public policy. Rather it also requires some micro-level data that explain individual region institutional settings that represented some degrees of customization in the design.

6.2 RESEARCH CONTRIBUTIONS TO PUBLIC POLICY PROPOSALS AND PUBLIC ECONOMICS LITERATURE

The model that has been developed in this research provides a basis for a government to develop a systemic approach for public policy intervention. The exogenous variables in the model (see Section 3.2) represent the channel for policy interventions for the purpose of promoting more efficient government. These variables spread across three institutions in the model. As a result, policy proposals by intervening these exogenous variables affect the performances of these institutions.

The first policy proposal is concerned with the fiscal institutional setting. The current structure has created flypaper effect and free-rider issues. The flypaper effect encouraged the local government to collect more revenues from local taxes and charges. Many of these new taxes and levies do not follow the guidelines on local taxes and levies provided by the central government. As a result, many of them have been cancelled by the central government.

Modifying the reward on local-own source revenues as described in Section 2.1.1 to also include the compliance of the new local taxes and levies on the guidelines is a proposal on reducing flypaper effect and free-rider behavior. While the new law has provided a form of penalty on this issue, providing additional support such as training programs to the local governments to understand the guidelines and to use them to design the correct local taxes and levies is necessary. However, tax compliance would not be sufficient to reduce flypaper effect and restrain free-rider behavior provided that the contribution of the Balance Funds arrangements to the total local government revenue remains dominant. This calls for a modification of

the transfer arrangements by returning larger portion of revenue sharing to the local government.

The second policy proposal is modifying the pool of the fiscal transfer to eliminate common pool problem. Currently, the fiscal common pool is the central government budget. This situation has created free-rider issue that encourage regional proliferation without considering fiscal capacity of the new regions. While there are other factors that encourage regional proliferation in Indonesia (see Section 4.1.1), modifying the fund pool so that proliferation will affect the allocation of the fund to the parent regions might contribute to a reduction in the problem.

The third policy proposal concerns with the standardization of public services provisions to encourage some degree of factors mobility across regions. The absence of mobile factors of production has made regional proliferation fails to discipline the local governments from demonstrating Leviathan government behavior. While encouraging perfect factors mobility is not possible due to some issues stated by respondents, some degree of mobility is necessary to constrain Leviathan government behavior. Encouraging the local governments to improve public service provisions based on the standard provided by the central government is necessary. While the Indonesian government through the Ministry of Home Affair has clearly understood that to have standard public service provision is important, determining the standard is not an easy task. This issue is beyond the scope of this research.

The fourth policy proposal is political education for the constituents. This research also demonstrates that Leviathan government behavior

intensifies as the constituents fail to function as social and political control agents. The expressive voting behavior demonstrated by the constituents during election time and strong patrimonial rulership value in the society support the argument. These factors contribute to public accountability issue. Furthermore, this issue is partly contributed by the society.

This situation calls for the need to redefining the long-term political education to encourage the society to understand their responsibility as citizens and to take part as social and political control agents. The education should reach both the young Indonesians through the school system as well as adults. The changes in the curricula at all levels of eduction to address this issue are inevitable. In addition, creating social capital by encouraging the citizens to engage in civic organizations and/or community services is also necessary. The government can take part in creating the capital by providing the opportunity and spaces including neighborhood community centers and public libraries where people can exchange information and become aware of social issues around them.

The model has shown an expanded scope of fiscal federalism theory to include country specific issues. These issues apply to a situation where the assumptions of the theory are not fulfilled or the social and political institutional settings are different from those in the countries where the framework was originally introduced. In this research, the regionally specific issues include the absence of regional competition to attract factors of production, the social values dominated by patrimonial rulership values and the expressive voting behavior of the constituents. By understanding the

institutional setting in a particular country, this research confirms that fiscal federalism can give different results when it applies in different countries.

Another contribution to the fiscal federalism theory is to test Leviathan government behavior based on the Brennan-Buchanan hypothesis. This research confirms the hypothesis is based on the assumption that the government spending is fully financed by taxes. However, if the spending is also financed by other sources such as the inter-regional fiscal transfer, then the Brennan-Buchanan hypothesis testing for Leviathan government behavior cannot be applied. The alternative hypothesis uses in this research also accounts for the transfer received by the local government. By accounting for all revenues received by the local government, this research confirms Leviathan government behavior in Indonesia.

6.3 FURTHER STUDIES

As the scope of fiscal federalism literature has been expanded, the challenge is to identify how to incorporate the issues into the economic modelling. The mobility factors of production in jurisdictional competition, social values system that match the society where fiscal federalism was originally formulated and instrumental voting behavior in a democratic system cannot be assumed. These issues should be tested in the model. Since this requires a multidisciplinary approach, the challenge is to identify the proxies to measure aggregative social and political variables that traditionally external to economics.

This research confirms the importance of social capital as an instrument to influence the constituents' voting behavior to promote

accountable government during election time. However, further research is required to understand the way or the mechanism social capital affects voting behavior of the constituents in Indonesia. Furthermore, it also proposes the role of government leadership to create an environment where social capital can thrive. This environment represented by the public policy proposed and implemented by the government. However, similar to the above case, further research to understand the link between the government and the accumulation of social capital in Indonesia is required. This might shed some light to understand the link between welfare state and social capital in promoting democracy in Indonesia.

In addition, this research also establishes the role of values as one of the contributing factors in stimulating Leviathan government behavior in Indonesia. While the model uses in this research indicates that the values system, in this case the personal rulership patrimonialism, affects government size and this research argues that the system was inherited from the Dutch colonial time, it does not explain the reason that this system remains in practice long after the colonial time is over. This leaves room for further research to understand the reasons that this value continues in practice post-colonial time and to design a policy to constrain the practice.

This research also identifies other policies required to constrain Leviathan government behavior including proposing a standard public service provision and political education for the Indonesians to understand their political rights and obligations as citizens, particularly as social and political control agents. These open up some areas for further studies including setting-up the standard of public service quality, designing curricula for all

levels of eduction and designing public policies to encourage citizens to be engaged in civic organizations and community services.

A small group of people such as those members of the Chamber of Commerce and Industry in *Bandung* Province indicates their attempt to break from the value. While the number of participants is too small to represent the behavior of the Indonesia population, their efforts to exercise their voice rights by using their organization as the channel indicates the attempt. This is the form of strengthening social capital in a network. This also opens an area for further study to understand if there is a beginning of an institutional adjustment process toward progressive social change in Indonesia by looking at the way social capital grows in the society. It is also interesting to identify the voting behavior of these people, namely if they tend to vote instrumentally rather than expressively during the general election time. This voting behavior is also another factor that can promote progressive institutional change.

Finally, this research attempts to expand the scope of economics analysis to other areas such as political science and sociology. The basic methodology that used in this research was economics methodology which is different from both political science and sociology. As the research proceeds, the challenge is to identify common variables that served as the channel to link all these three disciplines together in developing the framework to highlight the overlap areas of three different institutional settings as demonstrated by the extent these settings simultaneously determine the efficiency level of government operation.

Another challenge is to identify the proxies to measure variables that are external to economics so that the impact of non-economic factors can be identified and analysed by using economics methodology. This research is a small contribution to understand the phenomenon of Leviathan government behavior in Indonesia by using three different perspectives. Nevertheless, it demonstrates that interdisciplinary approach to understand a phenomenon is possible.

Appendix – A1

System: FINAL08SPEC
Estimation Method: Seemingly Unrelated Regression
Sample: 1 243
Included observations: 243
Total system (balanced) observations 1701
Linear estimation after one-step weighting matrix

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-5.8444	0.6201	-9.4254	0.0000
C(7)	-0.7274	0.1293	-5.6281	0.0000
C(3)	1.2233	0.1072	11.4096	0.0000
C(4)	-0.4775	0.0986	-4.8402	0.0000
C(5)	**1.0608**	**0.1460**	**7.2660**	**0.0000**
C(6)	**0.0032**	**0.0217**	**0.1483**	**0.8821**
C(9)	**-0.0415**	**0.0191**	**-2.1760**	**0.0297**
C(16)	**0.7352**	**0.0364**	**20.2160**	**0.0000**
C(10)	-0.3610	0.8185	-0.4410	0.6593
C(11)	0.1825	0.1987	0.9187	0.3584
C(13)	**1.8487**	**0.1768**	**10.4546**	**0.0000**
C(8)	**0.0165**	**0.0153**	**1.0772**	**0.2816**
C(14)	**0.2002**	**0.0294**	**6.8050**	**0.0000**
C(15)	**0.0432**	**0.0219**	**1.9711**	**0.0489**
C(17)	**0.2292**	**0.0433**	**5.2956**	**0.0000**
C(2)	**0.0008**	**0.0171**	**0.0439**	**0.9650**
C(19)	**0.0069**	**0.0152**	**0.4537**	**0.6501**
C(12)	**0.1199**	**0.0335**	**3.5831**	**0.0003**
C(20)	-0.6930	0.0624	-11.1029	0.0000
C(21)	-0.0916	0.0168	-5.4692	0.0000
C(22)	-0.0078	0.0245	-0.3168	0.7514
C(23)	-0.0195	0.0038	-5.1086	0.0000
C(24)	-0.0444	0.0216	-2.0577	0.0398
C(26)	**-23.3743**	**2.0381**	**-11.4689**	**0.0000**
C(27)	**-1.6730**	**0.2127**	**-7.8657**	**0.0000**
C(28)	**0.3272**	**0.1265**	**2.5859**	**0.0098**
C(29)	**1.3067**	**0.4743**	**2.7549**	**0.0059**
C(30)	**0.9172**	**0.0133**	**69.2136**	**0.0000**
C(32)	5.9099	0.1296	45.6019	0.0000
C(33)	0.0540	0.0306	1.7640	0.0779
C(34)	0.0000	0.0001	-0.0896	0.9286
C(31)	-2.90E-05	3.33E-06	-8.6844	0.0000

