Fiscal Federalism and Decentralization in Mongolia

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Abstract

Fiscal federalism has been an important topic among public finance theorists in the last four decades. There is a series of arguments that decentralization of governments enhances growth by improving allocation efficiency. However, the empirical studies have shown mixed results for industrialized and developing countries and some of them have demonstrated that there might be a threshold level of economic development below which decentralization is not effective. Developing and transition countries have developed a variety of forms of fiscal decentralization as a possible strategy to achieve effective and efficient governmental structures. A generalized principle of decentralization due to the country specific circumstances does not exist. Therefore, decentralization has taken place in different forms in various countries at different times, and even exactly the same extent of decentralization may have had different impacts under different conditions.

The purpose of this study is to investigate the current state of the fiscal decentralization in Mongolia and to develop policy recommendations for the efficient and effective intergovernmental fiscal relations system for Mongolia. Within this perspective the analysis concentrates on the scope and structure of the public sector, the expenditure and revenue assignment as well as on the design of the intergovernmental transfer and sub-national borrowing. The study is based on data for twenty-one provinces and the capital city of Mongolia for the period from 2000 to 2009.

As a former socialist country Mongolia has had a highly centralized governmental sector. The result of the analysis below revealed that the Mongolia has introduced a number of decentralization measures, which followed a top down approach and were slowly implemented without any integrated decentralization strategy in the last decade. As a result Mongolia became de-concentrated state with fiscal centralization. The revenue assignment is lacking a very important element, for instance significant revenue autonomy given to sub-national governments, which is vital for the efficient service delivery at the local level. According to the current assignments of the expenditure and revenue responsibilities most of the provinces are unable to provide a certain national standard of public goods supply. Hence, intergovernmental transfers from the central jurisdiction to the sub-national jurisdictions play an important role for the equalization of the vertical and horizontal imbalances in Mongolia. The critical problem associated with intergovernmental transfers is that there is not a stable, predictable and transparent system of transfer allocation. The amount of transfers to sub-national governments is determined largely by political decisions on ad hoc basis and disregards local differences in needs and fiscal capacity. Thus a

fiscal equalization system based on the fiscal needs of the provinces should be implemented. The equalization transfers will at least partly offset the regional disparities in revenues and enable the sub-national governments to provide a national minimum standard of local public goods.

This book is dedicated to my daughters, Namuun and Khaliun.

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Ariunaa Lkhagvadorj

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Abbreviations

BCE - Before Common Era
CBL - Consolidated Budget Law
CIT - Corporate Income Tax
EU - European Union
GDP - Gross Domestic Product
GTC - General Tax Code
IHSAM - Institution of History at the Scientific Academy of Mongolia
IMF - International Monetary Fund
LTAU - Law on Territorial and Administrative Units Mongolia
MoF - Ministry of Finance
NTA - National Tax Authority
OECD - Organization for Economic Co-operation and Development
PIT - Personal income tax
PSFML - Public Sector Finance and Management Law
TSA - Treasury Single Account
UK - United Kingdom
UNDP - United Nations Development Programme
USA - United Nations of America
VAT - Value-added tax
WB - World Bank

Chapter 1

Introduction

1.1 Background

Fiscal federalism has been an important topic among public finance theorists in the last four decades. The interest in intergovernmental fiscal relations has been strengthened by recent developments in the European Union (EU), countries in transition, and developing economies. Numerous discussions on fiscal federalism have produced a number of arguments, both pro and contra, and some of them have become "conventional wisdom" in politics. There is a series of arguments that decentralization of governments enhances growth by improving allocation efficiency. However, there is no theory that verifies a strong relationship between decentralization and economic growth. The empirical studies show mixed results on industrialized and developing countries and some of them state that there is a threshold level of economic development below which decentralization is not effective. Nevertheless, one can find a clear trend toward decentralization in the developing world.

Developing countries have built a variety of forms of fiscal decentralization as a possible strategy to achieve effective and efficient government. Transition countries are also developing new systems of intergovernmental finance. The issues that each decentralizing country faces are at the same time very different but also very similar. There is no generalized principle of decentralization because the countries have different political and economic structures, geography, demography, institutions, traditions and access to new technologies. Therefore, decentralization has taken many different forms in different countries at different times, and even exactly the same extent of decentralization may have different effects under different conditions (Bird and Vaillancourt, 1998).

As mentioned above the empirical studies do not show strong and clear relations between fiscal decentralization and economic growth and only partly support the theoretical hypothesis that fiscal decentralization improves economic growth. Both theoretical and empirical analyses tend to have inconclusive and ambiguous results. Thereby it is difficult to draw a clear recommendation regarding the optimal degree of decentralization. Each country should define an own country-specific model of fiscal decentralization, which will contribute to the welfare of the country by improving the provision of public goods.

Mongolia as a former communist-ruled country has a too centralized decision-making and administration of public goods supply, both in terms of efficiency and political democracy. In the last decade Mongolia has introduced a number of decentralization measures, which followed a top down approach and were slowly implemented without any integrated decentralization strategy. Despite these efforts, Mongolia is still a centralized country, or as it has been defined by the World Bank (WB), is a de-concentrated state with some fiscal centralization. The process of fiscal decentralization was stopped by the introduction of the treasury single account system (TSA) and the Public Sector Finance and Management Law (PSFML). By this law the important social services such as education, health and culture were assigned to the central portfolio ministers, hence local governments fulfill only very basic municipal and administrative functions. According to the current legislature the province governor's function is to be the local representatives of the central government, to run the municipal administration and to monitor the Soum (lower level of local government) activities and budgets. The current functional assignment creates dual subordination for the local governors, consequently the local governments' lack of political, economic, administrative and fiscal autonomy to manage their own affairs.

Since 2003 the share of aggregated local government revenues in total revenues has been decreasing and accounted for 6.9 percent of general government total revenues, which was equivalent to 5.6 percent of total local government expenditures in 2007. The system of tax sharing is unclear and unstable, which generates uncertainty and reduces predictability for local budgeting. The intergovernmental transfer system is not transparent, without clear rules and tends to provide revenue disincentives to the local governments. One final problem associated with intergovernmental transfers is that there is not a stable, predictable and transparent system of transfer allocation. As a result, local governments do not only frequently lack revenues for their efficient and equitable supply of services, but also have trouble planning the future budgetary development for their constituencies.

1.2 Research Content and Importance of the Study

The definitions and implications of fiscal federalism are in the center of the policy debates in many countries around the world. The lack of generalized principles for decentralization and a formalized theory on the relationship between decentralization and growth, and the need to define the optimal structure of fiscal decentralization in Mongolia creates an opportunity to conduct research that should be interesting both from a theoretical and practical point of view.

This work is important for a number of reasons. First, it will contribute to the further development of the theory of public economics. Second, it will give practical guidance to policy-makers for sequencing reforms for fiscal decentralization in the country. Finally, it will provide government leaders more detailed and comprehensive information and recommendations on the process of fiscal decentralization in Mongolia.

1.3 Research Goal and Expected Result

1.3.1 Research Goal and Questions

The purpose of this dissertation is to define the optimal structure for fiscal decentralization by making theoretical and empirical analysis and to develop an effective and efficient decentralization policy for the transition countries in general and for Mongolia in particular. For this purpose the following questions will be addressed:

1. Which level of jurisdiction has to fulfill which public tasks and which jurisdiction has the legislative power?
2. Which level of jurisdiction has the legislative power on tax law, which jurisdictional level gets the tax revenue, and which jurisdictional level has to administer the taxes?
3. Which structure should have the intergovernmental transfer system have to achieve the desired degree of vertical and horizontal equalization?
4. Which jurisdictional level has the borrowing power and which institutional design is appropriate for Mongolia?

1.3.2 Expected Result of the Study

On the basis of theoretical and empirical arguments to be found in the literature of fiscal federalism, a comprehensive review and assessment of recent decentralization efforts in Mongolia will be made, using both, economic and polit-economic perspectives . Then a model for a decentralization strategy in Mongolia is developed, which takes the interest of the lower jurisdictional levels into consideration and secures a more stable budgetary situation even in a mid-term perspective.

Finally, policy recommendations are formulated for the improvement of the tax sharing and expenditure autonomies for both, the national and local level of administration. Additionally further proposal are made to amend existing legislative acts and policy papers in the field of fiscal decentralization in Mongolia.

1.4 Literature on Fiscal Federalism

Since Tiebout' article "A pure theory of local expenditure" was published, the field of fiscal federalism has been substantially developed and many articles on fiscal decentralization have been contributed. In Oates' (2005) terminology, the "first generation theory" of fiscal federalism was well established in public finance. Tiebout (1956) argued that fiscal decentralization would result in the improvement of production efficiency by altering perfect mobility of citizens and overcome the free rider problem in public goods. Musgrave (1959) in his text book on "Public Finance" described the role of the government sector in terms of correcting the market failures. When private markets failed to supply such goods then government should introduce policy measures correcting such failures in the field of allocation, macroeconomic stabilization, and income redistribution. He also emphasized that allocation efficiency will be achieved when local tastes and preferences have been met. In addition Oates (1972) argued that the regions have different tastes and preferences for public goods so that local government will provide better services for their citizens because they have better information than central government about the preferences of the local citizens. Therefore, Oates' decentralization theorem states that economic efficiency will be achieved through the decentralized provision of public goods.

From the more recent discussion on public economics literature one can conclude that the central government should be responsible for national policy and provide efficient levels of national public goods. The sub-national governments' role is the provision of efficient levels of regional and local public goods for their constituencies. With a proper assignment and the necessary fiscal tools at their disposal, regional and local agent can implement welfare maximizing policies (Oates, 2005). Hence, the analysis will be focused on the intergovernmental relations in order to address the problem and to meet the demand of the study.

From a polit-economic view the public sector bureaucrats show a rent seeking behavior. Oates (2005) argues that new literature on fiscal federalism draws on two basic sources, that are a) public choice and political economy, which focus on political processes and behavior of political agents, and b) information problems (asymmetric information). According to this view the assessment of fiscal decentralization will have some different perspectives. For instance in case of developing and transition countries, in a setting of asymmetric information and control, incentives for budget maximizing behavior of the political agents are very strong. The main principle of the public-choice approach is that public decision makers are utility maximizers with their own objective functions. Niskanen (1971) has constructed a model, which explained the budget maximizing behavior of the public agents.

Niskanen listed a certain number of variables in their utility functions such as salary, reputation, power and patronage. Brennan and Buchanan (1980) extended this view and stated that the public sector is a monopolistic agent. Therefore fiscal decentralization will be a mechanism to constraint the expansionary tendency of the government ("Leviathan") through the competition between regional and local governments.

Cremer, Estache and Seabright (1996) argue that central government fails to get information about the local tastes and preferences. Hence, fiscal decentralization will have a positive impact because it allows regional and local government to provide an efficient supply of local public goods for their constituents. Qian and Weingast (1997) state that decentralization is the mechanism for controlling over intrusive and expansive tendencies of the public sector and supports effective operation of the private markets. So, from the public choice and political economy perspective, the fiscal decentralization will constrain the budget expansion through competition and enhance controlling and accountability, which results in an efficient supply of regional and local public goods and support the private markets.

However, local political agents are keen to expand their programs and expenditures beyond the mean and also try to increase local public goods by the expense of other jurisdictions. Rodden (2003) argues that it is a matter of fact, which form fiscal decentralization takes. If fiscal decentralization relies on own tax sources, smaller jurisdictions result and if transfers are financed by the central government an overall increase in the budget occurs. The public choice perspective does not examine the structure of fiscal institutions, which is an important component for fiscal decentralization and the effect of fiscal decentralization will certainly depend on the fiscal institutional structure.

From the economic and political science perspective, the fiscal decentralization has many benefits, however, decentralization is not a panacea, and it also does have costs. The decentralization can result in the loss of economies of scale and control over the scarce resources; inefficiency in service delivery and complexity in policy coordination may happen if decentralization is implemented in a wrong way (World Bank, 2007).

Thus, centralization and decentralization are not alternatives. Hence, the countries should find the appropriate balance of centralization and decentralization in order to achieve an efficient and effective structure of the public sector. Countries differ in circumstances, thus for a successful implementation of decentralization each country should develop an own model, which considers its specific conditions. However, there is also a general principle that finance should follow the public tasks. The main failure in the former socialist countries as well as in Mongolia was that they decided on the

revenue autonomy before making the expenditure assignments to the single jurisdictional levels.

1.5 Research Methodology

The research methodology refers to the instruments and techniques which are used to acquire knowledge. Two different approaches for the discovery of universal laws of behavior do exist, which are inductive and deductive. The inductive approach involves deriving generalizations from specific observations in a large number of cases, while the deductive-empirical approach starts with a theory, which then generates hypothesis subjected to test of hard facts (Porta and Keating, 2008). Within this study the deductive-empirical approach is used.

Academics need to understand the phenomenon in a general way before making investigation of the specific aspects, thus Simon (1978) hold the view that description (diagnosis) is the first step for research in social sciences. The next step is classification, which involves the organization of the described object into a scheme for interpretation. Then measurement is necessary, which is followed by testing and finally testing displays the limits of the theory. Yin (2003) argued that the case studies are particularly applicable when studying knowledge utilization. The field studies are characterized by the richness of the material and ability to recognize the details of practices. This study is a somewhat a mix of a case study and field study. The "how" and "why" questions are examined in the qualitative studies and the frequency of phenomenon is determined by using quantitative studies. Since the conduction of experiments is rarely possible in social sciences, datasets and statistical analysis are used to identify and isolate causes and effects, attaining appropriate explanations.

The qualitative study included several unstructured interviews of the governors of the different jurisdictional levels, and large number of archival materials. The quantitative study was undertaken by using the different statistical tools such as proportion, percentage and regression analysis.

1.6 The Organization of the Thesis

The thesis consists of five chapters. The introductory chapter presents the research problem and the main goals as well as research questions, followed by the description of the research methodologies and related literature in fiscal federalism. Chapter 2 concisely presents the theoretical research on fiscal federalism, which starts with the rationale and pros and cons of fiscal federalism. It also discusses the theoretical aspects of taxation in federal systems as far as tax competition and tax exporting are taken into considera-

tion. Then the theory of grants is discussed to solve the problem of the spillovers and the mismatch of the assigned expenditures and tax revenues is discussed. Here the important emphasis is given to the equalization transfers and their design. The basic principles of federal finance are presented by focusing on four main areas such as expenditure assignment, revenue assignment and intergovernmental fiscal transfers as well as sub-national borrowing.

Chapter 3 entails the analysis of the international experiences of fiscal federalism in selected high developed and developing countries. The study is concentrated on lessons to be drawn in case of transition countries. Chapter 4 presents the empirical analysis of fiscal federalism based on data from the Mongolian government sector. At first, the historical development of the government sector and recent economic developments are described then followed by an analysis of the structure and scope of the government sector in Mongolia. Based on this study the expenditure and revenue assignment, intergovernmental fiscal transfer and sub-national borrowing are analyzed. The policy recommendations for the improvement of the intergovernmental relations system concerning the four main pillars of the intergovernmental fiscal system of Mongolia are made at the end of the chapter. Chapter 5 presents the summary and conclusions drawn on this thesis.

Chapter 2

Theoretical Review on Fiscal Decentralization

As mentioned above many developing countries have implemented a variety of forms of fiscal decentralization as mean to achieve more effective and efficient government. Transition countries are also relying upon a new system of intergovernmental finance. However, there is no generalized principle of decentralization because the countries have different political, economic and demographic structures, institutions, traditions, geography and history as well as access to new technologies.

Public services in most countries are carried out by different levels of government while some countries have a more federal system and others a more unitary government. The United States, Canada, Germany and Australia are among other smaller nations organized as federal states with three jurisdictional levels, whereas the United Kingdom (UK) and France are unitary states with two levels – central and local. The basic questions are, how public goods should be efficiently provided and how the costs of provision should be shared in between the jurisdictional levels? More specifically: should there be a centralized system where decisions are made at the central level and financed from general tax revenue or should a decentralized system been implemented where choices are made by local government and financed by local taxation?

From a theoretic view point the government level, which is much closer to the people of their respective jurisdictions have better information of both preferences and costs (Oates, 1999). Therefore, the jurisdictional level with the best information should supply the respective public goods. If a decentralized provision of the public goods is striven for, then a multilevel system of governmental structure raise an interesting set of fiscal problems, which is discussed as fiscal federalism or central/local governmental relations in the literature. In federal systems the constitution should solve efficiently the question, which level of government has to fulfill which public tasks (supply of public goods) and which taxes have to be assigned to which level of government or more specifically, which level of jurisdiction has the legislative power on tax law, which jurisdictional level gets the tax revenue, and which jurisdictional level has to administer the taxes?

In this chapter the basic theoretical foundation of fiscal decentralization and principles of federal finance are discussed, and the attempt is made to answer the above mentioned questions. For this reason the definition of fiscal decentralization is presented and its impact on the national welfare will be assessed by reviewing the existing literature. Then centralized versus

decentralized government, theories of taxation and grants, as well as fiscal equalization will be taken into consideration.

2.1. The Theoretical Background for Fiscal Decentralization

2.1.1 Definition and Assessment of Decentralization

The design of the intergovernmental fiscal relations has become increasingly important in governmental practice and the basic structure of the government is experiencing a major change in both, developed and developing countries. In the past decades dissatisfaction with the central government in providing local public services has risen and the demand for more democracy has given elected officials more incentives for decentralization of the fiscal power, thus shifting resources to lower levels of government. Since the 1970s many industrialized and developing countries and, more recently, post communist countries have decentralized their governmental fiscal powers and functions from central government to sub-national governments. Formerly highly centralized countries like Spain, Italy or Belgium have been transformed into federal or quasi-federal states, and countries with a long history of federal traditions, like Germany and Austria, also have reformed their federal structures (OECD, 2002 and 2003). Of 75 developing and transition countries with population greater than 5 million, all but 12 claimed to have implemented more decentralized governmental structures. This process of decentralization is actively supported by supranational institutions such as the WB, the United Nations, mainly in developing and former socialist countries (World Bank, 2007).

Many different driving forces can be identified as cause for this decentralization process. First of all the worldwide spread of democracy is referred as an important source for decentralization by enhancing a local participation. Another argument is that increasing economic and social prosperity will foster the demands for decentralization and local democracy. The rapid progress of the new information technologies, globalization and integration would expand the markets and increase transnational interdependency, hence national governments are too small to cope with globalization, and too large and inefficient to take account of local requirements (Stegarescu, 2005). Consequently these forces create both, political integration of the nation-states and fragmentation into regions at the same time.

The problems that each decentralizing country faces are at the same time very different and very similar (Ebel, 1999). The differences arise from the diversity of the national economy, demography, geography and traditions. The fundamentals of the open economy and political goals serve as the

foundation of the policy similarities. The differences matter, but so do the similarities. The similarities tend to set the broad policy framework, which provides an instrument to address the country to country policy options that allows learning from each other's experiences.

There are many definitions for decentralization but generally the term of decentralization is defined as the transfer of responsibility for planning, management and resource raising and allocation from central government and its agencies to the lower levels of government (Rondinelli and Nellis, 1986). With regard to the degree of independent decision making at the sub-national level, three forms of decentralization are distinguished that include de-concentration, delegation and devolution (Prud'homme, 1994). First, *de-concentration* means the dispersion of responsibilities within central government to the local administrative units. De-concentration may take part in the administration where local administrative units have a responsibility for service delivery but the staffs remain under the direction and control of the centre. The local administration can have full or partly legislative sovereignty under the de-concentration. Second, *delegation* refers to a situation in which local government acts as an agent of the central government, executing a certain function on its behalf, which means that the legislative sovereignty is at the central government, while the administrative sovereignty is shifted to the sub-national government. Third, *devolution* refers to a situation in which not only implementation but also the authority to decide what is done is in the hands of the local governments so that the legislative and administrative sovereignties are shifted to the lower level (Petersen, 2008). In case of devolution the similar question regarding the tax autonomy will arise.

The assessment of decentralization will clearly depend on what in realty has occurred: de-concentration, delegation or devolution. Besides, there is also a distinction between administrative, political, fiscal and economic decentralization (Litvack and Seddon, 1999). Administrative decentralization is the hierarchical and functional transfer of executive powers between different levels of government. Political decentralization means that citizens or their elected officials have the power to influence decision-making at the local level. Fiscal decentralization refers to the fact that local authorities become responsible for the expenditure and revenue assignment, while economic decentralization implies the transfer of certain functions from the public to the private sector.

The discussions above and table 2.1 show that de-concentration and delegation correspond to the administrative decentralization and devolution to the political and fiscal decentralization. In the following it is considered that devolution is the most far-reaching form of decentralization containing of the transfer of political, administrative and fiscal powers whereas de-

concentration and delegation only include the transfer of administrative power. Therefore devolution is the form of decentralization, which especially has to be analyzed within this study.

Table 2.1: Forms of Decentralization

	Privatization	De-concentration	Delegation	Devolution
Economic Decentralization	X			
Administrative Decentralization		X	X	
Political Decentralization				X
Fiscal Decentralization				X

Source: Steiner, 2005, p. 10.

Bird (1998) argued that the evaluation also depends upon the decentralization approach, which can be top down and bottom up. The *bottom up* decentralization stresses generally political values as improved governance in the sense of local responsiveness and political participation. This approach will produce not only efficient and equitable service delivery through better information but also lead to a greater participation, hence improved political stability. In case of the top down approach for decentralization the central government's perspective may be to shift deficits downwards, or to achieve the allocation goal more efficiently or even to increase the level of the national welfare by delegating autonomy to the local governments.

Another important point in the analysis of the fiscal decentralization is the determination of a "good" degree of fiscal decentralization. Whether it is one, which better achieves central government goals or one, which frees local governments from the central government dictates. The choice of perspective is thus essential when speaking about the issue of fiscal decentralization.

2.1.2 Problems of Fiscal Federalism in Some Socialist Countries

Since Tiebout's article "A pure theory of local expenditure" was published, the field of fiscal federalism has developed substantially and many publications on fiscal decentralization have been contributed. From the above discussion on public economics literature one can conclude that the central government should be responsible for national policy and provide efficient levels of national public goods. The sub-national governments' role is the

provision of efficient levels of local public goods for their constituencies, because they are better informed about the preferences of the citizens.

The former socialist countries have had a highly centralized political and economic decision-making and administration. Changing the over-centralized system in order to achieve efficient and effective government was a difficult challenge for countries in transition. The transition countries were confronted with an extremely distorted initial situation and have faced severe macroeconomic crisis. For instance, most transition countries experienced a fiscal crisis, which resulted in the decrease of revenues and increase of expenditures. Major revenue sources of the former socialist countries were the state owned enterprises, which most of them became loss makers or the profits were "privatized". In addition, the increase of tax arrears and social security contributions became a major problem. Finally many countries in transition faced the conflicts between old communists and new democrats, as well as ethnic problems. Making structural change in public finance and getting it right along is a difficult task (Jackson, 2001). Therefore, developing an effective government sector and implementing decentralization reform would be much more difficult for countries in transition.

The UNDP (2005) has defined the number of differences in the current status of fiscal decentralization in transition countries and also points to a number of similarities. These similarities are predominantly the weaknesses in intergovernmental fiscal relations, such as inadequacy of local government structures, unclear expenditure assignments and lack of revenue autonomy as well as poorly administered intergovernmental transfers. As a result of these shortcomings, transition countries faced a number of problems in fiscal decentralization.

At first they had a bad sequencing in the decentralization strategies mainly because of the lack of comprehensive decentralization strategy. Secondly, most transition countries had a weak central government coordination mechanism for fiscal decentralization and too fragmented local governments. Finally, these countries had a lack of political commitment, which is an important factor for the success of decentralization. The main mistake in former socialist countries was that they devolved the revenue before making expenditure assignment. Therefore, the risk of getting fiscal decentralization wrong was high in transition countries.

2.2 Theory of Public Goods

2.2.1 Provision of Public Goods

Generally, the public goods are defined as goods and services "for which there is non rivalry in consumption and non excludable" (Hyman, 1993,

p.130; Atkinson and Stiglitz, 1980, p. 483). Non-rivalry in consumption means that a given quantity of public good can be enjoyed by many consumers at the same time without decreasing the amount enjoyed by them. Examples of these goods are the national defense, television and radio transmissions; when the population increases no citizen will suffer from the reduction in the quantity of that service. Non excludability means that it is too costly and not feasible to exclude those who enjoyed the benefit but refused to pay for enjoying the benefits of a given amount of goods. However, geography can place a limit into the non excludability character of public goods, hence, they differ by the user capacities (Petersen, 2007). Therefore, public goods can be divided into different categories such as global public good, international public good, national public good, regional public good and local public good according to their geographical coverage of benefits.

International public goods are most universal by its geographical coverage and all people can benefit anywhere in the world (Robbins, 2005). It includes international security, knowledge, the environment and economic stability. National public goods are those which are non excludable within a nation's border such as national defense and legal system. Logically local public goods are the goods which are limited with their capacities to the small jurisdictional boundary. Traditional public finance theory argues that the government level, which is much closer to the people of their respective jurisdictions, has a better knowledge of both preferences and costs (Oates, 1999, p. 1123). Therefore, the jurisdictional level with the best information should supply the respective public goods. Following this notion the provision of public goods would be more efficient if local governments would supply local public goods, regional governments provide regional public goods and national government deliver national public goods, respectively. This assignment is also in accordance with the principle of subsidiarity, which also has been implemented in the EU.

Because of the non-rival and non-excludable character of public goods, people tend to hide their true preferences, for instance if individual receives goods and services whether he pays for it or not, he may be tempted not to contribute for the production of that goods and services. This situation is named as a free rider problem, which justifies the government provision of the public goods. Therefore, public goods should be supplied by government financing through taxes, which ensure that everyone pays in accordance to his individual circumstances (regarding consumption and income).

Local public goods are public goods, which benefits are non-rival only for the population who live in certain geographical area. These goods are most efficiently provided when they are financed by the local government. Example of these services are police and fire protection, public sanitation,

refuse collection, traffic control, roads, water and sewer services as well as the education. The main advantage of the local provision and financing of such public goods is that it allows governments to produce services in accordance with the variations in tastes and cost conditions. Thus, a federal system where decisions are made at the local level and financed from local taxation would be superior to centralized systems of the public goods provision.

From the above discussion one can conclude that public goods do benefit those citizens in the jurisdiction where they are residents. But such often public supply also has beneficial effects on citizens of neighboring jurisdictions, which called a spillover effects. Oates (1972) decentralization theorem states that in case of spillovers a centralized system is preferred and without spillovers decentralized systems are superior. So, when spillovers are small decentralization is the better alternative and when spillovers are large centralization is more promising. However, traditional theories argue that the centralized provision of public goods produces 'one size fits all' policy outcomes that cannot differentiate the heterogeneous local tastes. Hence, it is insensitive to the preferences of the local citizen. Thus spillovers are inevitable and they can be reduced by integrating the jurisdictions at the same level for the supply of public goods where spillovers likely happen (special purpose association).

The implication from the discussions above is that provision of public goods could be efficient if different jurisdictional levels do supply the public goods with different capacities, steered by the citizens' preferences. This means that central government should be responsible on national policy and provide an efficient level of national public goods and local governments should provide the efficient level of local public goods for their constituencies. Thus, the volume of public expenditures will be determined by the quantity of the public goods supplied, which are determined by the citizens' preferences (using election mechanisms at all jurisdictional levels).

In order to get such results, political and fiscal decentralization has to be implemented successfully, allowing election at the different jurisdictional level and providing the legislative power as well as revenue sovereignty at the sub-national jurisdictional levels. Therefore, questions of allocation efficiency and cost sharing arise, and constitutional arrangements should be implemented, which decisions have to be made at the central government and financed from general tax revenue or to be made at the lower levels and financed by regional and local taxation.

2.2.2 Efficient Jurisdictional Structure

As the discussions of the public goods have demonstrated, each service should be provided and the costs shared in line with the preferences of the residents within the relevant benefit region. Thus the provision of public goods which are locally limited is more efficiently supplied by lower level jurisdictions, hence leading to the concept of optimal community size.

Musgrave (1989) has developed a model of an efficient design of the community size, which states that in an optimal fiscal community the marginal savings per capita service costs should be equal to the marginal per capita crowding costs for the services subject only to spatial limitation of benefits. According to this model the multiple fiscal units are different in their size and regional scope. Therefore, some goods are nationwide while others are quite local.

So far we have assumed that the benefits of a particular public good are limited to just the space of the providing jurisdiction. But in the real world the benefits and also costs are overlapped between jurisdictions, which leads to the spillover effects mentioned above. Like all externalities this will result in an inefficient service provision and can be corrected through a central system of grants.

2.2.3 Citizen's Mobility

A political jurisdiction is a defined area within which individuals make collective choice on publicly provided services. If the market mechanism fails to reveal consumer preferences for public goods then the political process can reveal preferences and define fiscal resources for the service delivery. Democratic voting is an efficient method for the preference revelation regarding to the public goods that links the tax and expenditure decisions. Only citizens of that jurisdiction can participate in the election, whose are affected by the provision of local public goods and share the costs for the provision of those goods. Tiebout (1956) developed a model, which stated that expenditures and taxes are widely differentiated among local political jurisdictions and a quasi-market process can solve the public goods problem for a particular jurisdiction (by inter-jurisdictional competition).

The model assumes that all citizens are fully mobile among communities and have full information about the budgets of alternative political jurisdictions. As Tiebout pointed out, "Spatial mobility provides the local public goods counterpart to the private market's shopping trip… Just as the consumer may be visualized as walking to a private market place to buy his goods, the prices of which set, we place him in the position walking to a community where the prices (taxes) of community services are set" (Tiebout, 1956. p. 422).

Therefore, individuals are "voting by their feet" and resettle in the community, which offers the bundle of public goods and taxes they like best. An optimal community size corresponds to the minimum unit costs of public services. Communities larger than the optimal size try to discourage new residents, while communities smaller that optimal size seeking to attract new residents. This competition among the local governments will result in an efficient solution similar to that in the perfectly competitive markets.

The Tiebout model is not a perfect description of the real world. There are also problem of inter-jurisdictional spillovers, which result in inefficiency for consumer or voters regarding the residential choice. These spillover costs and benefits also will affect the local government activities because of inaccurate reflection of the costs for services and taxes, which would make competition among local governments less effective. However, it provides a useful explanation of the mobility within a constrained geographical area.

2.3 Centralized versus Decentralized Government

2.3.1 Advantages of a Federal System of Government

Public services in most countries are carried out by many units of government, while some countries have a federal system and others a unitary government. Under the unitary system sub-national units function mainly as an administrative unit of the center, but a certain degree of local autonomy can even emerge in unitary states. Within federalism public sector decisions are made by different levels of government, which are independent from each other. However, in practice the distinction between unitary or federalist and centralized or decentralized government are often blurred. A federal system of government is characterized by numerous levels of government and each level of government has own powers to provide services and raise revenues. Thus fiscal federalism is the division of taxing and expenditure functions among the different levels of government.

Under centralized government decisions on the provision of the public goods are made by central government and will reflect the national median voter's preferences. National consensus would fit in the case of national public goods, which would be consumed by all citizens independently of the location of their residence. However, for local public goods national decision making will be not effective, because these goods are benefiting only the population of in a particular jurisdiction. For such goods, decentralized decision making provides the advantage of taking into account variations in preferences instead of the centralized one. In decentralized governmental systems citizens' decision with regard to the locations are influenced partly by the bundle of services provided and the associated taxes in alternative jurisdictions. This

may create incentives for local government to produce more efficiently its services and be more responsive to their citizens (Hyman, 1999. p. 634, and Rosen, 1999. p. 482.).

In a decentralized system the communities impose externalities on each other, which will result in overspending or under-spending. As decentralization promotes the competition between local governments to attract a business, hence, the initial equilibrium will shift from the optimal point and this will lead to misallocation. In the case of developing countries the problems with regards to the provision of the public goods consist on satisfying the basic needs rather than to meet variation of tastes, and the voters make decisions on the basis of the personal, tribal or political party loyalties, so preferences are not expressed on their votes (Prud'homme, 1995). Therefore, the central government regulation is needed to limit the competition and to promote the cooperation between the jurisdictions. Moreover, in countries with less economic diversification, hence, more vulnerable to external factors such as international commodity process, natural disasters, chronic inflation and in addition with weak local administrative capacities, the central government control of tax and spending for the stabilization purpose would be superior to extensive decentralization (Ebel, 1999).

From the above discussions one can conclude that the centralization or decentralization is a continuum rather than a dichotomy and effectiveness of the decentralization will depend on the optimal distribution of the taxing and expenditure responsibilities under consideration of the country specific factors such as economy, tradition, demography and topography. Therefore, the principle of subsidiarity allows making a decision by using both, the centralized and decentralized decision making mechanism in the federal governmental system. The principle of subsidiarity points to the fact that "decisions are taken as closely as possibly to the citizens", which means that the lower level of government should provide the local public goods. If the local government does not have the capacity to manage the tasks then upper levels of the government should overtake that action.

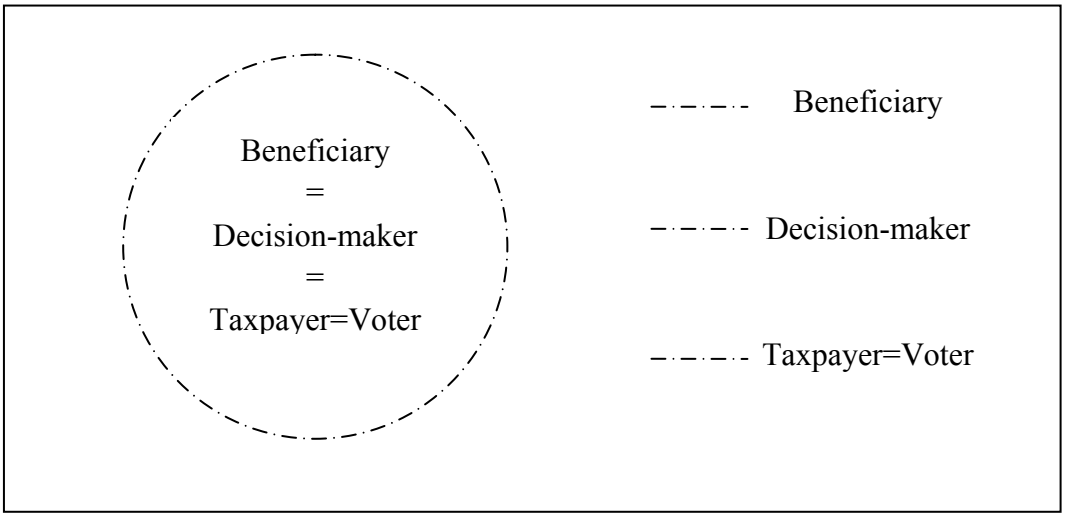
2.3.2 Public Choice and Fiscal Policy

Because the markets often fail to define the demand for public goods, budgetary determination based on collective choice by political process is needed for the preference revelation on the provision of public goods. The public choice will be made through the elections where each individual has one vote. From the economic point of view a rational individual will choose the level of public goods supply, which exactly equalizes the marginal benefit (of the public goods) with the marginal cost (the individual tax yield).

In a democracy the prevailing collective choice rule is majority voting that has two forms: direct and representative democracy. When all voters have single peaked preferences, majority rule will produce a unique political equilibrium at the most preferred median outcome. However, under certain circumstances when two or more alternative issues exist, the majority voting would not result in a clear political equilibrium. The models of political behavior demonstrate that political parties attempt to maximize votes whereas models of bureaucratic behavior presume that bureaucrats tend to maximize the size of their budgets (Petersen & Mueller, 1999). Interest groups also influence the political outcomes, seeking to increase the subsidies to their constituencies. Thus, the political equilibrium will be influenced by politicians, bureaucrats and special interest groups. Hence the outcome will be not efficient. However, voting is at least the second best solution for the preference revelation of public goods in a democratic society.

Thus, decentralized elections will strengthen the citizen's responsibility to participate in the political process and control the fiscal institutions in their use of public funds. The decentralized jurisdictional power will improve citizen's participation on the budgetary decisions and strengthen the politician's responsibility. This process would work properly only in a democratic system. The benefit principle would be equivalent to the market pricing, which ensure the voters' evaluation of the public goods quality, hence, improve the political accountability under decentralization. This process is reflected by the principle of institutional congruency.

Figure 2.1: Institutional Congruency

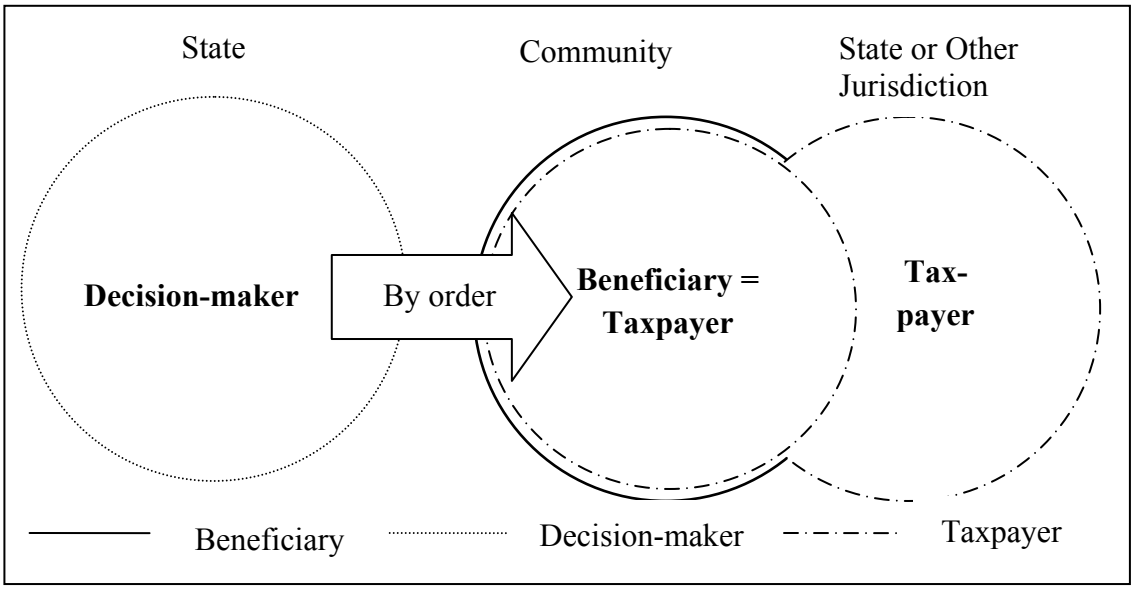


Source: Blankart, 2006.

The institutional congruency is achieved if beneficiaries, decision-makers and tax payers or voters fully coincide in case of certain public goods (figure 2.1). However, due to the spill-over effects, the institutional congruency is more or

less affected (figure 2.2). Then taxpayers from other jurisdictions have to contribute for the financing of the public goods. Another important principle of federalism is the principle of connectivity, where the legislative and revenue as well as administrative sovereignties are at one jurisdictional level. If the decisions made by order then the principle of connectivity is weakened (Petersen, 2008). Thus institutional in-congruency and non-connectivity will harm fiscal responsibility of the different government levels. Hence, to achieve effective fiscal decentralization the institutional settings should be taken into consideration.

Figure 2.2: Institutional In-congruency



Source: Blankart, 2006.

Therefore, the efficient provision of public goods at the regional and local level should be implemented hand in hand with the appropriate voting mechanisms allowing the citizens to vote for their interests. Then the local authorities will get efficient incentives to produce an adequate quantity and quality of public goods, being financed by regional/local taxes. The citizens' participation within the political process will also lead to an increased responsibility and declining corruption within the lower level jurisdictions.

2.4 Theory of Taxation in Decentralized System

As pointed out in Tiebout literature, fiscal decentralization has the benefit to allow people to influence the decisions of the government, which affect their lives positively. But it also has some costs, which might have a negative impact on the welfare of the people. Decentralized decision making can produce externalities in such a form that one unit of government can create costs for nonresidents through both, its public good supply and taxation decisions (Gordon, 1982). If decentralization should be realty, sub-national

governments must have sufficient revenues that are adequate to finance the expenditures which are assigned to them.

Due to the mobility of local taxes, the sub-national governments are very reluctant to levy a high tax rate because of the fear to be in competitive disadvantages relative to other jurisdictions, and this will lead to under-provision of public goods (Brueckner, 2004). Some local taxes are also exported to the residents of other jurisdictions and this tax exporting to non residents may lead to an under-estimation of the costs for service delivery in each jurisdiction of a decentralized system. Therefore, this chapter explores the theoretical aspect of taxation in a federal system, which is tax competition and tax exporting.

2.4.1 Tax Competition

A central idea of the modern tax competition literature is that local governments compete to attract capital by reducing the tax rates and public expenditure levels. Wilson (1986) argues that the tax competition exists whenever public production is labor intensive relative to private production and he demonstrated that local public expenditures financed by property taxation will distort local government decision making. Atkinson and Stiglitz (1980) also stated that distorting commodity taxes have an ambiguous effect on the optimal level of public goods provision. Oates (1972) describes this problem as "The result of tax competition may well be a tendency toward less than efficient levels of output of local services. In an attempt to keep taxes low to attract business investment, local officials may hold spending below those levels for which marginal benefits equal marginal costs, particularly for those programs that do not offer direct benefits to local business."

In other words, marginal costs will increase due to the costs from a negative impact of business investment taxation, and these additional costs might contain lower wages and employment levels, capital losses on homes or other assets, and reduced tax bases, therefore, will reduce public spending and taxes (Wilson, 1999). This means when each region independently chooses its tax policies to maximize the welfare of their residents, then its choice will affect the size of the tax bases to other regions, which is described as 'fiscal externality.' The implication from this is if all local governments behave like that, none of them gain competitive advantages hence regions are all worse off. Thus Tiebout equilibrium with full efficiency cannot be achieved hence each level of government faces a second-best problem of how to raise tax revenue with the least loss in welfare (Gordon, 1982).

Two types of inefficiency will occur as a result of the independent behavior of the local governments. First, public good levels are set inefficiently, because regions failed to count the interregional externalities, and second, capital is

misallocated across regions, so that the marginal product of capital is relatively high in high-tax regions. A fully efficient allocation cannot be achieved if tax rates differ by regions, and identical tax rates are usually not consistent with efficient differences in public good levels across regions. So, the externalities that appeared in decentralized decision making are rationale for central government regulations. Central government can solve this efficiency problem through transfers to local government and regulation on local government tax bases. It is also true that decentralized government should avoid the use of non benefit taxes on mobile units (Oates, 1999, and Oates & Schwab, 1991).

Up to this point we discussed the horizontal tax competition, where taxation in one region influences the tax base available to another region. There also exists vertical tax competition where one level of government diminishes the size of the tax base available to the other level of government. As a result tax rates are too high and create negative externalities; however, other aspects of political-economic environment must be specified, e.g., the behavior of the government levels, and timing of the actions undertaken by the government levels.

Boadway, Marchand and Vigneault (1998) consider the case where the federal government is benevolent and moves first to influence the behavior of the state governments in their model. The result is that vertical tax competition is occurring at the state level but not at the federal level, because federal government 'sees through' the state budget constraints when making its own policy choices, hence equilibrium is efficient. If the federal and state government levels set their policies simultaneously, then the federal governments cannot influence the state policy choices. Hoyt (1996) has made an analysis of such cases, and in most situations benevolent federal governments can still manipulate their policy instruments to at least partially compensate inefficiencies at the state level.

When all governments make simultaneous their decisions then the vertical tax competition problem will be dominating. The vertical tax competition creates inefficiencies when the state governments is unable to optimally manipulate the policy instruments of the local governments, due to commitment problems, information problems, or objectives other than welfare maximization (Wilson, 1999).

