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# DECENTRALIZATION IN BOLIVIA<sup>1</sup>

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## I - Introduction

Bolivia is a relatively small country (about 8 million inhabitants, roughly the population size of Greece, or of the Brazilian State of Parana) with a fairly low level of per capita income (about US\$ 1,000, roughly the GDP per capita of China). In the immediate post war period, the political situation and the economic situation have been rather unstable, with a number of military coups, and episodes of hyperinflation. Since 1985, however, Bolivia has been stable, both politically and economically<sup>3</sup>. In the 1990ies, the GDP growth rate has been around 4% per year (although it fell below 1% in 1999). Bolivia has traditionally been a highly centralized country. In 1994, Bolivia has turned to decentralization. This is an unfinished process, upon which there is a general political agreement and commitment. This paper reviews the progress made on this road, and discusses some of the pending issues.

### *Politico-administrative Context*

The territory of the Republic is divided into 9 regions (*departamentos*) and also in about 300 communes (*municipios*). There are no unincorporated parts of the territory.

At the level of communes, there are municipal governments (*gobiernos municipales*)<sup>4</sup>. In their present form, communes and municipal governments have been created by a 1994 Decentralization Law (*Ley de Participación Popular*). Municipal governments are run by locally elected councils and mayors. They benefit from substantial block grants (called *co-participaciones*), in addition to their own tax resources. All Bolivian governments have reiterated their intention to let municipal governments play a major role in the functioning of the public sector.

At the level of regions (*departamentos*), there are prefectures (*prefecturas*)<sup>5</sup>. Prefectures are at the same

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<sup>3</sup> According to the 1999 Index of Economic Freedom, Bolivia ranks 43 out of 160 countries.

<sup>4</sup> In practice, the word commune (*municipio*) is often used to designate the institution, that is the municipal government (*gobierno municipal*), as well as the area. We shall try to avoid this confusion.

<sup>5</sup> In practice the word prefecture (*prefectura*) is often used to designate the area, as well as the institution that operates at this level ; we shall try to avoid this confusion and to use the words

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time a deconcentrated hand of the central government and an embryonic subnational government. The prefect (*prefecto*) is appointed by the President of the Republic, but there is a regional council (*consejo departamental*) which is elected. Prefectures, in short, are hybrid creatures. A 1994 Deconcentration law (*Ley de descentralización administrativa*) has attempted but not fully succeeded, to clarify this ambiguity.

There has also been what could be called a decentralization (or perhaps more appropriately a deconcentration) movement at the level of the central government itself. A number of semi-autonomous institutions have been created to perform functions that used to be –and are in most countries– performed directly by central government ministries. This is the case, for instance, of the Tax Administration (*Servicio Nacional de Impuestos Internos*), or of the Road Administration (*Servicio Nacional de Caminos*), or of the Foreign Funding Administration known as the Directorate of Funds (*Directorio Unido de Fondos*). The directors of these « institutions » are appointed by the President of the Republic.

In addition, Bolivia has created ten regulatory agencies (*Superintendencias*). Of particular interest for our purpose are the Transport Regulatory Agency (*Superintendencia de Transporte*), that regulates urban and interurban transport, and the Sanitation Regulatory Agency (*Superintendencia de Saneamiento Básico*), that regulates water provision and sanitation. The directors (*superintendentes*) of these Regulatory Agencies are designated by the President of the Republic from a list of three names prepared by the Senate and approved at a two third majority. They are appointed for a long period of time (5 or 7 years). The intent is to protect these institutions from the alleged politicization, corruption and instability –and also low wages– associated with the sectoral ministries. Clearly, these institutions operate in all parts of the country, as well as ministries, and are very much part of the public sector in Bolivia.

Four important features of the politico-administrative context of the decentralization process can be described under the names of politicization, corruption, social control, and regionalism.

*Politicization* - The public sector is politicized in the sense that most of the employees are political appointees, at all levels of government. Whenever there is a political change as a result of elections, many –and in some cases most– of the bureaucrats are fired and replaced. There is practically no independent and stable

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region (*departamento*) to designate the area, and prefecture (*prefectura*) to designate the institution.

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civil service in Bolivia. This generalized spoils system operates at the central government level, at prefectures (*prefecturas*) and at municipal governments (*gobiernos municipales*).

*Corruption* - The issue of corruption is, by nature, more difficult to document. Allegations of corruption are frequently made in the press. Accusations of corruption are common in political campaigns. There is a general agreement that the politicians-bureaucrats in office have a take in a number of public expenditure deals. Transparency International, an independent institution, that conducts surveys amongst businessmen of their perception of corruption, ranks Bolivia 82nd of 99 countries studied in 1999<sup>6</sup>. More significant for a study on decentralization, a 1998 survey of nearly 3,000 persons revealed that 23% of the people interviewed had paid bribes to municipal governments employees; this percentage increased with income and reached 50% for high income people (Seligson 1999). The same survey asked respondents to appraise the honesty of various types of people, on a scale of 1 (very dishonest) to 10 (very honest): mayors (*alcaldes*) obtained 3.7 on average, just like judges, which was better than communal councilors (*concejales municipales*) who obtained 3.5, but worst than teachers (5.7) or priests (6.7).

*Social control (fiscalizacion)* - Bolivia is a country with many control mechanisms. It has a strong and independent press. It has two elected Chambers. It has independent universities. It has powerful trade unions. It has many NGOs and "civil society" institutions, including the catholic church, which is powerful, influential, and active in social and economic matters. At the local level, as we shall see, there are also a number of control institutions. The relationship between corruption and social control are complex. The two might seem contradictory. But they are also complementary. Social control is in part a response to corruption. It contributes to make corruption known, and to a certain extent it reduces it.

*Regionalism (regionalismo)* - The regions of Bolivia have a very strong identity. Many people identify themselves as being from a particular region as much as being from Bolivia. Members of Parliament from a given region would often get and vote together irrespective of their party affiliations. Regional loyalties would be as strong or stronger than political loyalties. It is even reported that in certain regions (*departamentos*), centrifugal forces are at work. All these features must be kept in mind in the analysis of the decentralization process.

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<sup>6</sup> See: <http://www.transparency.de>

### Socio-economic Context

So are several other features of the socio-economic context. Let us mention four.

*Heterogeneity* – One is the heterogeneity of the country. For historical and geographical reasons, Bolivia is a very diverse country. There are several cultures and even languages. In spite of intense ethnic mixing, the Indian/European divide remains very much alive. The fast developing areas of the Amazonian basin are economically very different from the aging mining areas of the altiplano. Decentralization policies must –and do– take this into consideration.

*Inequality* – A second feature is the high degree of inequality in the distribution of income and wealth in the country. This inequality both interpersonal and interspatial. Inequality between persons is important. In 1995, the top quintile, that is the 20% richest Bolivians, accounted for 58% of total income, and the lowest quintile for 4% (UDAPE 1999, p. 441). The numbers were the same in 1990. This is an interquintile ratio of 1/12, very high indeed by any standard. Inequality between spaces is also important. There are marked differences between regions (*departamentos*), as well as within the communes of each region. Annex A provides additional data on spatial socio-economic disparities in Bolivia.

*Concentration* – Another feature relevant to decentralization issues is the growing spatial concentration of the country, in economic and demographic terms. Largely as a consequence of interspatial differences, people tend to leave the poorer regions (Potosi and Oruro) for the richer regions (Santa Cruz and Cochabamba) and even more so rural areas for cities. A large share of population (29% in 1992, and much more today) and of output (46% in 1994) is concentrated in the three communes of La Paz, Cochabamba and Santa Cruz, which constitute what is known as the « central axis », and this share continues to increase. The country to city migration movement, and its outcome, are illustrated by Table 1 below.