Determinant residual covariance 3.96E-08

System: FINAL08SPEC
Estimation Method: Three-Stage Least Squares
Sample: 1 243
Included observations: 243
Total system (balanced) observations 1701
Linear estimation after one-step weighting matrix

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-5.1432	0.6655	-7.7282	0.0000
C(7)	-0.7235	0.1315	-5.5007	0.0000
C(3)	1.1811	0.1106	10.6836	0.0000
C(4)	-0.6041	0.1233	-4.8997	0.0000
C(5)	**1.0830**	**0.1492**	**7.2597**	**0.0000**
C(6)	**0.0148**	**0.0992**	**0.1495**	**0.8812**
C(9)	**-0.0646**	**0.0236**	**-2.7346**	**0.0063**
C(16)	**0.7315**	**0.0383**	**19.0995**	**0.0000**
C(10)	-2.1296	0.8464	-2.5161	0.0120
C(11)	0.6120	0.2055	2.9788	0.0029
C(13)	**1.7391**	**0.2411**	**7.2137**	**0.0000**
C(8)	**0.0369**	**0.0195**	**1.8941**	**0.0584**
C(14)	**0.2129**	**0.0366**	**5.8102**	**0.0000**
C(15)	**0.2690**	**0.0633**	**4.2484**	**0.0000**
C(17)	**0.2612**	**0.0671**	**3.8916**	**0.0001**
C(2)	**0.0649**	**0.0214**	**3.0382**	**0.0024**
C(19)	**-0.1047**	**0.1006**	**-1.0401**	**0.2984**
C(12)	**0.0823**	**0.0497**	**1.6567**	**0.0978**
C(20)	-0.8771	0.0403	-21.7516	0.0000
C(21)	-0.1004	0.0155	-6.4901	0.0000
C(22)	-0.0862	0.0220	-3.9212	0.0001
C(23)	-0.0364	0.0043	-8.3933	0.0000
C(24)	-0.0299	0.0102	-2.9208	0.0035
C(26)	**-26.4698**	**2.2026**	**-12.0176**	**0.0000**
C(27)	**-7.9293**	**0.7302**	**-10.8593**	**0.0000**
C(28)	**0.3510**	**0.0950**	**3.6953**	**0.0002**
C(29)	**1.3367**	**0.4133**	**3.2344**	**0.0012**
C(30)	**0.7577**	**0.0275**	**27.6003**	**0.0000**
C(32)	6.0256	0.1663	36.2402	0.0000
C(33)	0.0602	0.0556	1.0835	0.2787
C(34)	-0.0003	0.0002	-1.6096	0.1077
C(31)	-2.71E-05	3.47E-06	-7.8156	0.0000

Determinant residual covariance 3.39E-08

Appendix – A2

System: FINAL08SPEC
Estimation Method: Seemingly Unrelated Regression
Sample: 1 243
Included observations: 243
Total system (balanced) observations 1701
Linear estimation after one-step weighting matrix

Equation: LOG(X)= C(1)+C(7)*LOG(LA)+C(3)*LOG(R)+C(4)*LOG(LY)
Observations: 243

R-squared	0.475721	Mean dependent var	0.510712
Adjusted R-squared	0.469141	S.D. dependent var	0.395908
S.E. of regression	0.288459	Sum squared resid	19.88688
Durbin-Watson stat	1.687684		

Equation: LOG(LY)= C(5)+C(6)*LOG(V)+C(9)*LOG(X)+C(16)*LOG(LH)
Observations: 243

R-squared	0.615721	Mean dependent var	3.997978
Adjusted R-squared	0.610897	S.D. dependent var	0.189374
S.E. of regression	0.118128	Sum squared resid	3.335046
Durbin-Watson stat	1.650211		

Equation: LOG(V)=C(10)+C(11)*LOG(EG)
Observations: 243

R-squared	0.00212	Mean dependent var	0.390787
Adjusted R-squared	-0.00202	S.D. dependent var	0.344451
S.E. of regression	0.344799	Sum squared resid	28.65165
Durbin-Watson stat	2.169417		

Equation: LOG(EG)=C(13)+C(8)*LOG(BL)+C(14)*LOG(S)+C(15)*LOG(F)
+C(17)*LOG(L)+C(2)*LOG(BP)+C(19)*LOG(V)+C(12)*LOG(LY)
Observations: 243

R-squared	0.452842	Mean dependent var	4.118344
Adjusted R-squared	0.436543	S.D. dependent var	0.110384
S.E. of regression	0.082859	Sum squared resid	1.613401
Durbin-Watson stat	1.264877		

Equation: LOG(F)=C(20)+C(21)*LOG(FPDBH)+C(22)*LOG(FCDBH) +C(23)
*LOG(GYTOTAL)+C(24)*LOG(M)
Observations: 243

R-squared	0.098711	Mean dependent var	-0.91698
Adjusted R-squared	0.083563	S.D. dependent var	0.231067
S.E. of regression	0.221202	Sum squared resid	11.64545
Durbin-Watson stat	1.907708		

Equation: LOG(GYTOTAL)=C(26)+C(27)*LOG(F)+C(28)*LOG(X)+C(29)
*LOG(EG)+C(30)*LOG(GOVCAPITA)
Observations: 243

R-squared	0.952346	Mean dependent var	-0.32867
Adjusted R-squared	0.951545	S.D. dependent var	3.807282
S.E. of regression	0.838079	Sum squared resid	167.1656
Durbin-Watson stat	1.302574		

Equation: YGROWTH=C(32)+C(33)*LOG(GYTOTAL)+C(34)*(GYTOTAL^2)
+C(31)*YPERCAPITA
Observations: 243

R-squared	0.167738	Mean dependent var	5.440494
Adjusted R-squared	0.157291	S.D. dependent var	1.820688
S.E. of regression	1.671376	Sum squared resid	667.6462
Durbin-Watson stat	2.07041		

System: FINAL08SPEC
Estimation Method: Three-Stage Least Squares
Sample: 1 243
Included observations: 243
Total system (balanced) observations 1701
Linear estimation after one-step weighting matrix

Equation: LOG(X)= C(1)+C(7)*LOG(LA)+C(3)*LOG(R)+C(4)*LOG(LY)
Instruments: R BL LA BP S LH M FPDBH FCDBH L GOVCAPITA
YPERCAPITA INF C
Observations: 243

R-squared	0.467525	Mean dependent var	0.510712
Adjusted R-squared	0.460841	S.D. dependent var	0.395908
S.E. of regression	0.290705	Sum squared resid	20.19781
Durbin-Watson stat	1.680314		

Equation: LOG(LY)= C(5)+C(6)*LOG(V)+C(9)*LOG(X)+C(16)*LOG(LH)
Instruments: R BL LA BP S LH M FPDBH FCDBH L GOVCAPITA
YPERCAPITA INF C
Observations: 243

R-squared	0.610944	Mean dependent var	3.997978
Adjusted R-squared	0.60606	S.D. dependent var	0.189374
S.E. of regression	0.11886	Sum squared resid	3.376505
Durbin-Watson stat	1.635347		

Equation: LOG(V)=C(10)+C(11)*LOG(EG)
Instruments: R BL LA BP S LH M FPDBH FCDBH L GOVCAPITA
YPERCAPITA INF C
Observations: 243

R-squared	-0.01989	Mean dependent var	0.390787
Adjusted R-squared	-0.02412	S.D. dependent var	0.344451
S.E. of regression	0.34858	Sum squared resid	29.28345
Durbin-Watson stat	2.124381		

Equation: LOG(EG)=C(13)+C(8)*LOG(BL)+C(14)*LOG(S)+C(15)*LOG(F)
+C(17)*LOG(L)+C(2)*LOG(BP)+C(19)*LOG(V)+C(12)*LOG(LY)
Instruments: R BL LA BP S LH M FPDBH FCDBH L GOVCAPITA
YPERCAPITA INF C
Observations: 243

R-squared	0.151452	Mean dependent var	4.118344
Adjusted R-squared	0.126176	S.D. dependent var	0.110384
S.E. of regression	0.103186	Sum squared resid	2.502106
Durbin-Watson stat	1.665652		