The public choice literature takes a rather different perspective. Brennan and Buchanan (1980) argue that tax competition improves welfare, because without the tax competition the size of the government could be excessive (Leviathan hypotheses). Rodden (2003) has made empirical analysis using limited OECD sample data and concluded that decentralization when financed primarily by autonomous local taxation is associated with smaller govern-

ment, when funded by revenue sharing, grants, or centrally regulated local taxation then associated with larger government.

The theoretical literatures demonstrate that the tax competition among governments has both good and bad aspects. The assessment suggests a role for intervention by the central authority with careful consideration of both political and information problems.

2.4.2 Tax Exporting

The capability to increase tax rates by local governments also can depend on the tax exportation, because some taxes imposed by sub-national governments are exported to the residents of the other jurisdictions. In a decentralized system the tax exporting to non residents may distort the costs for the provision of public goods in each jurisdiction, therefore raise a tendency to make non optimal decisions. As defined by McLure (1962) “tax exporting is the loss on real incomes suffering non residents of the taxing state as a result of the tax in question.” Thereby, certain amounts of increase in taxes might be valued as less than that amount by local taxpayers, and result in a competitive advantage for the taxing jurisdiction.

Tax exporting lowers the cost of public services, and public goods are underpriced due to tax exporting, hence, regions tend to use the most easily exported taxes. If all taxes available to a region had the same exporting rate the choice among the taxes would not be distorted. There would be no incentive to adopt taxes with higher exporting rate even though the public goods would be relatively underpriced. Thus, no inefficiency problem would occur, however the public sector would tend to be relatively over expanded in each region. But further burdens may occur because for any one region the alternative forms of taxation do not result in the equal exporting rates. According to the theory of fiscal federalism taxes should be chosen on the basis of the consensus for the proper tax system, but not on the basis of the tax exporting ability.

Tax exporting may distort individual decisions concerning the location of residence hence undermine the Tiebout hypothesis, because people may choose to live where net tax burdens are low. If overall tax export rates were the same for all the regions there would be no distortions on the choice of residential location. Tax exporting may also be influential in political allocation of governmental functions between tiers of the government. The regions with larger export rates can be expected to favor local governmental activities while those regions with low export rates might reasonably favor central government activities. It is difficult to say in which way the decision would be made in any given case, but it is clear that if the export rate enter into the decision, then the decision would be not efficient. Thus tax exporting

may have important implications for the vertical as well as horizontal fiscal relationships between governments (McLure, 1967).

Individual taxes differ by their export rates, for instance, tourist trade taxes and natural resource taxes are most easily exported (McLure, 1967). The tax exporting for the natural resource taxes as well as corporate income taxes (CIT) of foreign owned firms can be allowed (Sorensen, 2002). From the above discussion on the theory of taxation in decentralized system one can conclude that a more intense tax competition will lead to lower tax rates of the mobile income recipients, hence to lower tax revenues. The mobile taxpayers tend to move to jurisdictions with lower tax rates. If the mobility costs are lower then the tax differentials, competition among the jurisdictions would be higher. As a result the tax rates would be lower, which leads to a smaller government sector. In contrast, tax exporting allows jurisdictions to increase service provision by exporting the taxes to nonresidents.

2.5 Theory of Grants

The theory of an optimal constitution states that because of the nature of the public goods the best distribution of sovereignties exists in a federation, and in federal systems the optimal allocation of resources can be achieved only if grants exist (Breton, 1965). The decentralized provision of public goods can improve efficiency by ensuring the better services, which suited better to local tastes and needs. Devolved taxing responsibilities on the one hand can be beneficial for the improvement of the local fiscal accountability, and on the other hand can deteriorate equity and efficiency of tax system. The fiscal capacity of the local governing units determines their ability to provide public goods and it varies by jurisdictions depending on the local tax bases and ability to export taxes. For example, if the tax rates are the same for all local governing units and all expenditures are financed by the own tax revenues, then the jurisdictions with lower per capita income supply less and lower quality public services. So, fiscal capacity can be measured by per capita income and per capita retail sales.

As mentioned before the distribution function is best performed by the national government; therefore, national (federal) government should concern with equity across jurisdictions to ensure the minimum level of public services through-out the nation. This objective can be fulfilled by providing intergovernmental grants to the sub-national jurisdictions and it also corrects inter-jurisdictional externalities and helps to achieve an efficient allocation of public funds.

Boadway and Flatters (1982) distinguished three reasons for the grants, which are closing the fiscal gap, correcting the spillover effects, and securing fiscal

equity. The grants differ mainly in terms of restrictions for the use of the funds by recipient government levels and are usually provided by higher levels of government to the next lower level of government. Some grants are transferred without any restrictions on use but others require recipient government to spend the grants on specific purposes. In general, three types of grants exist, which are matching grants, non matching grants and earmarked grants.

A general unconditional grant is a transfer of funds from a higher level of government to a lower level for the equalization purpose, which includes the revenue sharing among the governments without limitation to be used for specific services. Public services such as education, housing, and waste treatment facilities generate spillover effects. When spillovers exist, the tendency is overspending or under spending, depending on the costs or benefits, which are spilling over and the extent of the spillovers among the jurisdictions. When spillovers result in undersupply of the public services, the matching grants will be reasonable to subsidize the public services which generate external benefits. The grants can be made for the use of specific public service, called earmarked grants. The distinctions between grants are artificial because of the fungibility[1] of money, but the implications are important for the policy decisions. Therefore, this section makes a theoretical exploration of the different types of grants and its implication on the supply of public goods.

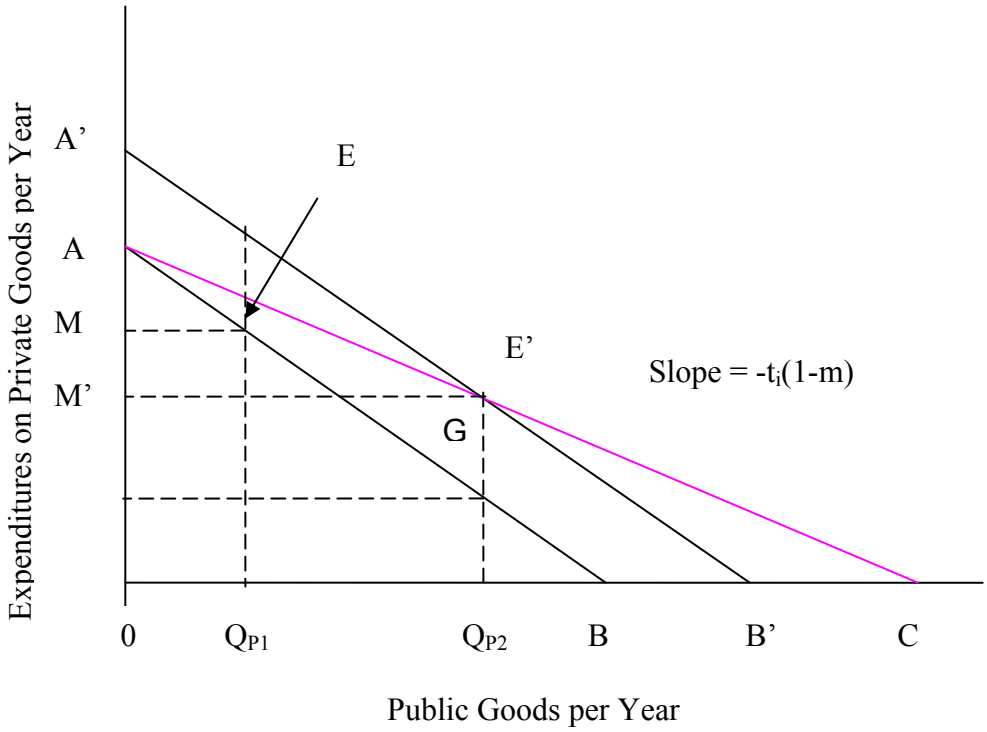
2.5.1 Matching versus Non-matching Grants

General purpose or lump-sum grants have only income effects, whereas matching grants have a substitution effects by reducing marginal costs for each unit of the certain services. Bradford and Oates (1971) demonstrated that matching grants will result in a higher level of production for the public goods. They considered two equal grants in volume that finance a single public good. The model assumes that grants are matching and non-matching as well as collective choices are made by majority rule. Figure 2.3 shows the analysis of the grants, where the budget line has a slope of $-t_i(1-m)$ which is the marginal tax per unit of the public good for each voter. In the figure 2.3 is assumed that the indifference curve have a standard shape, which is omitted and voter's most preferred mix of expenditure on private goods per year and units of public good per year are represented in point E. At the point E he/she consumes Q_{P1} units of the public good, gives up AM of his income in form of tax revenue and keeps OM of his income for the expenditure on private goods.

[1] Fungibility means that money can be used for more than one purpose.

Suppose that the aggregate grant to the government is equivalent to the subsidy G, equal to the imputed share, which voters receive under a matching grant. Such grant is illustrated as a parallel upward shift in the figure 2.3. The grant has no limitation on use, hence, voters evaluate the grant as increase on their net incomes equivalent to AA'. So a general purpose grant is like a gift to the local citizens, which increase their net incomes, then this increase in income will result in an increase of expenditures on both private and public goods. In other words a non-matching grant will only have an income effect and raise consumption of the public as well as private goods. The effects of the grant will be dependent on the voter's income elasticity of the demand for public goods.

Figure 2.3: Matching versus Non-matching Grant of Equal Value



Source: Musgrave, 1959.

If a matching grant is paid to the citizens of the local community and the national government's share of increased costs for more public good is *m*, then each citizen's tax share would fall by a fraction of *m* from the original tax share. This would rotate the voters' budget line from AB to AC. The introduction of matching grants reduces the tax rates per unit of the public good for all voters. The median voter's most preferred outcome would move from E to, say, E' in the figure 2.3. This will result in an increase of public good supply to Q_{P2} and increase the tax from AM to AM'. Hence, a matching grant will result in the increased provision of public goods, which is at the

point E'. Therefore matching grants are more efficient than non-matching ones in terms of increasing public good supply or the same objective can be implemented with lower costs by using the instrument of matching grants, whereas general non-matching grants can have some leakages, which support the consumption of private goods.

The earmarked grant is the subsidy with a restriction to use only for the provision of a specified public good. This type of grants will increase the expenditures for the specific service like a general grants but will be more efficient, too.

2.5.2 Tax Sharing and Grants

The analysis shows that the different types of grants can be used to achieve different fiscal objectives. In case of centrally collected tax revenue, grants can be used to return the part of the tax revenue to the original jurisdiction, which is usually called "tax sharing". As already discussed, the jurisdictions differ by fiscal capacity, hence, grants can be made to reduce inequality across the jurisdictions. So the transfer can be made by a higher level jurisdiction to a lower level jurisdiction according to its fiscal needs. For this purpose government can use general non-matching grants, which more or less have an equalization effect on the income of the recipients.

Grants are also designed to internalize externalities, to increase the overall level of public goods and to increase the level of particular public services. As discussed earlier, these objectives can be fulfilled more efficiently by using matching and earmarked grants. The analysis illustrates that the grants have leakages; hence efficiency of the grant instruments can be measured by their leakages. Thus the effectiveness of the grant policy depends on the premises which are given.

2.5.3 Fiscal Equalization

The jurisdictions differ in their fiscal capacity and fiscal needs as well as the costs for providing public goods due to the geographic, demographic, socio-economic and other factors. Fiscal equalization is attempted to mitigate the fiscal disparities within a federal or decentralized system of government by using monetary transfer of resources.

Following the public finance theory mentioned above, fiscal equalization principally can be divided into two directions: (1) Vertical equalization when transfers are provided by the next higher level of government from its budget. (2) Horizontal fiscal equalization when it occurs between government units at the same level through financial transfers from rich communities to the poor communities (Dafflon, 2002).

In general fiscal equalization exists because of the regional disparities. On the one hand the basic rule for a federation states that finance should follow functions. But on the other hand tax assignment are often implemented with the results that one level of government is allocating taxes, which increase over time with a growing revenue and other levels are confronted with taxes, which in the revenue development tend to stagnate (e.g. property tax). This will induce the question how to balance function and finance. The final decisions are usually made by politicians and the key political concerns are whether equalization should be introduced or whether it can be justified on efficiency or equity arguments (Buchanan, 2002).

If only the revenue side is considered, then the main causes of disparities between sub-national governments are the economic position and opportunities, economies of scale and differences in unit costs in the production of the public services. Opportunities for economic growth of the local government can be very different because of the geographic position, such as some regions are rich in natural resources and as a result their revenue raising capacities are very high relative to the resource poor regions. If the population is poor and small, some peripheral regions with few populations cannot attain a minimum service level. The unit costs of the production of public services differ because of the geographic condition and topography, for example, the cost for building roads or bridges will be higher in the mountain areas. The local choices on taxation and user charges will have an impact on the fiscal position of the local government but this would not have to be included into the equalization measure because this equalization impact results from the jurisdiction's own choice.

As mentioned above local fiscal equalization refers to reduce the fiscal disparities among the communities by monetary transfers. The fiscal disparity at the community level can be caused a variation in the revenue raising capacity and unit costs of the public services. Thus, equalization measures can be either resource equalization or cost (need) equalization, respectively. Cost equalization principally can be vertical equalization while resource equalization can also happen at the horizontal direction.

Equalization can be done explicitly by transfers with clearly defined purpose. If equalization is linked with specific conditional grants, the access to equalization instruments will be limited only to those communities, which are able to pay for additional expenditures (for the non-matched part). Equalization also can be implicit, which is the case for infrastructure programs if more means are sent to the poor region than the rich ones. However, the above discussion is for the design of equalization schemes in countries with well developed statistical data. But for countries in transition and developing

countries, which does not have the required information bases, different indicators have to be used.

2.6 Intergovernmental Fiscal Relations in Decentralized System

The theoretical considerations reflect a trade-off in various pros and cons of a decentralized governmental structure. Since 1990 there were at least six empirical studies and most of them used the endogenous growth model (Breuss and Eller, 2004). The empirical studies do not show strong and clear relations between fiscal decentralization and economic growth and only partly support the theoretical hypothesis on fiscal decentralization and economic growth. Both, theoretical and empirical analyses tend to have inconclusive and ambiguous results.

Therefore, it is difficult to draw a clear recommendation regarding the optimal degree of decentralization and each country should define an own country-specific model of fiscal decentralization, which will contribute to the welfare of the country by improving the provision of public goods. Following the Oates' decentralization theorem mentioned above, discussion on the intergovernmental fiscal relations will be focused on four main areas, which are the assignment of expenditure responsibilities, the revenue assignment, and intergovernmental fiscal transfers as well as sub-national borrowing.

2.6.1 The Assignment of Expenditure Responsibilities

It is well known that regions and local communities have a wide variation in tastes and preferences; hence, efficiency in the provision of the public services can be achieved at best by decentralization. Within this perspective almost all public services other than national public goods should be delivered at the local level and local political agents should decide the service types, quantity, quality and local taxpayers would have to pay for these services. Hence, local governments would be responsible and accountable for their citizens and charge them for their services.

To achieve accountability at the local level, it is important to establish a clear line of responsibility and accountability. If the functions and expenditure obligations for the different levels of government are unclear, then, the controversy and instability will occur in the decentralized system. The complete implementation of clarity in the expenditure assignment is very difficult to achieve because public actors from different jurisdictional levels may be involved in the supply of the respective services. The expenditure assignment is a very important base line for the design of the revenue assignment and the transfers.

In the case of Latin America and other transition countries the revenue were assigned before the decision was made to transfer the expenditure functions from central to local government (Martinez-Vazquez, 1998), which was a main factor for the failure of the decentralization policy. Thus, expenditure assignment should be the first fundamental step to fiscal decentralization. The efficiency in the provision of the public services could be achieved at best with the concrete assignment of public task and the respective expenditures.

Following the principle of subsidiarity, efficient expenditure assignment is to shift each function to the lowest level of government, which is able to fulfill this task in an efficient manor. But it also can be that local government is too small to carry out the responsibility efficiently (Rodden, 2003). Therefore, in assigning the expenditure responsibilities the central government should fix, which level of governments should be responsible for the specific functions and activities. In addition, the duplication and overlapping of the functions will hurt the accountability. However, these goals are not fully attainable because different level of governments can be appropriately involved in the provision of the same service.

For example, on the delivery of the education and health services, central, intermediate and local governments have their respective functions such as central government setting policy and standards, whereas local governments are providing school and kindergarten services directly to the residents. In the case of transition countries the expenditures were mandated to local governments without providing revenue sources. The consequence was not a better service delivery but the increase of the budget deficits at the sub-national governmental levels. So, the result was shifting the budget deficit downward by the process of decentralization (Shah, 2004). There is no general guideline for the optimal expenditure assignment but the adequacy could be evaluated with regard to the three basic functions of public finance or the goal set by the governments' decentralization strategy.

As we have argued above, the expenditure assignment is the first fundamental step for the design of decentralized system of intergovernmental finance. Therefore, without clear and specific assignment of expenditure responsibilities, it is not possible to assess the adequacy of the tax and revenue assignment as well as transfers to the different levels of government.

General objectives of fiscal decentralization include efficient allocation of resources, equitable provision of public services to the citizens in different jurisdictions, macroeconomic stability and economic growth. Martinez-Vazquez (1999) defined the four main principles or criteria for the effective expenditure assignment, which are efficiency, redistribution and stabilization objectives, no single best assignment, and the importance of a clear and stable assignment.

In order to fulfill efficiency in the public service provision, the expenditures should be assigned by the subsidiary principle and it also can be enhanced by benefit payments where consumption of benefits and costs of provision are linked. Following the public finance theory, the redistribution and stabilization function can be best pursued by central government, since local or regional governments will be unable to obtain equity because they will attract poor from other areas while have to tax more heavily their citizens.

There is no single best expenditure assignment at all, thus optimal expenditure assignment is one, which could be changed following the changes in costs and preferences. It is also important to have a clear and stable expenditure assignment, because false assignments would be a source of conflicts between central and sub-national governments, which leads to inefficient service provision. Therefore a specific expenditure assignment would protect sub-national governments from the ad hoc decision of the central government and help to provide a continuous service provision.

2.6.2 Tax Assignment

For the implementation of the assigned functions sub-national governments should have sufficient own revenue sources. The question is which revenue sources can and should be assigned to sub-national governments and how these assignments can be achieved. This set of questions is commonly called the "tax assignment problem"[2]. This section addresses the question, which type of taxes is the most suitable for different jurisdictional levels and describes alternative methods of achieving tax assignments.

As public finance theory and the Musgrave (1959) concept suggest, government has three functions: macroeconomic stabilization, income redistribution and resource allocation. The stabilization function is to ensure high employment and price stability and is generally assigned to the central government because sub-national governments commonly cannot much affect to the macroeconomic situation within their areas and they also have a limited power to borrow. Thus taxes with predominant stabilization effects such as corporate income taxes and progressive personal income taxes should be assigned to the central government and taxes that are more insensitive to the macroeconomic conditions such as consumption taxes, general sales taxes, excises and property taxes can be assigned to the sub-national governments. The redistribution function is to assure the equitable income distribution also commonly assigned to the central government, due to the distortions in the

[2] The tax assignment problem is a part of the revenue assignment which include tax assignment, design of the intergovernmental grants and sub-national borrowing. The latter two questions will be addressed in the following sections, thus here focus will be only on the tax assignment problem.

geographic allocation of the resources and the unsuccessful attempts of the sub-national governments in redistributive policies. The corporate income taxes and progressive individual income taxes are the most common instruments of the income redistribution and thus should be assigned to the central level of the government (McLure, 1999).

The allocation function is related to the provision and financing of public services. Concerning both, equity and efficiency, the tax payments should reflect costs and benefits of public services. In order to encourage the responsible use of the economic resources the services provided by government should be financed as much as possible by user charges and fees. So, each level of government should be assigned taxes related to their benefits of spending. The best example of these taxes is those levied on motor vehicles and fuel. Thus the proper tax assignment to the benefits depends on the expenditure assignments (McLure, 2001).

As stated by Shah (2004) the assignment of taxes to the different levels of government has to consider four general principles. First, in order to keep efficiency of the internal common market, taxes on mobile factors (labor, capital etc) and tradable goods should be assigned to the central government. Second, progressive taxes should be assigned to the central government with the purpose of national equity. Third, taxes should be assigned to the jurisdictional level according to the ability to assess them. Fourth, to ensure accountability, the ability to raise own revenue sources should be matched with expenditure needs as closely as possible. Bird (2000) defines a sub-national tax as one, which is assessed, decided at rates and collected by sub-national governments. However in realty there are no such taxes, which have all above mentioned characteristics. Local taxes include user fees, property tax, trade tax and sales tax, which, however, are not sufficient to cover the total costs of the assigned expenditures.

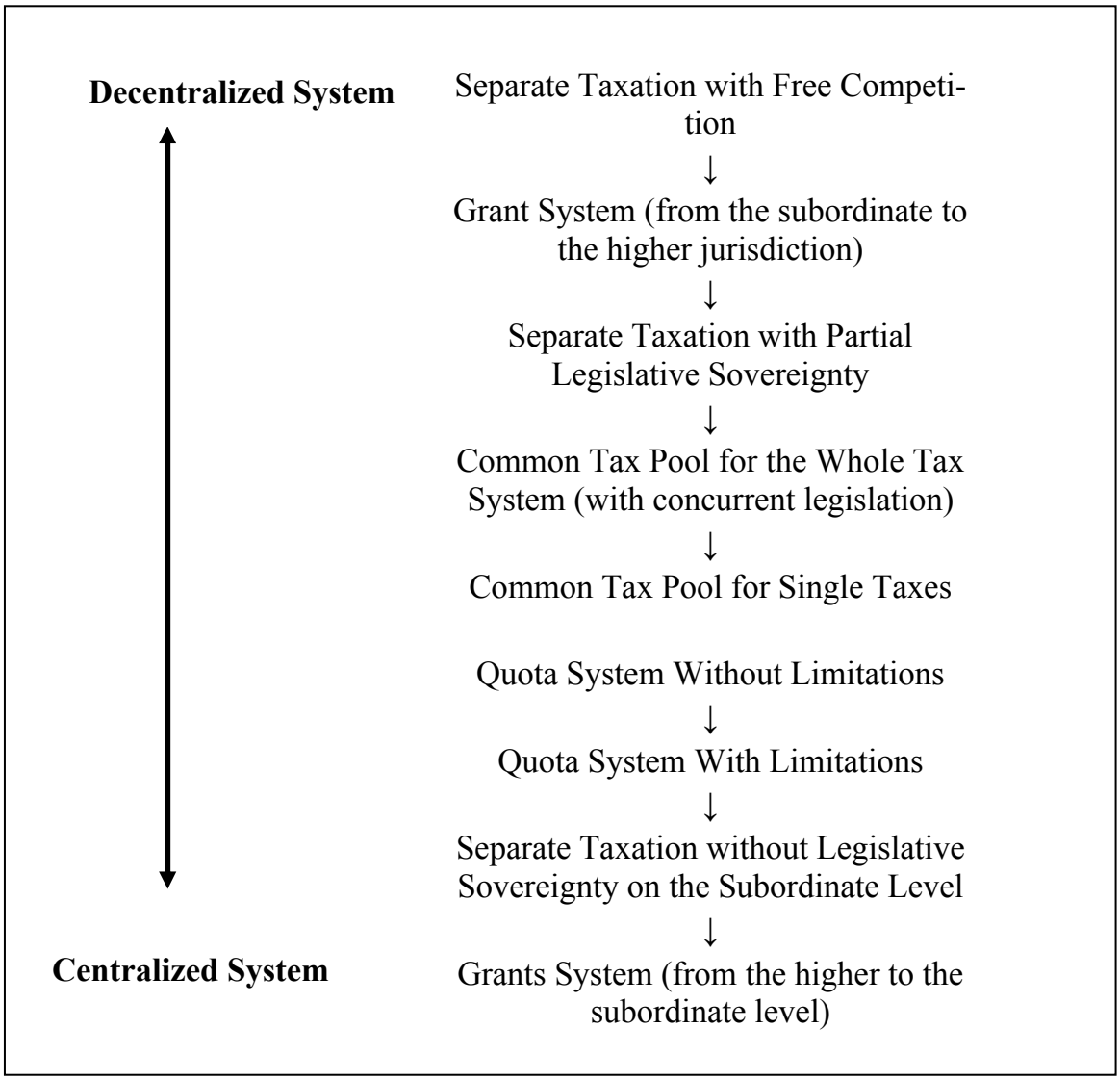
In the public finance perspective and with regard to the above mentioned principles on tax assignment one can conclude that to achieve fiscal autonomy at the sub-national government is a difficult task. The main problem for the tax assignment is to be seen in the fact that it usually does not provide sufficient revenue for the local governments to cover the costs for the assigned public tasks.

Methods of Revenue Assignment

Four different methods of revenue assignment can be observed in the existing federal systems (Petersen, 1993 and 2007). These methods differ by the degree of sub-national autonomy they provide (see figure 2.4). The separate taxation of the single jurisdiction, where sub-national governments have legislative, revenue and administrative sovereignties, provides most fiscal autonomy to the sub-national governments. But inequities, economic

distortions and also serious complexities related to the tax legislation and administration can occur under this approach, because of the separate activities of the single jurisdiction. These problems can be avoided by imposing the uniform ground-rules by federal government, for instance, rules for the definition and division of the corporate income tax base.

Figure 2.4: Different Methods of Revenue Assignment



Source: Petersen, 2007, p. 15.

Alternatively, sub-national surcharges can solve above mentioned problems and provide most important fiscal autonomy to the jurisdictions. This approach is the most appropriate means of providing own marginal revenues to the sub-national governments especially in less developed and transition countries, where administrative resources are scarce (Mclure, 1999). The tax sharing is the alternative method of the revenue assignment, under this approach the sub-national governments receive certain fraction of the national taxes originating within their jurisdictions. This approach restricts sub-national fiscal autonomy. Individual jurisdictions have autonomy on spending

of the given revenues but do not have power to control the amount of revenues they receive. Thus, they cannot control the level of public spending.

Revenue sharing or grants systems assign revenues of higher level of governments to lower levels of government. This approach of revenue sharing is not based on the original revenues; it redistributes the fiscal resources across the jurisdictions. This approach does not provide sub-national government with own marginal revenues, they only have autonomy on spending the revenues.

As figure 2.4 illustrates, depending on the influence pursued by the higher level of government, the methods of revenue assignments are characterized by more central or de-central elements. The separate taxation provides more fiscal autonomy than quota systems and a pure grants system as top down approach is the most centralized form.

Vertical Imbalance and Horizontal Disparities

A system of tax assignment designed in accordance with the above mentioned principles can result in a vertical imbalance to various levels of government as well as horizontal fiscal disparities among the governments at the same level due to differences in fiscal capacities and costs of the public goods and services. Vertical imbalances also occur because the taxes assigned to the sub-national governments cannot adequately be administered. However, particularly the assignment of natural resource taxes and corporate income taxes to the local or regional jurisdictions can create the horizontal disparities if the resources and economic activities are highly concentrated in few locations within a nation.

If the tax assignment creates vertical imbalances and horizontal disparities or the assigned taxes will not provide sufficient revenues to finance the service provision, grants from the higher level of government can compensate vertical imbalances or offset horizontal fiscal disparities and also close the revenue gap at the sub-national levels.

2.6.3 Intergovernmental Fiscal Transfers

The intergovernmental transfers are an important element of fiscal decentralization, which are addressing vertical imbalances and horizontal disparities as well as local government spending behavior. Regarding the intergovernmental transfers, their effects on the policy objectives are more important than the question of who is transferring or receiving them (Bird, 2000). Transfers must be designed to satisfy efficiency in the provision of the public services and in addition should be transparent and simple. Basically the transfer system is implemented by revenue sharing or forms of grants.

The important characteristics of any grants system are stability and flexibility, which are contradictory to each other. In order to achieve these characteristics of the transfer system, basically three methods are used: fixing transfers to central government revenues, paying them on an ad hoc basis (discretionary) or allocating them by formula. A sound transfer system distributes funds among different level of governments on the basis of a distributive *formula*, which takes into account the needs of the respective jurisdictional level. There are two quite different approaches used to define the transfers. First, simple unconditional lump-sum transfers ensure that local governments are able to provide a minimum standard of service provision. Second, central government use local government as an agent to execute national policies by *conditional transfers* with specific objectives. Expenditure conditionality requires that grants are spent on specified services while performance conditionality focuses on outputs rather than inputs.

2.6.4 Sub-national Borrowing

Public debt and borrowing traditionally has been as an important source to finance long-term infrastructure projects because it enhances intergenerational equity. Such type of intergenerational sharing enables local government to undertake the large-scale infrastructure investments.

Capital investment responsibilities should not be at the exclusive responsibility of central government. Hence, it should be assigned by the same principles as the recurrent expenditure assignment (Martinez-Vazquez, 1999). The main reason for the decentralized capital investment decisions are also efficiency criteria associated with being closer to the needs and preferences of taxpayers. In the case of assigning the capital investment decisions to the central level and maintenance and operations to the sub-national level creates a moral hazard type of problem and can lead to an inefficient service provision. Thus, the local ownership of the capital infrastructure is needed to achieve the efficient maintenance of the capital investment.

In most cases the sub-national governments are unable to finance their capital investment responsibilities out of the current savings. The only practical solution to this problem is to borrow the necessary funds for the new investments. Public debt and borrowing traditionally has been an important source to finance long-term infrastructure projects because it enhances intergenerational equity. Such type of intergenerational sharing enables local government to undertake the large-scale infrastructure investments (Shah, 1999). However, countries in transition and some developing countries have imposed strict restrictions on local borrowing because of insufficient revenue capacity of the local governments. More importantly rapidly growing local debt will endanger macroeconomic stability.

There are four basic debt controls which are applied in practice: a) primary reliance on markets; b) negotiations among the different levels of government for debt control; c) rule based debt controls, which are specified in the constitution or by specific law; and d) direct administration of the central government over the local borrowings.

2.7 Discussion and Conclusion

Following the public finance theory markets fail to supply the public goods, hence government should introduce policy measures to correct the market failure in the field of allocation, macroeconomic stabilization and income redistribution. Since the regions have different tastes and people are voting by feet for public goods so that jurisdictional level with the best information should supply the respective public services, which will at least in tendency result in economic efficiency on the allocation of public funds. Therefore, different government level should supply the public goods of different capacities according to the voters' preferences. This means that central government should be responsible for the national policy and provide efficient levels of national public goods and local governments should provide the efficient level of local public goods for their constituencies.

Since the markets fail to define the demand for public goods, the budgetary determination based on collective choice by political process is needed for the preference revelation on the provision of public goods and services. Decentralized elections will strengthen the citizen's responsibility to participate in the political process and control the fiscal institutions for the use of public funds and decentralized jurisdictional power will improve citizen's participation on the budgetary decisions and strengthen the politician's responsibility. Therefore, to achieve efficient provision of public goods at the local level, the political and fiscal decentralization should be implemented step by step that allows citizens to vote for their interest and local government to provide and tax their constituencies and also to be responsible for service provision to the citizens.

Decentralization has many benefits, but it also has costs if implemented in a wrong way. Hence, the countries should find the appropriate balance of centralization and decentralization in order to achieve an efficient and effective structure of the public sector. Thus the four main pillars of the intergovernmental fiscal relations system should be addressed to get a successful scope of decentralization. However, each country should develop an own strategy, which considers its specific conditions.

Expenditure assignment is a very important base line for the design of the revenue assignment and transfers. The basic principle for the expenditure

assignment is the principle of subsidiarity, which means that national benefits, income redistribution and services with spillover effects (externalities) should be assigned to the central government. The assignment of expenditure functions actually involve different levels of government that is to provide, finance and regulate certain services. Thus additional policy issues are needed to address this situation in order to assure that different levels of government are effectively working together. The next step is the revenue assignment, which should be linked with the expenditure assignments. Once the allocation function of the government is related to the quality of service provision; hence taxes should be assigned following their benefits. The main problem for tax assignment is to be seen in the fact that it usually does not provide sufficient revenue for the local governments to cover the costs of the assigned public tasks.

Therefore, intergovernmental transfers are an important element of fiscal decentralization, which address vertical and horizontal imbalances as well as local government spending behavior. Transfers must be designed to satisfy efficiency in the provision of the public services and in addition have to be transparent and simple.

Chapter 3

Fiscal Federalism: International Experiences in Selected Countries

In many countries around the world the fiscal relations between the different levels of government have come under inspection in order to improve public sector efficiency and promote economic growth. The main argument for decentralization is that a more responsive government to the local needs and mobility of the citizens will ensure the efficient resource allocation in the public sector. However, Bahl and Linn (1992, p. 392) argue that "Decentralization more likely comes with the achievement of a higher stage of economic development". Their contention is that the above mentioned mechanisms of decentralization, which ensure the efficiency in the public service provision, do not work properly for the developing or transition countries. The local sector function is very different in these countries and thus only at well-advanced stages of economic development the responsive local sector can be expected to emerge (Oates 1993).

The extent of fiscal decentralization in developed and developing countries are very different, and the government sector in developing countries appears to be more centralized than in the developed ones because they have inherited very centralized structures from the old colonial or socialist system. Oates (1972) studied the measures of fiscal centralization with a sample of 58 countries, which were significantly and negatively correlated with the level of per capita real income. This result also proved the Bahl & Linn (1992) argument that the threshold level of economic development where the fiscal decentralization emerges is relatively high.

Many countries with formerly relatively high degrees of centralization lowered this degree and devolved the provision of public goods in some steps, whereas several countries like Canada, Germany, Denmark, Finland, Norway, Sweden and Switzerland with formerly relatively high degrees of decentralization lowered this degree somewhat (Thiessen, 2005). Thus, the worldwide trend appears to be convergence towards a medium degree of fiscal decentralization. Due to this development and also to the difference in institutional structure, it is difficult to develop a universal model for decentralization. However, there is some widespread agreement on the general "norms" for the intergovernmental fiscal relations system around the world. The central question of the policy debate around the world is the division of fiscal powers among levels of government which is named intergovernmental fiscal relations.

This chapter studies the decentralization trends and experiences focusing on intergovernmental fiscal relations in developed and transition countries to find out lessons for the successful implementation of the fiscal decentralization in transition countries. The evaluation will be based on the use of criteria from the fiscal federalism theory with four broad areas, which are – as already mentioned above – the expenditure assignments, the revenue assignments to the different levels of the government and establishment of taxation autonomy, equalization of income disparities between regions by intergovernmental transfer, and sub-national borrowing.

3.1 Fiscal Decentralization Trends and Experiences in OECD

3.1.1 Overview of fiscal decentralization in OECD

The long term development of the decentralization in OECD countries are investigated based on data reported in the revenue statistics of the OECD, government finance statistics of the IMF, and research literature made by different scholars. The investigation was difficult and complex because of the lack of internationally comparable statistics and obstacles to obtain them.

Table 3.1 shows the degree of fiscal decentralization in selected OECD countries, based on sub-national expenditures and revenues as percentage of consolidated governments' expenditures and revenues. This index varies across countries and institutional design of states. In most federal countries the sub-national share of spending in consolidated government spending is higher than in the unitary states. However, this index is larger in some unitary states, for instance Nordic countries, and in almost all countries the sub-national share on consolidated government spending exceeds the same share in total revenues. The expenditure and revenue figures indicate no unique pattern of development across countries, but in general the degree of decentralization has risen in the majority of OECD countries[3]. During the 1985 to 2001 period as a result of the important constitutional changes, the sub-national share of expenditure and revenue increased in Belgium and Spain and also to a lesser extent in Canada, Finland, France, Italy and the USA.

The indexes shown in table 3.1 are very weak indicators for the degree of fiscal decentralization. In order to focus only on government functions, which reasonably could be decentralized according to fiscal federalism theory, Stegarescu (2005) in his calculation used the same ratios, which excluded social security expenditures from the central government expenditures. The

[3] Same results were observed in earlier studies carried out by Stegarescu (2005) and OECD (2003).

result was quite well, and figures revealed on average a more noticeable process of fiscal decentralization.

Table 3.1: Sub-national Government Spending and Revenue for the Selected OECD Countries

Countries	Share in general government spending*		Share in general government revenues		Tax revenues as % of total revenues	
	1985	2001	1985	2001	1985	2001
Federal countries						
Austria	28.4	28.5	24.6	21.4	23.8	18.9
Belgium	31.8	34.0	11.4	11.3	4.8	28.6
Canada	54.5	56.6	50.4	49.9	45.4	44.1
Germany	37.6	36.1	31.9	32.4	30.8	29.2
USA	32.6	40.0	37.6	40.4	32.7	31.7
Unitary countries						
Denmark	53.7	57.8	32.3	34.6	28.4	33.8
Finland	30.6	35.5	24.8	24.7	22.4	22.4
France	16.1	18.6	11.6	13.1	8.7	9.3
Greece	4.0	5.0	3.7	3.7	1.3	1.0
Ireland	30.2	29.5	32.3	34.6	2.3	1.9
Italy	25.6	29.7	10.7	17.6	2.3	12.2
Luxemburg	14.2	12.8	8.0	7.4	6.6	5.6
Netherlands	32.6	34.2	11.4	11.1	2.4	3.5
Norway	34.6	38.8	22.5	20.3	17.7	16.3
Portugal	10.3	12.8	7.6	8.3	3.5	6.5
Spain	25.0	32.2	17.0	20.3	11.2	16.5
Sweden	36.7	43.4	34.3	32.0	30.4	30.8
UK	22.2	25.9	10.5	7.6	10.2	4.1

Source: Joumard and Konigsrud, 2003.

* Excluding the transfers paid to other levels of government.

Out of 22 OECD countries 17 had a higher degree of decentralization and a more strong process of decentralization was observed in Spain. There is also evidence that sub-national governments increasingly rely on own revenue sources. Against the general trend in Germany, Ireland, Norway and UK the relative importance of intergovernmental transfers increased in the period of 1985-2000 (see table 3.2).

Table 3.2: Revenue Received by Local Government for the Selected OECD Countries, (as a percentage of total revenue)

Countries	Tax revenues		Non-tax revenues		Grants	
	1985	2000	1985	2000	1985	2000
Federal countries						
Australia	42.5	40.5	37.0	45.4	20.5	14.3
Austria	53.8	52.4	32.1	27.4	14.2	20.1
Belgium	32.0	37.2	6.7	9.2	61.3	53.6
Canada	36.5	40.6	15.6	19.9	47.9	39.5
Germany	36.9	39.5	36.0	25.3	27.0	35.2
Switzerland	50.9	48.2	32.4	34.5	16.7	17.3
USA	39.3	37.8	22.1	23.6	38.5	38.6
Unitary countries						
Denmark	44.0	52.9	10.0	7.8	46.0	39.3
Finland	46.2	55.1	19.6	22.6	34.2	22.3
France	46.7	45.1	18.9	19.3	34.4	35.5
Iceland	72.0	74.0	20.0	17.3	8.0	8.8
Ireland	5.4	4.9	20.0	18.7	74.6	74.6
Italy	6.3	37.2	11.7	13.5	82.0	49.3
Luxemburg	45.0	33.4	12.5	29.4	42.5	37.2
Netherlands	5.6	9.7	14.0	20.2	80.4	70.1
Norway	45.7	38.5	15.8	20.1	38.4	41.4
Spain	56.3	66.5	19.4	11.0	24.2	22.6
Sweden	57.7	74.9	20.5	5.7	21.8	19.4
UK	30.8	14.3	21.1	15.6	48.1	70.1

Source: Ahmad and Brosio, 2003.

According to the conventional and improved indicators, there is strong evidence of fiscal decentralization in a majority of the OECD countries over the last three decades. This trend was especially strong in Belgium, France, Italy and Spain. However, no unique development can be observed because several countries also exhibited a tendency to centralize the governmental sector.

3.1.2 Distribution of functions among the different levels of government

Expenditures on education, health, and social security are the largest share of the sub-national spending in most countries, mainly on the regional level of government for federal countries (Joumard and Konigsrud, 2003). The same development was illustrated by the OECD (2002) for the EU member and applicant countries. But the relative importance of these items varies widely between countries. In Italy, Mexico, and Spain expenditures on education and health care were reassigned and thus the degree of fiscal decentralization in these countries tended to rise. In Canada responsibilities for some labor market policies were shifted to sub-national governments (Thiessen, 2005). Almost all macroeconomic policies such as all parts of industrial policy and also defense policy follow the economies of scale argument and are a central government function. In the UK most unusually, law and order, as well as police services are local authority activities. In Denmark, health and social security services are highly decentralized.

Police services are usually centralized due to spillover and economies of scale considerations, and social security is typically centralized on the basis of the redistribution argument. Sub-national governments rarely play a major part in health service provision, because of the economies of scale and scope considerations. Many countries are rationalizing their supply of hospital services, where small clinics are closed down or transformed to deliver more specialized type of services, for instance in British Columbia of Canada, Finland, France and Italy introduced this reform in order to improve health care quality (OECD, 2001). If sub-national governments are responsible for the provision of public goods with externalities then a well designed transfer system is needed, so that it provides sufficient resources, however, experiences prove that this task has not yet been satisfactorily solved (Thiessen, 2003).

3.1.3 Revenue Assignment

Sub-national funding of the assigned responsibilities plays an important role on the local government spending behavior, and should meet several sometimes conflicting objectives. On the one hand, if local taxation allows spending to be matched with costs, sub-national government may better respond to the citizens' preferences. On the other hand, the need for stable local revenues, efficiency in tax collection, and minimization of the costs often claim centralization of the taxing powers. In realty sub-national government rely on the different combination of resources such as tax revenues, non-tax revenues and grants (see table 3.2).

Table 3.3: Tax Revenues of the Main Local Taxes, 2001, for Federal and Unitary Countries (as % of total tax revenues of local government)

	Income and profits	Pay-roll	Proper-ty	General consump-tion taxes	Specific goods and services	Taxes on use etc	Oth-er tax-es
Australia	-	-	100	-	-	-	-
Austria	37.7	19.1	10.0	22.7	3.8	1.7	5.0
Belguim	85.8	-	-	1.4	7.9	4.6	0.3
Canada	-	-	91.6	0.2	-	1.6	6.5
Germany	77.1	-	16.6	5.2	0.5	0.4	0.2
Switzer-land	83.1	-	16.6	-	0.2	0.1	-
USA	6.2	-	71.5	12.4	5.1	4.8	-

unitary countries (as % of total tax revenues of local government)

	Income and profits	Pay-roll	Proper-ty	General consump-tion taxes	Specific goods and services	Taxes on use etc	Oth-er tax-es
Denmark	91.1	2.2	6.6	-	-	-	-
Finland	78.6	16.9	4.3	-	-	-	0.2
France	-	-	49.1	-	7.6	3.4	39.8
Greece	-	-	56.2	2.8	23.1	17.9	-
Iceland	80.4	-	12.4	7.2	-	-	-
Ireland	-	-	-	100	-	-	-
Italy	8.8	-	18.0	-	8.7	10.6	53.9
Japan	47.5	27.4	31.1	7	8.1	5.4	1.0
Luxem-burg	-	92.6	5.8	-	1.0	0.2	0.3
Nether-lands	-	-	57.5	-	-	42.5	-
Norway	90.6	-	7.5	-	-	1.8	-
Spain	25.3	21.9	37.4	11.7	9.9	13.7	1.9
Sweden	100.0	-	-	-	-	-	-
UK	-	-	99.9	-	-	-	0.1

Source: Ehtisham & Giorgio, 2006.