**Table 1 - Urban and Rural Population, 1990-2000**

	Rural pop.	Urban pop.	Total pop.
1990 (in 1000)	3000	3600	6000
2000 (in 1000)	3000	5300	8300
1990-2000 (in 1000)	0	+1700	+1700
1990-2000 (in %)	0	+47%	+27%
1990-2000 (%/year)	0	+4%	+2.3%

Source: calculated from UDAPE 1999, p.435

Table 1 shows very clearly that the rural population of Bolivia does not increase at all. This means that the population of some rural areas actually decreases. The

urban population, on the other hand, increases at an average rate of about 4%, which implies that some cities are growing at a rate of 5 or 6% per year.

*Foreign aid* – A fourth feature is the important dependence of the country upon foreign investment and foreign aid. For the past decade, foreign aid in the form of loans or grants has accounted for a good half of total public investment in Bolivia. As a result, Bolivia has a high public foreign debt. It has benefited, and will again benefit from the debt relief program known as HIPC. Foreign public lenders, particularly the IADB and the World Bank, abandon part of their debt in exchange for domestic poverty reduction policies and projects. Such policies and projects are currently debated in Bolivia under the name of "national dialogue".

The structure of the paper is as follows. Section 2 presents a global view of the intergovernmental relationships that prevail in Bolivia. Section 3 analyzes the importance, functions, revenues, and problems of communes (*municipios*). Section 4 attempts to do the same thing for prefectures (*prefecturas*). Section 5 examines the specific transfers and the loans made to communes and prefectures. Section 6 looks at three important sectors of public activity (indeed, the three most important sectors in many ways): education, health and transportation, and sees how the different levels of government and institutions intervene in these sectors. Section 7 –the only one of interest to people knowledgeable with the Bolivian decentralization system– attempts to evaluate this system, and discusses various options that are available for its improvements. Section 8 concludes.

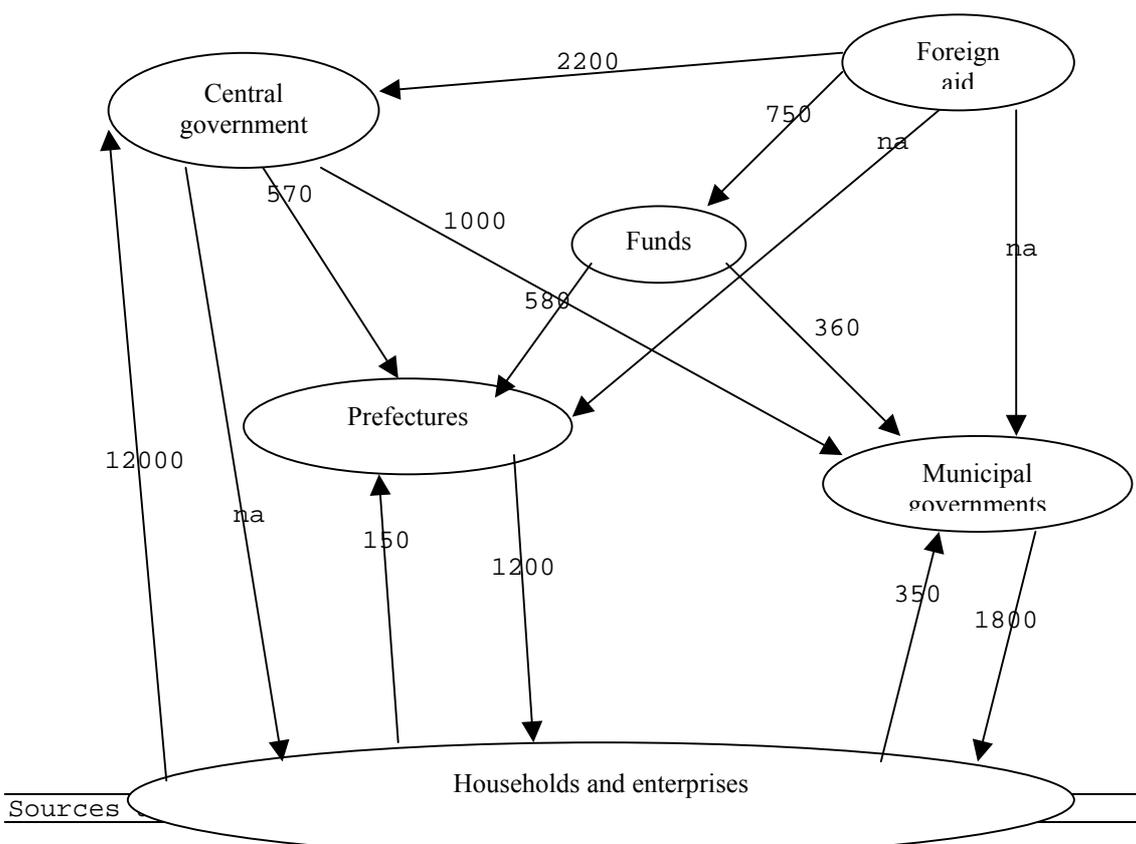
## Section II – Global overview

Decentralization refers to the relative importance, and to the relationships, of the various levels of government in the provision of public services. The greater the importance of the lower levels of government in the public sector, the more « decentralized » the country is. Decentralization has many dimensions (as well as many objectives). A standard view considers the decentralization of taxes, the share of local or subnational taxes in total taxes, as opposed to the decentralization of responsibilities or expenditures, the share of local or subnational government expenditures in total public expenditures). But such a simplified view, however useful, does not do justice to the complexities of intergovernmental relationships. One must also consider the various transfers that exist between the different levels of government, the lending and borrowing rules and practices and institutions, the constraints that are

imposed by the central government upon the freedom of lower level governments, the degree of deconcentration of the central government itself, etc. It is important to realize that all these dimensions or elements compose an integrated system. One element cannot be fully understood without reference to all other elements. This is particularly important when one wants to change and to improve the system. As in all systems, a change in one part will impact upon many other parts, and might well produce unintended outcomes.

Systems are notoriously difficult to describe and analyze. Figure 1 presents a diagrammatic view of the Bolivian system of decentralization that focuses on financial flows. It is far from exhaustive, as it ignores most of the legal, social, political, behavioral dimensions of the system. Nevertheless, it introduces the main actors of the system, identifies some of the most important mechanisms, and indicates the relative importance (in monetary terms) of the tax, expenditure, transfers and borrowing flows. It provides a useful starting point.

**Figure 1 - Bolivian System of Decentralization: Main Flows of Funds, 1999**



Taxes and fees are paid by enterprises and households to the central government and to communes (municipios), for about 10 billion (G) Bolivianos (Bls). Most (about 95%) of the taxes accrue to the central government. The

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four most important national taxes are a value-added tax (2.4 GBls), a tax on hydrocarbons (2.1 GBls), an income tax (0.9) and a specific sales tax (0.7). Local taxes (to be discussed later in more detail) account for a much smaller amount.

Part of the taxes raised by the central government are distributed in the form of block grants (*co-participaciones*) to communes and prefectures. The remainder is used to provide various public services to households and enterprises and to repay debt (not shown on Fig. 1). Part of these central government expenditures (the wages of teachers and doctors, for instance) are actually channeled through prefectures; since prefecture are in these cases mere distributing agents, such flows are not represented in Figure 1.