Equation: LOG(F)=C(20)+C(21)*LOG(FPDBH)+C(22)*LOG(FCDBH) +C(23)
*LOG(GYTOTAL)+C(24)*LOG(M)
Instruments: R BL LA BP S LH M FPDBH FCDBH L GOVCAPITA
YPERCAPITA INF C
Observations: 243

R-squared	-0.03514	Mean dependent var	-0.91698
Adjusted R-squared	-0.05254	S.D. dependent var	0.231067
S.E. of regression	0.237059	Sum squared resid	13.37493
Durbin-Watson stat	1.786768		

Equation: LOG(GYTOTAL)=C(26)+C(27)*LOG(F)+C(28)*LOG(X)+C(29)
*LOG(EG)+C(30)*LOG(GOVCAPITA)
Instruments: R BL LA BP S LH M FPDBH FCDBH L GOVCAPITA
YPERCAPITA INF C
Observations: 243

R-squared	0.757774	Mean dependent var	-0.32867
Adjusted R-squared	0.753703	S.D. dependent var	3.807282
S.E. of regression	1.88949	Sum squared resid	849.701
Durbin-Watson stat	1.895352		

Equation: YGROWTH=C(32)+C(33)*LOG(GYTOTAL)+C(34)*(GYTOTAL^2)
+C(31)*YPERCAPITA
Instruments: R BL LA BP S LH M FPDBH FCDBH L GOVCAPITA
YPERCAPITA INF C
Observations: 243

R-squared	0.141602	Mean dependent var	5.440494
Adjusted R-squared	0.130827	S.D. dependent var	1.820688
S.E. of regression	1.697417	Sum squared resid	688.6123
Durbin-Watson stat	2.059848		

Appendix – B1

Equation 1
Dependent Variable: RESID05^2
Method: Least Squares
Sample: 1 243
Included observations: 243

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.14431	0.0732	1.971444	0.0499
FPDBH	-0.01025	0.010026	-1.02193	0.3079
FPDBH^2	0.000232	0.000284	0.816275	0.4152
FPDBH*FCDBH	0.00719	0.050316	0.142904	0.8865
FPDBH*GYTOTAL	7.51E-05	0.000136	0.55042	0.5826
FPDBH*M	0.000202	0.000285	0.707517	0.4800
FCDBH	-0.04286	0.302391	-0.14173	0.8874
FCDBH^2	-0.05956	0.314925	-0.18911	0.8502
FCDBH*GYTOTAL	0.004397	0.004553	0.965837	0.3351
FCDBH*M	0.000779	0.008725	0.089312	0.9289
GYTOTAL	-0.0025	0.001994	-1.25256	0.2116
GYTOTAL^2	-2.12E-06	8.91E-06	-0.2382	0.8119
GYTOTAL*M	0.000135	6.01E-05	2.237307	0.0262
M	-0.00636	0.003892	-1.6336	0.1037
M^2	0.00011	5.63E-05	1.945586	0.0529

R-squared	0.073082	Mean dependent va	0.048339
Adjusted R-squared	0.016167	S.D. dependent var	0.078678
S.E. of regression	0.07804	Akaike info criterion	-2.20346
Sum squared resid	1.388562	Schwarz criterion	-1.98784
Log likelihood	282.7203	Hannan-Quinn crite	-2.11661
F-statistic	1.284042	Durbin-Watson sta	2.001797
Prob(F-statistic)	0.218265		

Equation 2
Dependent Variable: RESID06^2
Method: Least Squares
Sample: 1 243
Included observations: 243

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.06196	10.38203	0.391249	0.6960
F	-82.6322	16.30634	-5.06749	0.0000
X	2.03299	2.26929	0.895871	0.3713
EG	0.374578	0.279328	1.340997	0.1812
GOVCAPITA	1.67E-09	3.91E-10	4.267807	0.0000
F^2	142.4487	7.954133	17.90876	0.0000
X^2	-0.01198	0.048641	-0.24621	0.8057
EG^2	-0.00186	0.002059	-0.90414	0.3669
GOVCAPITA^2	-1.88E-20	1.73E-20	-1.08967	0.2770
F*X	-5.7549	2.353257	-2.44551	0.0152
F*EG	-0.3611	0.235435	-1.53377	0.1265
F*GOVCAPITA	-1.95E-09	6.50E-10	-3.0034	0.0030
X*EG	0.005501	0.035493	0.154984	0.8770
X*GOVCAPITA	-3.45E-10	1.74E-10	-1.97939	0.0490

R-squared	0.732203	Mean dependent va	2.634381
Adjusted R-squared	0.717001	S.D. dependent var	4.397244
S.E. of regression	2.339231	Akaike info criterion	4.593408
Sum squared resid	1253.088	Schwarz criterion	4.794655
Log likelihood	-544.099	Hannan-Quinn crite	4.674468
F-statistic	48.16356	Durbin-Watson sta	1.950519
Prob(F-statistic)	0.00000		

Appendix – B2

Equation 3
Dependent Variable: RESID01^2
Method: Least Squares
Sample: 1 243
Included observations: 243

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.599264	1.46121	0.410116	0.6821
LA	-28.4292	101.03	-0.281395	0.7787
R	0.002643	0.01928	0.13705	0.8911
LY	-0.01348	0.02132	-0.63217	0.5279
LA^2	133.5535	1788.59	0.07467	0.9405
R^2	-4.22E-05	9.51E-05	-0.444148	0.6573
LY^2	-5.30E-06	0.00011	-0.046826	0.9627
LA*R	-0.10543	0.70572	-0.149396	0.8814
LA*LY	0.512146	0.82936	0.61752	0.5375
R*LY	9.06E-05	0.00015	0.587389	0.5575

R-squared	0.005176	Mean dependent var	0.083173
Adjusted R-squared	-0.03325	S.D. dependent var	0.240281
S.E. of regression	0.244243	Akaike info criterion	0.058973
Sum squared resid	13.8995	Schwarz criterion	0.20272
Log likelihood	2.834802	Hannan-Quinn criter.	0.116873
F-statistic	0.134695	Durbin-Watson stat	2.006814
Prob(F-statistic)	0.99871		

Equation 4
Dependent Variable: RESID02^2
Method: Least Squares
Sample: 1 243
Included observations: 243

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.009628	0.045007	0.213923	0.8308
V	0.003581	0.017125	0.209109	0.8345
X	0.002578	0.014483	0.177983	0.8589
LH	0.000556	0.001103	0.504101	0.6147
V*X	-0.00309	0.004042	-0.763268	0.4461
V*LH	-3.27E-05	0.000274	-0.119137	0.9053
X^2	0.00068	0.000499	1.364074	0.1739
X*LH	-4.22E-05	0.000187	-0.225749	0.8216
LH^2	-6.89E-06	7.89E-06	-0.873416	0.3833

R-squared	0.059603	Mean dependent var	0.015349
Adjusted R-squared	0.027453	S.D. dependent var	0.022994
S.E. of regression	0.022676	Akaike info criterion	-4.69865
Sum squared resid	0.120328	Schwarz criterion	-4.56928
Log likelihood	579.8858	Hannan-Quinn criter.	-4.64654
F-statistic	1.853901	Durbin-Watson stat	1.644529
Prob(F-statistic)	0.068222		

Appendix – B3

Equation 5
Dependent Variable: RESID03^2
Method: Least Squares
Sample: 1 243
Included observations: 243

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.395976	0.13551	2.922117	0.0038
EG	-0.009	0.004418	-2.036332	0.0428
EG^2	7.28E-05	3.59E-05	2.026532	0.0438

R-squared	0.016985	Mean dependent var	0.121072
Adjusted R-squ	0.008793	S.D. dependent var	0.041456
S.E. of regress	0.041273	Akaike info criterion	-3.52493
Sum squared r	0.408837	Schwarz criterion	-3.48181
Log likelihood	431.2792	Hannan-Quinn criter.	-3.50756
F-statistic	2.073453	Durbin-Watson stat	1.992796
Prob(F-statistic	0.127998		

Equation 6
Dependent Variable: RESID04^2
Method: Least Squares
Sample: 1 243
Included observations: 243