Table 3.2 also provides some information on the composition of the sub-national revenue sources for the EU countries. As we see the local taxation plays an important role in most countries, however, the variance across

countries within the ratio of own-tax revenues on total local revenues are very high, which is ranging from more than 70 percent in Iceland to about 5 percent in the Netherlands. The grants also play an important role on the sub-national financing, but in the last decades the role of tax financing has increased and the share of grants in local budgets have decreased in most countries. However, the tendencies were in the opposite direction in the UK and Ireland, among unitary countries, and Switzerland among federal countries.

Table 3.3 illustrates the composition of the local tax revenues in the federal as well as unitary countries. In federal countries such as Australia, Canada and USA the majority of the local tax revenues consist on property taxes. In contrary the federal countries of the continental Europe (Belgium, Germany and Switzerland) rely more on income and profit taxes. In the case of unitary countries, the UK is relying only on property taxes, but Nordic countries exclusively rely on income taxation. Other countries such as Spain and Austria employ property and consumption taxes, which have a more balanced structure relative to the other countries.

Therefore, in OECD countries the sub-national revenue composition varies considerably. In most countries the direct taxes are high in importance and almost everywhere the consumption taxes are a less important revenue source at the sub-national level. Local authorities have some discretion over the tax rate in OECD countries, and local business taxes varies from pure profit tax in Luxemburg and Japan to an origin based value added tax in Italy, and tax of fixed assets of the companies in some states of the USA and France (Fossen and Bach, 2007).

The intensity of tax competition varies considerably, and competition to attract companies has often been more intense than competition to attract households specifically in USA and Canada. Finally, tax-sharing arrangements make difficulties for individuals to assess the performance of the certain government level, and central government transfers also create discretionary features (Finland, Korea and Norway) at the sub-national level (Joumard & Kongsrud, 2003).

3.1.4 Intergovernmental Grants

Almost in all countries a gap between the local revenues generated and expenditure needs exists, because of the externalities, disparities in fiscal capacity among jurisdictions and requirements of the minimum service provision. Thus many countries extensively rely on intergovernmental grants. The design of intergovernmental grants and an equalization scheme varies from one country to another. The experiences in several OECD countries

concerning the transfer and equalization scheme show that the disincentive effects both for recipient and donor were recognized (Thiessen, 2005).

Earmarked grants have been widely used on the ground that they could internalize externalities and assure minimum standards for the specific services across countries. For instance, in Switzerland the confederation contribution rates to cantonal expense reflect the confederation's fiscal position when specific earmarked grants were introduced (Joumard & Giorno, 2002). However, earmarked grants have resulted poor cost effectiveness and adverse distributive consequences. Thus many countries recently diminished the reliance on earmarked grants, in the 1990s Canada, Finland, Iceland, Norway and Sweden radically reformed their grant system (Joumard & Kongsrud, 2003).

As mentioned above, the equalization scheme varies significantly across countries and the OECD survey for individual country revealed that the equalization scheme has failed to improve public service efficiency or to reduce disparities. In Italy an over-dependence on transfers hindered the development of poor region (Bibbee & Goglio, 2002), and similarly in Japan and Germany high level of investments in poor region have had a little success in economic convergence (Wurzel, 1999).

3.1.5 Sub-national Borrowings

The sub-national borrowing is one of the main pillars for the intergovernmental fiscal relations system, and the borrowing policy varies greatly across countries. In some countries there are little or no restrictions on sub-national borrowing while some countries allow for borrowing only with special permission. For instance, in Belgium, Finland, Iceland, Norway, Sweden, USA and Canada a wide freedom for sub-national borrowing exist, and in France, Germany, and Switzerland no restriction on the borrowing for investment projects are to be found. But the UK, Denmark, Spain, and Greece have a tight control over the sub-national borrowing (Joumard & Kongsrud, 2003 and OECD, 2002).

A general concern about fiscal decentralization is that it may increase the risk for macroeconomic instability (Bird & Tassonyi, 2003). Sub-national government with newly endowed financial freedom will be tend to spend too much, tax too little and borrow excessively, thus behave fiscally irresponsible (Prud'homme, 1995). Efficient resource allocation by government requires that all benefits and all costs of the public action are fully internalized. In order to achieve fiscal efficiency at the sub-national level, necessary institutional preconditions should be met, which are an efficient central government, an efficient banking system, and capital and land markets (Inman, 2003).

3.2 Fiscal Decentralization in Transition Countries

The results of the studies on intergovernmental relations in industrialized and developing nations have shown a large variety in the extent of fiscal decentralization. Oates (1985) has made a study for 34 countries, and the sample statistics exposed an average share of central-government spending in total expenditure for 18 industrialized countries with 65 percent. In contrast in the sub sample of 25 developing nations the figure was 89 percent. But on the revenue side the central government share in total revenue was over 90 percent for developing countries (Oates, 1999). Thus, developing countries are characterized by a relatively high degree of fiscal centralization, and the trend is the same for transition countries, which had a centrally planned economy before transformation.

Former socialist countries have had a highly centralized political and economic decision-making and administration. Changing the inherited over-centralized system in order to achieve efficient and effective government, was a difficult challenge for transition countries. Implementing structural change in public finance and getting it right along is a difficult task (Jackson, 2001). Therefore, developing an effective government sector and implementing fiscal decentralization is one of the most important strategies for countries in transition.

3.2.1 Expenditure assignment

Many countries in transition have been reforming their government structure towards decentralization by implementing one or another form of decentralization policies since the 1990s. Comprehensive surveys and research have been done by international organizations as UNDP, OECD, IMF and WB.

Most surveys in eastern European countries and countries of the former Soviet Union show that reforms have focused on the revenue assignment and transfers, before designing expenditure assignment at the sub-national level. MartinezVazquez and Bird named such strategy as “putting the car before horse”. Bird (1993) has made detailed analysis of the intergovernmental relations in Hungary, Poland, Russia, Romania, Czech and Slovak Federal Republic, and China. The central government of these countries viewed fiscal decentralization as an opportunity to reduce central expenditures or shifting responsibilities “downstairs”. For example, in Hungary responsibilities for welfare expenditures were assigned to the local level, and in Russia social expenditures equivalent to six percent of gross domestic product (GDP) were transferred to the local level in 1992, which was a means to push the deficit down.

In the Czech Republic, Hungary and Poland local government have detailed expenditure responsibilities formalized by law, but in Russia there is no legal definition of expenditure assignments except for social programs. In contrast to most transition countries in Romania e.g., education and health services are still a sole central responsibilities. Overlapping responsibilities on culture and social assistance between the government levels were common to many transition countries (Bird, 1993).

In those transition countries, which were part of the Soviet Union, the expenditure assignments tend to agree with the public finance principle. Thus the services with local benefit impact such as tertiary hospitals, primary education, fire protection, and sanitation are assigned to the local government. The shares of sub-national expenditures in the consolidated budget remained constant in Russia and in the Baltic States, but fluctuated significantly in Ukraine and Kazakhstan. In most former Soviet countries social welfare expenditures are assigned to the sub-national level, which is against to the best-practice principle (Martinez-Vazquez, 1999).

The OECD (2002) survey for the EU applicant countries found few similarities in the expenditure assignment across the surveyed countries. For example, housing is the most important local expenditure in the all surveyed countries except Hungary. In Bulgaria and Hungary education and health sectors are also important local expenditure (see table 3.4). The data illustrates that the social expenditures were shifted to the sub-national level, which also proves the Shah (2004) argumentation that the decentralization in transition countries had a purpose to shift deficit downwards, which is against the best-practice principle and created disharmony among the different levels of government.

Bulgaria has started the reform in 2002, and the objective was to balance the expenditures and revenues assigned to the sub-national level and to make transparent intergovernmental relations. In Romania the Law of Local Public Administration defines that local government have to provide the education, health, culture, youth and sport, public order, fire protection, and there also exist decentralized services of the ministries. In Slovenia the Local Government Act defines the local tasks in general, while the specific allocation of functions is determined by individual sector laws.

Table 3.4: Current Sub-national Expenditures by Function, as a Share of Consolidated Government Expenditure, in the Selected Transition Countries, 2000

	Bulga-ria	Ro-mania	Slovak Repub-lic	Slo-venia	Czech Repub-lic*	Hun-gary*	Pol-and*
General public services	18.1	33.2	19.1	27.7	4.9	47.2	44.0
Defense	2.1	0.0	0.05	1.5	0.2	0.6	0.2
Public order & safety	0.0	3.2	0.2	5.9	9.8	7.6	32.6
Education	56.3	7.2	0.1	23.7	18.1	66.2	71.2
Health	45.3	0.2	0.2	1.6	1.3	43.8	7.0
Social security & Welfare	8.2	4.9	0.5	1.1	5.1	11.1	6.8
Housing & community amenities	69.6	96.4	64.1	75.7	79.1	-	88.5
Recreation, cultural & religious affairs	27.2	49.7	26.7	45.8	54.6	45.6	74.4
Fuel & energy	0.0	0.0	0.0	0.0	1.8	-	-
Agriculture, forestry, fishing, & hunting	4.9	2.2	4.9	13.8	5.1	5.2	32.5
Mining, manufactur-ing & construction except fuel & energy	0.0	0.0	1.1	0.0	9.3	12.7	28.0
Transportation & communication	23.5	36.4	21.5	23.2	43.7	12.2	64.0
Other economic affairs	11.4	5.1	3.1	24.7	3.5	10.6	18.0
Other functions	0.9	3.1	4.3	0.9	42.9	1.0	2.3
Total current government expenditure. Consolidated % of GDP	40.0	33.5	41.8	44.1	43.0	44.0	43.6
Total current sub-national expenditure. % of GDP	7.0	3.4	2.7	5.3	7.9	10.4	12.1

Source: OECD, 2002
* for 1999.

Despite these reform efforts there are still some problems in the expenditure assignment in transition countries such as lack of formal assignment,

inefficient assignment, ambiguity and co-sharing responsibilities (UNDP, 2005). The experience of Kazakhstan, Russia, and Ukraine show that the lack of formal assignment destabilizes intergovernmental relations. Another set of problem is that in early years of transition most countries have assigned the capital expenditure associated with the capital infrastructure, and funding of the social welfare services to the sub-national level, but the responsibility for public utilities (water and sewage) were assigned to the central government.

3.2.2 Revenue assignment

Sub-national revenue consists of three main sources, which are taxes, grants, and non-tax revenues, and the analysis of this section will be focused on tax revenues. As mentioned before because of political and administrative grounds only few taxes are available for the use as sub-national revenue sources, hence it may lead to vertical or horizontal imbalance of revenues among the governments. This problem is especially severe in case of the transition economies due to other macroeconomic problems.

Table 3.5: Overall Revenue and Expenditure Levels for the Selected Transition Countries, 1999 and 2000

	Total sub-national revenues (as % of total gov.revenue)	Total sub-national revenues (as % of GDP)	Total sub-national expenditures (as % of GDP)
Bulgaria (2000)	16.9	7.3	7.0
Czech Republic (1999)	20.8	8.6	7.9
Estonia (1999)	22.1	7.8	7.1
Hungary (1999)	26.7	11.1	10.4
Latvia (1999)	26.0	10.8	9.5
Lithuania (1999)	22.8	7.3	6.3
Poland (1999)	28.8	12.0	12.1
Romania (2000)	12.9	4.4	3.4
Slovak Republic (2000)	5.6	2.4	2.7
Slovenia (2000)	12.4	5.3	5.3
Mean	19.5	7.6	7.2

Source: OECD, 2002.

Therefore, decentralization of taxing powers may not be fully matched to the decentralization of the functions. However, in transition countries the taxing powers are much more centralized than economic considerations would allow.

Local governments have a very limited access to own source revenues such as property taxes and user charges, even for these taxes they have autonomy only with respect to setting tax rates within limits defined by the central government (Shah, 2004).

One simple way of determining the fiscal decentralization is how often sub-national revenue accounts for over 25 percent of total government revenues. The mean figure for transition countries is 19.5 percent, but it is higher in some countries such as Poland (28.8 percent), Hungary (26.7 percent) and Latvia (26 percent). The data show that Hungary is more decentralized than others, whereas the Slovak Republic is a less decentralized country among the surveyed transition countries (see table 3.5). As already mentioned the composition of sub-national revenues is very diverse in the transition countries. For example, the percentage of the grants is ranging from 4.1 percent in Lithuania to 50 percent in Hungary (see table 3.6).

Table 3.6: The Structure of Sub-national Revenues in Selected Transition Countries, 1999 and 2000

	Tax revenues (% of total revenue)	Non-tax revenues (% of total revenue)	Grants (% of total revenue)
Bulgaria (2000)	46.3	13.1	39.9
Czech Republic (1999)	47.7	36.3	16.0
Estonia (1999)	68.4	9.1	22.5
Hungary (1999)	33.0	17.0	50.0
Latvia (1999)	56.0	20.4	23.6
Lithuania (1999)	91.0	4.8	4.1
Poland (1999)	24.5	24.2	51.3
Romania (2000)	69.7	13.8	16.5
Slovak Republic (2000)	67.1	20.9	12.0
Slovenia (2000)	58.5	18.1	23.3
Mean	56.2	17.8	25.9

Source: OECD, 2002.

Bird (1993) has made detailed analysis of the tax assignment in transition countries and among all the surveyed countries, only in Hungary and Russia the sub-national governments have a large share in total revenues. In Hungary, sub-national governments get a share of personal income taxes (PIT), initially 100 percent, then 50 and 25 percent, and in Russia the sub-

national governments get 20 percent of the value added tax (VAT), 100 percent PIT and 60 percent of the corporate profit tax revenue. In most former Soviet republics the PIT is assigned to the sub-national level. In Hungary, Bulgaria, Poland, Romania, and Russia the property tax is assigned to the sub-national level, but the tax rates are significantly differentiated. Another tax granted to local government is the tax on individual business, which was introduced in Romania and Hungary, but this tax is not an efficient one as the author mentioned. Another possible local revenue source is the motor vehicle tax. Because of widespread exemptions the tax administration has become serious problems in the transition countries.

The discussions above suggest that the choice of the tax assignment differs across countries. This is caused by the fact that the lower level taxes often create inefficiencies in the resource allocation and cause inequities among individuals and jurisdictions. In addition the administrative costs can increase significantly, and these problems are more severe for some taxes than others (Shah, 2004). Thus tax decentralization should be made with care, balancing the costs and benefits of fiscal decentralization in each country.

3.2.3 Intergovernmental Transfers

Intergovernmental transfers are an important source of revenues for sub-national governments in transition countries. In 1999 they were accounting for 25.9 percent of total revenues in the average at the sub-national level in selected transition countries (see table 3.6). In designing the transfer system the central government should pay attention to the policy outcomes such as efficiency, equity and sub-national fiscal soundness. There are some broad objectives for national fiscal transfers, which are achieving vertical and horizontal balance, compensating spillovers, attaining national equity and creating macroeconomic stability, and each may apply in various degrees in different countries (Shah, 2004).

As Bird (1993) survey results have shown, the most sub-national governments in the transition countries were highly dependent on transfers. Table 3.7 illustrates that in average about 70 percent of revenues at the sub-national level came from transfers and the other standard approaches such as capital financing. Russia, China and Vietnam had no explicit arrangement for intergovernmental grants. In other countries the transfers were the most important revenue sources but decisions were made on an ad hoc base. Hungary was an exception, where an explicit formula for grants was used. Almost in all transition countries the revenues and expenditures were mismatched at the different levels of government so that the transfers had a balancing role. In terms of horizontal equity most countries were concerned to provide some minimum service level in education and social assistance.

While until 1993 Hungary had a relatively well developed grant system, in contrast in Romania, Russia, and in most of the other former Soviet republics transfers were entirely discretionary and negotiated on ad hoc bases.

Table 3.7: Structure of Sub-national Government Finance, in the Selected Transition Countries, before 1993

	Own resources, %	Shared taxes, %	Total local resources, %	Transfer from central government, %
Hungary	18.0	13.0	31.0	68.5**
Poland	50.0	25.0	75.0	25.0
Romania	25.0	0.0	25.0	75.0
Czech Republic	9.0	6.0	15.0	85.0
Slovad Republic	71.0	4.7	76.0	24.0
China*	15.0	85.0	100.0	0.0
Bulgaria	4.4	49.4	53.8	46.2
Russia	-	95.0	95.0	5.0

Source: Bird, 1993

* figures for 1985; ** 51.4 is a grants and 17.1 is a Social Security Funds transfers

Until 1999 the transfer systems in transition countries has made some progress, for example the Czech Republic and Poland introduced a formula based system, and in particular capital grants were allocated in accordance with specific government programs in the Czech and Slovak Republic. In Hungary in the period from 1993 to 1999 the most important sub-national revenue source was grants. It had a quite complicated transfer system, where grants were classified as normative grant, purpose oriented matching grants, deficit grants, special or targeted subsidies for supporting municipal investment, and equalization grants (Chang Woon Nam, 1999). The OECD (2002) has demonstrated that nearly two-thirds of grants were specific grants in the surveyed transition countries. For instance, the Czech Republic, Romania, and the Slovak Republic relied only on specific grants, while in contrast Bulgaria relied more on general grants whereas other countries had a mixed system.

From the discussions above one can conclude that no uniform patterns of transfer systems did exist since countries differ by policy objectives and circumstances. The intergovernmental transfer systems in transition countries have made some progress since 1990, however, more reforms are needed in order to achieve efficiency and equity in resource allocation in the public sector.

3.2.4 Sub-national Borrowing

The information about sub-national borrowing will complete the picture of the sub-national finance in transition countries. Almost in all transition countries the debt for the local level were drawn on the central bank following the five year plans in the former system. Thus, the borrowing facilities provided to the sub-national government in these countries have roots from the former planning system. Local access on borrowings are even restricted in western countries for several reasons such as macroeconomic stabilization. Local access to credit requires well functioning financial markets and credit worthy local governments. In transition countries the capital market is underdeveloped and local government creditworthiness is weak, hence sub-national access to credits is limited (Shah, 2004).

Local debt in forms of bank credits and municipal bonds are relatively new financial measures to cover the expenditure needs in transition countries. Municipalities can borrow from domestic as well as foreign banks, and issue bonds in Poland, Hungary, Czech and Slovak Republic. So the Czech Republic, Romania, and Slovak Republic have little or no control over sub-national borrowing. In the other extreme, Latvia and Lithuania permit borrowing only with special permission (OECD, 2002). The central government policy in transition countries is to control but not to assist the local borrowing. In addition due to lacking autonomies to tax, sub-national governments have low revenue capacities. Therefore, as Shah (2004) proposed, a first transitory step to provide credit market access for local governments may be to establish municipal finance corporations running on commercial principles and to decentralize taxes, which is important for the establishment of the private sector's confidence to local governments.

3.3 Discussion

Former socialist countries have had a highly centralized political and economic decision-making and administration. Changing the inherited over-centralized system to achieve efficient and effective government, was a difficult challenge for transition countries. Due to the former system, transition countries had more centralized governmental structures than developed countries, especially compared to countries being on the way to a more decentralized government or public sector. The worldwide trend in developed countries has led to a medium degree of fiscal decentralization, while the trends in transition countries are towards lowering the degree of centralization in last two decades.

The analysis of this section was focused on the decentralization of the intergovernmental fiscal structure across selected OECD and transition

countries. Due to the individual intergovernmental fiscal system of each country, the comparison should be made with care. The availability and comparability of the statistical data about the degree of fiscal decentralization and intergovernmental relations system set clear limitations for such comparisons. Even though general norms for the intergovernmental relations system exist, the division of fiscal powers among the different levels of government varies from country to country because of the variations in institutional settings, fiscal capacity and other circumstances. However, fiscal decentralization in various transition countries has had a number of similarities, especially with regard to the shortcomings of the intergovernmental fiscal relations (UNDP, 2005). Further progress in this agenda requires learning from past experiences of industrial countries as well as from more experiences of the transition countries.

As mentioned above the similarities in transition countries are mostly the weaknesses in intergovernmental fiscal relations, such as inadequacy of local government structures, unclear expenditure assignments, lack of revenue autonomy, and poorly administered intergovernmental transfers. As a result of these shortcomings, transition countries have faced a number of problems in fiscal decentralization. Firstly, they had a bad sequencing in the decentralization strategies mainly because of a lack of a comprehensive decentralization strategy. Secondly, most transition countries had a weak central government coordination mechanism for fiscal decentralization and too fragmented local governments. Finally, these countries had a lack of political commitment, which is an important factor for the success of decentralization. Therefore, the risk of getting fiscal decentralization wrong was high in transition countries.

Some lessons can be drawn from the review of the experiences both in the industrialized and transition countries. First, periodic reviewing of expenditure assignment is essential to rearrange responsibilities in line with changing economic and political circumstances. Second, it is essential to link spending and taxing decisions, otherwise accountability will be diminished in the public sector. Third, properly designed transfer systems will encourage competition in the supply of public goods, but in transition countries the supply is very much transfer dependent, which has undermined the fiscal discipline and accountability. Fourth, tax decentralization and development of the capital markets will enhance sub-national credit access. Finally, the greater degree of decentralization in the institutional environment is needed, which has not been sufficiently addressed in the reform efforts in most of the transition countries.

Chapter 4

Fiscal Decentralization: Empirical Evidence for Mongolia

Tiebout (1956) argued that the expenditures and taxes are widely differentiated among local jurisdictions so the individuals "voting by their feet" and locate in the community which offers the bundle of services and taxes they like best. Thus the jurisdictional level with best information on both, the citizens' preferences and costs should supply the respective public goods (Oates, 1999). For local public goods, decentralized decision-making provides the advantage of taking much better into account the variations in preferences than centralized one. In addition, fiscal federalism has a positive impact on the problem of corruption (Petersen, 2008). However, in decentralized systems jurisdictions impose externalities on each other and the competition between jurisdictions will shift the initial equilibrium which might lead to misallocation. In addition, for the developing countries with less economic diversification and vulnerable for external shocks, the central government control over the taxing and spending decisions would be superior to extensive decentralization.

Therefore the decentralization and centralization is a continuum rather than dichotomy and effectiveness of the decentralized decision-making will depends on the optimal distribution of the taxing and expenditure responsibilities under consideration of the country specific factors such as economy, tradition, demography and geography. Each country should define an own country-specific model of fiscal decentralization, which will contribute to the welfare of the country by improving the provision of public goods.

Therefore this chapter provides empirical research on the intergovernmental fiscal relations system of Mongolia by focusing on the four main pillars of intergovernmental fiscal relations system mentioned above. Before analyzing the tax and expenditure responsibilities, chapter 4.1 and 4.2 describe the history of the government sector and the current economic development in Mongolia. The other sub-chapters investigate the structure and scope of the government sector followed by an analysis of the expenditure assignment, revenue assignment and intergovernmental fiscal transfers as well as sub-national borrowing. Finally some policy recommendations are made with regard to the improvement of the intergovernmental fiscal relations system of Mongolia.

4.1 Brief History of Mongolian Government Sector

This section aims to provide an inquiry into the Mongolian governmental structures focusing on the fiscal relations in historical terms from the creation of the unified state to the present.[4]

Before discussing the state structure of the Mongolian Great Empire established by Chinggis Khaan in 1206 a brief history of an ancient Mongolian state structure and life style is presented. Then the most important periods for the further development of the Mongolian governmental system are described in more detail.

The Ancient Mongolian States

The Mongolian political history has a long tradition from the ancient Mongolian state of Khunnu[5], which was founded 209 before Common Era (B.C.E). The Khunnu State was formed by integrating 24 Aimags. This ancient political history can be divided into the Khunnu state (B.C.E 209-156), Syanbi state (156-235), Nirun state (330-550), Tureg (552-840), and the Mongolian Khanlig period (840-1206). The leaders of these states were kings and the administration had a military structure.[6] The king was called as Shanuy, and had an Assembly (Khuraldaan), which consisted of 24 chairmen, who were the heads of the Tumen (the highest unit that could mobilize 10,000 soldiers). The Shanuy was head of the Assembly and responsible for convening the Khuraldaan, launching laws and regulations as well as managing domestic and foreign policy. The Khuraldaan had two meetings in a year and the functions to elect the Shanuy, to decide questions regarding the taxation, jurisdiction and war. The Khunnu state had own financial resources derived from internal and external taxation, but detailed information about the tax system are lacking.

Ishjamts (1974) and Jugder (1987) argued that according to the territory, culture, tradition, economy and language the Khunnu is an ancestor of Mongolia. Khunnu was powerful state in central Asia and its territory extended from the Great Wall in south to the Baikal lake in north, and Il Tarvagatai in west as well as Korea Bay in east side.

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[4] For the period before 1990, the description draws particularly on the work of Sukhbaatar (2000), Rinchin (1996) and Chimid (2004) as well as Lhaashid (2009).

[5] "Xiongnu" is the modern Chinese pronunciation of Khunnu.

[6] The lowest unit of that hierarchical structure was Aravt with a capacity to mobilize ten soldiers, and the next level was consisted from ten lowest units and could mobilize 100 soldiers. The highest level was Tumen with a capacity to mobilize 10,000 soldiers, which was formed from ten 1,000s.

Mongolian Great Empire (1206-1634)

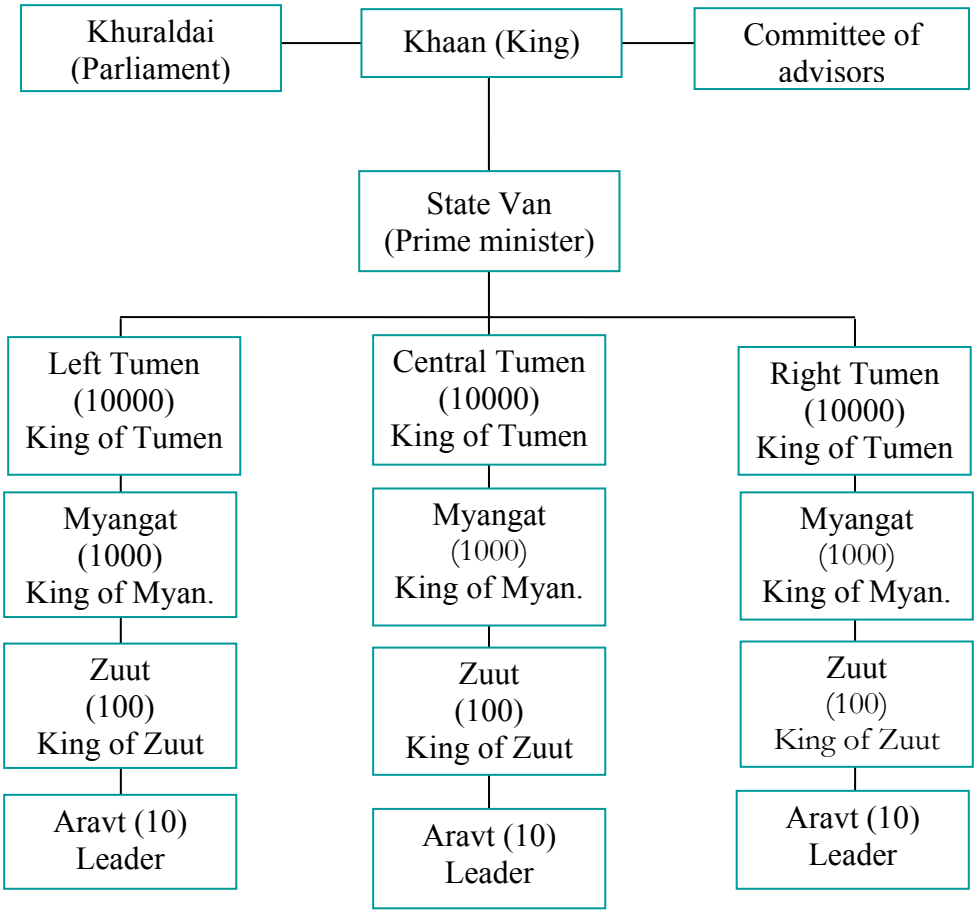
According to Lhaashid (2009) this period of Mongolian state can be divided into three phases, which are the Mongolian Great Empire (1206-1294), Mongolian Great Uyan Empire (1295-1370) and the United Mongolian Khaans' age (1370-1634). Within this period the Mongolian governmental structures were dominated by a hierarchical military system. In 1189 Temujin was enthroned as a king of the Mongolian Empire and reorganized jurisdictions into the thousandth structure.[7] The first assembly of the Khuraldai (parliament) was organized in 1206 on the river Onon. The Khuraldai declared the Mongolian Great Empire and titled Temujin as a Chinggis Khaan. It also passed the new Constitution of Mongolia, which was named "Ikh Zasag".

The law had about 54-57 articles and defined the authorities of the Chinggis Khaan and Khuraldai, organization and structure of jurisdictions, regulations regarding the taxation and custom duties. The head of the regions levied taxes to herdsmen and the volume of taxes were depended on number of population, cattle and economic capacities of the jurisdictions. According to the legal framework the regions had a partial legislative and administrative sovereignty.

Chinggis Khaan appointed 95 chairmen of the 1,000s, which were local government and as well as the second level of the hierarchical structure of the army. The lowest unit was tenths with a capacity to mobilize ten soldiers and horses in a crucial occasion. The next level comprised from ten cohorts and was named as 100s, and ten 100s were named 1.000s, respectively (see figure 4.1). Thus, during this period the Mongolian state was characterized by the military administrative structures based on a feudal system, and the further development of the jurisdictions was based on these military units.

[7] Myangat was the basic jurisdictional unit with a capacity to mobile thousand soldiers and consisted of ten 100s.

Figure 4.1: Governmental Structure of the Mongolian Great Empire, 1206-1634



Source: Based on data from Gaadamba (1990).

Chinggis Khaan had a Committee of advisors and the Khuraldai as well as the State Van (prime minister) for the administration of the governmental affairs (figure 4.1). The Khuraldai had a regular meeting every three years, and was responsible for the domestic and foreign policy, defense, and some state services. The Khuraldai also set the tax rate and bases. The main issues of the domestic policy were to define the administrative units, formatting the government structure, establishing public services, launching and executing law. With regard to the foreign policy Khuraldai has made decisions for introducing diplomatic relationship, giving equal rights for the religions, keeping trade roads (silk road) and encouraging foreign trade, cultural exchange, protecting its borders and citizens, as well as managing subordinated nations.

The function of the lower units (10s and 100s) of the local government was purely for war and army purposes, while upper units (1,000s and 10,000s) were organized as administrative units with territories and citizens under the administration of their respected nobles. So, the two upper units (Tumen and Myangat) were the real local governments or jurisdictions characterized by

their territory, citizens and administration. The nobles of the 1,000s and 10,000s were appointed by Chinggis Khaan. For instance, the Chinggis Khaan's resolutions stated that "Khoorchi should administer the Tumen (10000s), which consists from three 1000s of Toorin and Takhai Ashsig[8] with Adargani Chinos Toolis and Telegnud Aimag along the river Erchis" (Chimid, 2004). This resolution illustrates many characteristics of the jurisdictional structures of that time. The social system was a feudal one, hence the military character was diminished with the lords' ownership and the soldiers became vassals. By the variation of time family (Otog and Aimag) based arrangements were established in Mongolia.

Manchu Occupation Period (1758-1911)

After the collapse of the Mongolian Great Empire (1206-1634) step by step Mongolia was conquered by Manchu[9] from 1634 to 1758 and the country was completely administered by Manchu Chin Dynasty from 1758 until 1911. During this period the basic jurisdictional unit was named Otog (clan),[10] which was succeeded from the 1,000's structure. In the 16th century for instance, Tsahar Tumen had eight Otogs, North Mongolia seven Otogs, and South Mongolia five Otogs (Dalai and Ishdorj, 2003). During this period there were also jurisdictional units called Aimag, which was a lower unit of Otog. As noted in historical books, in every historical period of the development Aimag was a jurisdictional unit in Mongolia, however, its function and structure was changed by the time to time. From the second half of the 16th century the jurisdictional unit Khoshuu became dominant, which was organized by consolidating Otogs. This Khoshuu system was dominated for about 380 years in the Mongolian state administration and after the people's revolution it was reformed into Soum.

The policy of the Manchu Chin state was focused on the fragmentation of the Mongolian government with the purpose to weaken its power. Thus, at the end of the 18th century the central Mongolia had 86 Khoshuu and the inner Mongolia had 49 Khoshuu. This structure remained until the end of the Manchu Chin occupation period (Chimid, 2004). This jurisdictional structure was based on the old military administrative system. The Khoshuu[11] was the basic administrative unit and divided into Soums, and some Khoshuu had only one, while others about 10 Soums. Thus, the Khoshuu was the local government in the Mongolian jurisdictional structure until the socialist period.

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[8] "Takhai Ashig" is the name of the Myangats' king, and the resolution proves that Myangat (1000) were unified into the Tumen (10,000).

[9] South Mongolia was occupied at first in 1639, Central Mongolia in 1691, Blue lake Mongolia in 1723 and West Mongolia in 1758, respectively.

[10] Otog means a family or fireplace in Mongolian language, but in 15th century it was also jurisdictional unit with territorial base.

[11] Myangat was transformed into Khoshuu.

The outer Mongolian government structure in the Manchu Chin Dynasty was divided into five administrative levels, which are the Aimag, Khoshuu, Soum, Otog and 10 yurts.[12] The Manchu state passed and executed law named "Organizing the Soum thinking about the man" in Mongolia. The paragraph 146 of the law stated that "Families with 150 men in age from 18 to 50 would call a Soum in the Khoshuu, and the leader, deputy, and six chasers were appointed, while six Soums should have a chairman." Thus, during the Manchu occupation period, Soums had rather a military organizational character than an administrative one.

Monarchy Period (1911-1921)

The jurisdictional structure remained unchanged as in the Manchu occupation period and the basic administrative units were the Aimag and Khoshuu. The Aimag had an Assembly consisting of Aimag's Khan and Khoshuu Noyon (governors) as representatives of the respected administrative units and executing functions such as distributing tax revenues to the Khoshuu, appointing Khoshuu governors, and providing public services (transport, post, and defense). The Aimag had no taxing autonomy, while Khoshuu had revenue and legal sovereignty.

Socialist System (1921-1990)

After the people's revolution, the Mongolian jurisdictional structure was going through a wide range of reforms transforming predominantly military structures into a civil jurisdictional structure. This transformation can be divided into four phases regarding the basic qualitative changes.

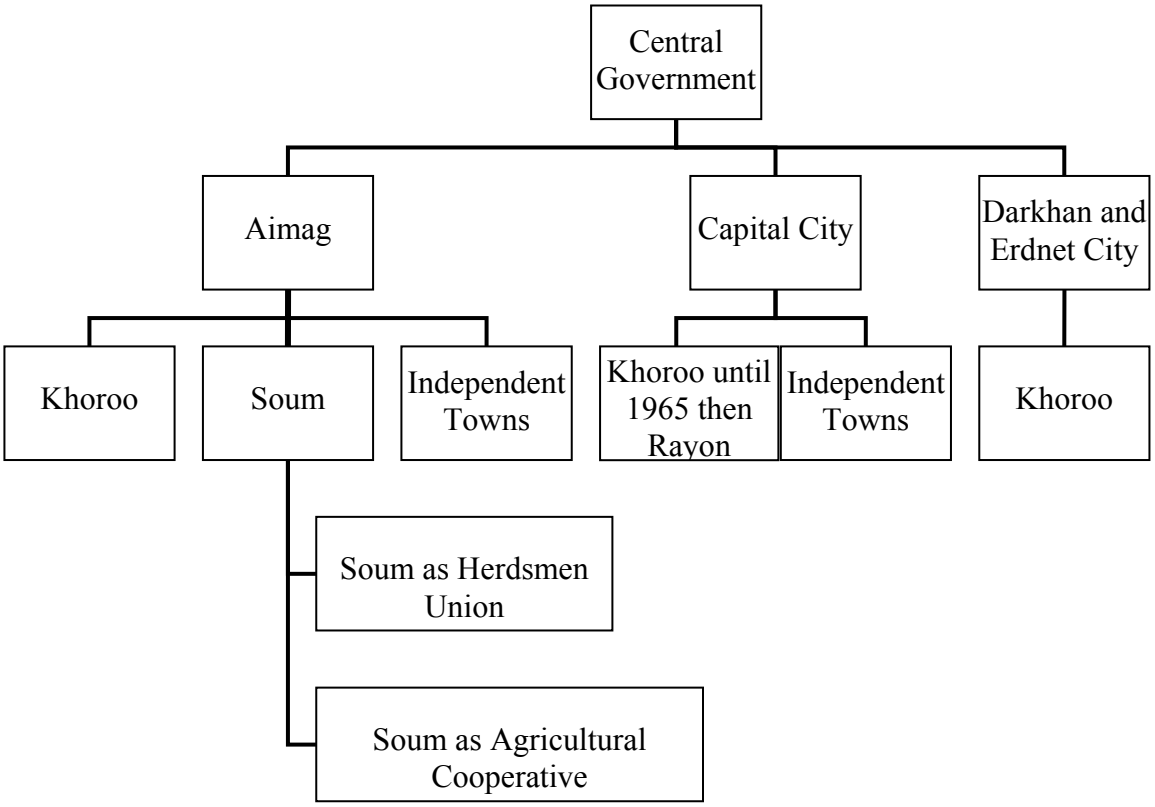
The two important modifications have been made during the first phase of a reform (from 1921 to 1923). The Aimag Khans became elected officials instead of the inherited status by the "Statute for the Limitation of the Van and Gun's Powers" passed in 1921. The dominant legislative authority was the Ardiin Ikh Khural (People's Great Assembly or Parliament) and Khoshuu also had own People's Assembly. The governor of the Khoshuu was appointed by the Khoshuu Assembly, and the central government representative body was appointed separately with functions to implement or to introduce governmental policies.

During the second phase of the reform (from 1923 to1931) the Soum was reformed as a middle jurisdictional levels consisting of 150 families, which had an own Assembly and a Soum governor was elected by this assembly. The basic function of the Soum was to work as an intermediate between the upper and lower government levels for the implementation of the state policies. By the "Mongolian Jurisdictional Statutes" of 1923 the Mongolian

[12] Yurt is the traditional nomadic dwelling with rounded building used by Mongols and Central Asian nomads.

jurisdiction was divided into five levels, which are Aimag, Khoshuu, Soum, Bag, and Arvan. The Bag (community) consisted of 50 families and functioned to provide primary information about population and livestock (census data), and the Bag governor was elected by referendum. The Arvan consisted of ten families and the leader elected by the ten families meeting and had a function to assist the community leader and collect taxes. The reform of this period was entirely focused on Soums while the next reform step was focused on the capacity building of Aimags.

Figure 4.2: The Jurisdictional Structure of Mongolia, 1960-1990



Source: Chimid, 2004, p. 39.

During the reforms of the 1931-1952 eight Aimags were reorganized into thirteen and the Khoshuu were abolished and new Soums were established. The Aimags had own centers, where public services such as education, health and culture were provided. Soums basically were reorganized, establishing the herdsmen's unions and agricultural cooperatives. In general, the reform of this period can be defined as a transfer from nomadic structure into the settled jurisdictional structure.

The resolution of the conference of the Mongolian Peoples Revolutionary Party in 1959 stated that *"The practical life has proved that Soums should be integrated into the herdsmen's union and the Soum governor should be combined with unions' director. Thus, the director of the herdsmen union and Soum governor will form one administrative body…Hence, our primary production and jurisdictional unit is Soum."* It means that Soums were

reorganized as the primary production and jurisdictional units, which completely changed their essence, as it can be seen from figure 4.2. As a result of this reform at the Soum level the professional body of the state administration was completely eliminated and replaced by business and party functionary without administrative capacities and experiences. Thus, local governments have lacked professional capacities and the local institutions remained underdeveloped until today.

Transformation into Democratic Government (1990 until to date)

The new Mongolian Constitution was adopted in 1992 and provides the legal foundation for the government structure. The constitution stated that "Mongolian government should be divided into Aimags and Capital city, and Aimags are subdivided into Soums, whereas the Capital city is subdivided into districts, and Soums are subdivided into Bags, while districts are subdivided into sub-districts (Khoroo)". The idea of this statement in the constitution of 1992 was to make a radical change within the jurisdictional structure in order to correct distortions, which were the result of the socialist reorganization. But the only new element was the recreation of Bags.

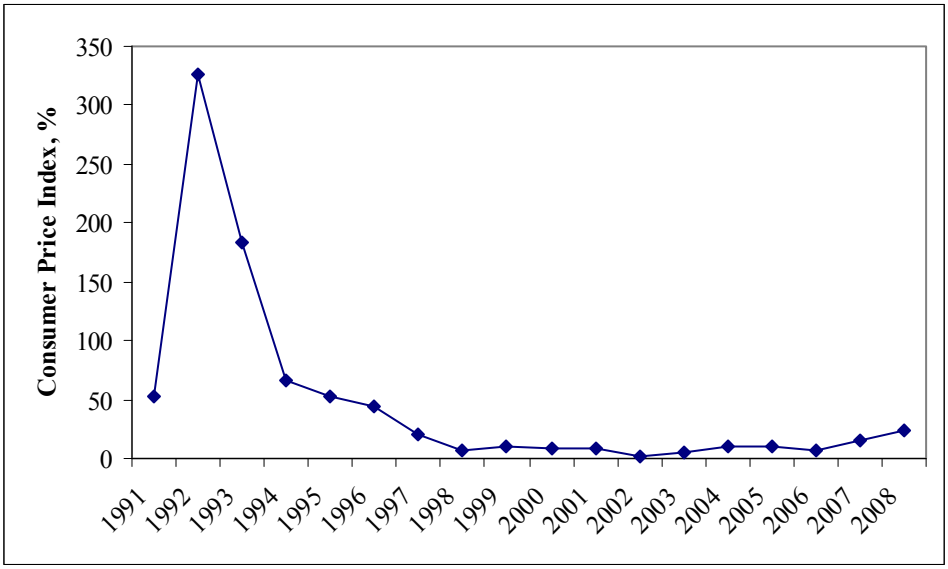
The Constitution also defined that "Aimag, Soum and district are economic, social and jurisdictional units (subjects) with own functions and self-governance". This is another new approach so that many small Soums should be integrated on the basis of their economic, social and natural characteristics. By the resolution of 1994, the cities of Darkhan and Erdenet were reorganized as Aimags and the Aimag centers got the Soum status. As a result, Mongolia has 21 Aimags with 329 Soums and 1559 Bags, and the capital city has nine districts and 117 sub-districts.

4.2 Reform Efforts in the Government Sector

4.2.1 Economic Development

Mongolia is a large landlocked country covering an area of 1.5 million square kilometers with a population of about 2.6 millions people, having an almost homogenous population with some small ethnic minorities. Since 1990 Mongolia has started the transition towards market economy and democracy, and during the first five years of the transition process the macroeconomic situation was unstable and the economy was in recession. In the following years Mongolia has implemented a number of policy efforts to improve governance as well as economic growth and currently Mongolia is named as one of the "rapid reformers" in the group of the transition economies.

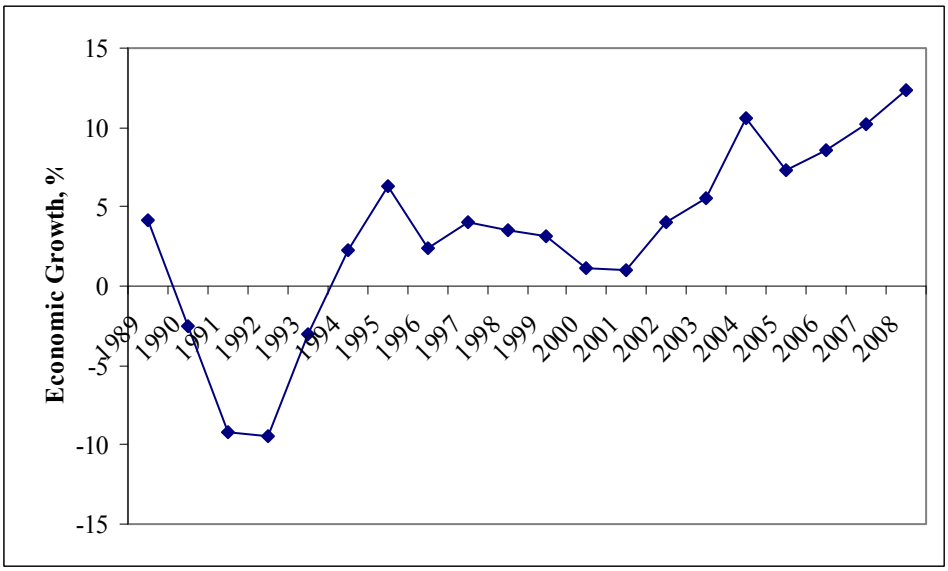
Figure 4.3: Inflation Rate in Mongolia, 1990-2009



Source: Data from annual report of Mongol Bank, 1991-2009.