Part of foreign aid goes to four "Funds" (to be discussed later in more detail). These Funds, in turn, are distributed to communes, and also in some cases, to prefectures, in the form of specific grants (*cofinanciamento*) or loans, for well identified specific investments. There is also foreign aid that accrues directly to the central government, and also to communes and in some cases even directly to households or enterprises, for amounts that are not easy to assess. Direct foreign investment, which is important, is not represented in Figure 1; neither are dividend flows, which are the counterpart of foreign direct investment.

With the taxes and fees they raise, plus the block grants (*coparticipation*) they get, plus the specific grants (*cofinanciamento*) and loans they obtain from the Funds, communes (*municipios*) and also prefectures undertake public expenditures. These expenditures are usually larger than their income, because they increase their indebtedness.

In addition, one could mention that many communes control "satellites" (not represented in figure 1). Water and sewerage, garbage collection and disposal, for instance, is often the responsibility of formally independent enterprises which are owned in part or in whole and partly financed by communes (*municipios*). These services can also be delegated to truly independent private enterprises in the framework of contracts.

### Section III - Municipal Governments (*Gobiernos Municipales*)

Bolivian communes and the municipal governments that manage them are very diverse in terms of history, size, resources, managerial capabilities, etc. In their present

form, they have been created by the 1994 Decentralization Law (*Ley de Participación Popular*). Before 1994, there existed a number of "cities", with elected mayors and taxes, but most of the territory was unincorporated, without representation nor taxation. This rural part of Bolivia was not left unattended, but was directly administered by the central government, that divided the country into regions (*departamentos*), provinces (*provincias*), and counties (*secciones*). The communes created in 1994 now cover all the territory of Bolivia. A few of the newly created communes coincide with the territory of former cities, as in the case of La Paz, for instance. In other cases, the newly created communes are made of counties (*secciones*) that do not include any former cities. Most coincide with counties (*secciones*) and include one (and occasionally more) former cities. In other words, some municipal governments (*gobiernos municipales*) have a long experience of self-government, others have no experience at all of local government, and most have an experience limited to one part of their territory.

Table 2 illustrates communal diversity from the viewpoint of size. Data in Table 2 comes from the last, 1992, census of population. It underestimates very much the population of most communes, particularly that of the larger ones because it does not take into account the important changes that have taken place since 1992. But it gives an idea of their relative importance. There are two very large communes, La Paz and Santa Cruz, followed by two large communes, Cochabamba and El Alto. All other communes are smaller. Small communes, with less than 20,000 inhabitants, account for a large share of the total number of communes (82 %) but a much smaller share of total population (34 %). Their share of total population has declined since 1992. Assuming that their population has remained constant, the 255 communes with less than 20,000 inhabitants represent only about one quarter of Bolivia's population in 2000.

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**Table 2 - Communes (municipios), by Size, 1992**

	Number	Pop (in 1000)	Share (in %)	Cumulated (in %)
With population:				
>100,000	8	2,827	44	44
<i>La Paz</i>		716;		
<i>Santa Cruz</i>		708		
<i>Cochabamba</i>		415		
<i>El Alto</i>		408		
<i>Oruro</i>		196		
<i>Sucre</i>		123		
<i>Potosi</i>		123		
<i>Tarija</i>		108		
20,000-100,000	48	1,430	22	66
<20,000	255	2,164	34	100
<b>Total</b>	<b>311</b>	<b>6,420</b>	<b>100</b>	
<i>Sources and notes: 1992 Census; 1992 data seriously underestimate the present population of the larger communes and overestimates the population of the smaller communes.</i>				

Some communes are much richer than other. Annex B illustrates the diversity of communes in terms of income, Human Development Index, taxes raised, and access to medical services . Data sources are not very reliable here, but they are nevertheless illustrative of intercommunal disparities, which are very significant.

#### *Institutional Framework*

In spite of their differences, communes are all couched in the same politico-administrative framework. Each commune is managed by a locally and freely elected council, that chooses a mayor (alcalde) from its members. There are 5 to 11 members in a communal council (5 in communes smaller than 50,000 inhabitants to 11 in the capital cities of each region-departamento). Council members are elected on the basis of political lists. Until a few years ago, councilmen/women and mayors were elected for 4 years, and could not be reelected. Things have changed: councilmen/women and mayors are now elected for 5 years, and are reeligibile; in addition, the mayor must be the head of one of the two lists that obtained the largest number of votes.

Local administration is generally weak. This is in part because both communes (*municipios*) and municipal governments (*gobiernos municipales*) are new creatures in most cases. Most of them are only six years old. Administrative weakness is also in part a result of the spoils system that prevails. Every new mayor fires a large number of the communal employees (large might mean: more than half) and hires new ones. Even if and when the mayor tries to appoint competent specialists, rather than merely

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political friends, the system does not help build a professionalized bureaucracy. According to the Census of Communal Governments, the number of communal employees in 1996, including temporary employees, was about 16,700. The four largest municipal governments had about 2,000 employees each. The eight largest cities employed about 10,800 people. The 300 other municipal governments employed therefore less than 6,000 persons, or about 20 persons on average. About half municipal governments had less than 10 employees.

The 1994 Decentralization Law (*Ley de Participacion Popular*) promotes popular participation at a sub-communal level. Basic territorial organizations (*organizaciones territoriales de base*), including traditional rural communities, are encouraged to get registered and organized. Each of them designates one member to a an Overseeing Board (*Comite de vigilancia*) which is supposed to make sure that municipal government investments are fairly distributed over space, and to approve the budgets as well as the accounts of the municipal governments. Submayors (sub-Alcades) can also be designated by the mayor to help administer portions of the communal territory.

The number of communes is not fixed, and can increase. A given commune can ask to be divided into two (or more) communes. The authorization is given by the Congress. The increase is slow: from 311 in 1994 to 315 to-day.

#### *Resources*

In Bolivia as elsewhere, municipal governments have four main types of resources: (their own) taxes, transfers, fees and property income, and loans. Accounting procedures make it difficult to distinguish between taxes and fees, and also to identify loans. A distinction is made between *impuestos* and *tasas* that does not correspond to taxes and fees. All *impuestos* are taxes, but so are some of the *tasas*: the business tax (*patente*) is a local tax, just as the garbage charge (*tasa de basura*) which is based on electricity consumption, and allocated to garbage collection. Water charges are indeed true fees, based on water consumption, but they do not appear in many municipal accounts, because they are collected by municipal water satellites. Property income seems relatively unimportant for most municipal governments. It therefore seems more meaningful to consider taxes and fees together. Loans and increased indebtedness are of two types. On the one hand, some municipal governments negotiate long or medium term loans from development banks (such as the FNDR) and from commercial banks, usually for specific projects or purposes. On the other hand, many municipal governments simply do not pay what they owe to the Social Security system and to enterprises that have

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worked for them. This increased indebtedness is often not recorded in communal accounts, and the expenditures on wages or investments financed by such indebtedness are not recorded either. Table 3 is an attempt to present a meaningful structure of the income of a sample of municipal governments.

The structure of resources varies greatly from municipal government to municipal government. For some, usually the largest, the magnitude of taxes is about equal to that of transfers. For smaller communes, transfers from the central government account for most of the income. In some cases, as in La Paz or in Sucre, property income (in the form of sales in La Paz, of interests in Sucre) can be significant. In all the communes represented in Table 3, the increase in indebtedness was significant.