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.03808	0.145449	-0.261817	0.7937
BL	0.000337	0.001292	0.260539	0.7947
BL^2	5.50E-07	4.36E-06	0.126179	0.8997
BL*S	-1.71E-05	1.20E-05	-1.426912	0.1551
BL*F	0.000773	0.001253	0.617439	0.5376
BL*L	-1.29E-06	1.92E-05	-0.067087	0.9466
BL*BP	-4.91E-07	1.13E-05	-0.04359	0.9653
BL*V	9.24E-05	0.000232	0.399143	0.6902
BL*LY	1.44E-06	1.33E-05	0.108701	0.9135
S	0.001803	0.001874	0.9624	0.337
S^2	5.16E-06	1.05E-05	0.493073	0.6225
S*F	-0.00221	0.001694	-1.301848	0.1944
S*BP	-1.40E-05	1.17E-05	-1.195429	0.2333
S*V	0.000814	0.000318	2.557157	0.0113
S*LY	-1.06E-05	2.04E-05	-0.518708	0.6045
F	-0.0391	0.15285	-0.255772	0.7984
F^F	-0.07427	0.103587	-0.716931	0.4742
F*L	-0.00045	0.002318	-0.193633	0.8467
F*BP	-0.00019	0.001152	-0.161494	0.8719
F*V	0.055875	0.032291	1.730339	0.085
F*LY	0.001116	0.002074	0.53814	0.5911
L	0.000857	0.002662	0.321789	0.7479
L^2	-1.56E-05	1.96E-05	-0.794356	0.4279
L*BP	1.66E-05	1.58E-05	1.054754	0.2927
L*V	-0.00051	0.000505	-1.003044	0.317
L*LY	2.01E-05	2.83E-05	0.708468	0.4794
BP	0.000137	0.001654	0.082691	0.9342
BP^2	2.52E-06	5.99E-06	0.420855	0.6743
BP*V	-0.00021	0.000271	-0.772916	0.4404
V	-0.01615	0.036834	-0.438404	0.6615
V*LY	-0.00054	0.000389	-1.38735	0.1668
LY	0.001734	0.002021	0.857627	0.3921
LY^2	-1.78E-05	1.33E-05	-1.340646	0.1815

R-squared	0.162259	Mean dependent var	0.022853
Adjusted R-squared	0.034604	S.D. dependent var	0.021742
S.E. of regression	0.021363	Akaike info criterion	-4.72868
Sum squared resid	0.095837	Schwarz criterion	-4.25432
Log likelihood	607.5349	Hannan-Quinn criter.	-4.53761
F-statistic	1.27107	Durbin-Watson stat	2.292281
Prob(F-statistic)	0.162728		

Appendix – B4

Equation 7
Dependent Variable: RESID07^2
Method: Least Squares
Sample: 1 243
Included observations: 243

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.52776	1.110749	0.475139	0.6351
GYTOTAL	-0.12219	0.310206	-0.393906	0.6940
GYTOTAL^2	0.003571	0.018895	0.188997	0.8503
YPERCAPITA	0.000164	6.01E-05	2.73224	0.0068
GYTOTAL^4	6.04E-07	1.98E-06	0.304817	0.7608
YPERCAPITA^2	-4.26E-10	1.44E-10	-2.950303	0.0035
GYTOTAL*GYTOTAL^2	-7.14E-05	0.000351	-0.203291	0.8391
GYTOTAL*YPERCAPITA	1.08E-05	7.37E-06	1.467437	0.1436
GYTOTAL^2*YPERCAPITA	-1.22E-07	1.50E-07	-0.812882	0.4171

R-squared	0.140811	Mean dependent var	2.957722
Adjusted R-squared	0.111437	S.D. dependent var	9.391034
S.E. of regression	8.852328	Akaike info criterion	7.235572
Sum squared resid	18337.11	Schwarz criterion	7.364944
Log likelihood	-870.122	Hannan-Quinn criter.	7.287682
F-statistic	4.793737	Durbin-Watson stat	2.117129
Prob(F-statistic)	0.000018		

Appendix – C1

System: REPRE09
Estimation Method: Seemingly Unrelated Regression
Sample: 1 243
Included observations: 243
Total system (balanced) observations 1701
Linear estimation after one-step weighting matrix

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	**-5.699152**	**0.63392**	**-8.990378**	**0.0000**
C(7)	**-0.243485**	**0.07652**	**-3.182144**	**0.0015**
C(3)	**1.396716**	**0.08629**	**16.18701**	**0.0000**
C(4)	**-0.188488**	**0.09416**	**-2.001763**	**0.0455**
C(5)	-74.1727	9.59304	-7.731931	0.0000
C(6)	9.030256	2.07628	4.349253	0.0000
C(9)	-7.845241	1.86605	4.204188	0.0000
C(16)	34.26617	2.69501	12.71468	0.0000
C(10)	**-3.720775**	**0.13835**	**-26.89386**	**0.0000**
C(11)	**0.997993**	**0.04038**	**24.71548**	**0.0000**
C(13)	-14.34384	3.39963	-4.219232	0.0000
C(8)	0.145659	0.00994	14.6475	0.0000
C(14)	0.286455	0.01541	18.586	0.0000
C(15)	0.462244	0.01672	27.64987	0.0000
C(17)	0.569696	1.15289	0.494146	0.6213
C(2)	1.130507	0.50073	2.257699	0.0241
C(19)	-0.326967	0.47537	-0.687823	0.4917
C(12)	3.137688	0.95105	3.299193	0.0010
C(40)	-0.270624	0.6075	-0.44547	0.6560
C(20)	**0.226861**	**0.03714**	**6.108098**	**0.0000**
C(21)	**-0.044158**	**0.01185**	**-3.726361**	**0.0002**
C(22)	**0.641754**	**0.03357**	**19.11601**	**0.0000**
C(23)	**0.000699**	**0.00055**	**1.275967**	**0.2021**
C(24)	**0.001976**	**0.00141**	**1.406234**	**0.1598**
C(26)	-0.245463	0.31678	-0.774884	0.4385
C(27)	-0.072278	0.1301	-0.555556	0.5786
C(28)	0.14316	0.09919	1.443251	0.1491
C(29)	0.006936	0.00296	2.345447	0.0191
C(30)	0.106164	0.01043	10.18131	0.0000
C(32)	**1.593127**	**0.2198**	**7.248179**	**0.0000**
C(33)	**0.228888**	**0.02325**	**9.843028**	**0.0000**
C(34)	**-0.002171**	**0.00034**	**-6.368955**	**0.0000**
C(31)	**-1.14E-05**	**2.20E-06**	**-5.170512**	**0.0000**

Determinant residual covariance 0.273705

System: REPRE09
Estimation Method: Three-Stage Least Squares
Sample: 1 243
Included observations: 243
Total system (balanced) observations 1701
Linear estimation after one-step weighting matrix

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	**-5.584239**	**0.84028**	**-6.645679**	**0.0000**
C(7)	**-0.223495**	**0.10119**	**-2.208757**	**0.0273**
C(3)	**1.477116**	**0.10933**	**13.5112**	**0.0000**
C(4)	**-0.279119**	**0.13663**	**-2.042932**	**0.0412**
C(5)	-69.05028	16.3951	-4.211653	0.0000
C(6)	13.68639	4.62048	2.962111	0.0031
C(9)	-5.591974	2.33873	2.391031	0.0169
C(16)	33.04304	4.52803	7.297451	0.0000
C(10)	**-3.740918**	**0.13901**	**-26.91215**	**0.0000**
C(11)	**1.003954**	**0.04058**	**24.74303**	**0.0000**
C(13)	-170.6349	37.1227	-4.596509	0.0000
C(8)	0.225176	0.05211	4.321116	0.0000
C(14)	0.168	0.06427	2.614116	0.0090
C(15)	0.627526	0.04679	13.41052	0.0000
C(17)	32.86919	11.5747	2.83975	0.0046
C(2)	9.688428	2.81619	3.440262	0.0006
C(19)	-66.73437	13.4351	-4.967154	0.0000
C(12)	6.812341	5.70072	1.194996	0.2323
C(40)	10.71256	4.77236	2.244709	0.0249
C(20)	**0.212902**	**0.03829**	**5.560967**	**0.0000**
C(21)	**-0.044627**	**0.01207**	**-3.698527**	**0.0002**
C(22)	**0.56882**	**0.03546**	**16.04115**	**0.0000**
C(23)	**0.002287**	**0.0007**	**3.281097**	**0.0011**
C(24)	**0.003496**	**0.00145**	**2.411889**	**0.0160**
C(26)	-2.133999	0.57945	-3.682819	0.0002
C(27)	-0.519563	0.22185	-2.341939	0.0193
C(28)	0.294259	0.15699	1.8744	0.0611
C(29)	0.008366	0.00417	2.004505	0.0452
C(30)	0.174024	0.02459	7.076058	0.0000
C(32)	**0.791951**	**0.30919**	**2.561383**	**0.0105**
C(33)	**0.467678**	**0.04808**	**9.727899**	**0.0000**
C(34)	**-0.006836**	**0.00086**	**-7.959622**	**0.0000**
C(31)	**-1.31E-05**	**2.87E-06**	**-4.568273**	**0.0000**

Determinant residual covariance 4.468453

Appendix – C2

System: REPRE09
Estimation Method: Seemingly Unrelated Regression
Sample: 1 243
Included observations: 243
Total system (balanced) observations 1701
Linear estimation after one-step weighting matrix

Equation: LOG(X/FPDBHSQROOT)= C(1)+C(7)*LOG(LA/FPDBHSQROOT)
+C(3)*LOG(R/FPDBHSQROOT)+C(4)*LOG(LY/FPDBHSQROOT)
Observations: 243

R-squared	0.805539	Mean dependent var	-0.2283
Adjusted R-squared	0.803098	S.D. dependent var	0.66882
S.E. of regression	0.296781	Sum squared resid	21.0509
Durbin-Watson stat	1.64997		