In the period from 1991 to 1993 prices were liberalized, trade barriers lowered, state owned enterprises privatized and a tight fiscal and monetary policy was implemented. As a result the economy was stabilized: the inflation dropped from 325 percent in 1992 to 57 percent in 1995 and the growth process took place since 2000 (figure 4.3 and figure 4.4).

Figure 4.4: GDP Growth in Mongolia, 1989-2009

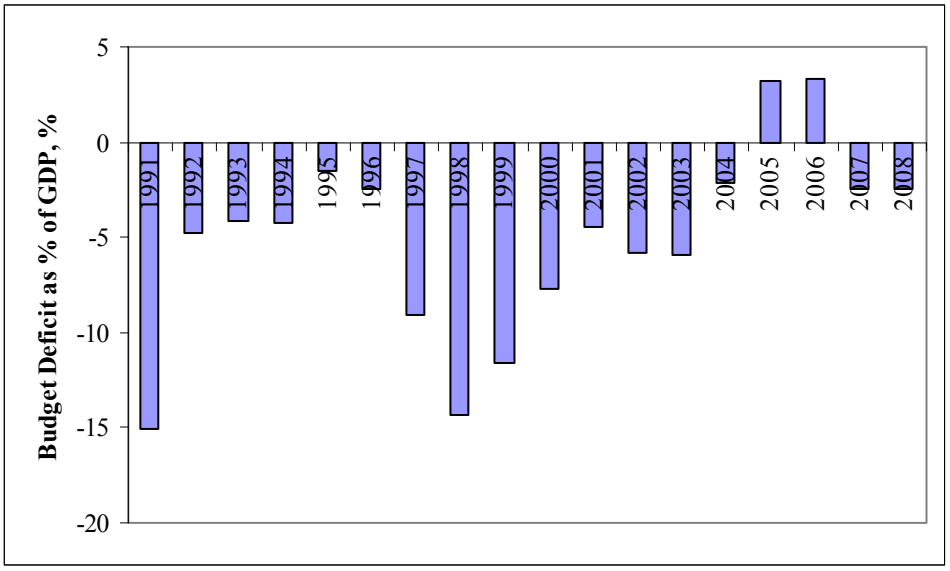


Source: Data from Statistical Year Book of Mongolia, 2000-2009.

The size of the public sector dropped from 51.8 percent of GDP in 1993 to about 34.4 percent in 2000. Mongolia's real GDP growth turned positive at 2.3 percent in 1994 and reached a peak level of 12.4 percent in 2008 (see figure 4.4). The overall budget deficit dropped from 14.7 percent of GDP in 1993 to 2.1 percent in 2004, and in 2005 and 2006 a surplus was observed

(see figure 4.5). The debt to GDP ratio more than doubled from 41.1 percent in 1995 to 93.9 percent in 1999 but since then it was decreasing as a consequence of the surpluses in the 2005/2006 and is currently slightly increasing again.

Figure 4.5: Budget Deficits as Percentage of GDP, 2000-2009



Source: Data from Statistical Year Book of Mongolia, 2000-2009.

Mongolia's macroeconomic transition to a market economy was quiet successful in the first five years. However, unfavorable external condition, harsh weather and weak public expenditure management eroded most of the stabilization gains (Government of Mongolia, 2003). The size of public sector remained too large and continued to expand. The resource allocation of the public sector has concentrated on cash transfers to the population and was inefficient in terms of service provision.

For restoring growth and improving public sector outcome Mongolia was confronted with triple challenges, which are to avoid deficits by strengthening public finance, to discipline the allocation of public spending across the jurisdictions, and to improve efficiency and effectiveness of the public service provision (Enebish, 2004).

4.2.2 Recent Reform Efforts

Since 1990 decentralization has been part of Mongolia's reform agenda. The "Management Development Program" of 1992 decentralized the political system and created management capacity at the local level of government. The "Public Service Law" of 1999 defined the tasks and directions of the public service system and Mongolia's reform policy on the "Trends and Structure of Government Activities" clarified the structure of authorities and functions of the central government. In 1991-1996 the central government

tried to maintain macroeconomic stability, and responsibilities for the service provision were increasingly shifted to the lower levels of government, however, ability to raise revenues and local capacities were limited at the local level. Local government share in the consolidated government expenditure rose to 35 percent, while the local share in the consolidated budget revenue decreased to 23 percent in the mid-1990s. All these decentralization efforts have been concentrated on the administrative side of the government and little efforts have been made towards fiscal decentralization. As a result Mongolia became a de-concentrated state with fiscal centralization.

Despite the elaborated rules and regulations for the management of public resources, informal practices were significantly different before the reform of 2003. Both, IMF and WB, recognized in their studies a weak financial discipline in Mongolia and identified many causes including lack of commitment to achieve such a discipline: a unreliable, unstable and unpredictable budget management framework, the violation of budget rules, a weak budget preparation process lacking hard budget constraints, and the lack of control of the government cash payments by the Ministry of Finance (MoF).

In order to address these issues, the Mongolian government undertook the next stage of reforms, which included series of measures to enhance the budgeting process, such as increasing transparency, linking policy priorities with budget resources, rationalizing the system of norms, introducing a Treasury Single Account (TSA) system, and improving the reporting system. These reform measures were based on the concept of New Pubic Management and legalized by the Public Sector Finance and Management Law (PSFML), which was passed in 2002 by Parliament. According to the PSFML, most social services were assigned to the central government and the service provision tasks were delegated to the local governments. Consequently, Mongolia remained a de-concentrated state with fiscal centralization and local governments neither had significant revenue raising powers nor control over the intergovernmental transfer system.

In a nutshell, decentralization in general and fiscal decentralization in specific has followed a top down approach being implemented slowly and without any integrated decentralization strategy. So far decentralization has remained incomplete. Thus this section makes an empirical analysis for the intergovernmental fiscal relations, and defines the basic problems at the jurisdictional levels, which are the key factors to the successful decentralization policy. Then policy proposals are developed to promote reform processes in the areas under consideration.

4.3 Structure and Scope of the Government Sector in Mongolia

The institutional and legal framework for intergovernmental finance defines the structure of government, and designs incentives for interaction between different levels of government. The effective intergovernmental system requires that all levels of government are clearly defined. Thus this section gives a description and assessment of the government structure in Mongolia and on this basis some policy recommendations are developed.

The unique character of Mongolia must be described before starting with the analysis of the government structure that afterwards to consider in the policy recommendations. Mongolia is a country with vast territory and very small population, where an urbanized and nomadic culture coexists, having an open minded population with very high literacy and education levels.

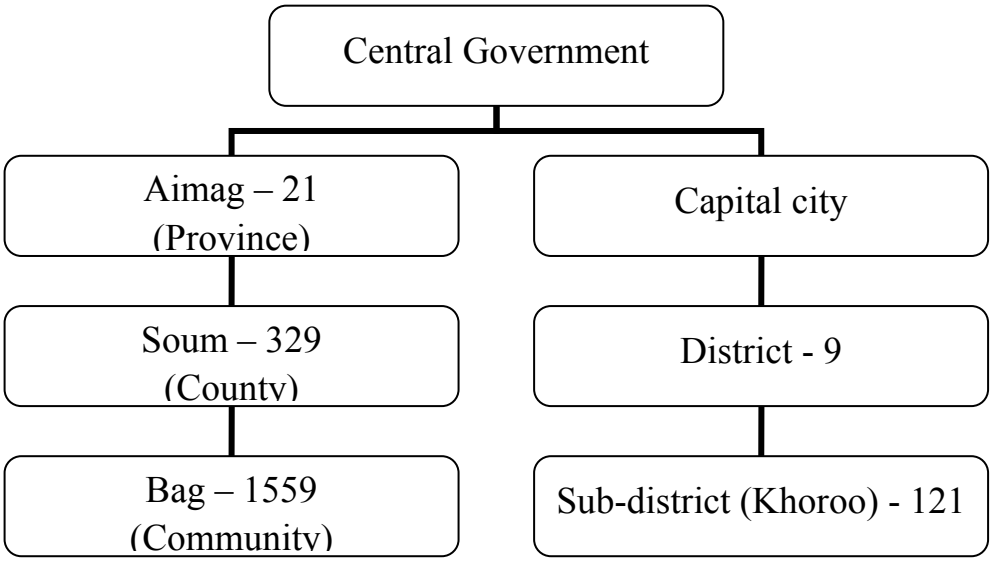
4.3.1 Sub-national government structure

Mongolia's constitution, which was adopted on 13 January 1992, provides the legal foundation for the government structure. Mongolia is a unitary state with central government and three levels of sub-national governments. As defined by IMF (1986) the provincial or regional bodies are "governmental units exercising a competence independently of central government in a part of country's territory that encompasses a number of localities". Following this definition the upper level of sub-national government has a provincial status for Aimag and Capital city. The provinces are subdivided into Soums and the Capital city is divided into districts, which are local governmental units. The lower layer of local government consists of communities, which are Bag[13] (rural sub-district) and Khoroo (urban sub-district). As a result, Mongolia has 21 provinces with 329 Soums[14] and 1559 Bags; the capital city has nine district and 117 sub-districts. The Capital city and provinces are intermediate tears of government, and Soums are local governments. Bag and Khoroos are the lowest formal administrative units (see figure 4.6). According to the Constitution, the administrative and territorial units of Mongolia are organized on the basis of both, self-governance and state administration. The system of intergovernmental fiscal relation is based on the Constitution, the law on Administrative and Territorial Units (LTAU), and the PSFML.

[13] Soum is the rural district equivalent to a county and Bag is the rural sub-district, which is the community level.

[14] In the Statistical Year Book of 2007 there are 331 Soums, but some Soums were reorganised in Khubsgul and Bayan-Ulgii respectively, so that there are 329 Soums at the moment.

Figure 4.6: Current Jurisdictional Structure of Mongolia



Source: The Law on the Territorial and Administrative Units of Mongolia, 2006.

The highest legislative body is the national parliament, the State Great Khural. Self government is vested on the Assembly (Khural) of the jurisdiction, which is a democratically elected representation of the local citizens for a four years legislative period. The executive body of Aimags and Soums are governors, who are nominated by the respective Khurals and appointed by the next level of government. The prime minister appoints the Aimag and Ulanbaatar (Capital) city governors. Correspondingly, Soum and Khoroo governors are nominated by their respected Assembly and appointed by the Aimag governors.

Provincial (Aimag) Level

Aimags in Mongolia are a de-concentrated tier of central government, which were formed on the basis of the former structure of the socialist period. As mentioned before, Mongolia has 21 provinces with a mean population of about 70,000 inhabitants and an Aimag consists of 18 Soums in average. Aimag governors run the local administrative organizations, play the role of local representatives of the central government, and serve for the term of four years. Governors make, implement, monitor, and evaluate local policies. In addition, Governors' offices also provide administrative services such as civil registration, and issuing licenses and permits. Local governors can veto the decisions of the Local Assembly. They are general budget executors with authorities to spend resources available to them, however they do not have any decision making powers regarding the local taxation.

Table 4.1: Assembly Size in Mongolia (by Number of Populations)

Population	Number of representatives	
Province (Aimag)	to 50,000	25 members
	50,001-90,000	30 members
	90,001 and more	35 members
Capital city		40 members
Soum	to 2,000	15 members
	2,001 - 9,000	20 members
	9,001 and more	25 members
District	to 20,000	21 members
	20,000-80,000	25 members
	80,000 and more	35 members

Source: Based on Constitution and LTAU of Mongolia, 2006.

According to the Constitution, the administrative and territorial units are organized on the basis of both, self governance and state management. The Aimag Assembly is elected by local citizens and the size of the Assembly varies with its population (see table 4.1). The basic functions of Aimags' and Soums' Assemblies are to serve as representative bodies of the local people, to pass regulations for their respective political and administrative jurisdictions, to monitor the local administrative bodies, and to approve the budgets of their respective Aimags and Soums as well as control their execution.

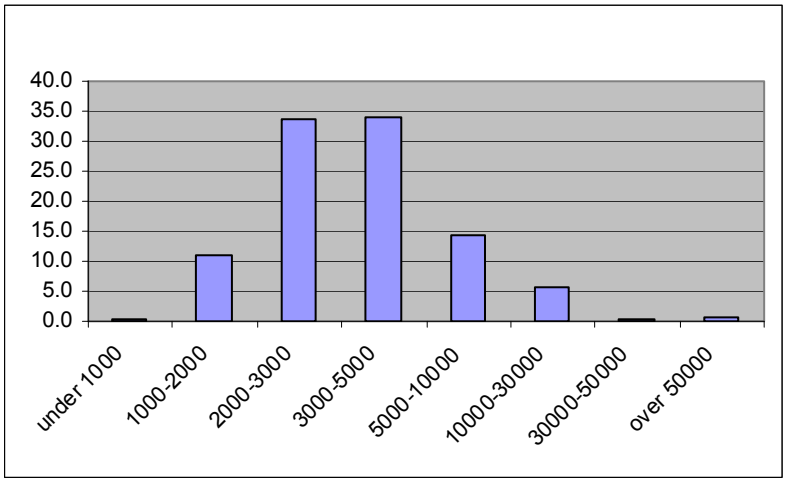
The Capital city of Mongolia is Ulaanbaatar, and it has a unique status defined by the Law about Legitimacy of the Capital city. Ulaanbaatar is subdivided into nine districts, which are equivalent jurisdictional levels to the Soum. The Capital city has own property within its boundary and has an independent budget. The Capital city's governor is appointed by the prime minister as nominated by the city Assembly (Khural). The city Khural has an authority for regulating migration, public services, transportation and communication, and can veto against the establishment of economic entities affecting the environment.

County (Soum) Level

The local government level in Mongolia is formed by the county or Soum level. The Soum governance structure includes Soum Assembly and the governor. Mongolia has 329 Soums with a mean population of about 4.600 people, but about 79 percent of the Soums have a population less than 4,600

(see figure 4.7). There are also Soums with a population less than 1,500 and most people of the Soums are nomads.

Figure 4.7: Distribution of Soums by Population Size Range



Source: Authors' calculation based on data from Statistical Year Book, 2000-2008.

Only few businessmen and public servants are living in the Soum centers. Rural Soums represent 93 percent of the total number of Soums and 42 percent of the national population. Therefore, most Soums are too small to be economically efficient, which means that no economies of scale for the private as well as the public services are to be observed in these areas.

The functions and appointment procedures of the Soum governor is similar to the Aimag level. The organizational structure for the Soum governor's office is defined by the Aimag governor, but salary funds and staffs are controlled by MoF. The Soum and district Assemblies are elected by their citizens and the size of the Assemblies varies from 25 to 40 representatives according to their population size (table 4.1). Soum Assemblies have an authority to decide the social and economic development of their jurisdictions.

Community (Bag) Level

The Constitution defines that Soums have to be divided into Bags, and districts into Khoroos (urban sub-district), and according to this statement the lowest and basic level of the jurisdictional structure are Bags and Khoroos in Mongolia. By the amendments of 2008 in the Law about State Service, the governors of Bags and Khoroos should be appointed by the respective Soum and district governors. Formerly they were nominated by Bag and Khoroo Assemblies and appointed by the governors of the higher level government. The government decision to appoint the Bag and Khoroo governor by upper level governor is a backward step, which illustrates the centralizing tendency in Mongolia.

The Bag as a community level plays a very important role within the Mongolian jurisdictional structure. Conceptually Bags should play an important role for the defining the local preferences and providing public services, deciding basic social-economic issues as well as organizing people's participation on self governance and implementation of the state policy for their constituencies within the territories. Since the Mongolian Great Empire the Bag was the lowest jurisdictional unit in Mongolia that consisted of ten, twenty and in maximum 100 families. The Bag was and to be the most suitable traditional unit for the jurisdictional structure in the country with vast territory and nomadic life style.

Table 4.2: The Amount of the Bag and Soum by Aimag, 2002

Aimags	All Soums	All Bags	Urban Bags			Rural Bags
			total	Aimag	Soum	
Arkhangai	19	99	24	6	18	75
Bayan-Ulgii	13	84	24	9	15	60
Bayankhongor	20	102	25	7	18	77
Bulgan	16	73	20	4	16	53
Gobi-Altai	18	82	10	6	4	72
Gobi-Sumber	3	9	5	5	-	4
Darkhan-Uul	4	24	16	18	-	8
Dornogobi	14	57	17	5	12	40
Dornod	14	65	27	10	14	40
Dundgobi	15	69	12	9	3	57
Zavkhan	24	113	30	6	24	83
Orkhon	22	19	17	16	1	20
Uburkhangai	19	108	29	8	21	79
Umnugobi	15	54	11	5	6	43
Sukhbaatar	13	67	25	8	17	42
Selenge	17	49	39	5	34	10
Tuv	27	102	33	6	27	69
Uvs	19	89	25	9	19	61
Khovd	17	91	28	10	16	63
Khubsugul	23	120	32	10	22	89
Khentii	11	83	25	8	17	58
Total	329	1559	474	170	304	1085

Source: Chimid, 2002, p. 93.

As table 4.2 illustrates, there are 1559 Bags and the Capital city with 121 Khoroos, hence, in total 1680 basic jurisdictional units in Mongolia. According to the population census, about one million inhabitants are living in the capital city and the rest of the population is living in rural areas. About 30 percent or 474 Bags are located in Aimag and Soum centers and about 70 percent or 1085 Bags are located in rural area with nomadic people (table 4.2).

Table 4.3: Comparison of the Quantity of Bags

Jurisdiction	The amount of bags			Difference	
	1950	1959	2002	from 1950	from 1959
Soum	323	260	329	6	69
Khoroo	10	32	9	-1	-21
Total	333	292	338	5	46
Bag	2740	1692	1559	-1181	-133
Khoring	141	190	121	-20	-69
Total	2881	1882	1680	-1201	-202

Source: Chimid, 2002, p. 92.

Table 4.3 illustrates the comparison of the Bags quantity in different periods of the Mongolian development and it demonstrates that the total amount of Bags in 2002 does not differ substantially from the situation about 50 years ago, however, during this period the population significantly increased. The amount of the Soums was increased from 1950 to 2002, while the amount of the Bags was decreased during the same period. As a result the Soums became smaller in size and Bags are enlarged.

The analysis of the Bags by their location, population, and economic conditions demonstrates that there is a huge variety of Bags in Mongolia. The smallest Bag in rural area consisted of 51 families (Tuv Aimag) and the biggest one of 368 families (Uvurkhangai Aimag).

There are also rural Bags consisting of 259 families while Bags, which are located at the Soum center, consists of 116 families (Tuv Aimag). In case of rural areas having more than 100 families and with vast territory it would be very difficult to manage services and deliver information as well as organize Assembly. Historicaly, the Bag is the product of the Mongolian culture and the traditional basic jurisdictional unit of the Mongolian state with socio-cultural roots, which evolved from the Mongolian Great Empire period.

In summary, according to the current jurisdictional structure Mongolia has a large number of small Aimags and Soums, which are very fragmented, but

Bags became larger in size, which is not suitable for the efficient and effective public service delivery in a vast territory with small population living in nomadic culture.

4.3.2 Shortcomings within the Existing Structure

A sound local government structure is an important foundation for a sound system of intergovernmental fiscal relations (Boex, Martinez-Vazquez & Timofeev, 2004). The overall sub-national government structure is appropriate and provides a clear division between the central government and provincial governments. However, current practices differ from the legislation in Mongolia. For instance, by law local Assemblies approve and execute the budget of the respective jurisdictions, in practice they are obliged to approve the budget as the governors submitted.

As mentioned before according to the Constitution and the LTAUs Mongolia are organized on the basis of both, self-governance and state administration. Thus the governors of the sub-national units have a dual function: as representation of the central government they implement central government policies at the sub-national level, and they also implement the decisions of their constituencies as represented by the local Assembly.

Due to the current legislation, Mongolia has a large number of extremely small local governments and this fragmentation could be detrimental for the ability of local government to deliver public services effectively. It should be noticed that most people in communities are living in nomadic life style and few small entrepreneurs and public servants are living at the Soum centers. Alesina and Spolaore (2001) stated that larger governmental units (by population size) can have benefits such as rely on more efficient form of taxation, economies of scale, and less costs for the uninsurable shocks. Thus the amalgamation of the Aimags and Soums as well as segregation of the Bags would result in a more effective jurisdictional structure, which supports efficient public service delivery.

To address the issue of fragmentation, the government of Mongolia has passed the Law on the Management and Regulations of the Regional Development in 2003 that aims to reduce the number of sub-national units in the country, and also has introduced a regional development program. According to this law Mongolia has formed four regions: the west region with five Aimags, the mountain region with six Aimags, the central region with seven Aimags, and the east region with three Aimags. By the law the regions should have a regional council and a regional centre. The head of the regional council should be appointed by the prime minister, and council members are the governors of the Aimags of that region. As defined in the law, the regional council is financed from the central budget. However, the regional council has

nor the status of jurisdiction and neither central government organization. Bolton, Roland & Spolaore (1997) noted that costs and benefits of the integration are not equally distributed among all members, hence a majority might vote against the amalgamation. The result of the referendum about the amalgamation of Aimags into four regions was negative, which proved the Bolton et al finding. Currently the regional development program is not effective in practice and the regional councils are existing more like symbols than having any political influence.

4.3.3 Reform Proposal

In order to have a sound system of intergovernmental fiscal relations, it is important to have efficient local governmental structures. Therefore, the Mongolian government should consider reforms in the structure of the local governments. In order to optimize the size and structure of the sub-national jurisdictions the implementation of the following measures are highly recommended. It is worth to note that these activities should take the historical tradition into consideration, which means the regional and local characteristics, topography and size of the territory as well as the preferences of the population. Such reform should concentrate on the following elements:

- Decrease the Aimags' quantity by amalgamating some Aimags from 21 (current quantity) to 10 so that the average population for one Aimag will be increased to about 140 000 inhabitants.

- Correspondingly, reduce the amount of Soums up to 200 by merging small Soums that the average population size for Soums can reach about 8000 inhabitants, which would be an economically efficient level for public as well as private production.

- In contrast to these measures, increase the amount of rural Bags (communities) in order to enhance service delivery at the basic units and improve activities of the Bag Assembly by motivating citizens' participation in the direct democratic process. The average size for a Bag would be more or less optimal if it comprises about 80 to120 families or 320 to 480 inhabitants[15] (Chimid, 2002).

- Redefine the number of the assembly's board members according to the new structures.

- Increase the frequency of the Assembly's meeting for a certain time period[16].

[15] Te average persons in families are 4.2 in rural area.

[16] By law the Assembly should have at least two meetings per year.

- All the above mentioned changes should be legitimized in a new law on self governance and local budget. In order to have an effective result of the change, it is necessary to develop a plan on the bases of a comprehensive survey including the territorial size, population density and movement, residency, ethnicity, infrastructure facility such as roads, communication, and energy supply.

4.4 The Expenditure Assignment in Mongolia

The expenditure assignment should be the first fundamental step to fiscal decentralization. The efficiency in the provision of the public services could be achieved at best with the concrete assignment of public tasks and the respective expenditures. Following public finance theory the distribution of government responsibilities among different levels of government belongs to the allocation function of government. In order to achieve the efficient resource allocation in the public sector, the expenditures should be assigned following the subsidiarity principle. However, there is no single best expenditure assignment at all, thus optimal expenditure assignment should be changed following the changes in costs and preferences.

The expenditure assignments in Mongolia were inherited from the centrally planned economy hence was very centralized. However, since 1990 reforms have made many attempts to shift responsibilities for spending decisions to the local level. This section describes the formal assignments of expenditure responsibilities as well as the actual spending between 2000 and 2008, evaluates the performance of the system of expenditure assignments, and then concludes with a summary and policy recommendations regarding the expenditure assignments.

4.4.1 Description of the Expenditure Assignment

The Constitution of Mongolia provides a broad assignment of functions for the territorial and administrative units and their governance. In this regards, the law states; “Local self-responsible jurisdictions resolve independently the socio-economic issues of the respective Aimag, Capital city, Soum, district, Bag and Khoroo, and organize the citizens’ participation on the decisions for national issues. The upper level bodies are not allowed to be involved into these issues being in the competencies of the local self-governing bodies.”

The LTAU provides detailed regulations of the administrative system, structure and competencies of the jurisdictions, and clearly defines the authorities of the Aimag, Capital city, Soum, district, Bag and Khoroo Assemblies, the authorities of the chairmen and board members as well as the authorities of the Aimag, Capital city, Soum, district, Bag and Khoroo governors. The PSFML entails detailed regulations connected with authorities

and responsibilities of the budget entities and officials with regard to the budget cycle and personnel management as well as the division of responsibilities for service provision among different levels of government.

Bag and Khoroo (Community) Level

The constitution defines that Bag and Khoroo Citizen's Assemblies have the authority to resolve socio-economic issues of the respected territories without any involvement of the upper level administrative bodies. According to the LTAU, Bag and Khoroo Citizen's Assemblies have the following nine authorities:

a) sending proposal for the nomination and resignation of the governor,
b) deciding assembly's organizational issues,
c) discussing and evaluating governor reports,
d) sending proposals to the Soum, district governor for the assistance, support and encouragement of the citizens,
e) sending proposals to the Soum, district governor for the tax exemptions of the families,
f) providing the execution of the basic rights of the citizens,
g) debating and sending proposal on the issues of the environmental protection,
h) other authorities in accordance with the law.

The constitution states that the governor implements the respected assembly's resolution and as representative of the central government has responsibilities to provide the law enforcement and implementation of the upper level administrative bodies decisions on his/her territory. As defined by the LTAU Bag and Khoroo governors have the authority in the following spheres: public order and safety, agriculture, health, food supply, education, social care and assistance, postal services, environment protection, fire protection and statistical data preparation. Their functions largely comprise the administrative support for the central government policies in the mentioned spheres and primary data collection on the community's socio-economic situation.

Soum and District (County) Level

Soum and district assemblies have an authority to debate and approve socio-economic issues of the respected jurisdictions other than within the authorities of the president, parliament, central government, ministries, agencies, and upper level assemblies, which is divided into three broad categories such as assembly's internal organization, monitoring and socio-economic development of the jurisdiction. The defined authorities include the approval of the general direction for socio-economic development of the respective jurisdiction, debate and approve Soum, district budgets upon the submission of the governor, monitor the tariffs for goods produced by locally owned enterprises,

set the rates for local taxes and fees within the limits defined by law, and manage locally owned properties.

The article 29 of the LTAU defines the general authorities of the Aimag, Capital city, Soum, and district governors'; the article 30 of the law defines authorities of the Aimag and Capital city governors, and the article 31 authorities of the Soum and district governors. Correspondingly, Aimag, Capital city, Soum and district governors have shared authorities in the spheres of finance, planning, tax collection, local property administration, agriculture, mineral resource and land use, construction, parks, transportation, road building, communication, energy supply, education, health, culture and sports, social security, sanitation, public order and safety. Instead of these broad authorities the Soum and district governors have the following authorities:

a) to manage Bag, Khoroo governors activities,
b) to appoint and resign Soum and district deputy governors with consensus of the Assembly's board members,
c) to resolve issues on land owning by individuals and business organizations according to the laws,
d) to distribute land according to the license issuance of the upper level authorities,
e) to organize the collection of the taxes and fees and to transfer them to the respected budgets,
f) to monitor sanitation of the service organizations in the territory,
g) to solve the question for building houses, changing roads and communication lines on the basis of the local citizens suggestions, provide services such as water supply, garbage collection, park maintenance, street lights,
h) to appoint and resign the staffs of the budgetary bodies with consensus of the upper level administrative bodies,
i) other authorities in accordance with the law.

Aimag and Capital City (Province) Level

According to the LTAU Aimag and Capital city assemblies have authorities defined in article 18 which are similar to the Soum and district authorities and also have specific authorities to resolve the bond issuance, decide realization and transfer of locally owned properties, privatization policy for local properties upon the governors' proposal, and other authorities in accordance with the law.

Aimag and Capital city governors have besides the general authorities defined by article 29 of this law the following specific authorities:

a) to manage Soum and district governors activities,

b) to appoint and resign Aimag and Capital city deputy governors with consensus of the assembly's board members,
c) submit, implement and develop infrastructure policy for the jurisdiction,
d) to make decisions with regards to the establishment of joint enterprise on the basis of the assembly's resolution,
e) to monitor and implement issues on defining land ownership, distributing land, mining and prospecting mineral resources in accordance with the law,
f) to administer defense, disaster protection and public order,
g) to register, inform and control the population movement,
h) to monitor the resolution of the Soum and district governors with regard to the consistency with the law,
i) to appoint and resign the head of the budgetary bodies with consensus of the respected administrative organizations if specified in the law,
j) to appoint and resign the heads of the locally owned or joint enterprises in accordance with the law,
k) to develop proposals for setting up protected areas in the respected jurisdiction and submit the proposal to the Assembly,
l) to determine and implement the per pupil variable costs for the schools according to the methodology issued by ministry of education,
m) other authorities in accordance with the laws.

As mentioned above, the PSFML provides the assignment of responsibilities for the budget institutions and disposers of all level of government. The law also distinguishes between pure responsibilities of local governments and those of central government responsibilities as well as the delegated responsibilities to the local level by the central government. Local government own expenditure responsibilities are financed from the local budget and delegated responsibilities are financed by the central government. The portfolio ministers[17] determine the output based budgets and expenditures in accordance with the government action plan and general guidelines for the socio-economic development. The general manager who is head of the state budgetary bodies delivers outputs and receives fund from the central budget in accordance with the contract made with the portfolio ministers.

The governors of the provinces are responsible for the delivery of the core local services and delivery of the delegated outputs, as well as raise revenue from the local sources. Governors of the Soums and districts are responsible for the delivery of the core local outputs and deliver central budget financed output to the province governors by contract. The functions contracted out to

[17] As stated in PSFML the portfolio ministers are line ministers and governors of the provinces and counties.

the local government level comprise the support for central government policies and key social services: education, health care, culture, labor, social welfare, and social security.

Among these broad areas of responsibilities, core local government responsibilities defined by PSFML include:

- sanitation and garbage collection,
- environment protection, renewal and maintenance,
- pest eradication and control,
- local road maintenance,
- sewage,
- flood barrier and soil protection,
- fire protection, prevention and mitigation,
- local public infrastructure facilities,
- fight and prevent from infectious diseases of animal.

Aimag governors have an authority to manage activities of the budgetary bodies and monitor the delivery of the output by contract while they do not have financial authority because the conditional transfers for financing social services are earmarked and prohibited to use the funds for other purposes by law.

As described above the Constitution makes a broad assignment of functions for the jurisdictional levels and their governance and it provides the legal foundation for the jurisdictions for deciding their own affairs. The LTAU assigns some specific functions to the Aimag and Soum government while other functions are assigned jointly to the Aimag and Soum levels. However, most public functions are assigned to the governors of the respected jurisdictional levels. So far, these legal provisions are quite ambiguous and have many duplicated assignments. They provide no guidance for resolving conflicts between Aimag and Soum governments on the assignments for the shared responsibilities mentioned above.

The next attempt for a more clear assignment of expenditure responsibilities was made with the PSFML, which was approved by State Great Khural (parliament) in 2002 and came into effect from January 1, 2003. The law distinguishes between pure responsibilities of local and central government and as well as delegated responsibilities to the local level by the central government. As a result the expenditure responsibilities for social services such as education, health, culture and sports shifted to the respective ministries. According to this law local expenditure responsibilities are financed from local revenue sources and delegated responsibilities are financed by central government. Therefore the law limits sub-national discretion on their socio-economic issues and service delivery, which contradicts with the authorities given by the Constitution and LTAU.

Table 4.4: The Assignment of Expenditures in Mongolia

Functions	Role and responsibilities by government level		
	Defining	Financing	Providing
1	2	3	4
General public services			
Parliament	Central	Central	Central
Government	Central	Central	Central
Local government	Central	Local	Local
Foreign relation	Central	Central	Central
Defense	Central	Central	Central
Public order and safety	Central	Central	local
Education			
Kindergarten	Central	Central	Local
Primary school	Central	Central	Local
Secondary school	Central	Central	Local
Universities	Central	Central	Central/local
Health			
Hospitals	Central	Central	Local
Health resorts	Central	Central	Local
Hygiene and Epidemiology	Central	Central	Local
Social protection and social welfare			
Social protection	Central	Central	Central/local
Social assistance	Central	Central	Central/local
Housing and community amenities			
Housing	Central/local	Central/local	Central/local
Sanitation and disposal	Central	Local	Local
Water supply	Central	Central/local	Central/local
Sewage	Central	Central/local	Central/local
Recreation and culture			
Recreation	Central	Central	local
Sports and culture	Central	Central	local
Information	Central	Central/local	Central/local
Economic affairs			
Fuel and energy	Central	Central	Central/local
Finance and economic activities	Central	Central/local	Central/local
Agriculture	Central	Central/local	Central/local
Mining and mineral resource	Central	Central	Central/local

1	2	3	4
Construction and road	Central	Central/local	Central/local
Transportation and communication	Central	Central/local	Central/local
Other economic activities	Central	Central/local	Central/local
Environmental protection	Central/local	Central/local	Central/local
Unclassified services	Central	Central/local	Central/local

Source: Authors' own estimation based on the respected laws and budget data on 2003-2008.

The *de jure* expenditure assignment in Mongolia generally complies with the general public finance principle that each level of jurisdiction should be responsible for expenditures within its geographical scope. The services which provide benefits beyond a single jurisdiction such as defense, foreign relation, postal service and civil aviation are assigned to the central government, and the services with local benefit areas such as sanitation, sewage, environment protection, and fire protection are assigned to the local jurisdiction. Correspondingly the services such as education, health, social welfare having benefits that are not only local but also national are shared tasks among the different levels of government.

The decision on expenditure responsibilities are very complex and should have the three important dimensions that must be considered in making assignments such as defining, financing, and providing the services. Table 4.4 gives an overview on the current situation in Mongolia based on law and existing budget data from 2003 to 2008. There are some expenditure areas in which two or three levels of government have shared responsibilities. However, most responsibilities on defining and financing public services are assigned to the central government and only service provision responsibilities at the local level.

In summary, according to the current legislation Mongolia became deconcentrated state with fiscal centralization. The existing expenditure assignment does not make differences between the responsibilities for funding, regulating and implementing expenditure programs. There are also many duplications and overlapping functions between different jurisdictional levels, which requires the reassignment of the expenditure responsibilities.

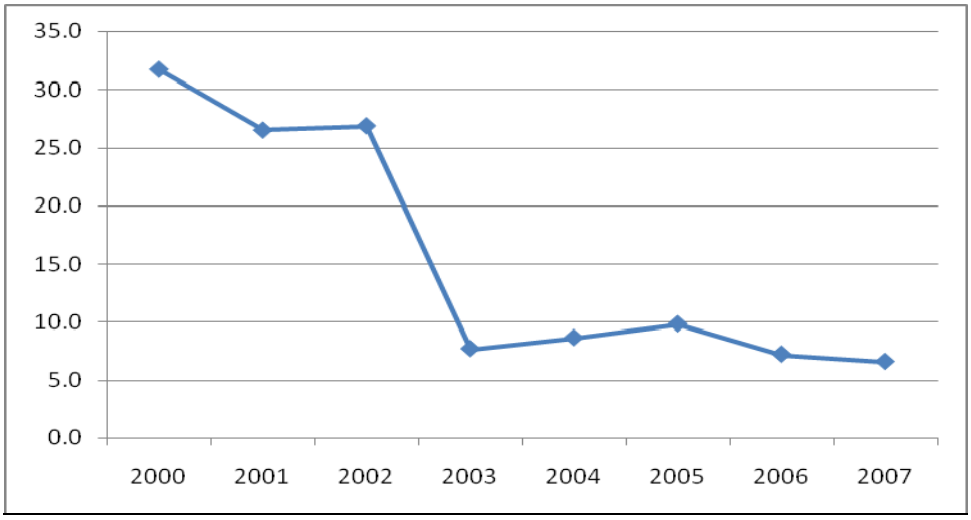
4.4.2 Degree of Expenditure Decentralization

In the literature different measures are used to investigate the degree of the centralization in the respective country. As already discussed above it is difficult to choose a fully satisfactory measure of the extent of decentralization because of theoretical problems and limitations on the data availability. The ratio of the sub-national expenditures as percentage of consolidated

expenditures, and sub-national expenditure as share GDP are used to measure the degree of decentralization in Mongolia.

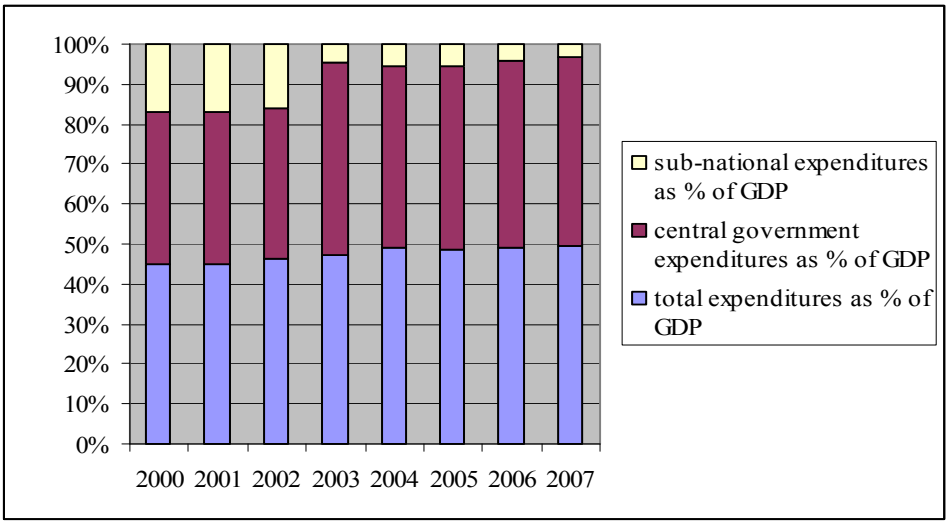
After the reform of 2003 the shares of local expenditures to total expenditures dropped sharply as a result of the relatively limited expenditure responsibilities assigned to the local level.

Figure 4.8: Sub-national Expenditures as Percentage of Consolidated Expenditures, 2000-2008



Source: Authors' calculation based on data from the Ministry of Finance.

Figure 4.9: Expenditures as Percentage of GDP, 2000-2007

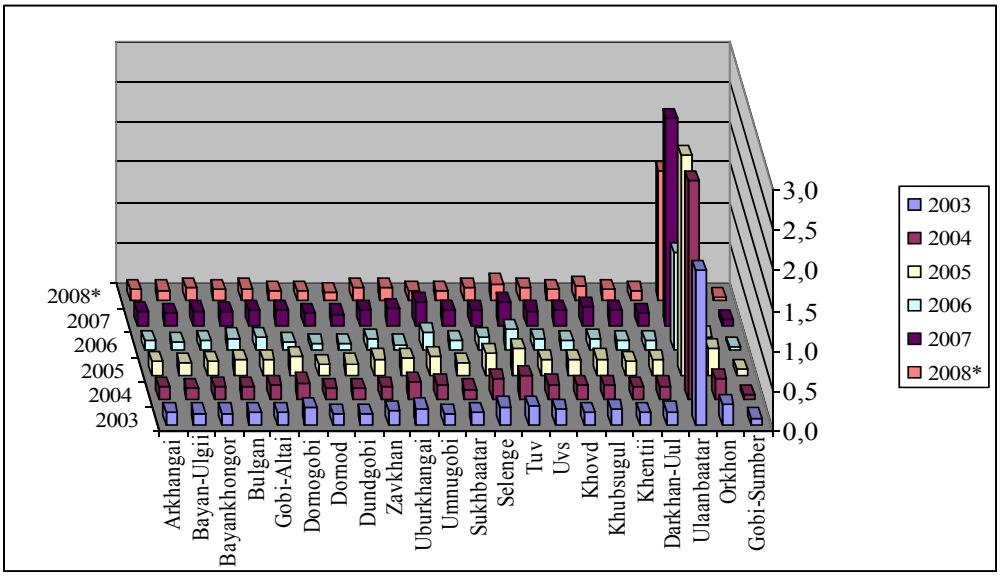


Source: Authors' calculation based on data from the Ministry of Finance.

This trend can be observed in figure 4.8 where sub-national expenditures as a percentage of consolidated expenditures sharply declined from 31.7 percent in 2000 to 7.7 percent in 2003. Sub-national expenditures as a proportion of GDP experienced also a sharp decline from 13 percent to 2.7 percent from 2000 to 2007, respectively, but have been relatively stable since 2003.

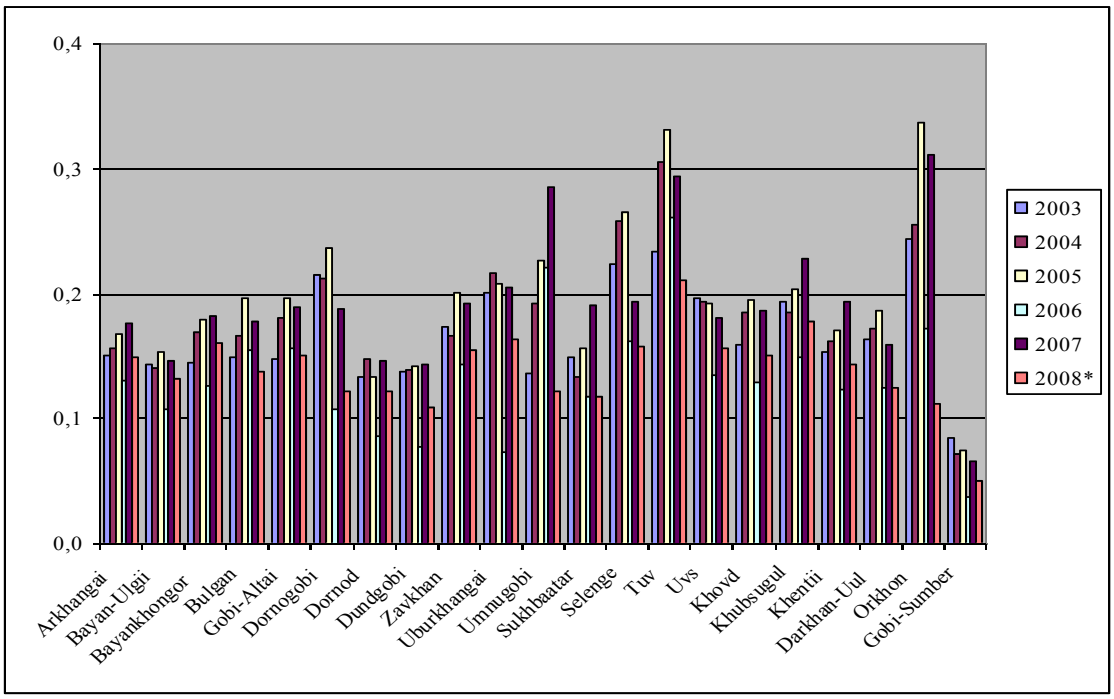
Consequently, the central government expenditures as a percentage in GDP increased from 29 percent in 2000 to 40 percent in 2007 (see figure 4.9).