**Table 3 - Income of Selected Municipal Governments (*Gobiernos Municipales*), by Source, 1999 (en M.BIs)**

	Taxes & fees	Block granta	Property incomeb	Loans & Adebtc	Total
La Paz 1999	201	141	80d	20	442
La Paz 1998	145	121	67d	17	350
El Alto 1998	40	69	-	19	128
Sucre 1998	18	27	12e	14	71
Trinidad 1998	8.3	10.0	1.6	3.0	22.9
Vinto 1999	1.4	3.3	0.2	1.0	7.6
Vinto 1998	1.7	3.8	0.1	0.1	5.7

Source: Municipal government accounts communicated by FNDR

Notes: a: coparticipacion; b: venta de bienes + intereses y otras rentas de propiedad; c: deficit; d: mostly venta de bienes; e: mostly intereses. As mentioned in the text, specific or matching grants provided by the various funds are not recorded.

**Taxes** - The tax structure of Bolivian municipal governments is relatively simple. It is dominated by four taxes: a property tax (IPBI, or *impuesto a la propiedad de bienes inmuebles*), an automobile tax (IPVA, or *impuesto a la propiedad de vehiculos automotores*), a property sales tax (IMTI, or *impuesto municipal a la transferencia de inmuebles y vehiculos automotores*), and a business tax (*patentes*)<sup>7</sup>. Table 4 presents the relative importance of these municipal government taxes. Table 4 shows that the picture is dominated by the property tax, that accounts for about half the proceeds of local taxation in Bolivia. The property tax is levied on houses and structures located in urban areas only. Houses and structures located in rural areas are exempt. There is also in principle a land tax levied on land located in rural areas. But there are many exemptions to this tax. Small landowners are exempt; so is communal land (*tierras comunales*) and land owned by indigenous communities. In addition, it seems

<sup>7</sup> The business tax (*patente*) is classified as a *tasa*, not an *impuesto*.

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that this land tax is in most cases not assessed and collected vigorously. As a result, it does not produce much revenue.

**Table 4 - Taxes and Fees of Municipal Governments (Gobiernos Municipales), 1996**

	In MBIs	In %
Property tax (IPBI)	128	51
Automobile tax (IPVA)	33	13
Property sales tax (IMTI)	20	8
Business tax (patentes)	18	7
Other taxes and fees <sup>a</sup>	52	21
Total, taxes and fees	251	100

Source: *Primer Censo de Gobiernos Municipales 98*, cuadro II-10\_2

Note: <sup>a</sup>Including water fees, garbage fees, cemeteries fees, slaughter house fees.

How are administered these taxes, and how "local" are they ? Local taxes in Bolivia are administered by municipal governments. Municipal governments have the heavy task of assessing the tax bases, and of collecting the tax income. They have a limited freedom in deciding on tax rates. This is a substantial difference with what is found in most developed countries, and also in many developing countries, such as Brazil or Argentina, where local governments decide what their local tax rates will be. In Bolivia, for the property tax, properties are classified (by the municipal government) into types, according to the quality of the building and to its location; for each type a per square meter rate is chosen by the commune, subject to approval by Parliament; the tax to be paid for a particular building is equal to the number of square meters times the rate for that type of building. For the automobile tax and for the tax on property sales, tax rates are also determined by the center. For the business tax (*patentes*), tax rates vary with the type of activity: they are decided by municipal governments, subject to the approval of Parliament.

In principle, a local tax is a tax the rate of which is decided by a local government. It would seem therefore that the freedom of municipal governments in determining tax rates, and hence tax burdens, is rather limited, and one could question on this basis the "localness" of Bolivian local taxes. This would be true in a country where tax assessment and tax collection are a matter of fact, because all (or nearly all) that is to be assessed is effectively assessed (there is a tax assessment rate close to 100%) and because all (or nearly all) that is to be collected is collected (there is a tax collection rate close to 100%). But it is not so in Bolivia. Tax assessment rates and tax collection rates are often low. Municipal governments may not have much control on their formal tax rates, but they do have control on their tax assessment and tax collection rates. The tax effort of municipal governments does not appear in their tax rates, but rather in their tax assessment or tax collection

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rates. It is nevertheless very real. Municipal governments have a fair degree of freedom to increase most of their taxes. This makes them true local taxes.

In a more formal fashion, let:

T = tax proceeds

B = tax base

r = formal tax rate

$\alpha$  = Tax assessment rate (the share of B that is effectively assessed)

$\chi$  = Tax collection rate (the share of  $r*\alpha*B$  that is effectively collected).

One has:

$$T = B*r*\alpha*\chi$$

In a developed country, with  $\alpha$  and  $\chi$  close to 1, one has the familiar equation:

$$T = B*r$$

In Bolivia,  $\alpha$  and  $\chi$  are lower, often much lower, than 1. Annex C gives, for several cities, estimates of  $\alpha$  (ranging from 0.3 to 0.9) and of  $\chi$  (ranging from 0.6 to 0.8). The ratio of number of buildings or vehicles actually taxed to the number of buildings and vehicles legally taxable ranges from 0.2 to 0.6.

More generally, one can define an "effective" tax rate or "tax effort"  $\rho = r*\alpha*\chi$ , and note:

$$T = \rho*B$$

Unfortunately, the only data available refers to t, the tax proceeds. B, the true tax base, cannot be known, and  $\rho$ , the tax effort cannot be calculated.

Intercommunal differences in tax revenues per capita are very large. They are documented in Annex B. Some municipal governments are tax-rich, and other communes are tax-poor. The 10% richest communes (in terms of tax revenues per capita) have per capita tax revenues which are <sup>8</sup> times greater than those of the 10% poorest communes. Indeed, most of the communes collect less than 20 Bls per capita<sup>9</sup>. Another fashion to illustrate these

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<sup>8</sup> CALCULATE

<sup>9</sup> CALCULATE.

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intercommunal disparities in local taxes is to say that 70% of local taxes are actually collected in only 10 municipal governments<sup>10</sup>. For the data limitations explained above, it is not possible to say whether these disparities reflect disparities in tax bases (in our B) or in tax efforts (in our  $\rho$ ). They probably do both. Municipal governments with low tax bases are also probably municipal governments with low tax efforts.

*Transfers* - Municipal governments benefit from two kinds of transfers. There are block grants and specific grants.

The most important is the block grant (*coparticipacion*). The total amount is defined<sup>11</sup> as 20% of "national taxes" (*ingresos nacionales*)<sup>12</sup>. The allocation formula is very simple: as a function of the number of inhabitants of each commune. The numbers used for that purpose are the 1992 census numbers. The 1994 Decentralization Law (*Ley de participacion Popular*) makes reference to a "demographic survey (*encuesta demografica*) to be undertaken in 1966 with a view to update the 1992 census numbers. For technical or political reasons, this survey has not been undertaken, and the 1992 numbers continue to be utilized.

Municipal governments are free to utilize block grant (*coparticipacion*) money as they wish, subject to one important constraint: they must spend at least 85% of this amount on investments. In practice, they can only meet this unusually high requirement by considering as investments some expenditure (such as street lighting, for instance) which are generally considered as operating expenditures.

In addition, municipal governments receive specific investment grants or matching grants (*cofinanciamento*) from various sources and in particular from the three Funds regrouped under the United Directorate of Funds (DUF, or *Directorio Unido de Fondos*). These specific grants are discussed in greater detail in section V below. The grants from these Funds are made for specific projects. Municipal governments are asked to contribute a certain share (10 to 30%) of the cost of the projects, as estimated by the Funds. This is the reason why these

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<sup>10</sup> CALCULATE

<sup>11</sup> In the Decentralization Law (*Ley de Participacion Popular*), art 20.

<sup>12</sup> "National taxes (*ingresos nacionales*) are defined as: value-added tax (IVA), complementary VAT (RV-IVA), corporate income tax (IRPE), tax on transactions (IT), specific consumption tax (ICE), custom taxes (GAC), inheritance tax (*sucesiones*), and export taxes. The important tax on hydrocarbons is not included. The law says that 20% of "national taxes" are allocated to communes, after a deduction of 5%, which is ear-marked for universities.