Equation: (LY/FPDBHSQROOT)= C(5)+C(6)*LOG(V/FPDBHSQROOT)+C(9)
*LOG(X/FPDBHSQROOT)+C(16)*LOG(LH/FPDBHSQROOT)
Observations: 243

R-squared	0.834248	Mean dependent var	33.3831
Adjusted R-squared	0.832168	S.D. dependent var	32.3001
S.E. of regression	13.23249	Sum squared resid	41848.6
Durbin-Watson stat	1.726705		

Equation: LOG(V/FPDBHSQROOT)=C(10)+C(11)*LOG(EG
/FPDBHSQROOT)
Observations: 243

R-squared	0.720457	Mean dependent var	-0.3483
Adjusted R-squared	0.719297	S.D. dependent var	0.67468
S.E. of regression	0.357457	Sum squared resid	30.7939
Durbin-Watson stat	2.051189		

Equation: (EG/FPDBHSQROOT)=C(13)+C(8)*(BL/FPDBHSQROOT)+C(14)
(S/FPDBHSQROOT)+C(15)(INF/FPDBHSQROOT)+C(17)*LOG(L
/FPDBHSQROOT)+C(2)*LOG(BP/FPDBHSQROOT)+C(19)*LOG(V
/FPDBHSQROOT)+C(12)*LOG(LY/FPDBHSQROOT)+C(40)*LOG(F
/FPDBHSQROOT)
Observations: 243

R-squared	0.992468	Mean dependent var	35.9799
Adjusted R-squared	0.99221	S.D. dependent var	31.1212
S.E. of regression	2.746735	Sum squared resid	1765.43
Durbin-Watson stat	1.687257		

Equation: (F/FPDBHSQROOT)=C(20)+C(21)*(FPDBH/FPDBHSQROOT)
+C(22)*(FCDBH/FPDBHSQROOT) +C(23)*(GYTOTAL
/FPDBHSQROOT)+C(24)*(M/FPDBHSQROOT)
Observations: 243

R-squared	0.825628	Mean dependent var	0.25923
Adjusted R-squared	0.822697	S.D. dependent var	0.29805
S.E. of regression	0.1255	Sum squared resid	3.74854
Durbin-Watson stat	2.06575		

Equation: LOG(GYTOTAL/FPDBHSQROOT)=C(26)+C(27)*LOG(F
/FPDBHSQROOT)+C(28)*LOG(X/FPDBHSQROOT)+C(29)*(EG
/FPDBHSQROOT)+C(30)*LOG(GOVCAPITA/FPDBHSQROOT)
Observations: 243

R-squared	0.440652	Mean dependent var	1.86027
Adjusted R-squared	0.431251	S.D. dependent var	0.85741
S.E. of regression	0.646618	Sum squared resid	99.5113
Durbin-Watson stat	1.6668		

Equation: (YGROWTH/FPDBHSQROOT)=C(32)+C(33)*(GYTOTAL
/FPDBHSQROOT)+C(34)*((GYTOTAL)^2/FPDBHSQROOT)+C(31)
*(YPERCAPITA/FPDBHSQROOT)
Observations: 243

R-squared	0.24517	Mean dependent var	2.96799
Adjusted R-squared	0.235696	S.D. dependent var	3.0822
S.E. of regression	2.694597	Sum squared resid	1735.34
Durbin-Watson stat	1.958231		

System: REPRE09
Estimation Method: Three-Stage Least Squares
Sample: 1 243
Included observations: 243
Total system (balanced) observations 1701
Linear estimation after one-step weighting matrix

Equation: LOG(X/FPDBHSQROOT)= C(1)+C(7)*LOG(LA/FPDBHSQROOT)
+C(3)*LOG(R/FPDBHSQROOT)+C(4)*LOG(LY/FPDBHSQROOT)
Instruments: R/FPDBHSQROOT BL/FPDBHSQROOT LA/FPDBHSQROOT
BP/FPDBHSQROOT S/FPDBHSQROOT LH/FPDBHSQROOT INF
/FPDBHSQROOT M/FPDBHSQROOT FPDBH/FPDBHSQROOT FCDBH
/FPDBHSQROOT L/FPDBHSQROOT GOVCAPITA/FPDBHSQROOT
YPERCAPITA/FPDBHSQROOT C
Observations: 243

R-squared	0.805752	Mean dependent var	-0.2283
Adjusted R-squared	0.803314	S.D. dependent var	0.66882
S.E. of regression	0.296619	Sum squared resid	21.0278
Durbin-Watson stat	1.653616		

Equation: (LY/FPDBHSQROOT)= C(5)+C(6)*LOG(V/FPDBHSQROOT)+C(9)
*LOG(X/FPDBHSQROOT)+C(16)*LOG(LH/FPDBHSQROOT)
Instruments: R/FPDBHSQROOT BL/FPDBHSQROOT LA/FPDBHSQROOT
BP/FPDBHSQROOT S/FPDBHSQROOT LH/FPDBHSQROOT INF
/FPDBHSQROOT M/FPDBHSQROOT FPDBH/FPDBHSQROOT FCDBH
/FPDBHSQROOT L/FPDBHSQROOT GOVCAPITA/FPDBHSQROOT
YPERCAPITA/FPDBHSQROOT C
Observations: 243

R-squared	0.826966	Mean dependent var	33.3831
Adjusted R-squared	0.824794	S.D. dependent var	32.3001
S.E. of regression	13.52004	Sum squared resid	43687.2
Durbin-Watson stat	1.749321		

Equation: LOG(V/FPDBHSQROOT)=C(10)+C(11)*LOG(EG
/FPDBHSQROOT)
Instruments: R/FPDBHSQROOT BL/FPDBHSQROOT LA/FPDBHSQROOT
BP/FPDBHSQROOT S/FPDBHSQROOT LH/FPDBHSQROOT INF
/FPDBHSQROOT M/FPDBHSQROOT FPDBH/FPDBHSQROOT FCDBH
/FPDBHSQROOT L/FPDBHSQROOT GOVCAPITA/FPDBHSQROOT
YPERCAPITA/FPDBHSQROOT C
Observations: 243

R-squared	0.720557	Mean dependent var	-0.3483
Adjusted R-squared	0.719397	S.D. dependent var	0.67468
S.E. of regression	0.357393	Sum squared resid	30.7829
Durbin-Watson stat	2.052997		

Equation: (EG/FPDBHSQROOT)=C(13)+C(8)*(BL/FPDBHSQROOT)+C(14)
(S/FPDBHSQROOT)+C(15)(INF/FPDBHSQROOT)+C(17)*LOG(L
/FPDBHSQROOT)+C(2)*LOG(BP/FPDBHSQROOT)+C(19)*LOG(V
/FPDBHSQROOT)+C(12)*LOG(LY/FPDBHSQROOT)+C(40)*LOG(F
/FPDBHSQROOT)
Instruments: R/FPDBHSQROOT BL/FPDBHSQROOT LA/FPDBHSQROOT
BP/FPDBHSQROOT S/FPDBHSQROOT LH/FPDBHSQROOT INF
/FPDBHSQROOT M/FPDBHSQROOT FPDBH/FPDBHSQROOT FCDBH
/FPDBHSQROOT L/FPDBHSQROOT GOVCAPITA/FPDBHSQROOT
YPERCAPITA/FPDBHSQROOT C
Observations: 243

R-squared	0.476702	Mean dependent var	35.9799
Adjusted R-squared	0.458812	S.D. dependent var	31.1212
S.E. of regression	22.89448	Sum squared resid	122653
Durbin-Watson stat	2.114345		

Equation: (F/FPDBHSQROOT)=C(20)+C(21)*(FPDBH/FPDBHSQROOT)
+C(22)*(FCDBH/FPDBHSQROOT) +C(23)*(GYTOTAL
/FPDBHSQROOT)+C(24)*(M/FPDBHSQROOT)
Instruments: R/FPDBHSQROOT BL/FPDBHSQROOT LA/FPDBHSQROOT
BP/FPDBHSQROOT S/FPDBHSQROOT LH/FPDBHSQROOT INF
/FPDBHSQROOT M/FPDBHSQROOT FPDBH/FPDBHSQROOT FCDBH
/FPDBHSQROOT L/FPDBHSQROOT GOVCAPITA/FPDBHSQROOT
YPERCAPITA/FPDBHSQROOT C
Observations: 243

R-squared	0.823626	Mean dependent var	0.25923
Adjusted R-squared	0.820661	S.D. dependent var	0.29805
S.E. of regression	0.126218	Sum squared resid	3.79157
Durbin-Watson stat	2.052644		

Equation: LOG(GYTOTAL/FPDBHSQROOT)=C(26)+C(27)*LOG(F
/FPDBHSQROOT)+C(28)*LOG(X/FPDBHSQROOT)+C(29)*(EG
/FPDBHSQROOT)+C(30)*LOG(GOVCAPITA/FPDBHSQROOT)
Instruments: R/FPDBHSQROOT BL/FPDBHSQROOT LA/FPDBHSQROOT
BP/FPDBHSQROOT S/FPDBHSQROOT LH/FPDBHSQROOT INF
/FPDBHSQROOT M/FPDBHSQROOT FPDBH/FPDBHSQROOT FCDBH
/FPDBHSQROOT L/FPDBHSQROOT GOVCAPITA/FPDBHSQROOT
YPERCAPITA/FPDBHSQROOT C
Observations: 243