Figure 4.10a: Aimag Expenditures as Percentage of Total Government Spending, Including Capital City, 2003-2008



Source: Authors' calculation based on data from the Ministry of Finance.

Figure 4.10b: Aimag Expenditures as Percentage of Total Government Spending, Excluding Capital City, 2003-2008



Source: Authors' calculation based on data from the Ministry of Finance.

A closer look for the breakdown of expenditures by the Aimag level is illustrated in figure 4.10a and 4.10b. The Aimag expenditures as share of consolidated government spending including the Capital city for 2003 to 2008

are illustrated in figure 4.10a, and the same data excluding Capital city illustrated in figure 5.10b, respectively.

The figure 4.10a indicates that over two-third of local government expenditures are accounted for Ulaanbaatar (Capital) city, most Aimag expenditure shares are less than 0.2 percent in consolidated government spending from 2003 to 2008 (see figure 4.10b). The Orkhon, Tuv, and Selenge as well as Umnugobi Aimags' expenditure shares are about 0.3 percent in consolidated government spending in the same period (figure 4.10b).

As mentioned before, the Mongolian government undertook the next stage of reforms to deal with a weak financial discipline, which included series of measures to enhance the budgeting process, increase transparency, linking policy priorities with budget resources, rationalization of the system of norms, introducing a TSA system, and improving the reporting system. These measures were based on the PSFML. According to this reform, most public service responsibilities including social services were shifted to the central government. Therefore, the sub-national expenditure shares in the consolidated expenditures are very small which illustrates a centralizing tendency of the government sector in Mongolia. Even though local public goods assigned to the lower level jurisdictions they are lacking of own revenues to provide these services.

Expenditure Patterns by Functional Classification

The shares at each level of government for major expenditure classifications are shown in table 4.5. The central government finances 100 percent of national defense, almost 100 percent of social security and assistance, energy and heating, mineral resource mining, manufacturing and construction expenses. The costs of other functions were shared by different levels of government before 2003. However, after the execution of the PSFML most expenses for the social services were shifted to the central government.

Sub-national governments financed about two-thirds of all expenditures in education and health in 2001 and 2002, then after the reform of 2003 these expenses were completely shifted to the central government. Similar trend are observed for the social safety and public order, which was financed by about 45 percent from the local governments in 2001 to 2002, then almost 100 percent of the expenses were paid by central government from 2003 to 2008. This large shift in the expenditure assignment in 2003 reflects the sharp decrease of the local government shares in the national economy. While the central government represented 72.4 percent of all expenditures in the national economy in 2002, by 2003 its share was increased to 94.3 percent.

Table 4.5: Distribution of Expenditures between Government Levels, 2001-2008

Level of government	2001	2002	2003	2004	2005	2006	2007	2008
Central government	72.08	72.40	94.33	93.28	92.90	95.73	93.24	95.36
Provincial government	27.92	27.60	5.67	6.72	7.10	4.27	6.76	4.64
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
General public services	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Central government	58.22	58.82	62.45	58.73	57.70	70.12	53.77	59.82
Provincial government	41.78	41.18	37.55	41.27	42.30	29.88	46.23	40.18
Defence	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Central government	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Provincial government	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Social safety and public order	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Central government	53.56	55.58	99.60	99.67	99.99	99.94	99.94	100.00
Provincial government	46.44	44.42	0.40	0.33	0.01	0.06	0.06	0.00
Education expenditures	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Central government	32.61	32.30	99.74	99.86	99.88	100.00	99.86	100.00
Provincial government	67.39	67.70	0.26	0.14	0.12	0.00	0.14	0.00
Health expenditure	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Central government	36.37	38.12	99.61	99.71	99.74	99.77	91.03	99.84
Provincial government	63.63	61.88	0.39	0.29	0.26	0.23	8.97	0.16
Social security and assistance	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Central government	98.97	98.89	99.96	99.92	99.93	99.90	100.00	99.93
Provincial government	1.03	1.11	0.04	0.08	0.07	0.10	0.00	0.07
Housing and community amenities	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Central government	26.48	14.30	40.89	14.16	12.49	19.80	23.07	21.22
Provincial government	73.52	85.70	59.11	85.84	87.51	80.20	76.93	78.78
Recreation, culture and sports	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Central government	57.59	58.25	92.63	90.00	92.68	96.89	96.91	98.08
Provincial government	42.41	41.75	7.37	10.00	7.32	3.11	3.09	1.92
Energy and heating	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Central government	98.74	99.19	98.99	99.47	99.62	99.56	98.16	99.71
Provincial government	1.26	0.81	1.01	0.53	0.38	0.44	1.84	0.29
Agriculture and forestry	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Central government	88.77	89.31	97.47	97.21	96.79	96.67	96.47	92.74
Provincial government	11.23	10.69	2.53	2.79	3.21	3.33	3.53	7.26

Government level	2001	2002	2003	2004	2005	2006	2007	2008
Mineral resource, mining, manufacturing and construction	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
Central government	100,00	100,00	100,00	100,00	100,00	100,00	100,00	98,02
Provincial government	0,00	0,00	0,00	0,00	0,00	0,00	0,00	1,98
Transportation, communication	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
Central government	95,80	94,39	83,43	76,32	69,88	87,37	94,83	79,38
Provincial government	4,20	5,61	16,57	23,68	30,12	12,63	5,17	20,62
Other economic activities	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
Central government	50,68	57,47	89,96	90,41	89,28	99,29	99,05	95,69
Provincial government	49,32	42,53	10,04	9,59	10,72	0,71	0,95	4,31
Unclassified services	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Central government	96,3	96,9	97,7	96,3	94,4	95,4	94,5	97,9
Provincial government	3,7	3,1	2,3	3,7	5,6	4,6	5,5	2,1

Source: Authors' calculations based on data from the Ministry of Finance.

Therefore, de-facto sub-national government supplies only four services, which are the general public services (40 percent), housing and community amenities (80 percent) and agriculture and forestry (4 percent) as well as transportation and communication according to the data from 2003 to 2008.

Table 4.6 presents the expenditures by economic classification of selected Soum and Aimag, and it illustrates that a large portion of the local expenditures are assigned to current spending, which accounts for more than 90 percent of total spending for Aimags, and 100 percent for the average Soum. Hence, no capital expenditures are assigned to the Soum level and only a small part (less than five percent of total spending) are assigned to the Aimag level, which is spent on capital and road repairs. With regard to capital expenditure responsibilities the investment decisions are made at the central level and maintenance, operation of facilities are organized at the local level, which creates many problems[18] at the local level and leads to inefficient service delivery. It is important to note that own revenues of the Soums and Aimags only cover the operational expenses of the respective governor's offices. The rest of the local government expenditures are covered by the provincial or the central government transfers, respectively.

[18] In the interview the governor of the Erdenebulgan Soum of the Arkhangai Aimag noted that the facilities of the new school building is too expensive due to the incompatible heating system for the regional condition, and there are many such cases in other Soums.

In average the composition of the aggregated provincial budgets remained relatively stable after 2003. However, the relative shares of the provincial governments varied substantially across the Aimags. The degree of centralization of the provincial finances was higher in those Aimags being mostly dependent on central government transfers, and relatively lower in the Capital and industrial cities, which provide the transfers to the other provinces.

Table 4.6: Aimag and Soum Expenditures by Economic Classification, 2002-2004

Types of expenditure	Bulgan Aimag	Uvs Aimag	Khentii Aimag	Dundgobi Aimag	Average Soum*
A. CURRENT EXPENDITURE	93.1	97.4	94.6	97.4	100.0
1. Goods and services	89.3	95.7	93.6	96.2	100.0
a. Wages and salaries	42.0	39.8	40.2	43.5	47.3
b. Social security contributions	10.8	10.2	9.8	10.5	12.0
c. Purchase of goods and service	36.2	45.7	43.6	42.2	31.8
c.1. Heating	10.8	11.2	14.0	12.6	9.3
c.2. Fuel and transportation	5.6	4.9	3.8	3.5	2.2
2. Subsidies and transfers	4.1	1.7	1.0	1.2	0.0
B. CAPITAL EXPENDITURE	6.9	2.6	5.4	2.6	0.0
a. Investment	3.2	2.6	3.4	1.1	0.0
b. Capital Repairs	0.4	0.0	1.6	1.5	0.0
c. Assets	1.3	0.0	0.4	0.0	0.0
d. Road Building and Repairing	2.0	0.0	0.0	0.0	0.0
TOTAL EXPENDITURE (A+B)	100.0	100.0	100.0	100.0	100.0

Source: Raich, 2005, p. 32.

Even though the PSFML defined the expenditure assignment to the different levels of government, it created the problem of unfunded mandates at the local level.[19] As a result of the execution of this law and the implementation

[19] The basic concept of the PSFML is the new public management that focused on result oriented budgeting, accrual accounting, and performance pay etc. The law supposed to support the decentralization process in Mongolia.

of the TSA[20] the sub-national budget autonomy is very restricted and local government became financially dependent from the central government. Hence, the unfunded mandates problem that imposes expenditure requirements on local governments without adequate funding is one of the major problems in Mongolia at the present day.

4.4.3 Discussion

The literature on international experiences suggests that there is no single optimal solution for the expenditure assignment, hence, the adequacy of the division of the responsibilities can be judged in accordance with the goals set up by the government in its decentralization strategy. However, there exist some general principles of expenditure assignment that can be used for the analysis of the expenditure assignments.As mentioned in the theoretical part the general objectives of fiscal decentralization include the efficient allocation of resources via responsive government, equitable provision of public goods, macroeconomic stability and economic growth.

The main criterion for effective expenditure assignment is the efficient service provision that the government satisfy needs and preferences of taxpayers as well as possible. This can be achieved at best by the "subsidiarity principle", which states that responsibility for service delivery should be assigned to that level of government, which has the best information on the preferences of their electorate as well as the involved benefits. Only if the local jurisdictions lack the necessary capacity to manage a task than the upper jurisdictional levels should be involved, too.

According to the current legislation most functions related to the public service delivery are assigned to the governor of the respected jurisdictional levels. PSFML makes a clear distinction between the pure local and delegated responsibilities. However, the existing expenditure assignments are not clear-cut and have many duplication and overlapping responsibilities among the different governmental levels. Thus, more clarity is needed.

The authority and responsibility for the key social services including education, health, and culture is clearly divided between the central and local governments, but these services are entirely financed from the central budget. The level of expenditures and service provision standards are established by the central government and only the provision of these services is assigned to local government. As a result of *de facto* assignment the local governments fulfill only very basic municipal functions and important local functions such as education, health and culture are under the command of the central

[20] According to this system the MoF transfers the budget to the account of the budget entities on monthly bases. As noted the local governors the revenue distribution from the MoF is not based on the local needs and creates difficulty in the financing.

portfolio ministers. Hence local governments act as de-concentrated agencies of the central government rather than as autonomous budget units, which leads to inefficient service delivery.

With regards to the capital expenditures the investment decisions are assigned to the central level, while maintenance and the operation of the facilities are assigned to the local level, which have also had a negative impact on the efficient service provision. The capital investment should not be in the exclusive responsibility of the central government, and it should be assigned to the different levels of government as for recurrent expenditures (Martinez-Vazquez, 1999). Thus further clarification of the assignments for the capital expenditures is needed. In addition the ownership of assets doesn't follow with the assignment of functions at the local level, which also became one of the important factors to the inefficient service delivery at the local level.

According to the theory of public finance local government should be responsible for allocation and central government should be responsible for equity and stabilization. The local governments usually would not be able to undertake effectively the functions related to the equity considerations, such as social welfare and housing for low income people, due to the mobility of the citizens. The services with benefits beyond the single jurisdiction are assigned to the central government while the services with local benefit areas are assigned to the local government in Mongolia. Correspondingly, defining the policy and financing responsibilities for the services with spill-over effects are assigned to the central government and only the service provision function is assigned to the local government. Thus, the existing assignment in Mongolia is in line with the principle of expenditure assignment in public finance.

There is no single best assignment, for instance in case of public services such as education and health the nature of services can be both local and national. Specifically primary education and primary health services may be local by the size of benefit area, however with the relevance in welfare and income distribution it can be national as well (Martinez-Vazquez, 1999). Therefore the best assignment is that which can change by time with the shift on costs and preferences. However, there is need for stable assignment for a given time period, and without the concrete assignment the intergovernmental fiscal relations will be unstable and public services delivery will be inefficient.

The public goods have a spatial limitation of benefit incidence, hence each service should be provided and costs shared in line with voters preferences. The benefit principle should be implemented to a possible extent through fee financing or benefit pricing that voters can evaluate the jurisdictional performance in comparison to the paid taxes, which is named principle of institutional congruency and connectivity (Petersen, 2008). In the current

expenditure assignment in Mongolia the beneficiary of the social services are local residents, but decision maker is central government, and taxpayers or voters are from different jurisdictions. Hence, it is nearly impossible to provide services according to the local preferences and link the expenditure and taxation for the local jurisdiction. In this case the central jurisdiction or ministers are responsible on the decision for supply and financing the social services, and local jurisdictions responsible for the administration of these services. Because of the institutional in-congruency and non-connectivity people have became discontent with the political system and developed mistrust in the government, what has damaged the fiscal responsibility of the local jurisdictions in Mongolia.

In decentralized systems the failure to establish clear assignments for each level of governments by law creates conflict between the central and sub-national governments and can lead to inefficient and ineffective service provision. In total, the current expenditure assignments in Mongolia do not violate the general principles of expenditure assignment. However, there exist overlapping in and duplications of responsibilities as well as problem of unfunded mandates, which creates unclear assignments and inefficient supply of public services. Therefore, the differentiation of the expenditure responsibilities by distinguishing defining, financing and providing of public services among government levels is needed. In addition the harmonization of the many laws, decrees, and departmental orders should be implemented. For this reason, it is highly recommended to conduct a comprehensive survey of the actual expenditure assignments at different levels in detail, in order to understand the actual expenditure assignments that have been working in the past years.

4.4.4 Reform Proposal on the Expenditure Assignment

From the economic and political science perspectives fiscal decentralization will improve resource allocation and accountability, which results in an efficient and effective supply of public goods and supports private markets. The expenditure assignment is a first and fundamental step for decentralization. It also would be a main criterion for the assessment of the revenue and tax assignment as well as the needs and effectiveness of the transfers. Thus Mongolian government should determine the decentralization strategy and set its goals clearly, then define the expenditure assignment, which best suits Mongolian tradition and national peculiarities by using general principles and best practices..

On the basis of the analysis the following policy proposals are recommended for the solution of the problems on the expenditure assignment in Mongolia:

- In order to solve the problem of vagueness and to obtain a clear distinction between decision making of the executive bodies, the interaction of the competencies between different levels of self governing bodies have to be defined and norms for the decision making process of the assemblies have to be clarified. For these reason the Law of Territorial and Administrative Units should be replaced by new law on Self Governance and Local Budgeting and the new law should include the following aspects of the expenditure assignments:
    - ✓ Due to the fact that Soums are too small and lack of the necessary capacity to manage public services efficiently Aimags can be proclaimed as local government.
    - ✓ Provide the condition so that each jurisdictional level to have a democratically elected assembly and governor.
    - ✓ Capital city, Aimags, and Soums should be provided an independent and predictable revenue sources.
    - ✓ Competencies of the assembly should be clearly defined on each jurisdictional level.
    - ✓ In order to solve the dual subordination problem in the education, health, and cultural sectors the competencies related to the service delivery should be shifted to the Aimag governor.
    - ✓ The assembly should be provided authorities on the defining, financing and providing local public services.
- Amendments in the State and Local Property Law should be made in order to provide conformity with the new Law on Self Governance and Local Budget with regards to the property ownership, particularly in case of education, health, culture, social safety and public order.
- Amendments in the Public Procurement Law should be implemented so that local governments have some authorities on the implementation of the investment decisions with regards to the local services.
- Discontinue the assignment of the some portion of the capital expenditures to the Parliament members, which is increasing in amount by each budget year.

Based on the reassignment of expenditure responsibilities, the tax sharing rates and transfers should be reevaluated to provide sufficient sources for those services being assigned to the sub-national governments.

The harmonization of the laws, decrees, departmental orders that effect and overlap expenditure assignments will be a more difficult tasks. Therefore, a comprehensive survey on the actual expenditure assignments should be conducted so that the regulatory power and responsibility for financing, as

well as service deliveries could be more decentralized. For instance, the roles of the central ministries such as education and health should be defined in the context of stronger sub-national level income e.g., for primary school and tertiary hospital.

4.5 Revenue Assignment

Once local governments are assigned to certain expenditure responsibilities, the second question to be addressed regarding the intergovernmental fiscal relations focuses on the revenue assignment. Governments rely on a wide variety of tax instruments for their revenue needs and the decision on tax assignment is important for the efficiency and effectiveness of the service provision. The important concept for the effectiveness of decentralization is the linkage between revenue raised and services provided by the local level.

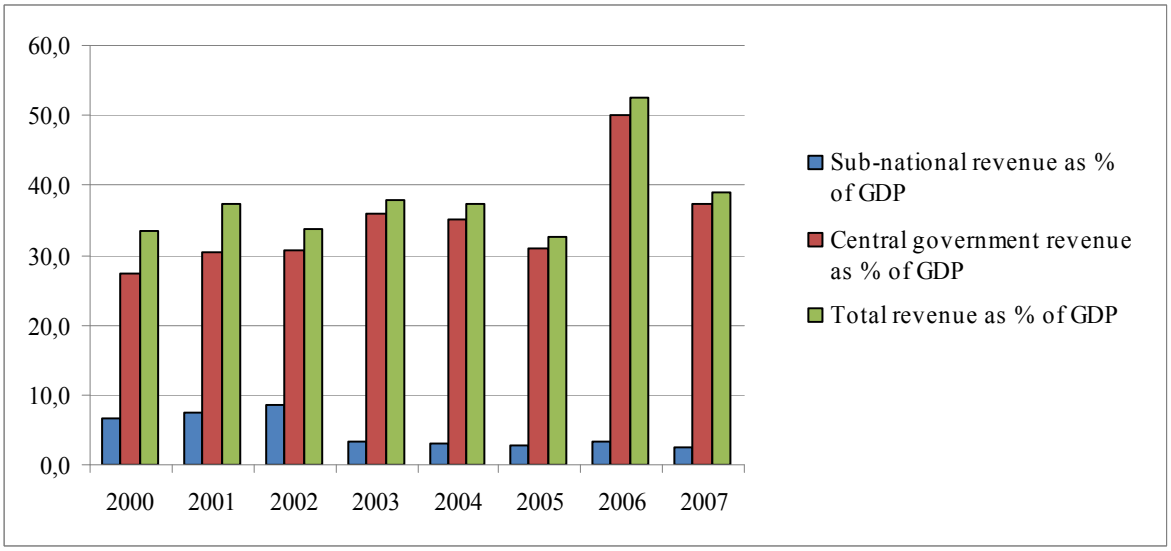
Therefore this section examines the issues in the revenue assignment among the different government levels in Mongolia. It includes the description of the current revenue assignments, an analysis of revenue collection trends and discussions of the problems in the current revenue assignments. Finally some policy recommendations for future reforms are developed.

4.5.1 Degree of Revenue Decentralization in Mongolia

Local government budget revenues comprise from own-source tax revenue (own revenue in the further text), non tax revenue and capital revenue as well as transfers. There also exists non budget revenue, which consists of funding from international organizations and donations from citizens and enterprises. The local government own revenues consist of local taxes and shared taxes in Mongolia. The latter comprise of VAT, royalties and license fee for mining and prospecting minerals and the former consist of PIT, property tax, vehicle tax, land payment, other taxes and fees. Non tax revenues are proceeds of dividends, rent, interest and fines, budget entities own revenue and other revenues. The capital revenues consist of income from the capital selling.

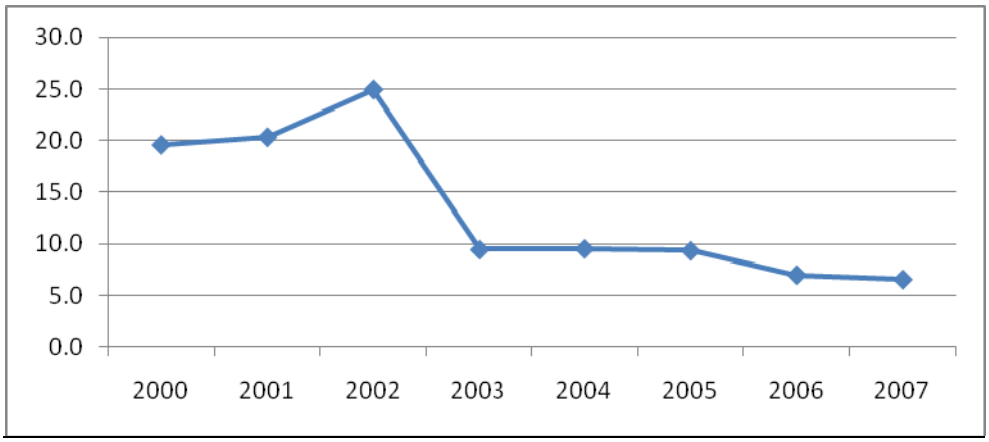
Figure 4.11 illustrates the aggregated sub-national revenues as share of GDP. The total budget revenues as share of GDP was increased from 33.4 percent in 2000 to 52 percent in 2006, while in contrast sub-national revenues as share of GDP were decreased from 6.5 percent in 2000 to 2.8 percent in 2007. The sub-national revenue as percentage of the consolidated revenue had the same dynamics as sub-national revenue as share of GDP (see table 4.12).

Figure 4.11: Sub-national Revenue as Percentage of GDP



Source: Authors' calculation based on data from the Ministry of Finance.

Figure 4.12: Sub-national Revenue as Percentage of Consolidated Revenue



Source: Authors' calculation based on data from the Ministry of Finance.

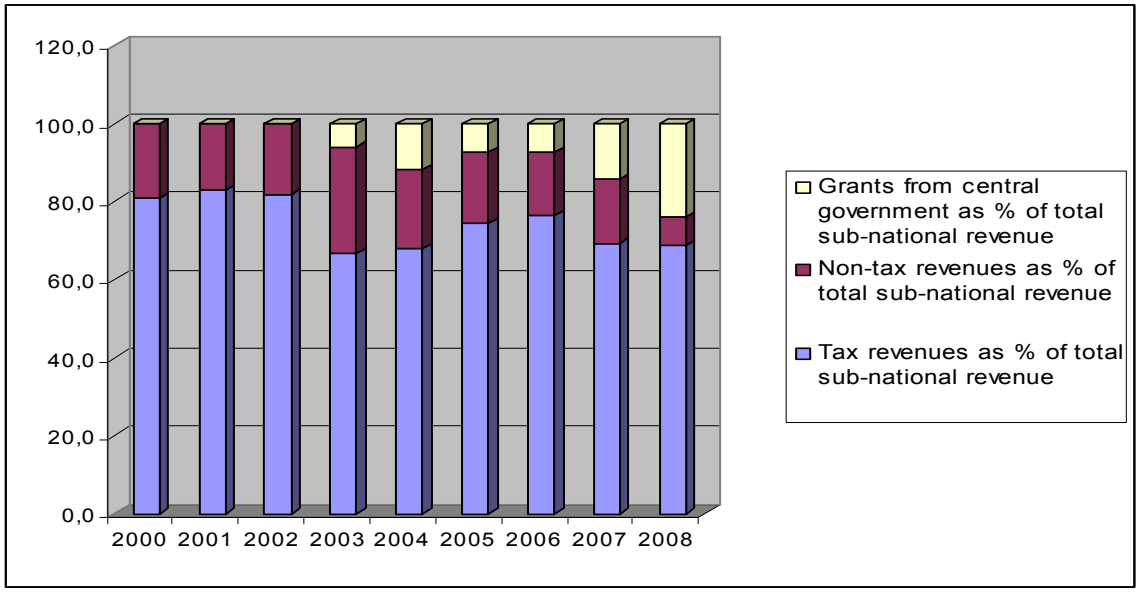
Table 4.7 illustrates the overall revenue and expenditure levels in Mongolia. The aggregated sub-national revenues accounted for 6.5 percent of GDP and about 19.6 percent of the consolidated budget revenues and were equivalent to 196.8 percent of total local government expenditures in 2000. The ratio of the sub-national revenue to sub-national expenditure was decreased to 95.8 percent in 2003. This dramatic change was a result of the public sector reform of 2003, which shifted the major public service responsibilities to the central government. Correspondingly, the revenues were also reassigned in favor of the central government and aggregated sub-national revenues accounted to 9.4 percent of the consolidated budget revenues in 2003.

Table 4.7: Overall Revenue and Expenditure Levels, 2000-2008

	2000	2001	2002	2003	2004	2005	2006	2007
Sub-national revenue as % of GDP	6.5	7.6	8.4	3.3	3.1	2.8	3.4	2.6
Sub-national expenditures as % of GDP	12.9	13.9	13.6	3.4	3.6	3.1	3.6	2.7
Sub-national expenditure as % of the sub-national revenue	196.8	183.4	161.1	95.8	101.6	101.3	97.6	103.6
Sub-national revenue as % of consolidated government revenue	19.6	20.3	24.9	9.4	9.5	9.3	7.0	6.6

Source: Authors' calculation based on data from the Ministry of Finance.

Figure 4.13: Percentage Shares of the Three Main Sources of Revenue for Sub-national Governments, 2000-2008



Source: Authors' calculation based on data from the Ministry of Finance.

The figure 4.13 illustrates the percentage shares of the three main sources of revenue such as tax revenue, non-tax revenue and transfers in the consolidated sub-national revenues from 2000 to 2008. The tax revenues play an important role in the sub-national revenues, which accounted about 80 percent of the total sub-national revenues from 2000 to 2002. However, shares of tax revenues in the total sub-national revenues were decreased to 66.7 percent in 2003. The share of transfers in the total sub-national revenues have been increased during this period from 5.9 percent in 2003 to 23.9 percent in 2008.

Table 4.8 illustrates the tax sharing among central and sub-national governments from 2000 to 2008 in Mongolia. Until 2003 the PIT including payroll taxes were assigned to the sub-national governments, and the corporate income tax and excise taxes as well as VAT were shared among the central

and sub-national governments. In 2003 the payroll tax was assigned to the central government and tax sharing of the CIT and excise taxes were removed from sub-national revenue sources and shifted to the central government budget.

Table 4.8: Shared Taxes Allocated to Sub-national Governments, 2000-2008, in %

	2000	2001	2002	2003	2004	2005	2006	2007*	2008**
PIT	100.0	10.0	100.0	16.5	17.4	18.1	18.2	16.7	10.4
Corporate income tax (CIT)	25.7	37.5	0.02	0.0	0.0	0.0	0.0	0.0	0.0
Value added tax	12.0	6.6	30.7	19.0	17.1	16.9	18.4	16.6	20.0
Excise tax	20.1	20.3	6.6	0.0	0.0	0.0	0.0	0.0	0.0
Royalty	0.0	0.0	0.0	12.4	6.8	8.8	16.7	22.7	31.2
License fee for mining and exploring mineral resources	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.3

Note: * - data from the expected budget execution.
** - data from the approved budget plan.
Source: Authors' calculation based on data from the Ministry of Finance.

As a result the sub-national government revenue share of GDP decreased from 6.5 percent in 2000 to 3.3 percent in 2003 (see figure 4.11). The statistical data proves the centralizing tendency since 2003, both in the expenditure as well as in the revenue assignment in Mongolia.

4.5.2 Description of the Revenue Assignment in Mongolia

The Parliament defines the tax bases and rates for custom duties, direct and indirect taxes in Mongolia. The Aimag Assembly has the right to define tax bases for the fees on the extraction of the natural resources other than minerals and common minerals, and tax rates for the fees on usage of springs and herbs within the limits set by Parliament. The General Tax Code (GTC) uniformly formulated and defines the tax bases and rates as well as fixes ceilings for sub-national taxes, and CBL defines the central and local taxes.

The main distinction in the revenue assignments in Mongolia is between own revenue and shared revenue. The Aimag and Soum governments generate their own revenue. However, the tax revenues permanently assigned to Aimag and Soum government are considered own revenue, even though sub-national governments have little or no autonomies on the bases and rates for the vast majority of these taxes.

Shared revenue refers to three taxes: VAT, royalty and license fee for mining and prospecting minerals, where VAT is shared at temporary rates between central and provincial governments. The tax sharing rates for the royalties and license fees are determined by the 2006 amendment in the Consolidated Budget Law (CBL).

Table 4.9: Legislative Control over Sub-national Own Revenues, 2008

Tax	Legislative level determining tax base	Legislative level determining tax rate	Budget to which tax revenues go
Personal income taxes	Central	Central	Local
VAT	Central	Central	Cent/Prov
Immobile property tax	Central	Central	Provincial
Gun ax	Central	Central	Local
Vehicle tax	Central	Central	Provincial
Stamp duty	Central	Central	Cent/Loc
Land payment	Central	Central	Provincial
License fee for mining and prospecting mineral resources	Central	Central	Cent/Prov/Loc
Royalty	Central	Central	Cent/Prov/Loc
Timber usage fee	Central	Cent/Prov	Local
Payment for usage of hunting resources	Central	Central	Cent/Loc
Fees on the extraction of the natural resources other than minerals	Provincial	Provincial	Local
Fee for water usage	Central	Central	Local
Fee for the extraction of the common minerals	Provincial	Provincial	Local
Fee for springs usage*	Central	Provincial	Local
Fee for herb usage*	Central	Provincial	Local

Note: *- These tax rates are set by province and capital city assemblies within the limits defined by parliament.

Source: Authors' evaluation based on the respected laws and decrees.

In order to achieve real revenue autonomy, sub-national governments must have a substantial autonomy at best over the tax rate. The degree which sub-national governments exercise control over their own-source revenues is illustrated in table 4.9.

The sub-national governments are able to set the rates for the fees on springs and herb usage within limits defined by parliament, and imposed the fees on the extraction of natural resources other than minerals as well as common minerals. However, these fees are not productive and generate tiny revenues for the local budgets. Almost all taxes are legislated by central government and sub-national governments have a limited autonomy to introduce their own taxes. As stated in the LTAU, the Aimag and Soum Assemblies have a right

to introduce only the fees on usage of the pastures, local roads and bridges, and the communities do not have any legislative sovereignty with regard the taxes in Mongolia.

Hence, the tax bases for custom duties, direct and indirect taxes are under the exclusive legislation of the national Parliament and tax rates are partly to be influenced by the lower jurisdictional levels. The sub-national governments lack of fiscal autonomy for the efficient provition of public services for their constituencies in Mongolia.

Table 4.10 illustrates the common taxes shared by all jurisdictional levels (central, provincial as well as county taxes). The shared taxes include VAT, royalties and license fees for the mining and prospecting mineral resources. The payroll tax, corporate income tax, custom duties, excise taxes, windfall taxes, gasoline and diesel taxes are central government taxes, and land payment, immobile property tax and vehicle tax are provincial taxes. Correspondingly, PIT including livestock tax, other taxes and fees are county taxes in Mongolia. The central, provincial and common taxes are under exclusive legislation and administration of the central government. The most local taxes are also under the central legislation with partial legislative sovereignty for the local government.

Table 4.10: Existing Tax System in Mongolia – Classified by Jurisdictional Level

Common Taxes	Central taxes	Provincial taxes	Local taxes
VAT, Royalty, License fees for the mining and prospecting mineral resources.	Payroll tax, Corporate income tax, Custom duties, Excise taxes, Gasoline and diesel taxes, Windfall taxes.	City tax[21], Land payment, Immobile property tax, Vehicle tax.	PIT including livestock tax Gun tax, Stamp duty, License fee for hunting, Fees for the use of natural resources other than minerals, Fee for herb usage, Tax on extraction of the common natural resources, Fees for the usage of water and springs.

Source: Authors' evaluation based on General Tax Code (2008) and Consolidated Budget Law (2002).

[21] The city tax is not yet introduced due to the lack of legal framework.

Table 4.11: Revenue Distributions between Government Levels, 2003-2008

Level of government	2003	2004	2005	2006	2007*	2008*
Total tax revenue	100	100	100	100	100	100
Central budget	92,2	92,2	91,8	93,7	93,0	63,8
Aggregated sub-national budget	7,8	7,8	8,2	6,3	7,0	36,2
Perssonal income taxes	100,0	100,0	100,0	100,0	100,0	100,0
Central budget	84,4	82,5	82,0	81,9	88,9	89,5
Aggregated sub-national budget	15,6	17,5	18,0	18,1	11,1	10,5
Corporate income tex	100,0	100,0	100,0	100,0	100,0	100,0
Central budget	100,0	100,0	100,0	100,0	100,0	100,0
Aggregated sub-national budget	0,0	0,0	0,0	0,0	0,0	0,0
VAT	100,0	100,0	100,0	100,0	100,0	100,0
Central budget	92,6	94,0	93,4	93,3	94,0	93,4
Aggregated sub-national budget	7,4	6,0	6,6	6,7	6,0	6,6
Excise taxes	100,0	100,0	100,0	100,0	100,0	100,0
Central budget	100,0	100,0	100,0	100,0	100,0	100,0
Aggregated sub-national budget	0,0	0,0	0,0	0,0	0,0	0,0
Property tax	100,0	100,0	100,0	100,0	100,0	100,0
Central budget	0,0	0,0	0,0	0,0	0,0	0,0
Aggregated sub-national budget	100,0	100,0	100,0	100,0	100,0	100,0
Royalty	100,0	100,0	100,0	100,0	100,0	100,0
Central budget	87,5	93,4	91,3	83,2	77,4	70,0
Aggregated sub-national budget	12,5	6,6	8,7	16,8	22,6	30,0
Custom duties	100,0	100,0	100,0	100,0	100,0	100,0
Central budget	100,0	100,0	100,0	100,0	100,0	100,0
Aggregated sub-national budget	0,0	0,0	0,0	0,0	0,0	0,0
Other taxes	100,0	100,0	100,0	100,0	100,0	100,0
Central budget	80,6	84,2	84,1	92,5	92,0	5,9
Aggregated sub-national budget	19,4	15,8	15,9	7,5	8,0	94,1
Non-tax revenues	100,0	100,0	100,0	100,0	100,0	100,0
Central budget	90,1	90,6	91,8	94,6	96,3	96,2
Aggregated sub-national budget	9,9	9,4	8,2	5,4	3,7	3,8

Note: Revenues from social insurance payment was included into the budget until 2007. The sharp increase of the other taxes on the sub-national share in 2008 were due to sharing of the license fees for mining and prospecting minerals among central, provincial and local levels.

Source: Authors' calculation based on data from the Ministry of Finance.

Table 4.11 illustrates the existing revenue distributions between different government levels in Mongolia from 2003 to 2008. The revenue sharing was regulated by the annual budget law until 2008. The sub-national tax revenues were relatively stable and small, which accounted about from 7 to 8 percent of

the consolidated tax revenues in 2003 to 2007, but rose to 36.2 percent in 2008. This change was due to the mineral resource tax sharing introduced by new tax law in 2008. The economic growth has fostered the development of the mining sector in Mongolia.

However, mineral resource mining usually has negative externalities such as environmental pollution. Before 2008 the royalties were shared at temporary rates among central and provincial governments, the license fees for mining and prospecting minerals were assigned to central government. The mineral tax sharing rates are formalized by the 2006 amendments in the CBL.

Table 4.12 represents the vertical distribution of common taxes in Mongolia. The revenues from royalties are shared by 70 percent for the central government, 20 percent for the Aimag and 10 percent for the Soum level. The revenues from the license fees for the mining and prospecting minerals are shared by 50 percent for the central government, 25 percent for the Aimag and 25 percent for the Soum level. The revenues from the VAT should be shared by 80 percent for the central and 20 percent for the provincial levels. However, the shares of the VAT are negotiated in between the central and provincial government, and sharing rates are fluctuating from year to year. For instance, VAT has been distributed by 92.2 percent to the central and 7.4 percent to the provincial government in 2003, but 94 percent to the central and 6 percent to the provincial government in 2007. Thus the VAT revenue sharing is unclear and unstable and generates uncertainty as well as reduces predictability for the sub-national budgeting and planning in Mongolia.

Table 4.12: Revenue Sharing in Mongolia

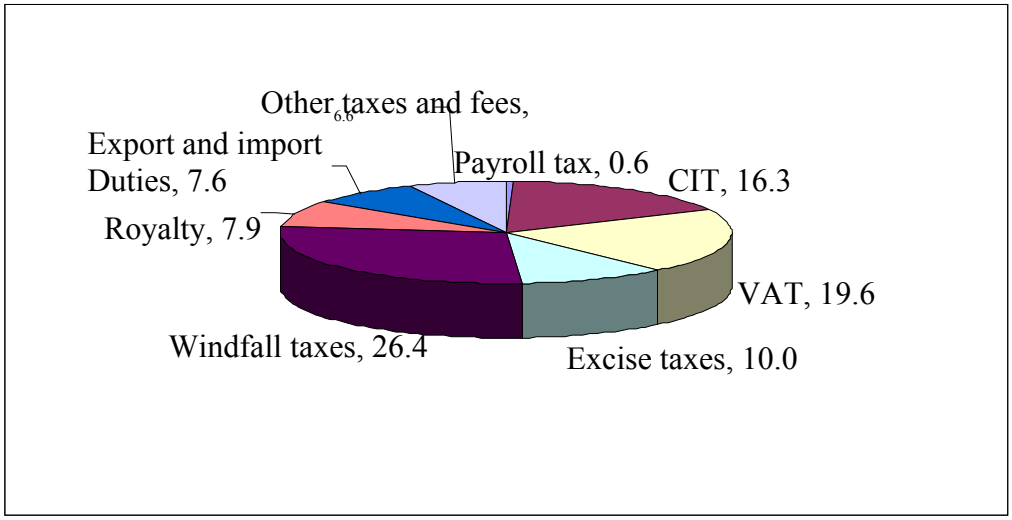
Type of taxes	Share of the central government, %	Share of the Provincial government, %	Share of the county government, %
VAT	80	20	-
Royalty	70	20	10
License fees for the mining and prospecting mineral resources	50	25	25

Source: Based on Consolidated Budget Law, 2002.

As shown in the table 4.11 tax sharing in between central and sub-national governments have increased from 2003 to 2008. During the period from 2003 to 2007 the central government received more than 90 percent of the total revenue, the provinces about 6 to 8 percents of the total tax revenue in Mongolia. The composition of the consolidated tax revenue by types of the taxes is shown in figure 4.14. In 2007 the windfall taxes were the taxes with highest revenue collections, which accounted in 26.4 percent of the consoli-

dated tax revenue, followed by the VAT, CIT, excise taxes and royalties as well as export and import duties.

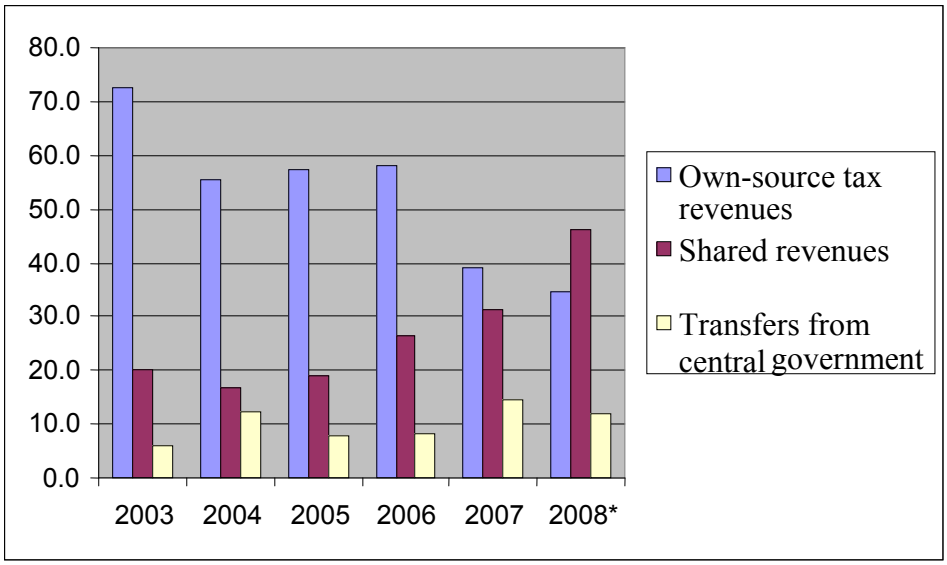
Figure 4.14: Composition of Consolidated Tax Revenue by Tax Types, 2007



Source: Statistical Year Book of Mongolia, 2007.

Only four taxes raised revenue of more than 70 percent of the consolidated tax revenue in Mongolia. According to the current legislation the most productive taxes are assigned to the central government and less productive taxes are assigned to the sub-national level. Therefore, sub-national governments have very limited revenue autonomy and are dependent on the intergovernmental transfers from the central government.

Figure 4.15: Composition of the Consolidated Sub-national Revenues by Revenue Sources, 2003-2008



Source: Authors' calculation based on data from the Ministry of Finance.

Figure 4.15 illustrates the composition of the sub-national revenue by revenue sources from 2003 to 2008. The shares of the revenue from tax sharing in the consolidated sub-national revenue were increased from 20 percent in 2003 to 46 percent in 2008. The shares of the equalization transfers were about 10 percent, which remained relatively stable during the same period.

The common tax pool and intergovernmental grants are parts of the revenue sharing system in Mongolia. Within the common tax pool the legislative sovereignty for the most taxes is at the central government. With regard to the intergovernmental transfer, the tax revenues for all taxes are collected by the central government, then transfers are distributed from the central budget to the province budgets. Therefore, sub-national governments are lacking of capacities to determine their revenues to finance own affairs. Hence, it is important to shift revenue autonomy to the sub-national level in Mongolia.

With regard the administrative sovereignty, Mongolia has a vertical fiscal administration under the authority of the MoF. All taxes are collected at the provincial and county level then local taxes are transferred to the respected budget accounts and other taxes are concentrated in the national budget. Then the revenue is partly shared and transfers are allocated to the province level. The sub-national tax departments are subordinate level of the National Tax Authority (NTA) and operate as its agencies. Thus, the administrative sovereignty is at the central level in Mongolia.

Within the current system, sub-national governments have no incentives to increase revenue collection. In fact, any increase in local revenues is equalized by reductions in either the tax sharing or transfers. Therefore, the current system encourages local governments to find extra-budgetary sources of income and sets incentives for an under-estimation of tax revenues.

Concerning the sub-national revenue, there a number of issues associated with revenue assignments. Despite the fact that Soums and Aimags have access to the own tax revenues, the revenue volumes of these taxes are very limited. The environmental hardships of Mongolia sometimes have negative impacts on local farmers, which have an impact on the collection of livestock taxes and land payments. According to the existing revenue assignment, the legislative and administrative sovereignties are at the central level with partly separated revenue sovereignty for some taxes. Thus lower jurisdictional levels have no influence on legislation, administration and sub-national tax revenue in Mongolia.

4.5.3 Vertical fiscal imbalances and horizontal disparities in Mongolia

A system of tax assignment designed in accordance with the principles of public finance and subsidiarity usually produce vertical imbalance in the revenues availability to various levels of government or horizontal fiscal disparities among governments of the same level.

Vertical fiscal imbalances

Vertical fiscal imbalance occurs when expenditures assigned to a given level of government are higher or lower than revenue from own sources. The lack of revenue autonomy at the sub-national level was the major cause of the vertical imbalances in Mongolia. Tax and revenue sharing as well as transfers are normally designed to equalize the vertical imbalances. McLure (2001) argued that neither tax sharing nor revenue sharing provides marginal sources of own revenues for sub-national governments. In most cases the bases and rates for the sub-national taxes are determined by central government and Mongolia is not an exception.