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transfers can be described as matching grants. Many mayors tend to think, and to say, that the unit costs (cost per classroom, for instance) utilized by the Funds are much higher than needed. They claim that they could do much more (more classrooms) if they were given the money. This claim is vigorously denied by the Funds, on the ground that mayors confuse costs with disbursements, and underestimate the true cost of own-provision. It should also be noted that the investments financed by the Funds in and for communes are actually managed by the Funds, not by the municipal governments. Contracts with builders are negotiated by the Funds, and their supervision is done by the Funds, not the municipal government. In most cases, such investments are not even recorded as communal investments. What appears in communal accounts is only the matching payment (*contraparte*). This is why these specific investment grants (*cofinanciamento*) could –and probably should– be called gifts in kind rather than transfers.

#### *Responsibilities & Expenditures*

The responsibilities of municipal governments are manifold. The Decentralization Law (*Ley de Participacion Popular*) transfers to municipal governments "the ownership of physical infrastructure for public services in the areas of health, education, culture, sports, communal roads and micro-irrigation" (art. 13). It also lists no less than fourteen tasks to be performed by communal governments (art. 14). They include: the administration, control, supervision, maintenance and enlargement of the physical infrastructure just mentioned; the supervision, in relation with the regional educational authorities, of the allocation of teachers "and their removal for justified reasons"; the administration of an urban cadaster and the collection of local taxes; the promotion and development of sports, culture and rural development; the response to requests ("*peticiones, representaciones, solicitudes y actos de control social*") from the people, from Basic Territorial Organizations and from Overseeing Boards (*Comités de Vigilancia*); as well as the development of policies incorporating the needs of women. This is a very broad assignment that concerns about every public service, except economic development and the regalian functions of the State, such as law and order, national defense, foreign policy.

To discharge these responsibilities, municipal governments spend money on three main items: operating expenditures, debt service, and investments. Table 5 presents the relative importance of these items for a few selected municipalities.

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**Table 5 - Expenditures of Municipal Governments, by Type, Selected Municipal Governments, 1999**

	Santa Cruz (1999)	El Alto (1998)	La Paz (1999)	Sucre (1998)	Trinidad (1998)	Vinto (1999)
Operating exp						
Wages	46	73	10	4	1	55
Other current exp.	11	73	11	1	0	20
Total operating exp	57	146	21	5	1	75
Debt service	3	122	5	4	0	133
Investments	80	164	38	12	5	147
Other	3	63	0	0	0	32 <sup>a</sup>
Total	142	495	64	21	6	387

Sources: Field trips for El alto and Santa Cruz; FNDR files for other municipal governments. Notes: <sup>a</sup>Including transfers to municipal enterprises.

These numbers must be taken with care, because accounting procedures are neither clear nor homogenized. The reimbursement of short-term liabilities is classified as "debt service" in certain municipal governments, not in others. Expenditures on wages might include or exclude unpaid social security contributions. Investments figures might relate only to investments financed out of municipal governments own resource (taxes and block grants) in certain cases, or include investments financed by specific grants from the funds in yet other cases. Some expenditure classified as investments could or should be classified as operating expenditures. The activities of satellite enterprises (for water, garbage collection, etc.) are usually not included in a consolidated fashion, although subsidies to these satellites occasionally appear.

The overall picture that emerges from table 5, and which is reinforced by the breakdown of communal expenditures for all communes for 1996 coming from the First Census of Communes, and presented in Annex D, is that a large share (roughly half) of communal expenditures is devoted to investments. These investments are primarily in education and in health, and to a lesser extent in roads. In larger cities, investments in school buildings are widely recognized as the number one priority. In many cities, classrooms are so scarce that they are utilized in shifts: in a given classroom, there is one shift in the morning, one in the afternoon, and one in the evening. Even more so than teachers, and supplies, which are not very abundant, classrooms seem to be the bottleneck in education.

### *Efficiency*

Are municipal governments efficient and accountable in Bolivia? There are four *a priori* reasons to doubt it.

The first is the lack of confidence in municipal governments displayed by the central government and its agencies. Municipal governments are treated as children. They cannot increase taxes or fees without *a priori* parliamentary approval. Their budgets have also to be approved by Congress. The constraint imposed upon the use

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of block grants (85% of it has to be allocated to investment) is dictated by an obvious distrust of municipal governments spending abilities. The Funds and FNDR (the lending agency) have, or have had, an "I know better" attitude in their relationships with municipal governments. Regulatory Agencies, such as the Sanitation Agency (*Superintendencia de Saneamiento Basico*), oversee the contracts passed by municipal governments for the supply of services for which they are responsible. In the case of La Paz and El Alto, the important, long-term, contract for water provision negotiated with Suez-Lyonnaise des Eaux completely bypassed these important communes. In a sense, these "parental" and prudent attitudes of central government institutions towards municipal governments can be understood. They reflect the weakness of municipal governments. But on the other hand, they also weaken municipal governments.

A second limit to efficiency of municipal governments is the obvious mismatch between resources and responsibilities. Responsibilities, as mentioned, are immense and cover most areas of public services. Resources are limited. The taxes allocated to municipal governments cannot yield much (even if they can yield more than they do), particularly in smaller and/or poorer communes, and the amount of the block grant (20% of certain national taxes) remains small. Overall, municipal governments have something like 30-40% of total public expenditures to make, and have something like 15-20% of total public revenues for that purpose. They cannot but be overwhelmed by the impossibility of the assignment.

A third point is the management weakness of municipal governments. Municipal governments, as mentioned earlier, lack professionalized cadres. They are not only led -which is desirable- but also staffed by politicians. There is therefore little continuity in policies and follow-up. The accounting system used is complicated and does not facilitate a correct understanding of the situation. Reporting and auditing procedures do not appear to be very efficient. There is, it seems, too much *ex ante* supervision by the center, and not enough *ex-post* supervision. Total staffing is not very important. A more detailed analysis would distinguish between types of communes. It seems that large communes have capability but no money, whereas smaller ones have money but no capability.

Finally, political control mechanisms are -or rather were, until recently- rather weak. One of the most powerful engines of decentralized efficiency is the desire of mayors to be re-elected (or the fear to be defeated). Until recently, this engine did not work in Bolivian municipal governments. Mayors could not be re-elected. In addition, mayors could be changed between elections, if only the governing coalitions changed. On this point,

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things have been improved significantly. Mayors can now be re-elected, coalitions are more stable, and only the heads of the two lists that obtained the highest number of votes can be elected mayors. Mayors, and communal councils, now have a much stronger incentive to perform. Nevertheless a widely held view in the public and in the press is that communal institutions are not to be much trusted (see Box 1).

**Box 1: The Role of the Commune in Water Provision in Cochabamba**

- In 1999, water supply in Cochabamba became a major national issue. A contract signed between SEMAPA, the municipal satellite society for water, and Aguas de Tunari, a British water company was violently rejected by activists. Two people were killed, and the contract had to be canceled. The decision to cancel was not taken by the municipal council and the mayor. The decision involved the Prefect, the Superintendencia de Saneamiento Basico, and finally the Presidency of the Republic. The board of SEMAPA was reorganized. Before, the commune had 4 of its 6 members, and it was chaired by the mayor. Now, the commune will only have 2 representatives on the board. This reduction in the role of the commune in water provision –a standard communal responsibility in most countries– was applauded by many. A respected newspaper titled "The Commune has less hegemony in SEMAPA (Alcaldia tiene menos hegemonia en SEMAPA)" (*La Prensa*, 12.4.2000)

Efforts are being developed to strengthen the administrative and management capabilities of municipal governments. One could cite the USAID-sponsored Democratic Development and Citizen Participation (DDCP) project, that has targeted 20 pilot municipalities. At the end of only 2 or 3 years, rather encouraging results are reported.