R-squared	0.321611	Mean dependent var	1.86027
Adjusted R-squared	0.310209	S.D. dependent var	0.85741
S.E. of regression	0.712108	Sum squared resid	120.689
Durbin-Watson stat	1.898227		

Equation: (YGROWTH/FPDBHSQROOT)=C(32)+C(33)*(GYTOTAL
/FPDBHSQROOT)+C(34)*((GYTOTAL)^2/FPDBHSQROOT)+C(31)
*(YPERCAPITA/FPDBHSQROOT)
Instruments: R/FPDBHSQROOT BL/FPDBHSQROOT LA/FPDBHSQROOT
BP/FPDBHSQROOT S/FPDBHSQROOT LH/FPDBHSQROOT INF
/FPDBHSQROOT M/FPDBHSQROOT FPDBH/FPDBHSQROOT FCDBH
/FPDBHSQROOT L/FPDBHSQROOT GOVCAPITA/FPDBHSQROOT
YPERCAPITA/FPDBHSQROOT C
Observations: 243

R-squared	-0.326201	Mean dependent var	2.96799
Adjusted R-squared	-0.342848	S.D. dependent var	3.0822
S.E. of regression	3.571692	Sum squared resid	3048.92
Durbin-Watson stat	2.099723		

Bibliography

Adamovich, I. B., & Hosp, G. (2003). Fiscal Federalism for Emerging Economies: Lessons from Switzerland? *Publius, 33* (1), 1-21.

Agrawal, A., & Ribot, J. (1999). Accountability i: A Framework with South Asian and West African Casees. *Journal of Developing Areas, 33*, 473-502.

Alm, J., Aten, R. H., & Bahl, R. (2001). Can Indonesia Decentralise Sucessfully? Plans, Problems and Prospects. *Bulletin of Indonesian Economic Studies, 37* (1), 83–102.

Ama, K. K. (2011, April 11). *Utang Pemda Makin Perparah Kemiskinan TTU*. Retrieved Oct 12, 2011, from Kompas.com: http://nasional.kompas.com/read/2011/04/11/04011125/

Ashby, N. J. (2007). Economic Freedom and Migration Flows between U.S. States. *Southern Economic Journal, 73* (3), 677–697.

Badan Pusat Statistik. (2008). *Perkembangan Beberapa Indikator Utama Sosial-Ekonomi Indonesia, .* Oktober, Jakarta: BPS.

Badan Pusat Statistik. (2009). *Statistik Keuangan Pemerintah Daerah Provinsi, 2005-2008.* Jakarta: BPS.

Banathy, B. H. (1996). Design as a multidimensional inquiry. In *Designing social system in a changing world* (pp. 155-219). New York: Plenum Press.

Banathy, B. H. (1996). What is design? Why do we need it? In *Designing social systems in a changing world* (pp. 11-47). New York: Plenum Press.

BAPPENAS-UNDP. (2008). *Evaluation of the Proliferation Administrative Region in Indonesia, 2001-2007.* Jakarta: Building and Reinventing Decentralised Governance.

Barro, R. (1990). Government Spending in a Simple Model of Endogeneous Growth. *Journal of Political Economy, 98* (S5), 103-125.

Blanchard, O., & Shleifer, A. (2001). Federalism With and Without Political Centralization: China versus Russia. *IMF Staff Papers, 48*, 171-179.

Blunt, P., Turner, M., & Lindroth, H. (2012). Patronage's Progress in Post-Soeharto Indonesia. *Public Administration and Development, 32*, 64-81.

Borghers, E. &. (2012). *Statistics - Econometrics - Forecasting.* Retrieved April 25, 2012, from Office for Research Development and Education: www.wessa.net

Brennan, G., & Buchanan, J. M. (1980). Natural Government: A Model of Leviathan. In *The Power to Tax: Analytical Foundations of a Fiscal Constitution.* New York: Cambridge University Press.

Brennan, G., & Hamlin, A. (1998). Expressive Voting and Electoral Equilibrium. *Public Choice*, 149-175.

Brown, R. A. (2006). Indonesian Corporations, Cronyism, and Corruption. *Modern Asian Studies, 40* (4), 953-992.

Buchanan, J. (1980). Rent-seeking and Profit-seeking. In J. Buchanan, R. D. Tollison, & G. Tullock, *Toward the Theory of the Rent-seeking Society.* College Station: Taxes A&M University Press.

Bush, P. D. (1983). An Exploration of the Structural Characteristics of a Veblen-Ayres-Foster Defined Institutional Domain. *Journal of Economic Issues, XVII* (1), 35-66.

Bush, P. D. (1989). The Concept of "Progressive" Institutional Change and Its Implications for Economic Policy Formation. *Journal of Economic Issues, XXIII* (2), 455-464.

Ciscel, D. H., & Carroll, T. M. (1980). The Determinants of Executive Salaries: An Econometric Survey. *Review of Economics and Statistics, 61* (1), 7-13.

Coase, R. H. (1937). The Nature of the Firm. *Economica, 4* (16), 386-405.

Coleman, J. S. (1988). Social Capital in the Creation of Human Capital. *American Journal of Sociology, 94*, S95-S120.

Conybeare, J. A. (1982). The Rent-Seeking State and Revenues Diversification. *World Politics, 35* (1), 25-42.

Corbett, D. C. (1992). Accountability and Ethics. In D. Corbett, *Australian Public Sector Management* (pp. 191-220). St Leonards, NSW, Australia: Allen & Unwin Pty Ltd.

Craw, M. (2008). Taming the Local Leviathan: Institutional and Economic Constraints on Municipal Budgets. *Urban Affairs Review , 43* (5), 663-690.

Cribb, R. (2011). A system of exemptions: historicizing state illegality in Indonesia. In E. Aspinall, & G. van Klinken, *The State and Illegality in Indonesia* (pp. 31-44). Leiden: KITLV Press.

Crouch, H. (1979). Patrimonialism and Military Rule in Indonesia. *World Politics, 31* (4), 571-587.

De Witte, K., & Moesen, W. (2009). *Sizing the Government.* Retrieved Nov 18, 2011, from Munich Personal RePEc Archive: http://mpra.ub.uni-muenchen.de/14785/1/MPRA_paper_14785.pdf

Demzets, H. (1972). Production, Information Costs and · Economic Organization, American Economic Review. *American Economic Review, 62* (5), 777-795.

Departemen Keuangan Republik Indonesia. (2000). *Nota Keuangan dan Rancangan Anggaran Pembelanjaan Negara Tahun Anggaran 2000: Periode 1 Aptil s.d. 31 Desember 2000.* Jakarta: Departemen Keuangan Republik Indonesia.

Departemen Keuangan Republik Indonesia. (1999). *Nota Keuangan dan Rancangan Anggaran Pendapatan dan Belanja Negara Tahun Anggaran 1999/2000.* Jakarta: Departemen Keuangan Republik Indonesia.

Departemen Keuangan Republik Indonesia. (2001). *Nota Keuangan dan Rancangan Anggaran Pendapatan dan Belanja Negara Tahun Anggaran 2001.* Jakarta: Departemen Keuangan Republik Indonesia.

Departemen Keuangan Republik Indonesia. (2002). *Nota Keuangan dan Rancangan Anggaran Pendapatan dan Belanja Negara Tahun Anggaran 2002.* Jakarta: Departemen Keuangan Republik Indonesia.

Departemen Keuangan Republik Indonesia. (1979). *Nota Keuangan dan RAPBN Tahun 1979/1980.* Jakarta: Departemen Keuangan Republik Indonesia.

Departemen Keuangan Republik Indonesia. (1992). *Nota Keuangan dan RAPBN Tahun 1992/1993.* Jakarta: Departemen Keuangan Republik Indonesia.

Dugger, W. (1990). The New Institutionalism: New but Not Institutionalist. *Journal of Economic Issues, XXIV* (2), 423-431.

Evaquarta, R. (2010). *Corupting Politics.* Retrieved Mar 17, 2010, from Inside Indonesia: http://www.insideindonesia.org

Fane, G. (2003). Change and Continuity in Indonesia's New Fiscal Decentralisation. *Bulletin of Indonesian Economic Studies, 39* (1), 159-176.

Fesler, J. (1968). Centralization and Decentralization. In D. Sills, *International Encyclopedia of the Social Science* (pp. 370-379). New York: Macmillan.

Field, J. (2008). *Social Capital.* New York: Routledge.

Fitrani, F., Hofman, B., & Kaiser, K. (2005). Unity in Diversity? The Creation of New Local Governmnets in a Decentralising Indonesia. *Bulletin of Indonesian Economic Studies, 41* (1), 57–79.

Foster, F. J. (1981). The Fundmental Principles of Economics. *Journal of Economic Issues , XV* (4), 937-942.

Gie, T. L. (1994). *Pertumbuhan Pemerintahan Daerah di Negara Republik Indonesia.* Yogyakarta: Liberty.