The vertical fiscal imbalances can be measured by two different ways. The first one is to look for a surplus or deficit for each consolidated level of government before borrowings, and the second way is to examine the sub-national expenditures that are financed by own-source revenues. However, the first one tends to be biased towards central or federal government level. The second coefficient for vertical imbalance is calculated as one minus the share of the sub-national expenditures that are financed from transfers and shared revenues. The coefficient takes values between zero and one, with values closer to zero indicates a larger vertical imbalance (Martinez-Vazquez & Boex, 2001). The coefficient calculated by the budget data for 2007 is 0.301, which indicates that the vertical imbalance is relatively high in Mongolia.

Table 4.13 represents the per capita tax revenues (per capita revenue in the further text) by Aimags including the central share from 2003 to 2007. The highest per capita revenue is for Orkhon Aimag, which accounted to 443.2 thousand Tugrug in 2007, followed by Umnugobi, Ulaanbaatar, Gobi-Sumber, Sukhbaatar, Dornogobi and Darkhan-Uul Aimags. According to the five year average figures the lowest per capita revenue results for Bayan-Ulgii, Bayankhongor and Arkhangai Aimags. According to the current legislature about 50 percent of the sub-national total tax revenue is transferred to the central government budget.

Table 4.13: Per Capita Tax Revenue by Aimags, 2003-2007, in thousands of Tugrug[22]

	2003	2004	2005	2006	2007	average
Arkhangai	8.726	9.047	16.285	19.205	20.308	14.714
Bayan-Ulgii	7.626	8.862	14.855	16.783	13.725	12.370
Bayankhongor	6.959	9.809	14.605	12.685	25.018	13.815
Bulgan	13.512	16.534	45.751	49.544	56.178	36.304
Gobi-Altai	10.419	12.437	18.685	20.959	21.387	16.778
Dornogobi	36.967	49.739	60.143	72.466	94.877	62.839
Dornod	17.074	20.513	27.477	38.080	46.459	29.921
Dundgobi	22.254	24.446	30.443	30.068	34.575	28.357
Zavkhan	12.683	14.447	20.708	22.541	19.786	18.033
Uburkhangai	9.536	11.357	16.386	18.952	27.103	16.667
Umnugobi	19.620	29.993	64.171	122.872	154.449	78.221
Sukhbaatar	13.107	12.362	21.204	119.882	103.099	53.931
Selenge	20.237	26.685	35.952	46.609	69.241	39.745
Tuv	14.754	17.901	29.053	44.785	53.776	32.054
Uvs	12.959	16.441	20.781	24.864	22.927	19.594
Khovd	11.697	12.977	17.971	21.138	18.476	16.452
Khubsugul	10.976	11.696	17.031	18.890	18.311	15.381
Khentii	14.200	15.329	21.546	24.883	32.159	21.623
Darkhan-Uul	44.174	47.064	60.075	75.771	79.823	61.382
Ulaanbaatar	72.650	97.737	112.016	122.547	127.274	106.445
Orkhon	104.391	191.290	197.344	273.570	443.160	241.951
Gobi-Sumber	83.449	109.819	134.419	131.819	107.222	113.346

Source: Authors' calculation based on data from the Ministry of Finance.

Table 4.14 illustrates the per capita expenditures by Aimags from 2003 to 2007. According to the five year average figures the highest per capita expenditure is for Umnugobi Aimag (112,461 Tugrugs in 2007) followed by Gobi-Sumber, Orkhon, Sukhbaatar, Tuv, Dornogobi and Gobi-Altai. The lowest per capita expenditure is for Bayan-Ulgii followed by Bayankhongor, Arkhangai, and Dornod Aimags.

[22] The Tugrug is the name of the Mongolian currency.

Table 4.14: Per Capita Expenditure by Aimags, 2003-2007, in thousands of Tugrug

	2003	2004	2005	2006	2007	Average
Arkhangai	10,237	13,093	14,459	17,924	34,907	18,124
Bayan-Ulgii	9,217	11,070	12,379	13,810	26,852	14,666
Bayankhongor	11,287	16,119	17,339	19,300	39,888	20,787
Bulgan	15,467	21,916	26,437	32,930	54,230	30,196
Gobi-Altai	15,713	23,764	26,209	33,290	57,937	31,383
Dornogobi	26,864	32,204	35,874	25,329	62,505	36,555
Dornod	11,692	15,925	14,684	15,133	36,856	18,858
Dundgobi	17,826	22,244	23,208	20,184	54,367	27,566
Zavkhan	13,612	16,493	20,213	22,777	43,730	23,365
Uburkhangai	11,527	15,261	14,728	8,160	32,691	16,473
Umnugobi	18,923	32,863	39,620	61,129	112,461	52,999
Sukhbaatar	17,207	18,739	22,613	27,252	64,056	29,973
Selenge	14,291	20,474	21,403	20,850	35,594	22,522
Tuv	16,427	27,402	30,551	38,944	63,003	35,266
Uvs	15,600	19,038	19,290	21,627	41,502	23,411
Khovd	11,886	16,777	17,909	18,785	38,894	20,850
Khubsugul	10,379	12,189	13,462	15,722	34,308	17,212
Khentii	14,101	18,202	19,466	22,353	50,173	24,859
Darkhan-Uul	12,316	15,706	17,194	18,283	33,379	19,375
Ulaanbaatar	13,966	23,283	22,757	15,619	45,743	24,274
Orkhon	21,150	26,064	34,418	27,944	71,785	36,272
Gobi-Sumber	45,369	46,260	49,262	38,287	96,246	55,085

Source: Authors' calculation based on data from the Ministry of Finance.

As table 4.15 illustrates, the expenditure needs for the local governments often exceeds their revenue capacities. For instance Gobi-Altai Aimag has covered about 30 percent of its expenditure needs by own revenues for the period 2003 to 2007, which is the lowest value among the 21 provinces. In contrast, the ratios of the per capita revenue and per capita expenditure are exceeding 100 percent for Orkhon, Capital city, Darkhan-Uul, Umnugobi, Dornogobi, Burgan and Selenge Aimags. Correspondingly, the ratio is about 50 percent for other 14 Aimags. Therefore, Aimags with ratios higher than 100 provide transfers to the other 15 Aimags, which have very low fiscal capacities in comparison to their fiscal needs.

Table 4.15: Share of the Per Capita Revenue in the Per Capita Expenditure, 2003-2007, in %

	2003	2004	2005	2006	2007
Arkhangai	55.5	42.6	51.8	53.5	57.3
Bayan-Ulgii	41.4	42.1	36.7	36.1	47.5
Bayankhongor	33.1	28.1	36.0	42.0	65.3
Burgan	60.8	49.7	128.7	111.7	102.7
Gobi-Altai	36.2	29.1	27.7	42.5	35.1
Dornogobi	91.5	97.5	95.5	167.8	119.7
Dornod	71.6	60.6	73.8	89.2	89.6
Dundgobi	51.2	41.0	42.3	53.0	46.9
Zavkhan	40.3	33.1	32.4	44.5	36.1
Uburkhangai	43.2	34.5	42.0	83.5	79.2
Umnugobi	64.8	64.3	96.1	137.2	150.0
Sukhbaatar	49.0	44.7	50.3	212.9	82.1
Selenge	63.7	55.4	75.1	86.0	148.8
Tuv	64.1	53.5	79.7	62.3	84.9
Uvs	50.2	41.6	35.6	32.5	35.6
Khovd	56.5	39.9	41.6	45.0	41.9
Khubsugul	58.0	48.7	50.5	51.7	53.8
Khentii	68.5	49.6	52.3	52.1	62.4
Darkhan-Uul	102.2	92.7	95.1	134.4	123.4
Ulaanbaatar	182.7	133.9	154.5	231.3	106.4
Orkhon	296.4	454.1	322.3	431.5	425.0
Gobi-Sumber	74.5	62.3	71.2	107.6	41.4

Source: Authors' calculation based on data from the Ministry of Finance.

Horizontal Disparities

The horizontal fiscal imbalance occurs when taxable capacity is unevenly distributed across sub-national jurisdictions. There are different methods to measure horizontal fiscal imbalances. The simplest approach is to compare per capita revenue collections and per capita expenditures across jurisdictions. However, both measures may be misleading indicators of the horizontal fiscal disparities (Martinez-Vazquez, 1999). Therefore, additional analysis of the fiscal capacity and the fiscal need measures are needed for more precise examination. Due to regional disparities in per capita income, jurisdictions differ by their fiscal capacities, hence a well balanced design of revenue sharing and the fiscal equalization system is an important part of the intergovernmental fiscal relations system. The more detailed discussion of the design of the fiscal equalization system will be presented in the next section.

The Analysis of the Fiscal Capacity

The per capita income can demonstrate regional disparities more precisely, but this data is lacking because of non-regionalized national accounts statistics. Thus the per capita tax revenue and the per capita consumption or per capita turnover will be used as a proxy measure for the regional fiscal capacities in Mongolia. Due to the data availability for the regional tax revenues, the analysis is based on the revenues for a five year period. It should be noted that the fluctuations of the per capita revenue is very high due to a rapid economic growth since 2005.

Figure 4.16a: Per Capita Revenue across Provinces, 2003-2007

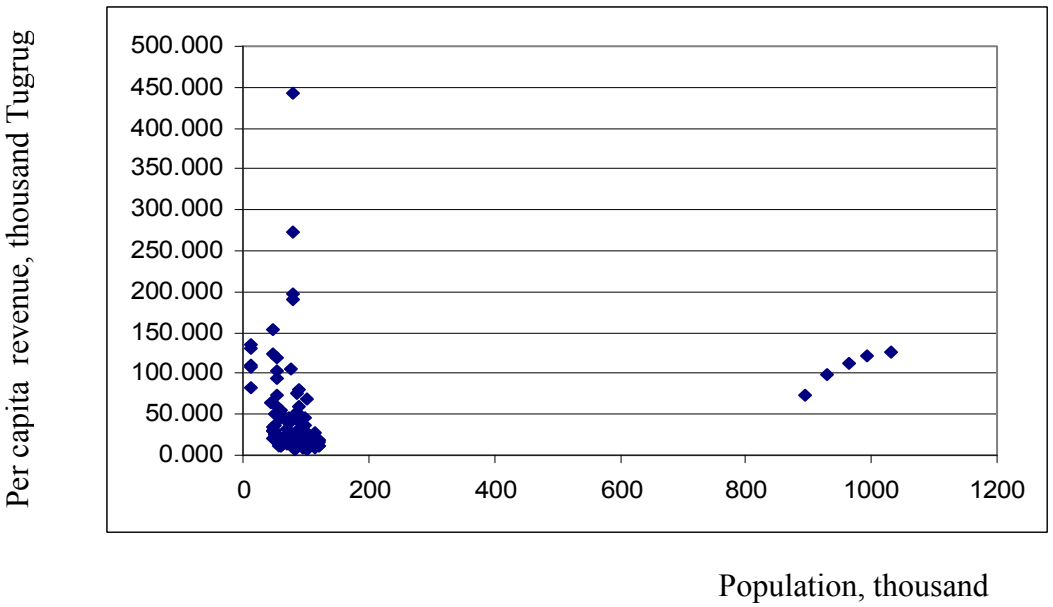
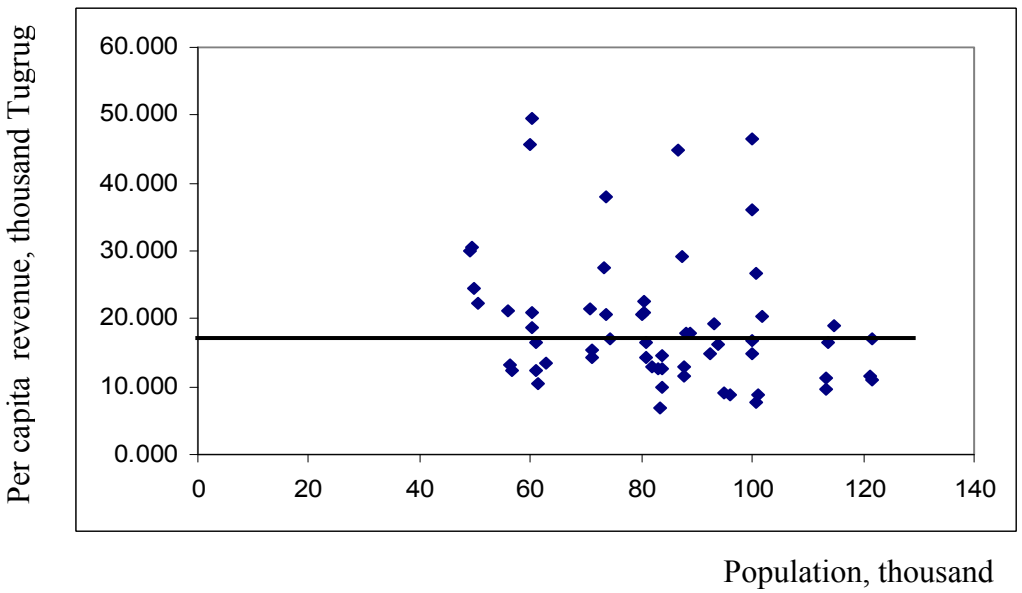


Figure 4.16b: Per Capita Revenue across Provinces, 2003-2007 (Excluding Capital City and 5 rich Provinces)



Source: Authors' calculation based on data from the Ministry of Finance.

Figure 4.16a and 4.16b illustrate the distribution of the per capita revenue across provinces from 2003 to 2007. The per capita revenue is indicated in the vertical axis while population size is in the horizontal axis. The per capita revenue is very high in the Capital city because the most businesses and population (about 40 percent) are concentrated in the Capital city. There also exist rich provinces with high per capita revenue. In figure 4.16b the Capital city and 5 rich provinces (Orkhon, Darkhan-Uul, Gobi-Sumber, Umnugobi and Dornogobi) are excluded in order to decrease deviations from the mean value.

The estimated national median average line for the per capita revenue is on 17,100 Tugrug (shown in the figure 4.16b). There are seven provinces with per capita revenue below the national average, which are Arkhangai, Bayan-Ulgii, Bayankhongor, Gobi-Altai, Uvurkhangai, Khovd and Khubsgul Aimags. Hence, fourteen provinces and the Capital city are with per capita revenue above the national average value. Therefore, one can conclude that the provinces below the national average line for the per capita income are poor Aimags and those above the line are at least richer or rich Aimags.

As table 4.16 illustrates, there are large disparities in per capita revenue collections across provinces, including the central revenue share, and these disparities are steadily increasing. The highest per capita revenue in 2003 was 15 times higher than lowest and by 2007 this difference has increased to 32, which demonstrate the increasing trend in regional disparities in Mongolia.

Table 4.16: Measures of Provincial Disparities: Per capita Revenue (Including central share), 2003 – 2007, (thousand of Tugrug)

	Mean	Minimum	Maximum
2003	25,8	7.0	104,4
2004	34,8	8,9	191,3
2005	45,3	14,6	197,3
2006	60,4	12,7	273,6
2007	72,2	13,7	443,2

Source: Authors' calculation based on data from the Ministry of Finance.

The disparities were created by the increasing economic concentration in a small number of the Mongolian regions. The Capital city alone represented 66.8 percent of total tax revenues, including the central share in 2003, and 56.4 percent in 2007 (see table 4.17). Orkhon Aimag represented 15.3 percent of all revenue collections in 2007, and five rich provinces represented 13.4 percent of all revenue in 2007. The other 15 provinces together represented 15 percent of all revenues, including the central share, which is equivalent to the only Orkhon Aimags' revenue in 2007 (table 4.17).

Figure 4.17a and 4.17b illustrate the distribution of the per capita consumption across provinces from 2003 to 2007 in Mongolia. The per capita consumption analysis was made to verify the evidence from the per capita revenue analysis. The national median average line for the per capita consumption is at 20,500 Tugrug, which is higher than the per capita revenue.

Table 4.17: Concentration of Total Revenue Collections of the Provinces, 2003 – 2007 (Including Central Share)

(percentage shares of total revenue collected by 21 provinces and capital city)

	2003	2004	2005	2006	2007
Capital city	66.8	67.4	65.1	60.4	56.4
Orkhon	8.1	11.1	9.4	10.8	15.3
5 high revenue provinces	10.4	9.2	10.6	12.3	13.4
Revenues of the other 15 provinces	14.8	12.3	14.9	16.5	15.0
Total	100.0	100.0	100.0	100.0	100.0

Source: Authors' calculation based on data from the Ministry of Finance.

Theoretically, the per capita consumption is usually higher than the per capita revenue due to the impact of the shadow economy. In the provinces with small per capita income subsistence economy is dominating so that the shadow economy in these Aimags is larger than in the rich Aimags. In the subsistence economy citizens have some possibilities to earn a sufficient wage in a legitimate manner, and working in the shadow economy is often the only way to earn money for providing minimal living standard (Schneider, 2005). The private savings are not included into the per capita consumption and saving rates were about 30-35 percent during the estimated period, which means that the per capita income is larger than the per capita consumption because the income consists of consumption and savings.

There are eight provinces below the median average line of per capita consumption such as Arkhangai, Bayankhongor, Gobi-Altai, Uvurkhangai, Zavkhan, Tuv, Khentii and Khubsgul. The analysis proves that both per capita revenue and consumption are below the median average line in Arkhangai, Bayankhongor, Gobi-Altai, Uvurkhangai, Zavkhan and Khubsgul. Correspondingly, these provinces are the poor jurisdictions, which get transfers in order to provide a certain minimum standard of public services for their constituencies.

Figure 4.17a: Per Capita Consumption across Provinces, 2003-2007

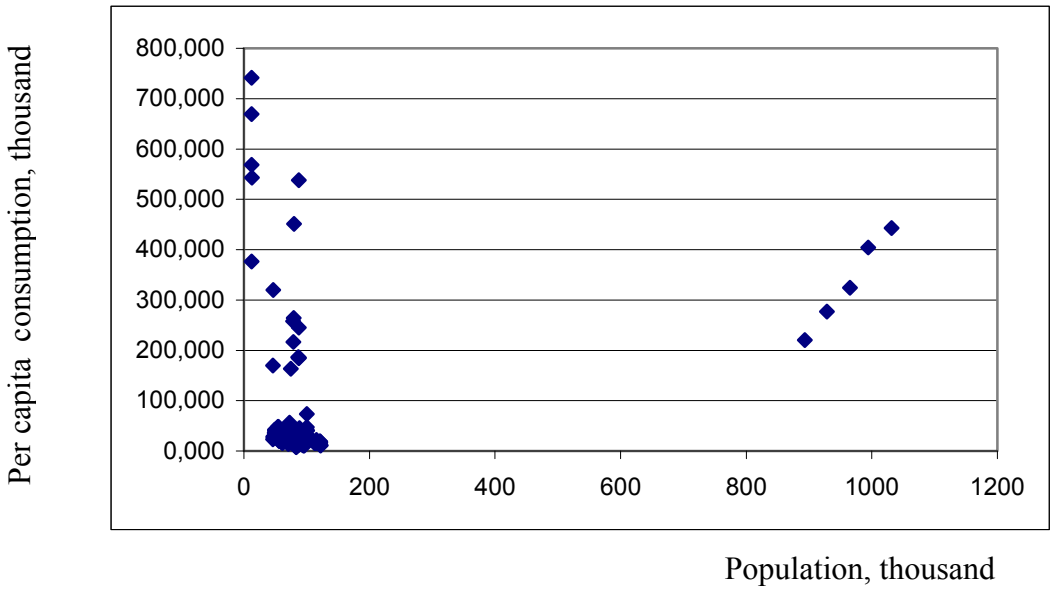
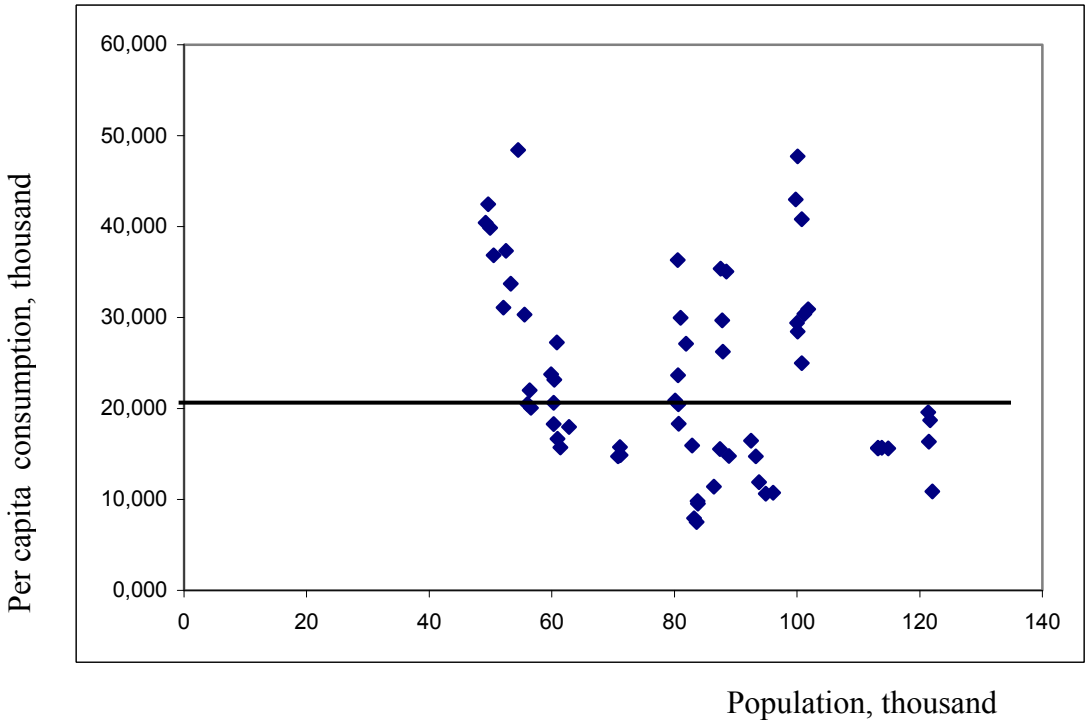


Figure 4.17b: Per Capita Consumption across Provinces, 2003-2007
(Excluding Capital City and 5 rich Provinces)



Source: Authors' calculation based on data from the Ministry of Finance.

In order to develop formula by which equalization transfer would be allocated the fiscal needs of the provinces are analyzed by regression method by using panel data. Figure 4.18a and 4.18b illustrate data for population size and per capita expenditures of the provinces in a scatter diagram for 2003 to 2007. As

shown in the figures 4.18a and 4.18b there is a tendency that in smaller jurisdictions the per capita expenditure is higher than in bigger jurisdictions. For instance, Gobi-Sumber Aimag is the smallest jurisdiction with per capita expenditure of 96,300 Tugrug and a population of 12,600 people. In contrast, Ulaanbaatar is the biggest jurisdiction represented by per capita expenditures of 45,700 Tugrug with a population of 1,031,200 people in 2007. Hence, the larger the population, the lower is the per capita expenditure. This can be explained by decreasing economies of scale because of the high fixed costs within the public goods supply. This corresponds to the Tiebout U-shaped curve with respect to the population or community size (Tiebout, 1961). Beyond that a minimum level of the per capita expenditures can be derived from the data by defining the estimated average cost function of expenditures (Kirn and Petersen, 2007). The investigation of the relationship between per capita expenditure and jurisdictions' size is made by panel analysis. The expenditure needs can be expressed on an average basis and the estimations of the average cost function are made in two different scenarios to ensure that the model fits good for Mongolian circumstances.

Figure 4.18a: Distribution of the Per Capita Expenditure by Jurisdictions' Size, 2003-2007

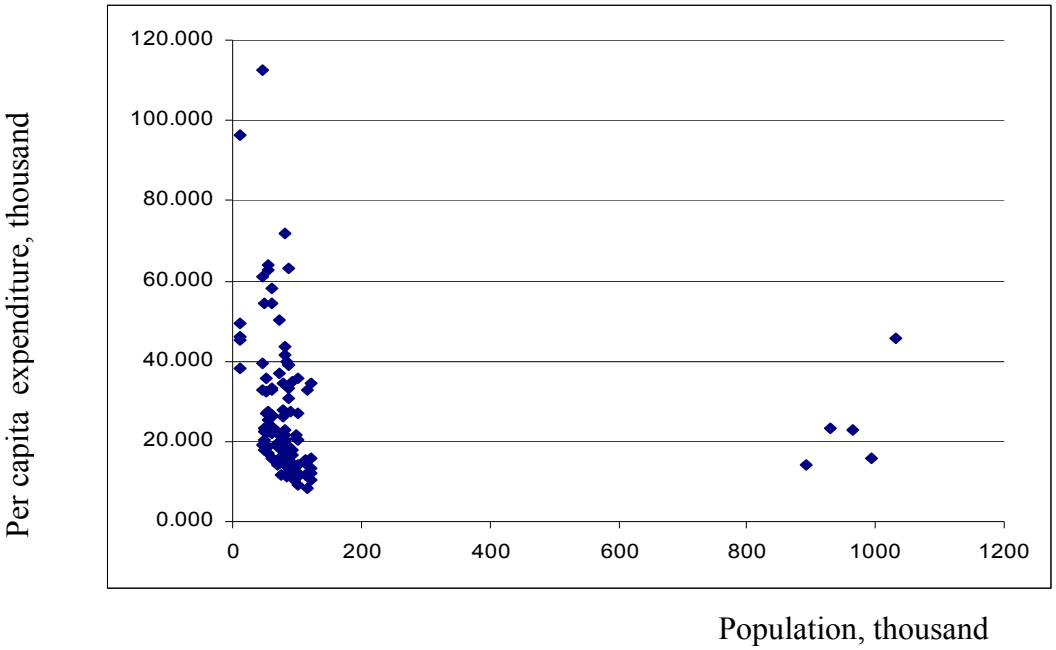
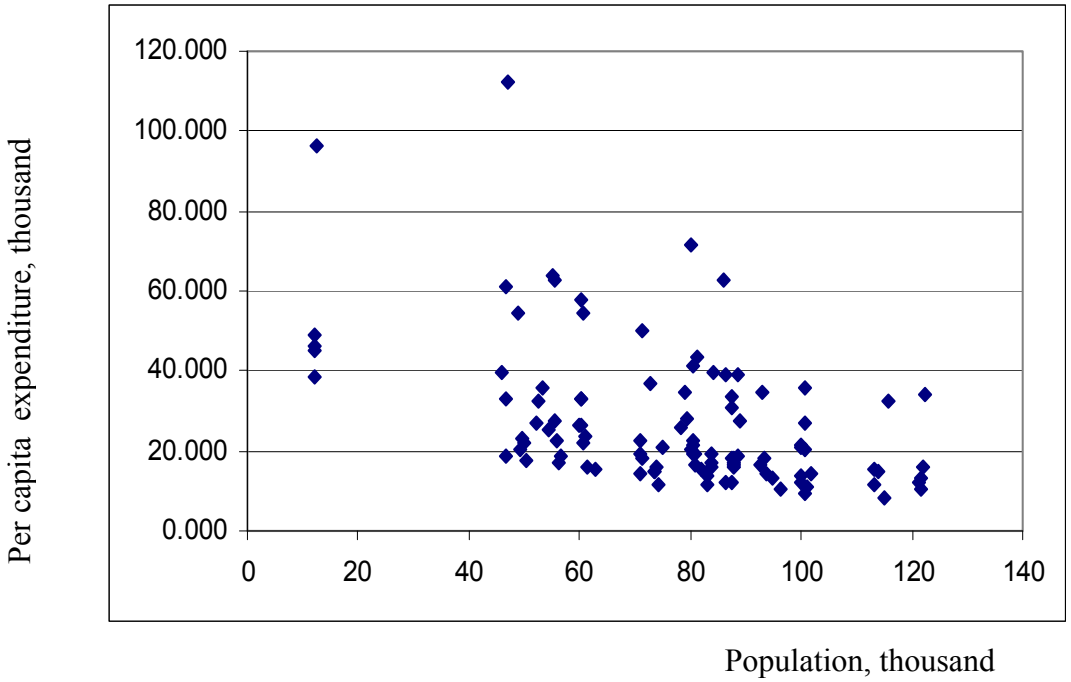


Figure 4.18b: Distribution of the Per Capita Expenditure by Jurisdictions' Size, (Excluding the Capital City) 2003-2007



Source: Authors calculation based on data from the Ministry of Finance

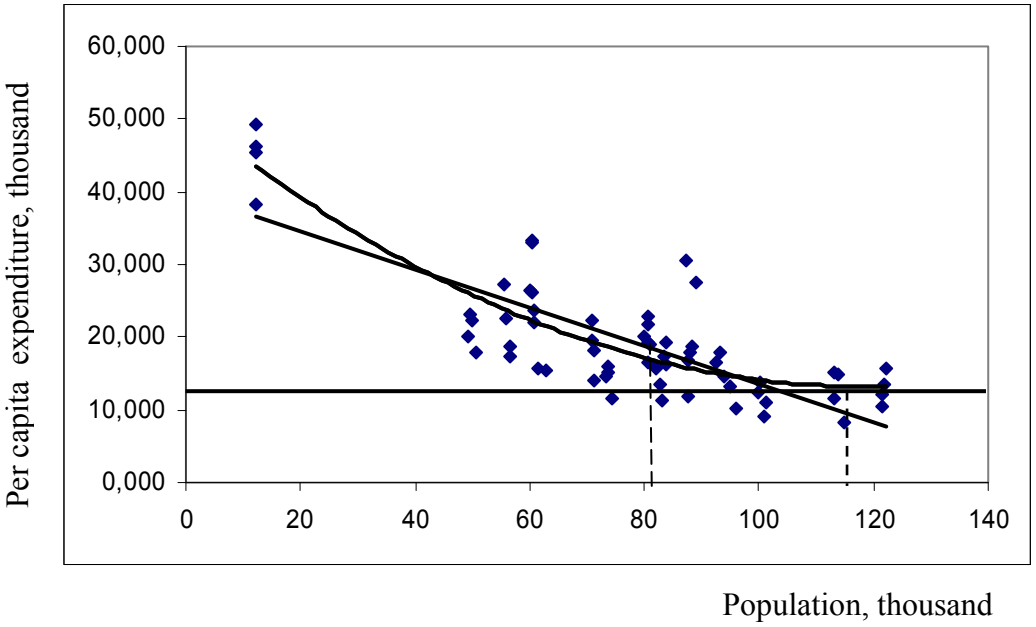
Scenario 1

The relationship of the per capita expenditure and population size is defined by using the data for all juricdictions, however, the degree of explained variation is low in this case. The expenditure level is affected by city and mining effects, hence the Capital city and five rich provinces are excluded in a first step of the calculation. The expenditure level for 2007 is affected by world market price increase for minerals, thus in a second step the data for 2007 are excluded from the calculation. The estimated average cost function of expenditures is a polynomial function, which is U-shaped with the minimum at 117,600 inhabitants (figure 4.19). According to this function the minimum per capita expenditure should be 13,500 Tugrug. However, this estimation doesn't fit the real situation because population of the provinces ranges from 40,000 to 120,000 people excluding the Capital city with a population of more than one million and Gobi-Sumber with a population of 12,600.

In order to simplify the model the polynomial function is approximated by a linear function. Due to the low economic development the average minimum per capita expenditure is defined at the median average population size. The median average population is at 80,600 inhabitants for the selected sample data. Thus, according to the estimated linear function the national standard for

public goods will be at a per capita expenditure of 18,700 Tugrug in the scenario 1 calculation.

Figure 4.19: The Estimated Average Cost Function of Expenditures (Scenario 1)

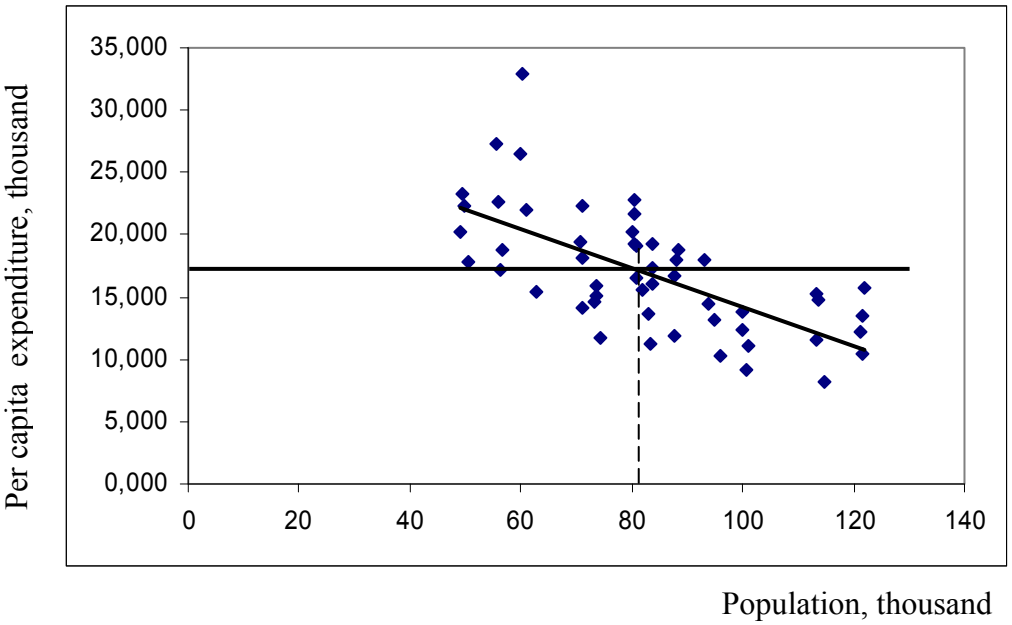


Source: Authors calculation based on data from the Ministry of Finance

Scenario 2

In the second scenario the first two steps of the optimization are similar as in the previous scenario, and in step three the smallest jurisdiction Gobi-Sumber is excluded. The result gives not a very high degree of explained variation due to the high expenditure level in Tuv Aimag which is located 43 km from the Capital city. Thus, in step four Tuv Aimag is excluded, and the estimated cost function results in a polynomial function. Then the polynomial function is approximated by a linear function, which illustrated in figure 4.20. Due to the low economic development the national standard of local public goods can be defined as average per capita expenditure which is 17,100 Tugrug at the average population of 81,500 people.

Figure 4.20: The Estimated Average Cost Function of Expenditures (Scenario 2)



Source: Authors calculation based on data from the Ministry of Finance

Such a minimum standard of public services should be delivered in order to improve living conditions and achieve economic growth. Thus, jurisdictions with per capita expenditure below the national average such as Arkhangai, Bayan-Ulgii, Dornod, Uvurkhangai, Khubsgul and Khovd should get transfer for providing at least the national minimum level of public goods for their constituencies. The jurisdictions located to the left hand side of the graph should get additional equalization transfers due to the smallness and these are Burgan, Gobi-Altai, Khentii, Sukhbaatar and Dundgobi as well as Gobi-Sumber Aimags. The small Aimags do not profits from the economies of scale so that they need additional transfers from the central government or the rich Aimags.

The analyses have proven that in particular the industrial structure and tax assignment can worsen the horizontal disparities. In Mongolia, most industries are concentrated in the capital city so that Ulaanbaatar alone raises about 60 percent of total tax revenues. In addition uneven distribution of natural resources and the sharing of natural resource tax and lisence fees contributed to the regional disparities, for instance in favor of the Orkhon Aimag, where a cupper mining factory is located. The Orkhon Aimag alone represented 15 percent of all revenue collections, which is almost equal to the revenue of the other 15 provinces. The five rich regions are also provinces, which are exploiting natural resources. Therefore, revenues are highly concentrated in the industrial areas and provinces being rich in natural resources in Mongolia.

Another factor that influences the regional disparities is involved within the VAT sharing arrangements. Because the VAT redistribution is made by population size, the provinces with small population size get little revenue from the VAT sharing, in contrast the provinces with bigger population size will get more revenue from the VAT sharing. For instance, the smallest province Gobi-Sumber has got ten-times lower revenue from VAT sharing than Khubsgul, which is the biggest in population size among the provinces. Thus, regional revenue disparities can be reduced if the VAT revenue would be shared with the provinces on a per capita basis, as is done for instance in Germany (Petersen, 2008).

In case of the Capital city, Orkhon and Darkhan-Uul Aimags, all are industrial centers, so they have higher revenue collections, for instance Orkhon Aimag's own source revenue including VAT sharing is four times higher than its expenditure needs. Bulgan and Umnugobi Aimags are natural resource rich areas that also raise own-source revenue. Including the shared VAT, their revenues are larger than their expenditures since 2005. Therefore, in order to solve the problem of horizontal disparities the provinces with high fiscal capacities should provide equalization transfers to the central government or to the other provinces and the volume of transfers should be carefully decided.

4.5.4 Current Shortcomings

The lower levels of government should have considerable own revenues determined by themselves within limits that provides them the opportunity to adjust their revenues at least at the margin. There are only very few taxes, where sub-national governments have influence on tax rates, thus on their own revenues. The most important and productive taxes are VAT, corporate income tax, payroll tax and excise taxes, which are under sole control of the central government. In other words, sub-national governments cannot control their revenues or they have not enough own revenues, which is one of the most important characteristics of insufficient local fiscal autonomy.

Conceptually, the revenue sources granted to sub-national governments should be sufficient to cover their expenditure responsibilities, or at least on a minimum level as mentioned above. According to the PSFML, major social services are assigned to the central government and provided by local government via earmarked transfers. The PSFML defines also core local government functions, however, local government own revenues are not sufficient for the provision of these core local services. Thus local governments are often financing the core local services by foreign aid programs, which became obvious in interviews with Soum governors. The local

revenues raised by own taxes are often too low to cover at least the local government operational expenses.

The taxes levied by the sub-national governments should not over burden the relatively mobile factors of production. The most of the tax revenues assigned to sub-national governments are levied on relatively immobile factors such as property taxes and land payments. In Mongolia, immobile property tax and land payments are assigned to the sub-national level which is in line with the above mentioned principles. Theoretically, natural resources gains should be transferred to the central government because they increase regional disparities. In Mongolia, central government fully determines all taxes on natural resource extraction and revenues of these taxes are shared among central, provincial and local governments. Therefore, these assignments have fostered horizontal disparities among the sub-national jurisdictions.

The VAT revenues are shared among the central and provincial governments, but sharing rates are fluctuating year to year. The local government revenue sources should be relatively stable and predictable. Therefore, VAT sharing rates should be formalized by law, in order to provide less volatile and more predictable revenues for local jurisdictions.

Centralized tax collection also does not create incentives to increase revenues, as any increase in local revenues is equalized by one to one reductions in either the tax sharing or transfer amounts. Due to the cost for the administration of local taxes the provincial and local authorities have a greater interest to collect the central taxes. Therefore the system encourages local governments to find extra-budgetary sources of income and under-estimate their tax revenues.

The most serious issue in intergovernmental fiscal relations in Mongolia is the lack of incentives to increase own revenue collections and rationalize the expenditures at the local level. During the early years of transition the revenue assignment, revenue sharing and transfers were allocated without any legalized rules and such decisions were under the discretion of the Ministry of Finance, the Parliament and Cabinet and changed from year to year. Thus the system failed to provide hard budget constraints, motivation to increase own revenues and to limit expenditures at the sub-national government level. The 2003 reform took significant measures towards the imposition of hard budget constraints, result oriented and medium term budgeting. However, hard budget constraints were only achieved through very strict regulations implemented by the TSA system.

The poor design of intergovernmental transfers reduced the incentives for sub-national governments to increase revenue collections, because the equalization transfers were also provided by a gap-filling approach, and any increase in local own revenues was balanced by reductions in either tax

sharing or transfers. Therefore, the current system creates unpredictability and perverse negative incentives for sub-national revenue collections.

Before the reform of 2003, there was a constant change in tax sharing rates and formulas over time, which was regulated by the annual consolidated budget law. Since 2003 only VAT was shared among the central and local governments, however, the sharing rates were fluctuated year to year. By the amendments of 2006 in CBL tax sharing rates among the central and sub-national governments were defined for the royalties and license fees from mining and prospecting mineral resources. The fluctuations in VAT revenue sharing create uncertainties and reduced predictability for sub-national budgeting and planning. Therefore, the crucial concern in revenue assignment is that sub-national government lack of adequate revenue autonomy, which is the important element of a well functioning system of intergovernmental relations.

4.5.5 Reform Proposal

First, the revenue sharing and transfers should be allocated according to a fixed formula and must be legitimized that it can provide predictability and create incentives to raise own-source revenues for sub-national government. The formula based financing would be more transparent so that the regions can understand the rationality of the transfer scheme and reduce political bargaining. It also will improve sub-national planning due to the stability within the revenue situation. As mentioned before, the formula should be based on per capita variables, hence, central government could assure well balanced financial conditions for the sub-national jurisdictions. For these reason the following measures are recommended:

- VAT should be shared on a per capita base instead of the current arbitrary transfers to the sub-national governments,
- formulas on per capita basis or other simple formulas for VAT sharing arrangement should be developed,
- mid term planning as defined by the PSFML should be implemented or adequate amendments in the CBL should be made.

Second, in order to enhance local accountability and responsibility the shares of sub-national revenues in GDP (currently being about 3%) should be increased so that at least the local authorities can finance a certain minimum standard of public services (excluding social services). Therefore, the following measures are recommended:

- A new law on Self Governance and Local Budgeting should be passed to provide some authorities for Aimag Assemblies' to ensure at least partial legal soveriegnty and revenue sovereignty at the lower level lurisdictions.

- The sales tax might be assigned to the sub-national governments if the costs for administration for local governments are too high, the alternative could be corporate income tax sharing by formula, thus businesses should pay taxes in the regions, where they operate instead of paying taxes in regions, where they are registered.
- The property tax is a good local tax due to its stability and immovability, thus revenues from the property tax can be increased via passing land law.
- Another option for improving local autonomy might be an increase of the livestock tax.

The recommended measures for the revenue reassignment should be implemented on the basis of careful estimation with consideration of the expenditure assignments that provide sufficient resources for sub-national government to deliver effective and efficient service for their constituencies.

4.6 Intergovernmental Transfers in Mongolia

Intergovernmental fiscal transfers are the third pillar of intergovernmental fiscal relations and the main form of the sub-national government financing in developing and transition countries (UNDP, 2005). There are a number of different instruments under the general term of "transfers", which include: intergovernmental grants, subsidies, subventions, donations and sharing of tax revenues. Transfers help to address imbalances that result from the mismatch between local expenditure responsibilities and revenue raising capacity. The important characteristics of any good system of intergovernmental grants are stability and flexibility (Bird and Smart, 2002).

Therefore, this chapter examines the existing structure of intergovernmental fiscal transfers, identifies basic problems and makes some tentative proposals for reform of the intergovernmental transfer system in Mongolia.

4.6.1 Overview of Intergovernmental Fiscal Transfers

Central-provincial and provincial-local transfers are the important source of revenues for the provincial and local governments in Mongolia. Transfers are representing about 55 percent of consolidated sub-national revenues until 2003, and the ratio dropped to 40 percent of consolidated sub-national revenues after the reform of 2003, which shifted major social service responsibilities to the central government. However, the intergovernmental fiscal transfers sharply increased and amounted to 71.1 percent of consolidated sub-national revenues in 2007 (see table 4.18).