*Municipal Governments Associations* – Municipal governments are also involved in self-help. In each region (*departamento*), they have created regional associations of communes, regrouping all the communes of the region, to share experiences, to organize training courses for their technicians, and to lobby. These associations have recently formed a federation (FAM, *Federacion de Asociaciones Municipales*) that speaks in the name of all associations, and also in the name of all municipal governments.

*Mancomunidades* – In addition, municipal governments have also spontaneously created ad hoc groupings (*mancomunidades*), to gain strength, and to pursue specific purposes. A *mancomunidad* can regroup from 3 to 15 communes, and some of them can be very large. One of the best known, the Gran Chiquitania, in the Santa Cruz region, regroups 11 communes on a territory nearly as large as that of England (230.000 km<sup>2</sup>). There is no census of *mancomunidades* and the number of *mancomunidades* is not known precisely. The figure of 35 *mancomunidades* grouping about 70% of Bolivian municipal governments has been cited. The exact number does not matter much, because some of them are not very active. What matters is that this movement, which is provided for in the law, but has

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not been particularly aided, testifies of municipal government's vigor and initiative.

Municipal governments remain weak, but it is important to put this weakness in perspective. It is only in 1994 that Bolivian communes and municipal governments in their present form were created by the Decentralization Law (*Ley de Participacion Popular*). Six years is not much to change centuries-old practices and attitudes, and it is not surprising that communes remain rather weak, not very efficient, and not always accountable in Bolivia. But the efforts that have been made seem to bear fruit, and one should perhaps be more impressed by the progress realized in these brief six years than by the magnitude of what remains to be done.

## Section IV - Prefectures (*prefecturas*)

The roles and functions of the nine prefectures are described in a 1995 Deconcentration Law curiously entitled Administrative Decentralization Law (*Ley de Descentralization Administrativa*). As mentioned earlier, Prefectures are hybrid institutions which are simultaneously deconcentrated units of the central government and (at least in an embryonic fashion) decentralized units of government.

### *Resources*

Prefectures have no tax resources. Only the central government and communes can levy taxes in Bolivia. Prefectures have three main sources of income. Table 6 presents the relative importance of these income sources for three prefectures in particular, and for all prefectures.

**Table 6 - Resources of Prefectures, by Source, All Prefectures and Selected Prefectures, 1999**

	All Pref. (in MBlS)	Chuquisaca (in MBlS)	Santa Cruz (in MBlS)	Oruro (in MBlS)
Fees and property income	155	10	76	4
Transfers from central gov				
Block grants				
Royalties (regalias)	290	18	76	21
Based on Fuel Tax (IEH) <sup>a</sup>	186	22	44	25
Compensation Fund	94	1	-	-
Specific grants	230	41	23	40
Total, CG Transfers	800	82	143	86
Loans	250	19	55	17
Total	1205	111	274	107

Note: <sup>a</sup>20% of the fuel tax levied by the national government is allocated to prefectures pro rata the amount collected in each prefecture.

Transfers from the central government are, by far, the most important source of income of prefecture. They include two block grants, to be presented in more details in section V below. In addition, prefectures, just as communes, can receive specific transfers from the three Funds financed by multilateral and bilateral aid.

Prefectures also levy some fees. In particular, they benefit from a share of tolls collected on regional (*departamental*) roads. More importantly, some of them have substantial property income. This is largely because they have inherited the assets of the Regional Development Funds, that existed before the 1994 changes.

Prefectures are also allowed to borrow. They have benefited from substantial loans from FNDR, or more precisely from international donors agencies (mostly the IADB and the World Bank or its affiliate IDA) acting through FNDR. They have also benefited from loans directly made to them by bilateral institutions like the German KFW (*Fondo Ameman de Credito para la Reconstrucion*)

Prefectures also receive from the central government important amounts of money for the payment of the wages of schoolteachers and of doctors and nurses. In some prefecture accounts, these sums of money appear on the income side of the budget. They also appear, for a similar amount, on the expenditure side of the same budget, when these wages are paid. In practice, prefectures have here a purely ancillary and automatic role that could be contracted out to private banks, for instance. Prefectures have no real control over these flows of funds, and it seems, therefore, more meaningful to ignore such flows.

The structure of prefectural resources vary greatly between prefectures. No exhaustive data seems available, but Table 6bis presents data on the sources of financing of prefectural investments for two, very different, regions: Oruro, one of the poorest, and Santa Cruz, the richest.

**Table 6bis – Sources of Financing of Prefectural Investments,  
Chuquisaca and Santa Cruz, 1999**

	Chuquisaca	Santa Cruz
Population	455,000	1,364,000
GDP per cap (1994, US\$ at PPP)	1,260	2,810
IDH (1992)	0.40	0.60
Investments by source (in MBls)		
Fees & regalias	6	68
Other domestic transfers	8	25
Total domestic resources	14	93
International resources	37	84
Total	51	177
Investment by source, per capita (Bls)		
Fees & regalias	13	50
Other domestic transfers	18	18
Total domestic resources	31	68
International resources	82	62
Total	113	130

*Source; Calculated from VIPFE, Presupuesto de inversion publica*

Table 6bis shows a very large discrepancy in fees and royalties (regalias), with the prefecture of the richer region getting four times more, on a per capita basis than the prefecture of the poorer region. This discrepancy is not reduced by the other domestic transfers, since the two prefecture get about the same amount on a per capita basis –although, by itself, this is enough to reduce the relative disparity between the two prefectures. International assistance provides more, on a per capita basis, to the prefecture of the poorer region. In the end, the difference in what is available for investments by prefectures is not very large: about 15% more in Santa Cruz than in Chuquisaca.

#### *Responsibilities and Expenditures*

The Deconcentration Law (art. 5) lists a large number of functions to be undertaken by the prefect<sup>13</sup>: ensure law and order; prepare economic and social programs; formulate and execute investment programs and projects in the areas of roads, rural electricity, irrigation, research, tourism, welfare; administer and control human resources in the areas of education, health and welfare. Prefecture also have the responsibility to oversee investments of the municipal governments of their region (*departamento*). In a number of cases, when a municipal government is too poor to pay the matching share (*contraparte*) of a specific grant made by FIS, the prefecture will contribute this matching grant –in particular if and when the mayor of this commune happens to be a political friend of the prefect. There are also reports of politically-driven "investment competition" between a prefecture and a municipal government: a municipal government, dominated by party A, builds a market in one part of a city, the prefecture, controlled

<sup>13</sup> Rather than by the prefecture

by party B, builds a similar (or more beautiful) market in another part of the same city.

No consolidated data on expenditures by type seems available for prefectures as a whole. Table 7 presents this data for the prefecture of one of the poorer regions (*departamentos*), Oruro.

**Table 7 - Expenditures by Functions, Oruro Prefecture, 1999**

	(In MBIs)	(In %)
General affairs	7	5
Sanitation	44	33
Health & social	17	13
Energy	11	8
Roads	9	7
Other <sup>a</sup>	16	12
Non affected	30	22
Total	134	100

*Source: Informe de gestion 1999. Note: <sup>a</sup>Education, urban infrastructure, agriculture and environment, local development coordination, tourism*

Table 7 suggests that health and sanitation dominate the picture. Here again, one is struck by the social dimension, as opposed to the economic development dimension, of public expenditures and policy in Bolivia. However, one must be careful not to generalize too quickly the case of Oruro. There are indications that in the richer regions of Santa Cruz and Cochabamba and also La Paz, the share of productive investments (in roads and irrigation, particularly) is much more important.