Goeltom, M. (2007). *Essay in Macroeconomic Policy: The Indonesian Experience.* Jakarta: Gramedia Pustaka Utama.

Granovetter, M. (1985). Economic Action and Social Structure: The Problem of Embeddedness. *American Journal of Sociology, 91* (3), 481-510.

Guess, G. M. (2005). Comparative Decentralization Lessons from Pakistan, Indonesia, and the Philippines. *Public Administration Review, 65* (2), 217-230.

Hadiz, V. (2001). Capitalism, Oligarchic Power and the State in Indonesia. *Historical Materialism, 8* (1), 119-152.

Hadiz, V. R. (2004). Decentralization and Democracy in Indonesia: A Critique of Neo-Institutionalist Perspectives. *Development and Change, 35* (4), 697-718.

Hadiz, V., & Robison, R. (2005). Neo-liberal Reforms and Illiberal Consolidations: The Indonesian Paradox. *Journal of Development Studies, 41* (2), 220-241.

Hardin, G. (1968). The Tragedy of the Commons. *162* (December), 1243-1248.

Hardin, R. (1982). Collective action and prisoner's dilemma. In R. Hardin, *Collective Action* (pp. 16-37). Baltimore: Johns Hopkins University Press.

Hidayat, S. (2009). Pilkada, money politics and the dangers of "Informal Governance" practices. In M. Erb, & P. Sulistiyanto, *Deepening Democracy in Indonesia? Direct Elections for Local Leaders (Pilkada)* (pp. 125-146). Singapore: Institute of South Asian Studies.

Hirschman, A. (1970). *Exit, Voice, and Loyalty.* Cambridge: Harvard University Press.

Hofman, B., & Kaiser, K. (2002, May). *Can Decentralization Help Rebild Indonesia?* Retrieved from World Bank: http://www1.worldbank.org/publicsector/LearningProgram/Decentralization/Hofman2.pdf

Hughes, O. (2003). Accountability. In *Public Management and Administration.* New York: Palgrave Macmillan.

Hunt, E. (1981). *Property and prophets: the evolution of economic institutions and ideologies.* New York: Harper & Row Publishers.

International Monetary Fund. (1997). *Indonesia Letter of Intent.* Retrieved June 19, 2012, from International Monetary Fund Organization: http://www.imf.org/external/np/loi/103197.htm

Istiandari, R. (2009). Tata Kelola Ekonomi Daerah & Kesejahteraan Masayarakat di Indonesia. *KPPOD-Brief, May-June*, 1-5.

Jaweng, R. E. (2010b). Kerugian Triliunan Rupiah. *Kompas , Jul 9*, p. Hukum & Politik.

Jaweng, R. E. (2011a). Mengantisipasi Gelombang Baru Pemekaran. *Jurnal Nasional, May 12*, p. 9.

Jaweng, R. E. (2010a). Politik Rusak Birokrasi Daerah. *Suara Pembaruan , June 17*, p. Politik & Hukum.

Jaweng, R. E. (2011b). *Tata Ulang Distribusi Birokrat*. Retrieved January 25, 2012, from Seputar Indonesia: http://www.seputar-indonesia.com/edisicetak/content/view/412976/

Jones, R. (1994). The Citizen's Charter Programme: An Evaluation, Using Hirshman's Concepts of 'Exit' and 'Voice'. *Review of Policy Issue, 1* (1), 43-55.

Jottier, D., & Heyndels, B. (2010, October 20). *Does Social Capital Increase Political Accountability? An Empirical Test for Flemish Municipalities.* Retrieved November 12, 2010, from Public Choice: http://www.springerlink.com.ezproxy.flinders.edu.au/content/128qg22309x8x40q/fulltext.pdf

Kementrian Keuangan Republik Indonesia. (2008). *Nota Keuangan dan Rancangan Anggaran Pendapatan dan Belanja Negara 2008.* Jakarta: Departement Keuangan RI.

Kementrian Keuangan Republik Indonesia. (2009a). *Nota Keuangan dan Rancangan Anggaran Pendapatan dan Belanja Negara 2009.* Jakarta: Departement Keuangan RI.

Kementrian Keuangan Republik Indonesia. (2004). *Nota Keuangan dan Rancangan Anggaran Pendapatan dan Belanja Negara Tahun Anggaran 2004.* Jakarta: Kemetrian Keuangan.

Kementrian Keuangan Republik Indonesia. (2005). *Nota Keuangan dan Rancangan Anggaran Pendapatan dan Belanja Negara Tahun Anggaran 2005.* Jakarta: Kementrian Keuangan Republik Indonesia.

Kementrian Keuangan Republik Indonesia. (2011). *Nota Keuangan dan Rancangan Anggaran Pendapatan dan Pengeluaran Negara Tahun Anggaran 2011.* Jakarta: Kementrian Keuangan Republik Indonesia.

Kementrian Keuangan Republik Indonesia. (2009b). PDRD: Pajak Daerah dan Retribusi Daerah. Jakarta, Indonesia: Direktorat Jendral Perimbangan Keuangan.

Kingsbury, D. (2005). Traditional and colonial influence. In D. Kingsbury, *The Politics of Indonesia* (pp. 18-37). Melbourne: Oxford University Press.

Kirzner, I. M. (1960). *The Economic Point of View.* Menlo Park, California: Studies, Inc.

Klimina, A. (2008). Veblenian Concept of Habit and Its Relevance to the Analysis of Captured Transition. *Journal of Economic Issues, XLII* (2), 545-552.

Koentjaraningrat. (1974). *Kebudayaan, Mentalitas dan Pembangunan.* Jakarta: PT. Gramedia.

Kompas. (2010). *APDB Belum Berpihak kepada Rakyat*. Retrieved June 3, 2010, from KPPOD: http://www.kppod.org/index.php?option=com_jdownloads&Itemid=54&view=view.download&catid=16&cid=286

Kompas. (2011 , April 27). *Kinerja Daerah Baru Jeblok*. Retrieved June 15, 2012, from Kompas.com: http://nasional.kompas.com/read/2011/04/27/02482418/Kinerja.Daerah.Baru.Jeblok

Koopmans, T. C. (1947, Aug). Measurement Without Theory. *Review of Economics and Statistics, 29* (3), pp. 161-172.

KPPOD. (n.d.). *Pembatalan Peraturan Daerah oleh Pemerintah Pusat*. Retrieved June 1, 2012, from KPPOD: http://www.kppod.org/index.php?option=com_content&view=article&id=5&Itemid=9

Lampung Post. (2012, Januari 9). *Pendapatan Daerah: Pemda Terbitkan 9.000 Perda Bermasalah*. Retrieved May 28, 2012, from Lampungpost.com: http://www.lampungpost.com/Ragam/pendapatan-daerah-pemda-terbitkan-9000-perda-bermasalah.html

Lewis, B. D. (2003). Tax and Charge Creation by Regional Governments under Fiscal Decentralisation: Estimates and Explanations. *Bulletin of Indonesian Economic Studies, 39* (2), 177-192.

Lewis, B. D. (2001). The New Indonesian Equalisation Transfer. *Bulletin of Indonesian Economic Studies, 37* (3), 325–43.

Lewis, B. D., & Chakeri, J. (2004). Central Development Spending in the Regions Post-Decentralisation. *Bulletin of Indonesian Economic Studies, 40* (3), 379-94.

Leys, C. (1996). The rise and fall of development theory. In C. Leys, *The rise and fall of development theory* (pp. 3-44). Bloomington: Indiana University Press.

Lin, T. C. (2006). The Impact of Corporation Income Tax Policy on Investment Expenditures: A United States Survey. *International Journal of Management, 23* (3), 412-418.

Matsui, K. (2003, August). *Decentralization in Nation State Building of Indonesia.* Retrieved April 4, 2012, from Institute of Developing Economies - Japan External Trade Organization: http://www.ide.go.jp/English/Publish/Download/Papers/02.html

McLeod, R. (2000). Soeharto's Indonesia: A Better Class of Corruption. *Agenda, 7* (2), 99-112.

Mello, L. D. (2001). Fiscal Federalism and Government Size in Transition Economies: the Case of Moldova. *Journal of International Development, 13* (2), 255-268.

Mises, L. v. (1949). *Human Action: A Treatise on Economics.* New Haven: Yale University Press.

Mitchell, W. C. (1910). The Rationality of Economic Activity: I. *Journal of Political Economy, 18* (2), 97-113.

Mokoginta, I. S. (2006). Regional Public Accountability Based on the Decentralization Laws and Regulations in Indonesia. *Discussion Paper No. 32*. Adelaide: Centre for Development Studies, Flinders University.

Morisson, T. (2004, July 26). What is Regionalism? What is Decentralisation? *Lecture Notes in the topic Regionalism, Decentralisation and Governance (POAD 9116) at the Flinders University of South Australia* . Bedford Park.

Morse, J. M. (1991). Approaches to Qualitative-Qantitative Methodological Triangulation. *Nursing Research, 40* (2), 120-123.