Table 4.18: Share of Transfers in Total Sub-national Revenue, 2000-2007

	2000	2001	2002	2003	2004	2005	2006	2007
Arkhangai	62,0	62,0	n/a	43,2	44,2	36,9	45,2	62,8
Bayan-Ulgii	71,0	69,0	n/a	56,8	49,5	45,3	56,3	67,0
Bayankhongo	70,0	65,0	n/a	68,3	57,2	50,9	57,1	71,0
Bulgan	62,0	57,0	n/a	32,7	41,2	11,7	12,4	29,6
Gobi-Altai	76,0	77,0	n/a	65,6	60,3	59,5	57,0	75,5
Dornogobi	55,0	53,0	n/a	18,8	15,6	16,7	19,9	37,7
Dornod	61,0	56,0	n/a	31,0	33,5	27,2	35,6	364,4
Dundgobi	66,0	61,0	n/a	49,4	50,6	48,6	58,0	72,1
Zavkhan	68,0	66,0	n/a	53,4	55,9	51,0	55,4	71,5
Uburkhangai	60,0	56,0	n/a	56,4	48,9	42,7	54,3	63,9
Umnugobi	67,0	61,0	n/a	54,4	62,6	49,9	48,3	45,9
Sukhbaatar	76,0	74,0	n/a	48,8	46,9	50,0	81,3	67,5
Selenge	22,0	30,0	n/a	26,9	35,5	23,6	30,9	60,4
Tuv	33,0	44,0	n/a	31,3	43,6	23,2	33,7	53,5
Uvs	69,0	65,0	n/a	49,9	50,2	51,4	63,6	75,2
Khovd	70,0	66,0	n/a	39,6	49,3	46,8	51,1	67,0
Khubsugul	67,0	63,0	n/a	43,2	39,4	36,5	41,7	62,4
Khentii	64,0	60,0	n/a	31,8	42,2	41,5	53,5	66,3
Darkhan-Uul	22,0	15,0	n/a	32,6	18,7	26,2	26,6	11,5
Ulaanbaatar	0,0	5,0	n/a	16,4	11,7	12,5	10,1	9,8
Orkhon	17,0	6,0	n/a	3,5	4,9	6,2	10,7	61,2
Gobi-Sumber	55,0	37,0	n/a	45,7	63,6	62,6	62,0	67,0
Average	55,1	52,2	n/a	40,9	42,1	37,3	43,9	71,1

Source: Updated table from Lkhagvadorj, 2007, p. 27.

The Mongolian fiscal system is based on a layer cake model where a strict vertical hierarchical relationship among different levels of government does exist. Thus, the central government determines transfers to the provincial (Aimag) level governments and there are no direct central transfers to the county (Soum) level of governments. The county level receives the transfers from the provincial level of government, which is congruent with the structure and allocation criteria of central transfers.

Beyond that the transfers in Mongolia can be classified into two categories such as unconditional and conditional transfers. The unconditional transfers consist of revenue-sharing transfers and equalization transfers. The conditional transfers are allocated to the local governments for financing centrally agreed delegated services such as education, health, culture, sports, social assistance, public order and safety. All central transfers being assigned to the sub-national levels pass through the provincial governments. The provinces manage the transfers to the counties in a similar ad hoc way as in case of the central to provincial transfers.

Unconditional grants

The VAT, PIT, corporate income tax and excise tax were shared among central and sub-national governments until 2003. By the 2003 reform progressive PIT, corporate income tax and excise tax sharing were removed, but VAT sharing is remained so that a certain amount of the original revenues are returned to the respective provinces.

The consolidated budget law (CBL) defines the level of VAT sharing to sub-national governments for each budgetary year, and determines the tax sharing rates (since 2006) for royalties, license fees for prospecting and mining mineral resources for the central, provincial and local governments. 20 percent of the revenue of the VAT, 30 percent of the royalties and 50 percent of the license fees for mineral resource usages are determined for the sub-national governments. The central government determines tax bases and rates as well as administers all taxes, so the revenue sharing transfers can be classified as unconditional grants. The VAT sharing rates between central and sub-national governments are unstable and unclear, and the *de facto* sharing rates were 18.4 percent in 2006 and 16.6 percent in 2007 (see table 4.8 on page 114).

The consolidated budget law determines the level of transfers allocated to sub-national governments which vary from year to year. Financial equalization transfers are one of the most important components of sub-national finance in Mongolia. In order to get transfers, sub-national governments submit the revenue and expenditure estimates to the Ministry of Finance. The compilation of the budgets is largely based on the norms and expenditure benchmarks. Consolidated request from provinces are reviewed, analyzed and recommendations are made by the MoF. Based on these estimates the MoF calculates the amount of transfers for each province and the Parliament approves the transfers. Counties receive transfers from the province government in a similar way. The assignment of transfers is based on expenditure and revenue projections, which are more or less ad hoc and no formula for the transfer allocation does exist.

Conditional grants

The second type of transfer are conditional transfers to sub-national governments for financing sub-national investments and centrally agreed services such as education, health, culture, sports, social assistance, public order and safety. At the province level these transfers cover all costs for the provision of the mentioned services and operation of the respected departments. At the county level those transfers are financing the schools, kindergartens, hospitals and cultural centers. The conditional grants are earmarked and transferred directly to the respective budget entities at the sub-national level. The investment expenditures on health, education, culture and sports are delegated

to sub-national governments and financed by conditional transfers from the respected line ministries budgets. The investment on transportation is financed by the conditional grants allocated from auto-road funds, which are financed by the vehicle taxes. In addition, the specific purpose conditional transfers are assigned to sub-national levels to finance programs and projects since 2008.

The revenue sharing and equalization transfers are recorded separately as intergovernmental transfers in the budget documents, but conditional grants are included in the line ministries budget. In addition, sub-national governments have extra-budgetary funds, which mainly consist of international aids and local donations. These revenues are not always registered in the budget records and are often the only financial source for local capital expenses as well as local services assigned to sub-national governments by the PSFML.

Table 4.19: Consolidated Intergovernmental Transfers

	2007		2008	
	Amount (billion Tugrugs)	Percentage of total transfers	Amount (billion Tugrugs)	Percentage of total transfers
Unconditional transfers				
Revenue sharing transfers	58,2	72,5	84,2	79,2
Equalization transfers	22,1	27,5	22,1	20,8
Subtotal	80,3	100,0	106,3	100
Own-source revenue	114,89		162,8	
Total local revenue	195,19		269,1	
Share of transfers in total local revenue		41,1		39,5

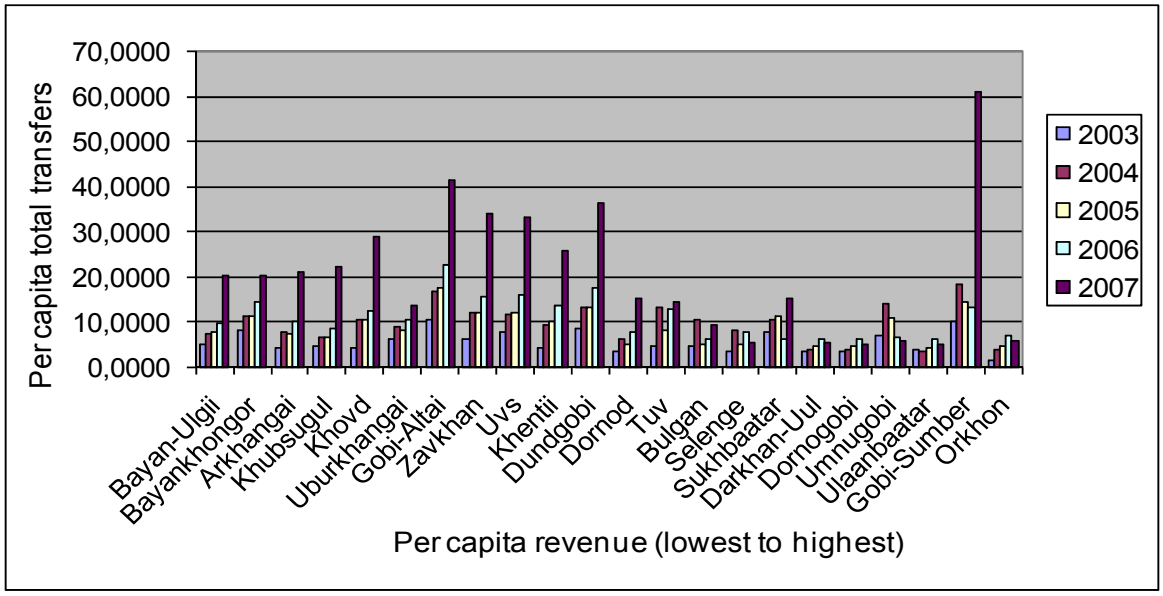
Source: Authors' calculation based on data from the Ministry of Finance.

As mentioned before central to sub-national transfers are the most important source of revenues for the sub-national governments and they have substantially been increased from 2003 to 2008. The equalization grant has grown rapidly in size from 7.1 billion Tugrug in 2006 to 22 billion Tugrug in 2007. However, the revenue sharing transfers had a gradual increase in 2003 to 2006, tripled in size at 58,2 billion Tugrug and accounted to 79.2 percent in total transfers to the sub-national governments in 2007 (see table 4.19). The revenue sharing transfers increased sharply[23] due to the introduction of mineral tax sharing by the amendment of 2006 in the CBL. The relative role of equalization transfers in the sub-national budgets remained somewhat

[23] Due to the mineral resources price increases in the world markets both budget revenue and expenditure have had substantial increases in 2007.

constant, while the role of revenue sharing transfers in the sub-national budgets increased from 2006 to 2008.

Figure 4.21: Distribution of Per Capita Total Central Transfers by Province, 2003-2007

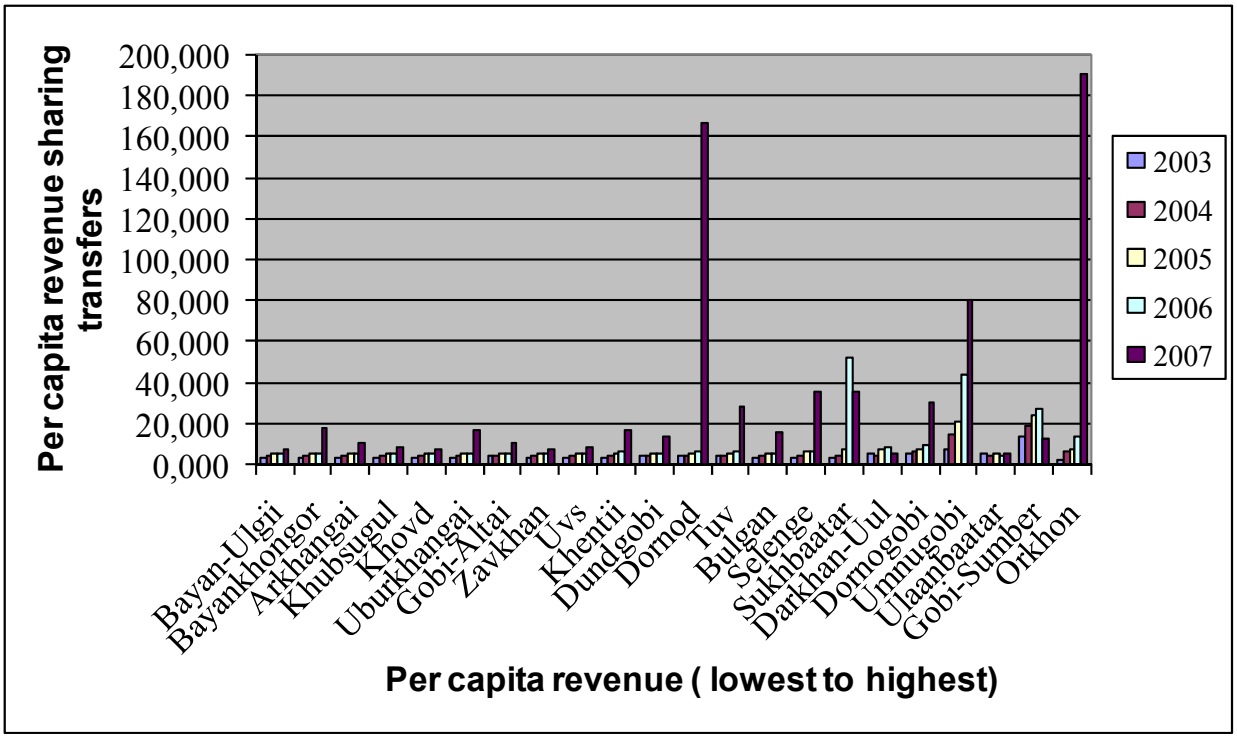


Source: Authors' calculation based on data from the Ministry of Finance.

Figure 4.21 illustrates the distribution of the per capita total transfers across the provinces, which are arranged by per capita tax revenue in ascending order for the period of 2003 to 2007. The Gobi-Sumber (60,860 Tugrug) has been the highest per capita total transfer receiving province followed by Gobi-Altai, Dundgobi, Zavkhan and Uvs Aimags, while Orkhon (4,500 Tugrug), Ulaanbaatar, Darkhan-Uul and Dornogobi Aimags have received a relatively low level of per capita transfers.

Figure 4.22 illustrates the distribution of the revenue sharing transfers across the provinces according to the ascending order of the fiscal capacities from 2003 to 2007. Orkhon has obtained the highest per capita revenue sharing transfers of 190,349 Tugrug, followed by Dornod, Umnugobi, Sukhbaatar and Gobi-Sumber Aimags, while Bayan-Ulgii, Khovd and Zavkhan Aimags have received a relatively low level of per capita revenue sharing transfers. The transfers allocated to the sub-national governments are characterized by high fluctuations, and the strongest increases in transfers took place in 2006 and 2007.

Figure 4.22: Distribution of Per Capita Revenue Sharing Transfers by Provinces, 2003-2007



Source: Authors' calculation based on data from the Ministry of Finance.

The analysis demonstrates that provinces with high per capita revenue obtained higher per capita revenue sharing transfers. These are the provinces either with better infrastructure or mineral resource rich areas. Thus, the origin based VAT sharing and mineral resource tax sharing is not effective in terms of equity because it contributes to the regional disparities in Mongolia. With regard to the ad hoc transfers, the provinces with a fiscal capacity lower than the average received relatively high transfers, than the provinces with very low fiscal capacities. Despite the shortcomings the ad hoc transfers have had some positive impacts on equity.

According to the current expenditure and revenue assignments, some provinces are unable to provide the national average minimum service standard, which determined in the panel analysis (p. 125). Thus, fiscal equalization transfers can be an instrument for reducing vertical and horizontal imbalances.

4.6.2 Problems with the Existing Systems

Circumstances and objectives differ in countries around the world, however, there are some commonly accepted criteria for effective transfer systems, which are flexibility, stability, adequacy of resources and clear mandates for sub-national levels of government. The basic task of the transfer system is to assure that sub-national governments are accountable both to their citizens and to higher levels of government (Bird & Smart, 2002). In case of properly

designed transfers equalization can be achieved even if transfers finance 90 percent of local expenditures, so the design of the transfer system matters.

The intergovernmental fiscal transfers are a dominant source of sub-national revenues in Mongolia, hence, the design of these transfers are vital for the efficiency and equity of local service delivery. As Shah & Shen (2006) summarized, there are six broad objectives for national fiscal transfers, which are bridging fiscal gaps, reducing regional disparities, compensating for benefit spillovers, setting national standards, influencing local priorities in area of high national but low local priority, and stabilization. Each of these objectives can be applied to a varying degree in Mongolia, and each objective needs a specific design of transfers.

According to the current legislature the revenue sharing transfers do not provide predictability for sub-national governments in Mongolia. In addition, origin based mineral resource tax sharing contributes to local disparities, which is not in accordance with the best practices. In order to enhance local incentives and achieve expenditure efficiency, the transfers should be designed to balance local fiscal effort and central allocation of funds, and local government should have some degree of revenue autonomy. The tax sharing with formula that considered both needs and capacity like in Germany can be contributed to sub-national autonomy for the setting of their priorities.

As mentioned before intergovernmental fiscal transfers are determined on ad hoc basis by using a revenue pooling system, which disregards the local differences in needs, costs and own revenue raising capacity. In conclusion, Mongolian intergovernmental fiscal transfer system lacks of the basic ingredients of a good equalization system, namely to provide sufficient resources even to the poorest and smallest jurisdictions, to enable all local governments to deliver at least t a national minimum standard of public goods.

The analysis of this section has identified a number of shortcomings of the intergovernmental fiscal transfer system in Mongolia. As mentioned, the current system of transfers including revenue sharing transfers is not adequate to meet revenue needs of sub-national governments in consideration of the expenditures assigned to them. The transfer program has been implemented largely to fill vertical gaps created by the existing assignments at the sub-national level. Due to the bottom-up budgeting and consolidating budgeting process, the amount of transfers is unknown until the consolidated budget is approved by parliament. Thus, sub-national governments cannot reasonably estimate intergovernmental transfers until the budget execution starts. Annual changes on the amount of transfers and lack of clarity in the distribution of funds create highly unpredictable and unstable conditions for sub-national governments, which makes sub-national planning for budgetary resources

impossible. Therefore, the existing system lacks of transparency, predictability and stability, which are the most important components of an effective transfer system.

The amount of transfers to sub-national governments is determined largely by political decisions on ad hoc basis and disregards local differences in needs and fiscal capacities. Consequently, the system does not support efficient delivery of public services and local incentives. In addition, unconditional transfers focused on input controls do not provide accountability for sub-national governments. Provincial-local transfers use the same allocation criteria as central to provincial transfers. These criteria do not differentiate among local governments by type, population size and urban/rural character. These "one size fits all" approach in provincial-local transfers creates resource inadequacy and inefficiency of the services delivery.

4.6.3 Reform Proposal

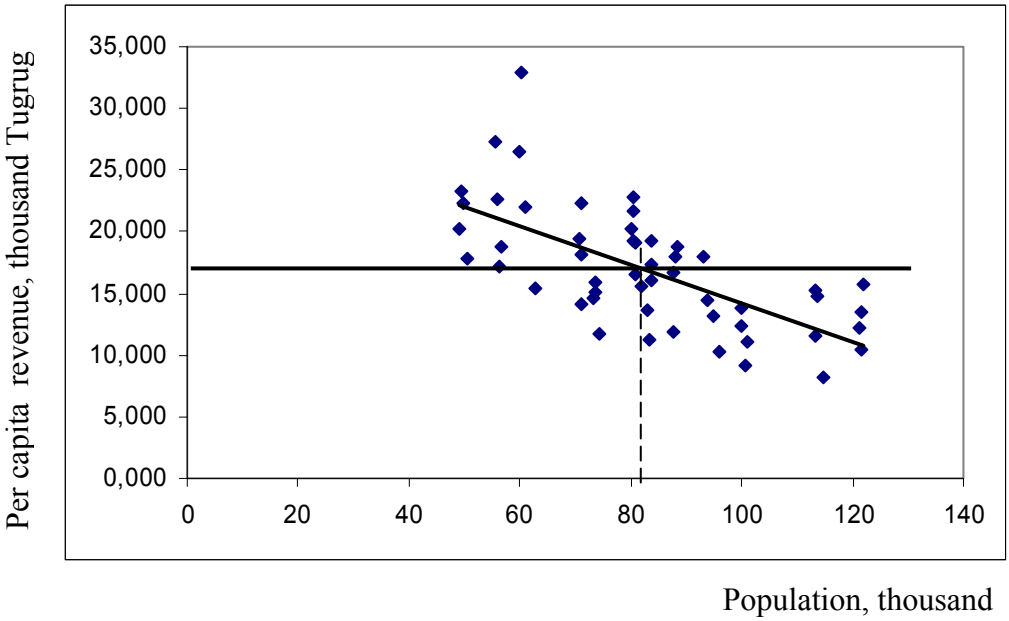
The analysis of this section identified the shortcomings of the existing intergovernmental fiscal relation system of Mongolia. The existing transfer system does not consider the fiscal needs and capacities of the sub-national jurisdictions and the allocation of funds is basically implemented in an ad hoc way. In order to cope with this problem and enhance the local incentives, a fiscal equalization based on the fiscal needs of the provinces should be implemented.

Many federalist countries such as Canada, Australia and Germany provide equalization transfers for reducing revenue disparities between sub-federal governments of the same level. In these countries sub-federal governments with fiscal capacities below the national average receive some additional funds (Baretti, Huber & Lichtblau, 2000). The equalization will at least partly offset the regional disparities in revenues and enable sub-national governments to provide national minimum standards of local public goods.

Following a proposal of Kirn and Petersen (2007) the Principality of Liechtenstein in 2007 has reformed its fiscal equalization law in the direction discussed above.[24] The figure 4.23 demonstrates the derivation of the minimum standard for the supply of public goods from the panel of the per capita expenditures of the Mongolian Aimags in the period of 2003 to 2007, which has been described in detail on section 4.5.3. The national standard of local public goods supply is fixed at the per capita expenditure of 17,100 Tugrug (the vertical line in figure 4.23).

[24] The Liechtenstein Fiscal Equalization Law is attached as appendix 7 and also can be found on the website http://www.gesetze.li/Seite1.jsp?LGBlm=2007336.

Figure 4.23: The Allocation of Equalization Transfers



Source: Authors calculation based on data from the Ministry of Finance

Then the standardized minimum per capita expenditures have to be guaranteed by transfers from the central government to assure a minimum supply of public goods and services for all jurisdictions, thus guaranteeing a certain equality of living standards within a national state. The minimum level of the expenditure can be estimated by the minimum standard of the average per capita expenditure multiplied by the number of the inhabitants, so from the regression analysis the following formula can be derived

$$E_j = 17.100 \times N_j \qquad (1)$$

where j indicates the Aimag, N_j the number of inhabitants and E_j the minimum standard of expenditures for the Aimag.

The analysis of the public expenditures, which has done in the section 4.5.3 revealed that the per capita expenditures are higher in smaller jurisdictions than in larger ones due to the lacking economies of scale. Thus the Aimags with per capita expenditure lower than the national minimum standard are eligible to get transfers and the per capita expenditure should be estimated for a four to five year period. The Aimags with higher per capita expenditure have to finance the difference above the standard by own revenue or should reduce their expenditures to that standard. According to the current assignment, Aimags collect own revenues (R_j), hence the own revenue should be subtracted from the standard transfers to secure the interests of the Aimags to raise own revenue. The transfers (Tr_j) to be paid by the central government can be estimated by the following formula:

$$Tr_j = (17.100 - R_j) \times N_j \qquad (2)$$

As figure 4.23 demonstrates, the Aimags with a population of less than about 81,500 inhabitants do have per capita expenditure, which are clearly above that minimum amount of 17,100 Tugrug. Obviously such small Aimags do much less profit from the economies of scale than the bigger ones. With other words small Aimags are confronted with diseconomies of scale because the necessary fixed costs of such jurisdiction are shared by a comparatively small population. Due to geographical restrictions but also cultural traditions, it is often not possible to form larger jurisdictional units. Then such "costs of smallness" have to be taken into consideration so that an additional transfer formula is needed to compensate for the costs of smallness. Such a transfer formula is also presented in figure 4.23, which might be linear and starts from the limit of smallness (which is 81,500 inhabitants).[25]

On the left side of the observation points from the population figure of 81,500 inhabitants, one can derive a linear transfer formula, which is decreasing with the number of inhabitants. For instance such formula can be estimated as following:

$$Tr_j^S = 0.1565(81.500 - N_j) \times N_j \qquad (3)$$

where j again indicates the (small) Aimag, Nj the population and Tr_j^s the transfers for smallness. This can also be expressed in a perhaps more understandable way that the minimum per capita expenditure level is increased by about 0.1565 thousand Tugrug if the number of inhabitants declines by one person starting from the limit of 81,500 inhabitants as mentioned above.

As a result two kinds of transfer from the central budget would exist: a) the transfer to guarantee the minimum per capita expenditure level for all Mongolian Aimags, and b) the transfer to compensate the smallness for the Aimags with population below the 81,500 inhabitants. As a consequence the disparities between the Aimags at least would be substantially limited and – an even larger advantage – all Aimags would fall under a fiscal equalization scheme, which is transparent and would provide predictability and stability for regional planning and budgeting. In order to implement such a formula-steered fiscal equalization scheme, the government should pass a new law on fiscal equalization. A good example for such a draft law is the Liechtenstein Fiscal Equalization Law, which consists of just eight articles and is one of the simplest and most effective laws in the world.

[25] Also a stepwise increase is possible with increasing smallness as in case of the Liechtenstein fiscal equalization law.

4.7 Sub-national Borrowing

Public debt and borrowing traditionally has been as an important source to finance long-term infrastructure projects because it enhances intergenerational equity. Such type of intergenerational sharing enables local government to undertake the large-scale infrastructure investments (Shah, 1999). The sub-national borrowing is the final pillar of fiscal decentralization, in addition to first three pillars. In case when local government's expenditures are exceeded by their revenues, sub-national budget deficits and the incurrence of debt are the consequence.

However, countries in transition and some developing countries have imposed strict restrictions on local borrowing because of insufficient revenue capacity of the local governments. More importantly rapidly growing local debt will endanger macroeconomic stability. This section explores the current situation of the sub-national borrowings in Mongolia.

The borrowing activity of the government is regulated by PSFML, LTAU and CBL. By PSFML local governments must obtain approval for borrowing from the central government through the MoF, and only Aimag or Capital city governors have a right to borrow. Aimag and Capital city governors and general managers of the budgetary bodies are forbidden to spend above the appropriation and to overdraw the bank account as well as to borrow by PSFML. Aimag and Capital city governors can borrow from the central government.

As defined by LTAU the province Assembly has the authority to approve bond issuing according to the governors proposal. However, sub-national borrowing is currently limited because of the underdevelopment of the capital markets especially at the province level in Mongolia.

Table 4.20: Consolidated Budget Execution, 1995-2002, (percent of GDP)

	1995	1996	1997	1998	1999	2000	2001	2002
Revenues including transfers	33.8	27.8	25.5	27.6	27.2	34.5	38.5	38.7
Expenditures	40.4	36.0	34.5	41.9	39.4	41.5	43.9	44.2
Net lending	0.9	1.1	7.9	10.5	8.7	5.5	5.7	5.4
Balance including transfers	-6.7	-8.2	-9.1	-14.3	-12.2	-7.0	-5.4	-6.0

Source: World Bank, 2002.

The balance of expenditures, revenues and transfers of the consolidated budget between 1995 and 2002 was relatively high and net lending as a percent of GDP sharply increased until 1998. During the transition period

from 1995 to 2002, the consolidated budget after transfers yielded in a deficit, which was declining after 1998 (table 4.20).

Table 4.21: Consolidated Budget Execution, 2003-2008, (percent of GDP)

Government level	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*
			Central government			
Revenues after transfer	*35.82*	*35.16*	*35.01*	*34.98*	*38.74*	*31.44*
Expenditures	*40.06*	*37.22*	*31.67*	*31.67*	*36.58*	*35.62*
Balance after transfers	*-4.24*	*-2.06*	*3.34*	*3.30*	*2.16*	*-4.18*
Balance before transfers	*-5.84*	*-3.25*	*2.10*	*2.52*	*1.48*	*-5.60*
			Consolidated sub-national government			
Revenues after transfer	*3.20*	*3.16*	*3.26*	*2.45*	*2.59*	*3.08*
Expenditures	*2.43*	*2.72*	*2.45*	*2.57*	*3.09*	*3.50*
Balance after transfers	*0.77*	*0.44*	*0.81*	*-0.12*	*-0.50*	*-0.42*
Balance before transfers	*0.56*	*0.00*	*0.55*	*-0.31*	*-0.98*	*-0.82*
Net lending	*6.19*	*5.70*	*3.29*	*2.13*	*2.23*	*n/a*
GDP, millions of Tugrug	*1461169.2*	*1910880.9*	*2266505.5*	*3715000.0*	*4525900.0*	*5464300.0*

Source: Authors' calculation based on data from the Ministry of Finance.

However, the reform of 2003 imposed the limits on state borrowing in general and sub-national borrowing in specific. As mentioned the sub-national governments are strictly prohibited to spend over the approved budget expenditures and make loan or budget arrears. As a result of these measures the sub-national budget after and before transfers are leveled off on about to zero percent of GDP from 2003 to 2005, and turned into a deficit of about one percent of GDP from 2006 to 2008 (table 4.21). The reform measures of 2003 established the budget discipline with hard budget constraints at the sub-national level.

Generally, short term borrowing is limited because of its impact on macroeconomic stabilization. Financing the current expenditure by debt leads to an increase of the public debt and has a crowding-out effect on the private investments. So, local governments are allowed to borrow only for financing the capital expenditure. Long and medium term borrowing is restricted to finance the infrastructure and central government has a strong control on the overall levels of borrowing in Mongolia.

According to the current legislation the sub-national borrowing is under the direct control and administration of the central government in Mongolia. The sub-national borrowing can be used for financing the large scale infrastructure projects to support economic growth. Due to the weak capital market development the market based borrowing control is currently not possible in Mongolia. In a market system lenders charge higher borrowing costs to excessive or irresponsible borrowers. But this approach only works effectively in well developed capital markets and institutions. Therefore, rule based debt control is appropriate for Mongolia.

4.8 Concluding Remarks

A sound local government structure is an important foundation for the effective and efficient system of intergovernmental fiscal relations. According to the current legislation, Mongolia has a large number of extremely small local governments and this fragmentation could be detrimental for the ability of local government to deliver public services effectively. However, communities (Bags) became large in size, which is also inappropriate for the service delivery in a vast territory with small population living in nomadic culture. The basic recommendation for the improvement of the size and structure of the sub-national jurisdictions is the amalgamation of the Aimags and Soums as well as the segregation of the rural Bags. It is worth to note that these activities should take the historical tradition into consideration, which means the regional and local characteristics, geography and size of the territory as well as the preferences of the population.

The main criterion for an effective expenditure assignment is the efficient service provision that government satisfies needs and preferences of taxpayers as well as possible and this can be achieved at best by the subsidiarity principle. The analysis demonstrates that the current expenditure assignments in Mongolia do not violate the general principles of expenditure assignment. However, there exist overlapping in and duplications of responsibilities, which create unclear assignments and inefficient supply of public services. With regard to the capital expenditure, the maintenance and the operation of the facilities are assigned to the local level, which also have had a negative impact on the efficient service provision at the sub-national levels. To address

the mentioned deficiencies in the existing expenditure assignments, the LTAU should be amended or replaced by new law on Self Governance and Local Budgeting that defines clear distinctions and interactions of the competencies between different levels of self governing bodies and clarifies norms for the decision making process of the Assembly.

The revenue assignments lack a very important element, for instance significant revenue autonomy given to sub-national governments, hence, sub-national governments cannot control their revenues and have not enough own revenues. In addition, the intergovernmental fiscal relations in Mongolia lack of incentives to increase the own revenue collections and rationalize the expenditures at the local level. In order to address these issues the sub-national governments should be provided with sufficient revenues, for instance the shares of sub-national revenues in GDP could be increased to about five percent, so that at least they can finance their minimum level of the local services.

The analyses illustrates that there are significant vertical and horizontal imbalances in Mongolia. Due to regional disparities in per capita income, jurisdictions differ by their fiscal capacities. Hence, a well balanced design of revenue sharing and fiscal equalization system is an important part of the intergovernmental fiscal relations system. The average minimum per capita expenditure is 17,100 Tugrug, thus provinces with per capita expenditure below this level are poor jurisdictions and those above the level are the rich jurisdictions.

The critical problem associated with intergovernmental transfers is that there is not a stable, predictable and transparent system of transfer allocation. The amounts of transfers to sub-national governments are determined largely by arbitrary political decisions on an ad hoc basis and disregarding local differences in fiscal needs and fiscal capacity. Thus, a fiscal equalization system based on the fiscal needs of the provinces should be implemented. The equalization transfers will at least partly offset the regional disparities in revenues and enable sub-national governments to provide a national minimum standard of local public goods. In total, local governments are still far away from having the political, administrative and fiscal autonomy to manage their own affairs. Current expenditure assignments and limited revenue raising possibilities became major obstacles for the development of local self-government and the promotion of fiscal decentralization. Therefore the most important result of this analysis is the proposal for fiscal equalization scheme, which is formula based in determining the transfers.

Chapter 5

Summary and Conclusion

The definitions and implications of fiscal federalism are core elements of the policy debates in many countries around the world. At the beginning it was pointed out that more responsible government at the local level will ensure the efficient resource allocation in the public sector, which is possible in a decentralized governmental system. The multilevel systems of jurisdictions then raise the problem of fiscal federalism.

Tiebout (1956), Musgrave (1959) and Oates (1972) classic argument for decentralization is that government should correct market failure in the supply of public goods by decentralization because local communities have better opportunities to meet differences in tastes and preferences. The jurisdictional level with best information about the citizens' preferences should supply the respective public goods, which will result in economic efficiency regarding the resource allocation. Then central government should be responsible on national public goods like in the fields of redistribution and stabilization. Hence, local government should provide the efficient level of local public goods for their constituencies. Under centralized government the decisions on the service delivery are made according to the median national voters' preferences. National consensus will not fit in case of local public goods, because these goods benefit only the population of that jurisdiction. Thus, for local public goods decentralized decision making provides advantage of taking into account variations in preferences what centralized decision making cannot do.

In a democratic setting citizens have the opportunity to vote on such issues. Decentralized elections will strengthen the citizen's responsibility to participate in the political process and control the fiscal institutions for an efficient use of public funds and the decentralized jurisdictional power will improve citizen's influence on the budgetary decisions and strengthen the politician's responsibility. Therefore, to achieve efficient provision of public goods at the local level, the political and fiscal decentralization should be implemented hand in hand that allows citizens to vote for their interest and local government to provide services and tax their constituencies appropriately.

Decentralization has many benefits, but it also has costs if it is implemented in a wrong way. Hence, the countries should find the appropriate balance of centralization and decentralization in order to achieve an efficient and effective structure of the public sector. In case of a decentralized provision of public goods, the multilevel system of government raises an interesting set of

fiscal problems, which are referred to as fiscal federalism or central/local government relations. The intergovernmental fiscal relations will be focused on the four main areas, which are expenditure and revenue assignment, transfers as well as sub-national borrowing.

Expenditure assignment is a very important base line for the design of the revenue assignment and transfers. In order to achieve efficiency in service provision, the expenditures should be assigned by the subsidiarity principle. The duplication and overlapping of the functions should be avoided as much as possible because conflicting competencies will hurt accountability. There is no single best expenditure assignment at all, thus the optimal expenditure assignment is which could be changed following changes in costs and preferences.

For the implementation of the assigned functions, sub-national governments should have sufficient own revenue sources. Conceptually, the taxes with stabilization and redistribution effects as well as taxes on mobile factors should be assigned to the central government. As a result of this assignment the local government does not have sufficient revenue to cover the costs for the assigned goods. The capability to increase tax rates by local governments depend on the tax competition and tax exportation. The tax competition and exporting have both positive as well as negative aspects. Thus central government should take the effects of tax competition and exporting into consideration in its policy decisions.

As a result of the decentralized expenditure and revenue responsibilities the different regions have different fiscal capacities. Some regions would be unable to provide a certain standard of public goods with own tax revenue. Therefore, grants from the higher level of government can compensate the vertical and horizontal imbalances. The grants are designed to internalize externalities and to achieve vertical as well as horizontal equity. Fiscal equalization transfers are mainly designed to mitigate disparities within a decentralized system of government.

Many countries around the world have reformed the fiscal relations between different levels of government to improve public sector efficiency, hence, promote economic growth. The problems that each country faces are at the same time very different and very similar. The differences arise from the diversity of the national economy, demography, geography and traditions. The government sector in developing countries appears to be more centralized than in developed ones. As stated in UNDP (2005) the similarities of fiscal decentralization in transition countries are mostly involved in the shortcomings of the intergovernmental relations such as inadequacy of local government structures, unclear expenditure assignments, lack of revenue autonomy and poorly administered intergovernmental transfers.

Following Bahl & Linn (1992) there is a threshold level of economic development below which decentralization is not effective. Prud'homme (1995) stated that in case of developing countries voters make decisions on the basis of tribal and political party loyalties, so that preferences are not expressed on their votes, hence, public goods provision consist on the satisfying the basic needs rather to meet variation in the preferences. In addition in countries with less economic diversification, more vulnerable external factors such as international commodity prices, natural disasters and chronic inflation as well as weak local administrative capacities, centralization might be superior to extensive decentralization. Therefore, the centralization and decentralization is a continuum rather than a dichotomy and effectiveness of decentralization would depend on the optimal distribution of the taxing and expenditure responsibilities taking into consideration the country specific factors such as economy, tradition and demography as well as geography.

The empirical research was focused on the intergovernmental fiscal relations system of Mongolia. Within this perspective the analysis is made on the scope and structure of the governmental sector, expenditure assignment, revenue assignment and design of the intergovernmental transfer as well as sub-national borrowing. On the basis of the theoretical and empirical research some policy recommendations for the development of the efficient and effective intergovernmental fiscal relations system have been developed.

As former socialist country Mongolia has had a highly centralized governmental sector. In the last decade Mongolia has introduced a number of decentralization measures, which followed a top down approach and were implemented without any integrated decentralization strategy. As a result Mongolia became de-concentrated state with fiscal centralization. According to the current legislation, Mongolia has a large number of extremely small local governments and this fragmentation could be detrimental for the ability of local government to deliver public services effectively. The historical research on the local government structure of Mongolia demonstrated that to improve the public service delivery the amalgamation of the Aimags and Soums as well as a segregation of the rural Bags should be implemented taking into consideration the tradition, geography and demography as well as culture.

With regard to the expenditure assignment the analysis demonstrated that the current expenditure assignments in Mongolia do not violate the general principles of expenditure assignment. However, there exist overlapping in and duplications of responsibilities which create unclear assignments and inefficient supply of public services. To address the mentioned deficiencies in the existing expenditure assignment, the Law of Territorial and Administra-

tive Units should be amended or replaced by new law on Self Governance and Local Budgeting that defines the clear distinction and interaction of the competencies between different levels of self governing bodies and clarifies norms for the decision making process of the Assembly.

The revenue assignment is lacking a very important element, for instance significant revenue autonomy given to sub-national governments, which is vital for the efficient service delivery at the local level. The tax bases for custom duties, direct and indirect taxes are under the exclusive legislation and administration of the central government in Mongolia. The most local taxes are also under the central legislation with partial legislative sovereignty for the local government. Within the current system sub-national governments have no incentives to increase revenue collection. In fact, any increase in local revenues is equalized by reductions in either the tax sharing or transfers. Therefore the current system discourages local governments incentives to increase own revenue collections and rationalize the expenditures at the local level. In order to address these issues the sub-national governments should be provided with sufficient revenues, for instance the shares of sub-national revenues in GDP could be increased to about five percent by introducing the corporate income tax sharing and increasing the livestock tax, so that at least the regional and local authorities can finance minimum level of local services.

The critical problem associated with intergovernmental transfers is that there is not a stable, predictable and transparent system of transfer allocation. The amount of transfers to sub-national governments is determined largely by political decisions on ad hoc basis and disregards local differences in needs and fiscal capacity. The current tax assignment contributed to regional fiscal disparities due to the origin based VAT and mineral tax sharing. Thus a fiscal equalization system based on the fiscal needs of the provinces should be implemented. The equalization transfers will at least partly offset the regional disparities in revenues and enable sub-national governments to provide national minimum standards of local public goods.

Therefore, in order to achieve efficiency and effectiveness in the public sector Mongolian government have to design the integrated decentralization strategy considering the country specific characteristics, and implement reform with right sequeincing. The policy paper should have the components such as expenditure assignment, revenue assignment and intergovernmental transfers as well as sub-national borrowing. In addition, the budgeting and financial management aspects also should be included in the policy paper. The recommendations developed within this thesis with regard the four main pillars of intergovernmental fiscal relations system can be considered as starting point for the development of such policy paper on fiscal decentralization in Mongolia.

The conduction of the comprehensive survey of the actual expenditure assignment of the different governmental levels by unbundling services is highly recommended to clarify expenditure responsibilities of the jurisdictions. Finally, the implementation of formula-steered equalization transfer scheme based on fiscal needs of the jurisdictions is strongly recommended.

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Appendices

1. Population of Mongolia by Aimags, 2001-2007
2. Population, Territory and Livestock Data by Soums for 2000
3. Distribution of Taxes and Fees among the Government Levels
4. Consolidated Budget Expenditures by Services, 2001-2008, thousand of tugrug
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7. The Liechtenstein Fiscal Equalization Law

Appendix 1: Population of Mongolia by Aimags, 2001-2007

	2001	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*
TOTAL	**2 442.5**	**2 475.4**	**2 504.0**	**2 533.1**	**2 562.4**	**2 594.8**	**2 635.2**
				West region			
Total	**422.4**	**418.3**	**414.5**	**411.6**	**409.0**	**410.0**	**411.1**
Bayan-Ulgii	96.9	98.9	100.8	101.2	100.0	100.1	100.8
Gobi-Altai	64.2	62.7	61.4	60.9	60.4	60.3	60.2
Zavkhan	86.8	84.6	82.9	80.7	80.1	80.6	81.1
Uvs	85.8	83.6	81.9	81.0	80.6	80.5	80.4
Khovd	88.7	88.5	87.5	87.8	87.9	88.5	88.6
				Khangai region			
Total	**558.7**	**558.5**	**551.9**	**552.5**	**551.8**	**553.8**	**555.7**
Arkhangai	98.3	97.4	96.1	94.9	93.8	93.3	92.8
Bayankhon-gor	85.7	84.4	83.2	83.8	83.6	83.8	84.2
Bulgan	63.3	63.5	62.8	60.8	59.9	60.3	60.5
Orkhon	76.5	77.4	75.1	78.4	79.0	79.4	80.1
Uvurkhangai	114	113.9	113.2	113.2	113.8	114.9	115.7
Khubsgul	120.9	121.9	121.5	121.4	121.7	122.1	122.4
				Central region			
Total	**446.5**	**449.3**	**442.3**	**439.0**	**436.1**	**436.5**	**437.9**
Gobisumber	12.4	12.4	12.2	12.3	12.2	12.3	12.6
Darkhan-Uul	86	87.8	86.5	87.8	87.7	87.5	87.6
Dornogobi	51.5	52	52.1	52.5	53.3	54.5	55.6
Dundgobi	51.3	51.2	50.5	49.9	49.6	49.2	48.8
Umnugobi	47.3	47.2	46.7	46.8	46.1	46.5	46.9
Selenge	101.7	102.2	101.8	100.8	99.8	100.1	100.5
Tuv	96.3	96.5	92.5	88.9	87.4	86.4	85.9
				East region			
Total	**202.4**	**202.8**	**201.9**	**201.5**	**200.2**	**200.2**	**199.3**
Dornod	74.5	74.7	74.4	73.7	73.4	73.6	72.9
Sukhbaatar	56	56.1	56.4	56.6	56.0	55.6	55.1
Khentii	71.9	72	71.1	71.2	70.8	71.0	71.3
				Ulaanbaatar			
Ulaanbaatar	**812.5**	**846.5**	**893.4**	**928.5**	**965.3**	**994.3**	**1031.2**

Source: Mongolian Statistical Year Book 2007.