#### *Prefectures as Deconcentrated units of the Central Government*

There is no doubt that prefectures are deconcentrated units of the central government. The Deconcentration Law states it very clearly: "in each region (*departamento*), a Prefect (*prefecto*) designated by the President of the Republic is in charge of and administers the Executive Power" (art. 4).

It is not clear, however, that in practice, a prefect is well equipped to carry out this important task. The prefect has not much authority to control and coordinate the activities of the various ministries in his region (*departamento*), nor has he the power to spend (much) central government money in his region.

Representatives in a region (*departamento*) of the various ministries or of the quasi-autonomous institutions in charge of a specific central function (roads, taxation) are called district or regional (*departamental*) directors. They are in principle appointed by the prefect, on the proposal of the ministry in charge. The ministries, and their district directors, define the policies and allocate resources. The prefect is supposed to implement them. In

many cases, as in the case of education for instance, he has virtually no control on the use of the funds he manipulates, which are completely ear-marked, and most prefectures do not even present wages expenditures in their budgets. The activities of the State in a given region are therefore poorly coordinated.

A Bolivian prefect is even less a major allocator of resources in his region (departamento). The budget of the prefecture is small relative to what is spent directly in the region by the central government, and smaller than the total budgets of municipal governments.

#### *Prefectures as Decentralized Units of Government*

Prefectures can even less be considered as decentralized units of governments. It is true that the prefect is usually a politician from the region (departamento) who can therefore "represent" the people to a certain extent. But this extent is very limited. The prefect is appointed by the President, not elected by the people. It is also true that there is a regional council (consejo departamental) in every prefecture. But this council is composed of indirectly elected members. In each district (there are 5 or 6 districts in every region) the communes (municipios) of the district designate one or two members, taken out of their own ranks and on a purely political basis. They represent the political parties of the area more than they represent the people. As such, they have a weak legitimacy. And their role is minimal. They approve the budget, but there is not much to approve, at least on the income side, since prefectures have no taxes of their own.

#### *Prefecture as Organizational Units*

The managerial capabilities of prefectures (prefecturas) vary from case to case, but on the whole, it does not seem to be very high. A prefecture has relatively few employees: about 260 in Chuquisaca, including people working on Funds-financed specific projects. When a prefect is changed -which happens quite often- many employees, at least at the top, are also changed. As a result, it is often said that prefectures do not know enough about their own region (*departamento*).

## Section V - Transfers and Loans to Communes and Prefectures

Transfers, and to a much lesser extent loans, constitute the bulk of the resources of municipal

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governments and prefectures in Bolivia. By transfer, we mean a resource which is not dependent upon a political decision of the decentralized (or deconcentrated) unit that receives it, but entirely decided by the central government. Transfers, also called grants or subsidies, are of two main types: block grants, that come with no (of few) strings attached, and specific grants, that are earmarked for specific projects or programs. Some grants, particularly specific grants, require the receiving local government to pay a certain share of the cost: they are usually called matching grants. Most specific grants in Bolivia are of the matching grant type. The names used in Bolivia to describe existing grants might be misleading about the true nature of these grants. The main central government transfer to municipal governments is called "fiscal co-participation" (*coparticipacion tributaria*), or "popular coparticipation" (*coparticipacion popular*), but in reality it does not involve any participation of the receiving municipal governments in tax or allocation decisions: it is simply a block grant. Similarly, the main ear-marked transfers for specific investments are called "co-financing" (*cofinanciamiento*); the word is less misleading because these specific grants do require a contribution (*contraparte*) from the receiving government: this is exactly the definition of a specific matching grant. This section examines in turn the block grant to municipal governments, the block grants to prefectures, the specific matching grants to municipal governments, and the loans made to municipal governments and prefectures.

#### *Block Grant to Municipal Governments (Coparticipation)*

*Total amount* - The total amount of the block grant to be distributed to all municipal governments is equal to 20% of "national taxes". National taxes (*ingresos nacionales*) are defined as: value-added tax (IVA), complementary VAT (RV-IVA), corporate income tax (IRPE), tax on transactions (IT), specific consumption tax (ICE), custom taxes (GAC), inheritance tax (sucesiones), and export taxes. The important tax on hydrocarbons is *not* included. Neither are royalties on natural resources. Table 8 presents the total amount of the block grant over the past few years.

**Table 8 - Block Grant (coparticipacion) and GDP, 1995-1999**

	GDP (MBls)	$\Delta$ GDP (%)	Grant (MBls)	$\Delta$ grant (%)
1995			666	
1996		+4.7	830	+24
1997		+4.5	947	+14
1998		+4.6	1127	+19
1999		+1.8	1022	-9

Note: Data on GDP and block grant is in current prices.

The numbers in Table 8 are surprising and worrying. They show a great volatility of the elasticity of the

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grant to GDP. In the 1995-1988 period, a robust, but modest, economic growth led to very large increases in the grant –and presumably in national taxes as well, since the grant is supposed to be a constant share of these taxes. But in 1999, an economic recession cut the growth rate of GDP by more than half, although it remained positive; yet the grant, and the taxes, declined by nearly 10%.

*Allocation formula* - The allocation of the global amount of *the block grant* account is simple if not simplistic: each municipal government receives an amount according to its population as it has been counted at the 1992 census. Rural or urban, living in poor or less poor commune or municipal government, inhabitant of the Altiplano or Oriente regions, each Bolivian carries the same amount of block grant to the profit of the municipal government of the commune where he/she lives.

This formula has been purposely designed to bring financial resources to the many rural municipal governments – 174 – that have been created by the 1994 Decentralization Law. Taking in account the initial goal of the Bolivian government and Parliament, several questions may, however, be raised about this formula.

First, the 1992 Census has been notoriously badly answered at a time when people were of course not aware of the assignment of block grant money in favour of the municipal government of the commune where they lived but on the contrary were fully aware of a supposed linkage between Census and tax assessment procedures.

Second, not only the 1992 Census figures were initially doubtful but they are every day made more obsolete by the rural-urban emigration movement.

Finally, the plainness of the allocation formula has its advantages – transparency at least – but presents the major drawback of not linking the block grant to any consideration of territorial inequalities in terms of tax bases. The 314 Bolivian municipal governments are not placed on an equal footing to provide public goods and services their "people": so much the better for high tax base municipal governments, so much the worse for low tax base municipal governments of rural Bolivia or of some Bolivian cities, especially in the Altiplano.

*Constraints* - Municipal governments are not totally free to do what they please with the block grant money they receive. 85% of it must be allocated to investment. The matching contribution (*contraparte*) they must make to benefit from the specific matching grants qualifies, of course, as investment. In practice, however, for the remainder, expenditures that would not be considered as investments in other countries, are considered as such in Bolivia.

### *Block Grants to Prefectures*

Prefectures, as mentioned, do not raise taxes. They are mostly financed by three block grants. As in the case of municipal governments, prefectures must spend 85% of this income on investments.

*Hydrocarbons-based block grant* - A first transfer is based on the national hydrocarbon tax, an important tax on oil and gas consumption, that accounts for a quarter of national tax resources. The total amount of the grant is equal to 25% of the proceeds of this tax. The allocation formula to the 9 prefectures is as follows. First, 50% of the total amount is divided equally between the 9 prefectures. This allocation criteria favors greatly the less populated regions (*departamentos*) that obtain much more, on a per capita basis, than the more populated regions. Then, the remaining 50% are allocated pro rata the 1992 Census population of each region.