Mulgan, R. (2000). Accountability: An Ever-expanding Concept? *Public Administration, 78*, 555-573.

Musgrave, R. A. (1997). Devolution, Grants, and Fiscal Competition. *Journal of Economic Perspectives, 11* (4), 65-72.

Nabli, M. K., & Nugent, J. B. (1989). The New Institutional Economics and Its Applicability to Development. *World Development, 17* (9), 1333-1347.

Neuman, W. L. (2011). *Social research methods: qualitative and quantitative approaches.* Boston: Allyn & Bacon.

North, D. C. (1992). Insitutions and Economic Theory. *American Economist, 36* (1), 3-6.

North, D. C. (1991). Institutions. *Journal of Economic Perspectives, 5* (1), 97-112.

North, D. C. (1984). Transaction Costs, Institutions, and Economic History. *Journal of Institutional and Theoretical Economics, 140*, 7-17.

North, D. (1990). Institutions and transaction cost theory of exchange. In J. E. Alt, & K. A. Shepsle, *Perspectives on Positive Political Economy.* Melbourne: Cambridge University Press.

Nugroho, R. (2010, Oct 29). Tata Kelola Pemda Masih Belum Dukung Pertumbuhan Ekonomi. *Harian Kontan*, p. 2.

O'hara, P. A. (1997). A New Measure of Macroeconomic Performance and Institutional Change: The Index of Community, Warranted Knowledge, and Participation. *Journal of Economic Issues, 31* (1), 103-127.

Oates, W. E. (1999). An Essay on Fiscal Federalism. *Journal of Economic Literature, 37* (3), 1120-1149.

Ostrom, E. (1999). Institutional Rational Choice: An Assessment of the Institutional Analysis and Development Frameworks. In P. A. Sabatier, *Theories of the Policy Process.* Oxford: Westview Press.

Park, R. (1966). Estimation with Heteroscedastic in Error Terms. *Econometrica, 34* (4), p. 888.

Percy, S. L., Hawkins, B. W., & Maeir, P. E. (1995). Revisiting Tiebout Moving: Rationales and Interjurisdictional Relocation. *Publius Journal of Federalism, 25* (4), 1-17.

Peters, B. G. (1999). *Institutional theory in political science: the 'new institutionalism.* London: Pinter.

Peters, B. G. (2001). *The politics of bureaucracy.* London: Routledge.

Praktikno. (2009). Political parties in Pilkada: some problems for democratic consolidation. In M. Erb, & P. Sulistiyanto, *Deepening Democracy in Indonesia? Direct Elections for Local Leaders (Pilkada)* (pp. 53-73). Singapore: Institute of Southeast Asian Studies.

Prud'homme, R. (1995). The Dangers of Decentralization. *World Bank Research Observer, 10* (2), pp. 201-210.

Putnam, R. D. (1993). Social capital and institutional success. In *Making Democracy Work: Civic Traditions in Modern Italy* (pp. 163-185). Princeton, New Jersey: Princeton University Press.

Putzel, J. (1997). Accounting for the 'Dark Side' of Social Capital: Reading Robert Putnam on Democracy. *Journal of International Developement, 9* (7), 939-949.

Qian, Y., & Weingast, B. R. (1997). Federalism as a Commitment to Preserving Market Incentives. *Journal of Economic Perspectives, 11* (4), 83-92.

Regional Autonomy Watch. (2008). *Local Economic Governance in Indonesia: A Survey of Businesses in 243 Regencies/Cities in Indonesia, 2007.* Retrieved October 30, 2008, from kppod.org: //kppod.org/ind/datapdf/rating2007/rating2007.pdf

Renoe, C. E. (2002). Institutionalized "Corruption": Implications for Legal Reform in Indonesia and the Need to Make Haste Slowly. *Stanford Journal of East Asian Affairs, 2*, 102-113.

Roth, G. (1968). Personal Rulership, Patrimonialsim, and Empire-Building in the New States. *World Politics, 20* (2), 194-206.

Rothstein, B. (2005). How is social capital produced? In B. Rothstein, *Social Traps and the Problem of Trust* (pp. 92-128). Cambridge: Cambridge University Press.

Rutherford, M. (2001). Institutional Economics: Then and Now. *Journal of Economic Perspectives, 15* (3), 173–194.

Rutherford, M. (1987). Wesley Mitchell: Institutions and Quantitative Methods. *Eastern Economic Journal, 13* (1), 63-73.

Sale, J. E., Lohfeld, L. H., & Brazil, K. (2002). Revisiting the Quantitative-Qualitative Debate: Implications for Mixed-Methods Research. *Quality & Quantity, 36*, 43-53.

Sarungu, J. (2008). Pola Penyebaran Spasial Investasi di Indonesia: Sebuah Pelajaran dari Masa Lalu. *Jurnal Ekonomi Pembangunan, 9* (1), 61-67.

Silver, C., Azis, I., & Schroeder, L. (2001). Intergovernmental Transfers and Decentralisation in Indonesia. *Bulletin of Indonesian Economic Studies, 37* (3), 345-362.

Simanjuntak, R. A., & Mahi, R. (2004). Local tax revenue mobilization in Indonesia's decentralizing era. In J. Alm, J. Martines-Velasquez, & M. S. Indrawati, *Reforming Intergovernmental Fiscal Relations and the Rebuilding of Indonesia: the "Big Bang"Program and Its Economic Consequnces* (pp. 101-133). Cheltenham, UK, UK: Edward Elgar.

Simon, H. (1972). Theories of bounded rationalitiy. In C. McGuire, & R. Radner, *Decision and Organization* (pp. 160-176). Amsterdam: North-Holland Publishing Company.

Skyttner, L. (2005). Basic Ideas of General System Theory. In L. Skyttner, *General Systems Theory: Problems, Perspectives, Practice* (pp. 49-109). Singapore: World Scientific Publishing Co. Pte. Ltd.

Smith, B. (2002). Decentralisation. In C. Kirkpatrick, R. Clarke, & C. Polidano, *Handbook on Development Policy and Management.* Cheltenham: Edward Elgar.

Smoke, P. (2004). Expenditure assignment under Indonesia's emerging decentralization: a review of progress and issues for the future. In J. Alm, J. Martines-Velasquez, & M. S. Indrawati, *Reforming Intergovernmental Fiscal Relations and the Rebuilding of Indonesia: the "Big Bang"Program and Its Economic Consequnces* (pp. 77-100). Cheltenham, UK: Edward Elgar.

Stirton, L. &. (2001). Transparency mechanism: Building publicness into public services. *Journal of Law and Society, 28* (4), 471-489.

Tarigan, A. (2010). Dampak Pemekaran Wilayah. *Perencanaan Pembangunan , XVI* (01), pp. 22-26.

Thiessen, U. (2004). Fiscal Decentralisation and Economic Growth in 'Rich' OECD Countries: Is there an Optimum? *Economic Bulletin, 41* (5), 175-182.

Tidey, S. (2012, Apr-Jun). *New Rules, New Forms of Corruption*. Retrieved from Inside Indonesia: http://www.insideindonesia.org/edition-108-apr-jun-2012/new-rules-new-forms-of-corruption-02042900

Tool, M. (1977). A Social Value Theory in Neoinstitutional Economics. *Journal of Economic Issues, XI* (4), 823-846.

Tullock, G. (1967). Welfare Costs of Tarrif, Monopolies and Thefts. *Western Economic Journal, 5*, 224-232.

Vedder, K. R., & Gallaway, L. E. (1998). *Government Size and Economic Growth.* Joint Economic Committee, Washington. DC.

Wagner, R. E. (1976). Revenue Structure, Fiscal Illusion and Budgetary Choice. *Public Choice, 25*, 45-61.

West, E., & Winer, S. L. (1980). Optimal Fiscal Illusion and the Size of Government. *Public Choice, 35*, 607-622.

White, L. (2002). Connection Matters: Exploring the Implications of Social Capital and Social Networks for Social Policy. *System Research and Behavioral Science, 19* (3), 255-265.

Williamson, J. (2002, November). *What Washington means by policy reform*. Retrieved June 20, 2012, from Peterson Institute for International Economics: http://www.iie.com/publications/papers/paper.cfm?researchid=486

Williamson, O. E. (1981). The Economics of Organization: the Transaction Cost Approach. *American Journal of Sociology, 87* (3), 548-577.

Winter, I. (2000). Major themes and debats in the social capital literature: The Australian connection. In I. Winter, *Social Capital and Publc Policy in Australia.* Melbourne: Australian Institute of Family Studies.

World Bank. (2009). *Investing in Indonesia's Education in District Level: An Analysis of Regional Public Expenditure and Financial Management.* Washington, DC: World Bank.

Wrong, D. H. (1961). The Oversocialized Conception of Man in Modern Sociology. *American Sociological Review, 26* (2), 183-193.

Yilmaz, F. (2007). Veblen and the Problem of Rationality. *Journal of Economic Issues, XLI* (3), 841-862.

Zax, J. S. (1989). Is There a Leviathan in Your Neighborhood? *American Economic Review, 79* (3), 560-567.