Appendix 2: Population, Territory and Livestock Data by Soums for 2000

I. Arkhangai

	Soums' name	Population	Territory (hectare)	Livestock
1	Erdenebulgan	17,932.0	53,607.0	78,703.0
2	Ikhtamir	6,577.0	484,658.0	138,179.0
3	Erdenemandal	6,395.0	336,330.0	167,325.0
4	Ondor-ulaan	6,068.0	439,401.0	119,182.0
5	Tariat	5,673.0	347,730.0	76,724.0
6	Khotont	5,544.0	241,740.0	127,896.0
7	Tsenkher	5,414.0	322,304.0	95,489.0
8	Jargalant	4,531.0	283,278.0	89,985.0
9	Tsetserleg	4,437.0	256,730.0	122,592.0
10	Khashaat	4,347.0	258,524.0	142,528.0
11	Batstengel	4,106.0	353,653.0	150,226.0
12	Chuluut	3,965.0	392,754.0	66,628.0
13	Khairkhan	3,783.0	254,430.0	98,321.0
14	Tuvshruuleh	3,628.0	118,958.0	53,200.0
15	Khangai	3,455.0	438,462.0	46,585.0
16	Ugiinuur	3,401.0	168,648.0	95,225.0
17	Olziit	3,386.0	172,037.0	93,263.0
18	Bulgan	2,373.0	321,945.0	37,508.0
19	Tsakhiur	2,218.0	339,800.0	36,560.0
	Total	**97,233.0**	**5,584,989.0**	**1,836,119.0**

II. Bayan-Ulgii

	Soums' name	Population	Territory (hectare)	Livestock
1	Olgii	27,145.0	15,000.0	22,341.0
2	Ulaankhus	8,584.0	605,045.4	131,646.0
3	Deluun	8,463.0	559,499.0	198,334.0
4	Tsengel	8,277.0	645,939.0	162,900.0
5	Nogoonnuur	7,268.0	522,194.0	110,457.0
6	Bulgan	6,061.0	497,733.1	99,615.0
7	Bayannuur	5,227.0	233,950.0	101,489.0
8	Sagsai	5,027.0	313,999.0	96,792.0
9	Tolbo	4,810.0	297,594.6	89,246.0
10	Altai	4,149.0	316,356.0	77,929.0
11	Bugat	3,563.0	215,002.0	68,000.0
12	Buyant	3,298.0	184,567.0	71,188.0
13	Altantsugts	3,259.0	178,609.9	67,890.0
	Total	**95,131.0**	**4,585,489.0**	**1,297,827.0**

	III. Bayankhongor			
	Soums' name	Population	Territory (hectare)	Livestock
1	Bayankhongor	22,698.0	6,400.0	52,324.0
2	Galuut	5,271.0	504,745.0	95,320.0
3	Erdenetsogt	4,890.0	410,023.0	51,553.0
4	Baatsagaan	4,364.0	744,682.0	116,730.0
5	Jargalant	4,224.0	417,453.0	73,557.0
6	Buutsagaan	4,084.0	583,977.0	149,394.0
7	Bayantsagaan	3,986.0	539,513.0	116,211.0
8	Bayanlig	3,810.0	1,191,767.0	84,022.0
9	Olziit	3,741.0	385,283.0	83,100.0
10	Bogd	3,311.0	398,287.0	89,114.0
11	Bayan-Ovoo	2,991.0	324,449.0	41,373.0
12	Gurvanbulag	2,845.0	444,181.0	68,499.0
13	Bayangovi	2,812.0	466,159.0	54,987.0
14	Bumbugur	2,783.0	304,377.0	54,961.0
15	Bayan-Undur	2,721.0	1,689,135.0	86,952.0
16	Kureemaral	2,486.0	432,832.0	105,008.0
17	Shinejinst	2,459.0	1,650,123.0	51,988.0
18	Zag	2,396.0	256,100.0	70,968.0
19	Jinst	2,381.0	531,264.0	71,840.0
20	Bayanbulag	2,208.0	317,030.0	63,783.0
	Total	**86,461.0**	**11,597,780.0**	**1,581,684.0**

IY. Bulgan

	Soums' name	Population	Territory (hectare)	Livestock
1	Bulgan	12,623.0	9,995.0	44,367.0
2	Khutag	4,495.0	560,547.0	101,588.0
3	Khangal	4,373.0	165,564.0	40,922.0
4	Saikhan	3,946.0	277,276.0	166,003.0
5	Dashinchilen	3,772.0	231,896.0	128,244.0
6	Orkhon	3,600.0	421,478.0	120,569.0
7	Rashaant	3,543.0	101,212.0	37,374.0
8	Gurvanbulag	3,537.0	268,611.0	150,676.0
9	Selenge	3,403.0	482,952.0	33,153.0
10	Khishig-Undur	3,395.0	245,505.0	94,863.0
11	Teshig	3,374.0	771,992.0	52,227.0
12	Mogod	2,815.0	282,047.0	140,828.0
13	Bayan-Agt	2,764.0	307,970.0	120,308.0
14	Buregkhangai	2,697.0	349,792.0	132,358.0
15	Bugat	2,024.0	300,446.3	43,670.0
16	Bayannuur	1,724.0	96,017.0	50,443.0
	Total	**62,085.0**	**4,873,300.3**	**1,457,593.0**

Y. Gobi-Altai

	Soums' name	Population	Territory (hectare)	Livestock
1	Esonbulag-Altai	17,927.0	216,133.0	92,458.0
2	Tsogt	4,544.0	1,661,804.0	147,929.0
3	Delger	3,837.0	662,507.0	101,346.0
4	Bayan-Uul	3,572.0	583,609.0	134,564.0
5	Khaliun	3,173.0	521,354.0	121,503.0
6	Tonkhil	2,928.0	732,244.2	121,250.0
7	Butag	2,864.0	992,086.0	90,916.0
8	Biger	2,849.0	382,623.0	75,385.0
9	Jargalan	2,842.0	368,262.0	99,823.0
10	Khukhmorit	2,814.0	631,451.0	61,721.0
11	Tseel	2,780.0	563,091.0	106,635.0
12	Chandmana	2,775.0	462,831.0	72,936.0
13	Sharga	2,550.0	556,585.0	101,270.0
14	Altai	2,516.0	2,025,612.0	75,019.0
15	Erdene	2,471.0	2,506,626.0	84,078.0
16	Tugrug	2,164.0	534,328.0	78,704.0
17	Darvi	2,060.0	352,309.0	85,466.0
18	Taishir	1,828.0	391,312.0	63,728.0
	Total	**66,494.0**	**14,144,767.2**	**1,714,731.0**

YI. Dornogobi

	Soums' name	Population	Territory (hectare)	Livestock
1	Sainshand	17,279.0	735,101.0	56,979.0
2	Zamin-Uud	6,253.0	340,603.0	8,104.0
3	Airag	3,295.0	250,200.0	62,760.0
4	Khatanbulag	3,135.0	316,051.0	80,013.0
5	Erdene	2,697.0	405,478.0	71,138.0
6	Ikhhet	2,542.0	318,869.0	59,689.0
7	Dalanjargalan	2,396.0	270,674.0	66,407.0
8	Urgun	2,015.0	541,647.0	67,049.0
9	Mandakh	1,896.0	485,238.0	64,483.0
10	Delgerekh	1,881.0	342,781.0	67,137.0
11	Ulaanbadrakh	1,761.0	607,025.0	68,015.0
12	Khubsgul	1,658.0	620,889.0	48,025.0
13	Altanshiree	1,596.0	362,402.0	52,419.0
14	Saikhandulaan	1,310.0	1,542,114.0	66,043.0
	Total	**49,714.0**	**7,139,072.0**	**838,261.0**

YII. Dornod

	Soums' name	Population	Territory (hectare)	Livestock
1	Kherlen	37,928.0	28,084.0	89,436.0
2	Bayan-Uul	4,804.0	562,278.0	36,626.0
3	Dashbalbar	3,578.0	871,315.0	90,594.0
4	Tsagaan-Ovoo	3,576.0	650,200.0	102,540.0
5	Khalkhgol	3,434.0	2,809,299.0	32,689.0
6	Choibalsan	2,967.0	1,015,212.0	53,842.0
7	Bayandun	2,873.0	623,705.0	66,513.0
8	Sergelen	2,526.0	416,929.0	87,520.0
9	Matad	2,350.0	2,283,133.0	54,041.0
10	Bayantumen	2,067.0	832,080.0	43,462.0
11	Bulgan	2,065.0	711,111.0	42,817.0
12	Khulunboir	1,770.0	377,308.0	50,944.0
13	Chuluunkhoroot	1,579.0	653,931.0	17,211.0
14	Gurvanzagal	1,421.0	525,158.0	25,852.0
	Total	**72,938.0**	**12,359,743.0**	**794,087.0**

YIII. Dundgobi

	Soums' name	Population	Territory (hectare)	Livestock
1	Saintsagaan	13,909.0	340,603.0	145,807.0
2	Erdenedalai	7,185.0	735,101.0	191,627.0
3	Adaatsag	3,363.0	329,960.0	107,156.0
4	Ulziit	2,891.0	1,542,114.0	115,496.0
5	Delgerkhangai	2,771.0	620,889.0	66,626.0
6	Saikhanovoo	2,720.0	405,478.0	70,079.0
7	Delgertsogt	2,605.0	250,200.0	84,032.0
8	Khuld	2,587.0	607,025.0	80,767.0
9	Deren	2,512.0	362,402.0	103,284.0
10	Gurvansaikhan	2,508.0	541,647.0	106,204.0
11	Luus	2,237.0	316,051.0	91,401.0
12	Gobi-Ugtaal	1,886.0	270,674.0	83,965.0
13	Tsagaandelger	1,598.0	342,781.0	39,072.0
14	Undurshil	1,580.0	485,238.0	55,307.0
15	Bayanjargalan	1,405.0	318,869.0	56,542.0
	Total	**51,757.0**	**7,469,032.0**	**1,397,365.0**

IX. Zavkhan

	Soums' name	Population	Territory (hectare)	Livestock
1	Uliastai	18,154.0	2,821.0	55,168.0
2	Tosontsengel	9,776.0	530,233.0	52,402.0
3	Ikh-Uul	6,691.0	377,598.0	67,790.0
4	Aldarkhaan	4,298.0	715,829.0	106,878.0
5	Otgon	3,523.0	600,867.0	97,653.0
6	Ider	3,500.0	370,805.0	49,940.0
7	Telmen	3,452.0	344,605.0	49,189.0
8	Tes	3,301.0	87,229.0	57,361.0
9	Yaruu	3,248.0	495,614.1	40,443.0
10	Bayantes	2,683.0	433,898.1	60,802.0
11	Shiluustei	2,606.0	268,990.0	70,431.0
12	Durvuljin	2,648.0	726,022.0	115,866.0
13	Tsetsenuul	2,659.0	237,286.0	56,235.0
14	Numrug	2,635.0	327,740.0	28,242.0
15	Bayankhairkhan	2,606.0	255,811.0	46,634.0
16	Erdenekhairkhan	2,598.0	416,728.0	61,018.0
17	Santmargats	2,283.0	239,183.8	84,620.0
18	Tudevtei	2,472.0	267,182.0	29,062.0
19	Songino	2,214.0	248,953.0	51,319.0
20	Urgamal	2,057.0	349,199.0	89,138.0
21	Tsagaankhairkhan	1,984.0	265,332.0	53,712.0
22	Tsagaanchuluut	2,071.0	257,103.0	73,890.0
23	Zavkhanmandal	1,498.0	361,137.0	73,423.0
24	Asgat	1,042.0	65,400.0	15,581.0
	Total	**89,999.0**	**8,245,566.0**	**1,486,797.0**

X. Uburkhangai

	Soums' name	Population	Territory (hectare)	Livestock
1	Uyanga	7,686.0	313,936.0	97,948.0
2	Arvaikheer	19,058.0	17,303.0	23,785.0
3	Kharkhorin	13,964.0	224,116.0	86,760.0
4	Khujirt	7,606.0	171,782.0	114,125.0
5	Bogd	5,744.0	1,015,519.0	241,685.0
6	Bat-Ulzii	5,643.0	242,820.0	72,289.0
7	Bayan-Ulaan	5,765.0	270,098.0	75,010.0
8	Bayan-Undur	4,691.0	324,832.0	123,771.0
9	Bayangol	4,669.0	354,257.0	157,393.0
10	Taragt	4,864.0	339,544.0	68,056.0
11	Nariinteel	4,122.0	270,170.0	95,293.0
12	Burd	3,987.0	258,138.0	84,592.0
13	Sant	4,319.0	256,406.0	126,720.0
14	Khairhandulaan	4,287.0	413,770.0	87,316.0
15	Ulziit	3,135.0	179,705.0	78,938.0
16	Bayan-Ulaan	2,852.0	394,111.0	76,674.0
17	Tugrug	2,944.0	546,688.0	71,996.0
18	Esunzuil	3,696.0	221,088.0	86,348.0
19	Guchin-Us	2,388.0	475,250.0	100,395.0
	Total	**111,420.0**	**6,289,533.0**	**1,869,094.0**

XI. Umnugobi

	Soums' name	Population	Territory (hectare)	Livestock
1	Dalanzadgad	14,050.0	47,630.0	54,904.0
2	Gurvantes	3,608.0	2,796,727.1	105,517.0
3	Nomgon	3,013.0	1,946,837.0	123,509.0
4	Khanhongor	2,470.0	993,129.9	116,451.0
5	Sevrei	2,327.0	809,572.1	110,468.0
6	Bulgan	2,395.0	749,815.1	100,446.0
7	Bayandalai	2,431.0	1,075,073.0	102,977.0
8	Manlai	2,323.0	1,241,789.0	74,308.0
9	Khanbogd	2,373.0	1,515,156.0	47,468.0
10	Mandal-ovoo	2,366.0	643,271.0	85,317.0
11	Tsogttsetsii	2,185.0	724,643.0	65,491.0
12	Khurmen	2,177.0	1,239,326.0	64,167.0
13	Tsogtovoo	1,928.0	652,676.0	51,826.0
14	Bayanovoo	1,643.0	1,047,370.0	46,425.0
15	Noyon	1,569.0	1,055,032.0	59,992.0
	Total	**46,858.0**	**16,538,047.2**	**1,209,266.0**

XII. Sukhbaatar

	Soums' name	Population	Territory (hectare)	Livestock
1	Asgat	1,891.0	718,595.0	80,285.0
2	Bayandelger	4,681.0	785,049.0	187,581.0
3	Dariganga	2,694.0	477,630.0	86,741.0
4	Munkhhaan	4,691.0	738,495.0	130,766.0
5	Naran	1,804.0	350,979.0	75,734.0
6	Ongon	3,959.0	644,616.0	153,853.0
7	Sukhbaatar	3,170.0	1,270,873.0	114,314.0
8	Tuvshinshiree	3,375.0	428,442.0	95,770.0
9	Tunebtsogt	2,850.0	212,224.0	52,024.0
10	Ulaanbayan	3,888.0	492,086.0	122,802.0
11	Khalzan	1,883.0	377,409.0	72,115.0
12	Erdenetsagaan	6,147.0	1,692,581.0	137,638.0
13	Baruun-Urt	15,133.0	1,500.0	119,515.0
	Total	**56,166.0**	**8,190,479.0**	**1,429,138.0**

XIII. Selenge

	Soums' name	Population	Territory (hectare)	Livestock
1	Mandal	23,964.0	484,373.0	70,590.0
2	Sukhbaatar	22,374.0	4,535.0	22,786.0
3	Saikhan	8,737.0	131,186.9	45,345.0
4	Eruu	6,077.0	820,351.0	31,566.0
5	Bayangol	5,391.0	197,628.2	48,718.0
6	Shaamar	4,809.0	67,191.0	21,448.0
7	Tsagaannuur	4,153.0	381,472.1	60,844.0
8	Orkhontuul	3,760.0	294,083.0	77,434.0
9	Altanbulag	3,489.0	210,030.0	22,085.0
10	Baruunburen	2,939.0	281,454.0	72,809.0
11	Zuunburen	2,507.0	120,494.0	32,646.0
12	Orkhon	2,817.0	130,626.9	30,489.0
13	Sant	2,062.0	138,705.9	26,444.0
14	Khuder	1,799.0	183,865.0	8,591.0
15	Tushig	1,899.0	249,282.0	17,133.0
16	Jabkhlant	1,767.0	118,970.0	35,328.0
17	Khushaat	1,406.0	201,015.0	21,185.0
	Total	**99,950.0**	**4,015,263.0**	**645,441.0**

XIY. Tuv

	Soums' name	Population	Territory (hectare)	Livestock
1	Buren	3,473.0	375,728.0	115,749.0
2	Batsumber	6,537.0	243,112.0	52,390.0
3	Bayan	3,193.0	290,531.0	28,776.0
4	Bayanchandmana	3,458.0	63,220.0	26,077.0
5	Bayanjargalan	1,789.0	237,651.0	58,818.0
6	Bayan-Unjuul	2,503.0	479,099.0	102,863.0
7	Bayandelger	2,058.0	214,656.0	56,666.0
8	Bayantsagaan	2,724.0	663,048.0	66,067.0
9	Bayankhangai	1,710.0	100,733.0	43,772.0
10	Bayantsogt	2,430.0	132,173.0	48,369.0
11	Argalant	1,988.0	112,637.0	39,062.0
12	Arkhust	2,008.0	82,912.0	36,298.0
13	Jargalant	5,513.0	189,581.0	60,768.0
14	Altanbulag	3,702.0	565,295.0	94,335.0
15	Undurshireet	2,265.0	268,420.0	82,051.0
16	Bornuur	4,206.0	112,183.0	50,081.0
17	Delgerkhaan	2,470.0	221,625.0	46,622.0
18	Zaamar	6,342.0	277,845.0	100,221.0
19	Zuunmod	14,837.0	1,893.0	22,918.0
20	Lun	3,697.0	251,269.0	116,022.0
21	Mungunmorit	2,569.0	672,756.0	33,328.0
22	Sumber	1,982.0	50,838.0	18,880.0
23	Sergelen	2,005.0	387,612.0	47,982.0
24	Ugtaal	3,534.0	137,428.0	53,702.0
25	Tseel	3,671.0	165,686.0	56,201.0
26	Erdene	3,110.0	801,647.0	72,050.0
27	Erdenesant	5,494.0	304,659.0	137,967.0
	Total	**99,268.0**	**7,404,237.0**	**1,668,035.0**

XY. Uvs

	Soums' name	Population	Territory (hectare)	Livestock
1	Kharhiraa	25,369.0	260,433.0	89,230.0
2	Tes	6,505.0	308,506.0	160,455.0
3	Tarialan	5,053.0	247,799.0	96,464.0
4	Umnugobi	4,734.0	314,580.0	95,583.0
5	Naranbulag	4,626.0	525,781.9	122,989.0
6	Undurkhangai	3,849.0	465,205.0	92,062.0
7	Baruunturuun	3,621.0	329,232.0	18,683.0
8	Tsagaankhairhan	3,087.0	399,374.0	79,675.0
9	Zuungobi	3,011.0	401,314.0	75,734.0
10	Ulgii	2,949.0	234,053.0	88,855.0
11	Malchin	2,919.0	402,778.0	88,062.0
12	Zuunkhangai	2,908.0	265,823.0	75,438.0
13	Khovd	2,812.0	297,175.1	69,224.0
14	Khyargas	2,707.0	341,598.1	87,606.0
15	Zavkhan	2,484.0	682,364.0	76,563.0
16	Sagil	2,466.0	379,482.0	78,099.0
17	Bukhmurun	2,403.0	373,475.0	65,892.0
18	Tyrgen	2,108.0	225,342.0	69,178.0
19	Davst	1,943.0	504,224.0	45,861.0
	Total	**85,554.0**	**6,958,539.1**	**1,575,653.0**

XYI. Khovd

	Soums' name	Population	Territory (hectare)	Livestock
1	Jargalant	26,887.0	7,253.0	24,759.0
2	Bulgan	9,056.0	810,478.0	124,227.0
3	Khovd	5,137.0	282,057.0	97,378.0
4	Mankhan	5,083.0	433,035.0	143,175.0
5	Uench	4,760.0	747,673.0	91,606.0
6	Must	4,076.0	392,729.0	88,931.0
7	Myangad	3,979.0	325,850.0	100,565.0
8	Chandmana	3,542.0	601,679.0	137,022.0
9	Zereg	3,535.0	252,383.0	75,867.0
10	Byant	3,526.0	368,697.0	81,318.0
11	Erdeneburen	3,402.0	277,222.0	104,773.0
12	Altai	3,128.0	1,314,426.1	80,611.0
13	Durgun	3,058.0	412,812.0	67,062.0
14	Darvi	3,055.0	560,460.0	77,918.0
15	Tsetseg	2,833.0	349,199.0	84,342.0
16	Munkhhairkhan	2,603.0	255,413.0	72,489.0
17	Duut	2,247.0	214,671.0	60,279.0
	Total	**89,907.0**	**7,606,037.1**	**1,512,322.0**

XYII. Khubsgul

	Soums' name	Population	Territory (hectare)	Livestock
1	Murun	28,416.0	10,290.0	73,289.0
2	Tarialan	6,030.0	343,067.0	97,671.0
3	Tsagaan-Uul	5,705.0	586,631.0	105,552.0
4	Tsetserleg	5,639.0	745,162.0	69,632.0
5	Galt	5,364.0	359,683.0	144,702.0
6	Jargalant	5,160.0	254,928.0	54,821.0
7	Burentogtokh	4,861.0	376,860.0	92,396.0
8	Arbulag	4,515.0	352,921.0	95,472.0
9	Renchinlkhumbe	4,405.0	844,834.0	89,096.0
10	Shine-Ider	4,370.0	205,356.0	88,869.0
11	Tumurbulag	4,343.0	252,172.0	106,074.0
12	Bayanzurkh	4,187.0	429,914.0	82,697.0
13	Tosontsengel	4,145.0	204,223.0	116,628.0
14	Ikh-Uul	4,059.0	202,382.0	113,487.0
15	Ulaanuul	3,731.0	1,005,752.0	62,257.0
16	Tynel	3,649.0	357,733.0	70,373.0
17	Rashaant	3,466.0	198,252.0	105,290.0
18	Chandmana-Undur	2,942.0	448,754.0	37,732.0
19	Edenebulgan	2,853.0	469,438.0	39,550.0
20	Alag-Erdene	5,446.0	450,296.0	71,314.0
21	Tsagaan-Uur	2,379.0	873,533.0	21,021.0
22	Khanh	2,286.0	549,871.0	23,282.0
23	Tsagaannurr	1,356.0	540,830.0	8,838.0
	Total	**119,307.0**	**10,062,882.0**	**1,770,043.0**

XYIII. Khentii

	Soums' name	Population	Territory (hectare)	Livestock
1	Kherlen	18,003.0	392,792.4	105,075.0
2	Umnudelger	5,732.0	1,101,333.0	136,371.0
3	Binder	3,862.0	527,450.0	69,029.0
4	Batnorov	6,580.0	502,029.1	121,476.0
5	Galshir	2,697.0	667,608.0	128,411.0
6	Delgerkhaan	2,967.0	398,581.0	108,915.0
7	Norovlin	2,851.0	515,110.9	67,071.0
8	Dadal	2,631.0	488,247.0	18,864.0
9	Bayanadargana	2,389.0	318,119.0	38,400.0
10	Bayankhutag	2,034.0	602,943.0	97,413.0
11	Murun	2,500.0	215,085.0	77,385.0
12	Batshireet	2,267.0	722,823.0	25,034.0
13	Jargaltkhaan	2,068.0	275,154.0	82,802.0
14	Darkhan	8,878.0	445,361.4	92,051.0
15	Tsenkhermandal	2,147.0	316,885.0	71,480.0
16	Bayanmunkh	1,687.0	255,385.0	58,470.0
17	Bayanovoo	1,653.0	327,845.0	58,463.0
	Total	**70,946.0**	**8,072,751.8**	**1,356,710.0**

XIX. Darkhan-Uul

	Soums' name	Population	Territory (hectare)	Livestock
1	Darkhan	68,285.0	10,315.0	63,660.0
2	Sharin gol	8,458.0	16,060.0	33,887.0
3	Khongor	5,543.0	253,338.0	49,328.0
4	Orkhon soum	3,374.0	47,787.0	32,819.0
	Total	**85,660.0**	**327,500.0**	**179,694.0**

XX. Orkhon

	Soums' name	Population	Territory (hectare)	Livestock
1	Orkhon	71,618.0	24,902.0	125,870.0
2	Jargalant	3,621.0	59,498.0	42,975.0
	Total	**75,239.0**	**84,400.0**	**168,845.0**

XXI. Gobisumber

	Soums' name	Population	Territory (hectare)	Livestock
1	Gobisumber	8,650.0	376,819.8	47,967.0
2	Shiveegobi	2,549.0	85,754.8	12,936.0
3	Bayantal	987.0	91,605.4	4,070.0
	Total	**12,186.0**	**554,180.0**	**64,973.0**

Source: Chimid (2004), pp. 66-76.

Appendix 3: Distribution of Taxes and Fees among the Government Levels

Specific tax	Tax imposed by	Tax base determined by	tax rate determined by	Revenue distribution	Principle used for revenue split
1	2	3	4	5	6
Central government taxes and fees					
Personal income tax	C	C	C	C (94.1%) L (5.9%)	C - payroll tax L- livestock tax, unidentified income tax, small business tax,
Corporate income tax	C	C	C	C (100%)	
Windfall tax	C	C	C	C (100%)	
Social insurance payment	C	C	C	social security fund (100%)	
VAT	C	C	C	C (80%) P (20%)	S since 2002, but sharing rates are unstable
Excise taxes on certain alcohol	C	C	C	C (100%)	
Excise taxes on cigarettes	C	C	C	C (100%)	
Excise taxes on cars	C	C	C	C (100%)	
Excise taxes on gasoline and diesel	C	C	C	C (100%)	
Export duty	C	C	C	C (100%)	
Import tariffs	C	C	C	C (100%)	
Stamp duty	C	C	C		
License fees for mining and exploring mineral resources	C	C	C	C (50%) P (25%) L (25%)	S
Tax on gasoline and diesel	C	C	C	C (100%)	
Payment for the use of hunting resources, and license fees for hunting	C	C	C	C - hunting re-sources (100%) L - hunting li-cense fee (100%)	
Royalty	C	C	C	C (70%) P (20%) L (10%)	S

1	2	3	4	5	6
Province taxes and fees					
City tax					not yet introduced
Immobile property tax	C	C	C	P (100%)	Since 2005 local tax
Vehicle tax	C	C	C	P (100%)	
Land payment	C	C	C	P (100%)	
Local taxes and fees					
Unidentified income tax	C	C	C	L (100%)	
Self-employ-ment tax	C	C	C	L (100%)	
Livestock tax	C	C	C	L (100%)	
Gun tax	C	C	C	L (100%)	
stamp duty	C	C	C	C (89%) L (11%)	
Forest tax	C	C	C, P	L (100%)	
Tax on extraction of common natural resources	P	P	P	L (100%)	
Fees for springs use	C	C	P (within limits set by C)	L (100%)	
Fees for water use	C	C	C	L (100%)	
Herb fees	L	C	P (within limits set by C)		
Fees for use of natural resources other than minerals	P	P	P	L (100%)	

Note: C, P, and L denoted the central, provincial and local respectively, and S denoted the shared responsibilities.

Source: Authors' own evaluation based on budget data from the Ministry of Finance

Appendix 4: Consolidated Budget Expenditures by Services, 2001-2008, thousand of Tugrug

	2001	2002	2003	2004	2005	2006	2007	2008
General public services	50,247,914.3	53,905,549.5	53,590,429.0	63,685,308.5	69,179,510.5	116,519,241.0	182,551,464.1	174,903,110.1
Defence	25,384,089.0	28,071,337.9	27,899,377.0	32,891,033.5	35,914,317.3	45,669,768.5	66,149,253.4	100,799,154.3
Social safety and public order	28,747,594.6	30,501,988.3	33,401,130.1	44,246,302.4	49,839,111.9	63,335,321.0	89,107,399.6	146,452,483.0
Health expenditure	53,096,068.9	57,963,541.9	58,127,738.6	73,243,041.1	80,151,684.4	99,915,714.9	158,276,511.2	261,183,015.2
Education expenditures	98,709,026.8	103,708,857.8	115,354,079.9	141,019,549.3	147,792,222.7	195,090,806.9	251,251,691.1	397,794,281.6
Social security and assistance	84,542,313.9	96,897,513.8	117,602,768.4	150,618,311.8	185,675,015.5	258,374,543.2	378,305,098.3	696,125,876.4
Housing and community amenities	7,179,556.1	7,570,289.3	6,301,903.8	9,629,569.7	7,967,464.5	4,941,000.1	6,123,341.4	9,191,298.4
Recreation, culture and sports	15,049,962.0	17,515,953.8	18,232,449.5	21,462,934.4	20,791,711.4	24,705,324.6	39,204,138.0	57,883,160.9
Energy and heating	11,212,829.6	14,985,761.5	17,385,014.6	24,423,308.8	21,310,487.3	35,582,550.1	34,175,820.7	56,505,346.6
Agriculture and forestry	11,259,939.6	13,926,021.5	12,903,826.2	12,763,701.1	14,532,021.8	18,242,277.1	30,032,015.2	79,504,987.2
Mineral resource, mining, manufacturing and construction	2,112,246.2	3,791,123.0	3,337,656.8	3,457,856.1	5,071,249.3	9,334,490.1	11,437,957.5	36,790,489.3
Other economic activities	7,305,947.4	10,247,223.0	14,733,658.5	20,060,020.9	18,995,833.2	240,855,296.0	388,861,529.8	489,839,625.4
Unclassified services	175,773,019.6	172,785,568.2	146,886,983.1	176,822,917.6	124,604,603.8	138,388,559.1	164,302,012.7	265,268,359.5
Total	583,875,856.3	628,078,750.0	650,970,690.3	798,506,543.3	807,035,078.6	1,287,444,327.1	1,844,388,641.9	2,848,555,669.9

Source: Data from the Ministry of Finance, 2009.

Appendix 5: Aggregate Sub-national Expenditures by Aimags, 2001-2008, millions of Tugrug

	2001	2002	2003	2004	2005	2006	2007	2008*
Arkhangai	**5,409**	**5,687**	**984**	**1,243**	**1,356**	**1,672**	**3,239**	**4,232**
Bayan-Ulgii	5,238.6	5,596.0	929.1	1,120.3	1,237.9	1,382.2	2,706.7	3,754.7
Bayankhongor	5,187.0	5,376.1	939.1	1,350.8	1,449.5	1,616.8	3,358.6	4,570.8
Bulgan	4,904.6	4,819.7	971.3	1,332.5	1,583.6	1,985.7	3,280.9	3,906.9
Gobi-Altai	4,951.4	5,337.5	964.8	1,447.2	1,583.0	2,007.4	3,487.8	4,302.4
Dornogobi	4,209.5	4,965.6	1,399.6	1,690.7	1,912.1	1,381.2	3,475.3	3,484.2
Dornod	4,780.8	4,932.3	869.9	1,173.7	1,077.8	1,113.4	2,686.8	3,474.2
Dundgobi	3,263.4	3,573.6	900.2	1,110.0	1,151.1	992.6	2,653.1	3,099.6
Zavkhan	5,562.5	5,965.8	1,128.4	1,331.0	1,619.1	1,836.6	3,546.5	4,400.9
Uburkhangai	5,649.3	6,202.6	1,304.8	1,727.5	1,676.1	937.4	3,782.4	4,646.2
Umnugobi	3,662.7	3,969.5	883.7	1,538.0	1,826.5	2,841.5	5,274.4	3,485.0
Sukhbaatar	4,239.7	4,328.2	970.5	1,060.6	1,266.3	1,514.2	3,529.5	3,355.0
Selenge	7,580.3	8,550.2	1,454.8	2,063.8	2,136.0	2,087.3	3,577.2	4,477.5
Tuv	6,919.7	7,571.5	1,519.5	2,436.0	2,670.2	3,365.9	5,412.0	5,996.1
Uvs	5,800.3	5,794.6	1,277.6	1,542.1	1,554.8	1,741.2	3,336.8	4,455.1
Khovd	5,433.5	5,613.2	1,040.0	1,473.0	1,574.2	1,662.0	3,446.0	4,271.2
Khubsugul	6,374.7	6,808.6	1,261.1	1,479.8	1,638.3	1,919.3	4,199.3	5,063.3
Khentii	5,399.7	5,329.5	1,002.6	1,296.0	1,378.2	1,587.9	3,577.3	4,065.7
Darkhan-Uul	6,619.4	7,655.5	1,065.3	1,379.0	1,507.9	1,600.2	2,924.0	3,535.6
Ulaanbaatar	50,893.8	53,683.8	12,476.9	21,618.5	21,967.3	15,530.3	47,170.4	45,521.6
Orkhon	5,663.0	5,622.0	1,588.4	2,043.4	2,719.0	2,220.0	5,750.0	3,189.0
Gobi-Sumber	1,590.8	1,521.5	553.5	569.0	601.0	470.7	1,212.7	1,447.1
Total	159,333	168,905	35,485	52,025	55,486	51,466	121,627	128,734

Note: *expected budget execution.

Source: Data from the Ministry of Finance.

Appendix 6: Aimags' Own Revenues, 2003-2007, millions of Tugrug.

	2003	2004	2005	2006	2007
Arkhangai	546.5	529	702.4	893.7	1856
Bayan-Ulgii	384.3	471.8	453.8	498.7	1285.5
Bayankhongor	310.9	379.8	521.1	678.5	2,193.1
Bulgan	590.3	662.5	2038.5	2217.1	3,369
Gobi-Altai	348.9	421.8	438.9	852.3	1,223.2
Dornogobi	1,280.5	1,649.2	1826.8	2318	4,158.9
Dornod	622.8	711.1	795.4	993	2,408.1
Dundgobi	460.8	455.4	487.2	525.8	1,245.6
Zavkhan	454.3	441.0	525.3	817.7	1,281.0
Uburkhangai	564.3	595.4	704.6	783.1	2,997.4
Umnugobi	572.2	988.2	1756	3898.1	7,911.0
Sukhbaatar	475.9	474.3	637.3	3224	2,897.4
Selenge	926.2	1,143.1	1603.7	1794.6	5,324.0
Tuv	974.6	1,302.9	2128.4	2095.5	4,595.7
Uvs	641.7	641.6	553.6	566.1	1,187.1
Khovd	587.2	587.8	655	748.7	1,445.3
Khubsugul	731.6	721.1	827.3	993.1	2,258.9
Khentii	686.6	642.6	720.6	826.7	2,232.8
Darkhan-Uul	1,088.6	1,277.9	1434	2150.4	3,608.7
Ulaanbaatar	22,790.5	28,943.7	33943	35918	50,185.8
Orkhon	4,707.5	9,278.6	8,762.6	9580.4	24,438.5
Gobi-Sumber	412.5	354.6	428.2	506.4	502.1

Source: Data from the Ministry of Finance.

Appendix 7: The Liechtenstein Fiscal Equalization Law

Liechtensteinisches Landesgesetzblatt

Jahrgang 2007 Nr. 336 ausgegeben am 19. Dezember 2007

Finanzausgleichsgesetz (FinAG) vom 24. Oktober 2007

Dem nachstehenden vom Landtag gefassten Beschluss erteile Ich Meine Zustimmung:

I. ALLGEMEINE BESTIMMUNGEN

Art. 1 Gegenstand

Dieses Gesetz regelt die nicht zweckgebundenen Finanzausgleichszuweisungen (Ausgleichsbeiträge) des Landes an die Gemeinden.

Art. 2 Zweck der Ausgleichsbeiträge

Zweck der Ausgleichsbeiträge ist es, die Finanzierung der den Gemeinden obliegenden öffentlichen Aufgaben sicherzustellen.

Art. 3 Anspruchsberechtigung

Anspruch auf Ausgleichsbeiträge haben Gemeinden, deren Steuerkraft zur Finanzierung der ihnen obliegenden öffentlichen Aufgaben nicht ausreicht.

II. GRUNDLAGEN FÜR DIE BERECHNUNG DER AUSGLEICHSBEITRÄGE

Art. 4 Grundsatz

Die Höhe der Ausgleichsbeiträge ist abhängig:

a) vom Finanzbedarf einer Gemeinde (Art. 5);

b) von der Steuerkraft einer Gemeinde (Art. 6).

Art. 5 Finanzbedarf

1) Der Finanzbedarf der Gemeinden errechnet sich aus den durchschnittlichen Pro-Kopf-Ausgaben aller Gemeinden der vorangegangenen letzten vier Jahre vor Antragstellung durch die Regierung gemäss Abs. 3.

2) Die Pro-Kopf-Ausgaben nach Abs. 1 setzen sich zusammen aus:

a) den laufenden Aufwendungen (Personal- und Sachaufwand sowie Beitrags-leistungen) mit Ausnahme der Abschreibungen auf das Verwaltungs- und Finanzvermögen; und

b) den Nettoinvestitionen.

3) Der Mindestfinanzbedarf errechnet sich aus der Multiplikation des Finanzbedarfs nach Abs. 1 mit einem vom Landtag auf Vorschlag der Regierung festzulegenden Faktor (k), der zwischen 0 und 1 liegt. Der Vorschlag der Regierung orientiert sich dabei in der Regel an der Gemeinde mit den tiefsten Durchschnittsausgaben. Der so berechnete Mindestfinanzbedarf gilt für eine Dauer von vier Jahren und bleibt während dieser Zeit unverändert. Die Regierung unterbreitet ihren Vorschlag dem Landtag im zweiten Jahr vor Beginn einer neuen Vierjahresperiode.

Art. 6 Steuerkraft

1) Bei der Steuerkraft wird zwischen standardisierter und originärer Steuerkraft unterschieden; sie wird pro Einwohner einer Gemeinde berechnet.

2) Die standardisierte Steuerkraft setzt sich aus den Einnahmen aus der Vermögens- und Erwerbssteuer (berechnet auf der Grundlage eines Gemeindesteuerzuschlags von 200 %), den Gemeindeanteilen an der Grundstückgewinnsteuer und 70 % der Gemeindeanteile an der Kapital- und Ertragssteuer zusammen, dividiert durch die Einwohnerzahl der Gemeinde per Ende des Vorjahres.

3) Die originäre Steuerkraft setzt sich aus den Einnahmen aus der Vermögens- und Erwerbssteuer (berechnet auf der Grundlage des von der Gemeinde für das entsprechende Steuerjahr angewendeten Gemeindesteuerzuschlags), den Gemeindeanteilen an der Grundstückgewinnsteuer und 70 % der Gemeindeanteile an der Kapital- und Ertragssteuer zusammen, dividiert durch die Einwohnerzahl der Gemeinde per Ende des Vorjahres.

III. Ausrichtung der Ausgleichsbeiträge

Art. 7 Stufenweise Ausrichtung

1) Die Ausgleichsbeiträge werden jährlich in zwei Stufen wie folgt ausgerichtet:

a) Stufe 1: anspruchsberechtigt sind alle Gemeinden, deren standardisierte Steuerkraft nach Art. 6 Abs. 2 unter dem Mindestfinanzbedarf nach Art. 5 Abs. 3 liegt;

b) Stufe 2: anspruchsberechtigt sind alle Gemeinden, deren Einwohnerzahl per Ende des Vorjahres unter 3 300 liegt und deren originäre Steuerkraft nach Art. 6 Abs. 3 unter dem Finanzbedarf nach Art. 5 Abs. 1 liegt.

2) Die Höhe der Ausgleichsbeiträge der Stufe 1 berechnet sich aus der Differenz zwischen dem Mindestfinanzbedarf und der standardisierten Steuerkraft multipliziert mit der Anzahl Einwohner einer Gemeinde per Ende des Vorjahres.

3) Die Höhe der Ausgleichsbeiträge der Stufe 2 berechnet sich aus der Differenz zwischen der Zahl 3 300 und der Anzahl Einwohner einer Gemeinde per Ende des Vorjahres multipliziert mit:

a) einem Zuschlag von:

1. 2 Franken pro Einwohner für Gemeinden mit einer Einwohnerzahl unter 500;

2. 1.4 Franken pro Einwohner für Gemeinden mit einer Einwohnerzahl zwischen 501 und 2 000;

3. 1.1 Franken pro Einwohner für Gemeinden mit einer Einwohnerzahl zwischen 2 001 und 3 300; und

b) der Anzahl Einwohner einer Gemeinde.

4) Für die Deckung der Kosten des Naherholungsgebietes Steg-Malbun erhält die Gemeinde Triesenberg einen Sonderzuschlag, der sich nach Abs. 3 mit einer theoretischen Einwohnerzahl von 1 200 multipliziert mit einem Zuschlag von 1.1 Franken pro Einwohner berechnet.

Art. 8 Zeitpunkt der Berechnung und Ausrichtung der Ausgleichsbeiträge

1) Die Berechnung und Ausrichtung der Ausgleichsbeiträge erfolgt bei Vorliegen der notwendigen Steuerdaten im Zuge des Rechnungsabschlusses des Landes.

2) Die Regierung kann während des Jahres Akontozahlungen an die Gemeinden leisten.

IV. Übergangs- und Schlussbestimmungen

Art. 9 Durchführungsverordnungen

Die Regierung erlässt die zur Durchführung des Gesetzes notwendigen Verordnungen.

Art. 10 Übergangsbestimmungen

1) Für das Rechnungsjahr 2007 findet das bisherige Recht Anwendung.

2) Für die Rechnungsjahre 2008 bis 2012 werden der Berechung des Finanzbedarfs (Art. 5 Abs. 1) die durchschnittlichen Pro-Kopf-Ausgaben aller Gemeinden der Jahre 2001 bis 2004 zu Grunde gelegt. Der Faktor

(k) zur Berechnung des Mindestfinanzbedarfs (Art. 5 Abs. 3) wird für diesen Zeitraum mit 0.87 festgelegt.

Art. 11 Aufhebung bisherigen Rechts

Es werden aufgehoben:

a) Gesetz vom 30. Oktober 1996 über die nicht zweckgebundenen Finanzzuweisungen an die Gemeinden (Finanzausgleichsgesetz), LGBl. 1997 Nr. 25;

b) Gesetz vom 17. Dezember 1997 betreffend die Abänderung des Gesetzes über die nicht zweckgebundenen Finanzzuweisungen an die Gemeinden (Finanzausgleichsgesetz), LGBl. 1998 Nr. 24;

c) Gesetz vom 16. Dezember 1999 betreffend die Abänderung des Gesetzes über die nicht zweckgebundenen Finanzzuweisungen an die Gemeinden (Finanzausgleichsgesetz), LGBl. 2000 Nr. 38;

d) Gesetz vom 13. März 2002 betreffend die Abänderung des Gesetzes über die nicht zweckgebundenen Finanzzuweisungen an die Gemeinden (Finanzausgleichsgesetz), LGBl. 2002 Nr. 54.

Art. 12 Inkrafttreten

Dieses Gesetz tritt unter Vorbehalt des ungenutzten Ablaufs der Referendumsfrist am 1. Januar 2008 in Kraft, andernfalls am Tage der Kundmachung.

In Stellvertretung des Landesfürsten:

gez. *Alois*
Erbprinz

gez. *Otmar Hasler*
Fürstlicher Regierungschef

Fiscal federalism has been an important topic among public finance theorists in the last four decades. Developing and transition countries have developed a variety of forms of fiscal decentralization as a possible strategy to achieve effective and efficient governmental structures. A generalized principle of decentralization due to the country specific circumstances does not exist. Therefore, decentralization has taken place in different forms in various countries at different times.

As a former socialist country Mongolia has had a highly centralized governmental sector. Mongolia has introduced a number of decentralization measures, which followed a top down approach and were slowly implemented without any integrated decentralization strategy in the last decade. The revenue assignment is lacking a very important element, for instance significant revenue autonomy given to sub-national governments, which is vital for the efficient service delivery at the local level. According to the current assignments of the expenditure and revenue responsibilities most of the provinces are unable to provide a certain national standard of public goods supply. Hence, intergovernmental transfers from the central jurisdiction to the sub-national jurisdictions play an important role for the equalization of the vertical and horizontal imbalances in Mongolia. The critical problem associated with intergovernmental transfers is that there is not a stable, predictable and transparent system of transfer allocation. Thus a fiscal equalization system based on the fiscal needs of the provinces should be implemented.

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