*Royalties (Regalias)* - A second block grant is based on royalties levied on natural resources exploitation, that is on mining, foresting, oil and gas production. The rate at which these royalties are assessed and levied is decided by the central government. As such, royalties must be seen as a central government tax. The allocation formula is origin-based: royalties accrue to the budgets of the prefectures of regions (*departamentos*) where the corresponding mines, forests, and wells happen to be located. This is because regions tend to consider these resources as "their own", even though they have done nothing to create them. Nothing but nature has planned the location of these windfall natural and fiscal resources. This allocation formula is in the nature of a lottery. The Santa Cruz region (*departamento*) is the great winner of this lottery. Royalties account for 40% of the income of the prefecture, which is supposed to be the arm of the central government in this region of the country.

*Royalties (Regalias) Compensation Fund* - The allocation procedure for royalties is so random and unfair that it has been necessary to create a Compensation Fund to correct its outcome. All prefectures with royalties (*regalias*) per capita below the national average are entitled to receive an additional block grant that will allow them to reach this national average. Note that it is a compensation, not a perequation. Nothing is taken away from the more lucky prefectures, with high royalties per capita. The Compensation Fund is financed by the general budget. It operates as a vertical compensation, not as a horizontal compensation in the spirit of German interLander transfers. Note also that, as it is defined, the Compensation Fund is an open-ended fund. The central government does not know ahead of time how much it will cost him. The more unequal the distribution of royalties

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per capita becomes, the more costly it will be for the central government.

*Specific Matching Grants to Municipal Governments & Prefectures (Cofinanciamiento)*

An important share of municipal government resources, and to a lesser extent, of prefecture resources, comes from the expenditures made by "the Funds". There are three main Funds: the Fund for social investment (FIS), the Fund for regional development (FNDR) and the Fund for rural development (FDC). They have been set up in the mid 80's following the dramatic changes of the socio-economic context and macro economic policies leading to the implementation of substantial programs of international aid to Bolivia. The Funds have been, and still are, a major mechanism of international, particularly multilateral, aid in Bolivia.

*Magnitude of specific matching grants* - Table 9 gives some orders of magnitude, for 1999, of the relative importance of the Funds in the financing of public investments by municipal governments and prefectures.

**Table 9 - Investments of Municipal Governments and Prefectures, by Source of Financing, 1999**

	Municipal Governments	Prefectures (in MBls)	Total (in MBls)
Source of financing: (in MBls)			
Block grants & Taxes	1,116	404	1520
of which: matching contribn	109	43	152
Specific matching grants	360	23	383
Other internatl grants	50	375	425
Total	1635	845	2480

Source: Calculated from data in *Presupuesto de Inversion Publica, Ejecucion presupuestaria*

Data in table 9 must be taken with care. The estimates for investments financed by block grants and taxes may be an overestimate, because it takes as investments 85% of block grants amounts. Table 9 suggests that Fund investments would represent about a quarter of municipal governments investments. If one takes into consideration the matching contribution of municipal governments (*contraparte*), Funds-aided investments could represent nearly a third of municipal investments. Table 9 presents data on public investments undertaken by municipal governments and prefectures only. In addition, there are investments undertaken directly by the central government? They amount to an additional 1,400 MBls. An important share of these investments is also financed by foreign aid, particularly in the area of transportation.

*Sources of finance of Funds* - Table 10 indicates the origin of Funds' income.

**Table 10 - Fund's Income, by Source, 1999**

	FIS (in MBls)	FDC (in MBls)	FNDR (in MBls)	Total (in MBls)
IADB	71	33	238	342
World Bank	123	51	77	251
Bilateral sources	53	30	44	127
Germany	33	12	-	45
Japan	-	11	44	55
Other sources	34	1	-	35
total	281	115	359	756

Source: Calculated from: KPMG (for DUF), *Evaluacion de las operaciones de cofinanciamiento de la inversion publica*, March 2,000

As shown in Table 10, the Funds have mostly been funded by the IBD and the World Bank. They have been very much influenced by these institutions. They were the vehicle through which a sizeable share of multilateral aid to Bolivia was channelled and allocated, both spatially (to what municipal governments) and sectorally (to what sectors).

*Procedures* - Funds expenditures are presented here as matching specific grants to municipal governments. They could also be presented as gifts in kinds to municipal governments. The reason is that Funds expenditures do not—or rather did not, because procedures are about to change—exactly take the form of grants put at the disposal of municipal governments for specific investments projects. As a matter of fact, investments were directly undertaken by the Funds for municipal governments. Project design originated in principle in municipal governments, but in fact it was revised by the Funds, according to their quality and price norms. Bidding for contractors was done by the Funds, not by municipal governments. So was supervision and payment. Funds expenditures do not appear in municipal accounts that only record the matching share (*contraparte*) paid, to the Funds, by municipal governments. The Funds take this matching share, add their own money, finance the investment, and when it is finished hand it over to the municipal government of the commune where it is located.

*Sectoral and spatial allocation* - Table 11 provides an overview of the allocation of Funds grants by sector.

**Table 11 - Funds Specific Matching Grants, by Sector, Yearly Averages 1995-1998**

	FIS (M.US\$)	FDC (M.US\$)	FNDR (M.US\$)	Total (M.US\$)
Health	4.6	-	-	4.6
Education	19.7	-	-	19.7
Water & sanitation	10.0	-	24.5	34.5
Rural development	-	7.0	-	7.0
Transportation	-	-	16.5	16.5
Urban development	-	-	5.5	5.5
Energy	-	-	0.5	0.5
Multisectoral	0.6	-	2.0	2.5
Total	35.0	7.0	49.0	91.0

Source: Calculated from: KPMG (for DUF), *Evaluacion de las operaciones de cofinanciamiento de la inversion publica*, March 2,000

*Appraisal* - The action of the Funds is often heavily criticised, by municipal governments and by ministries. The Funds are accused of being bureaucratic, slow, arbitrary, costly, and even corrupt. Many mayors believe, and say, that if given the amount of money spent by the Funds "for them", they could achieve much more than what they get. Some complain that the matching share (*contraparte*) they are asked to deposit with the Funds is often not used for months or years. The Funds claim that some municipal governments promised matching shares and never paid them, which forced them (the Funds) to require municipal governments to deposit the matching share first. It is not easy to assess properly the validity of such claims and counter-claims; but there must some truth in most of the criticisms heard. It should be noted, however, in defence of the Funds, that they operate under severe constraints. They must implement national and donor's policies, in terms of sectoral allocation, spatial allocation, quality and safety, and procurement procedures, and at the same time take municipal governments' wishes into consideration. A few observations can be made.

First, Funds-aided investments have favoured social, rather than economic, investments. As can be seen from Table 11, the three key sectors referred to in Bolivia as the main contributors to the "war against poverty", health, education, and sanitation, account for two-thirds of total investments. This is not surprising. The Funds have explicitly been created to cater to the "social needs" of the country, by reducing social infrastructure "gaps". Nor is it necessarily worrying for economic development. Economic investments, in transportation, energy, rural and urban development, are mostly financed through other channels. They take the form of grants or loans made by multilateral or bilateral aid agencies to the central government, and/or are financed directly by the central government out of its own savings. It is nevertheless interesting to note that social investments are much more decentralised than economic investments.

Second, Funds matching grants have not contributed to strengthen municipal governments. As mentioned, these grants (or gifts) have resulted in investments made for them rather than by them. A chance to use this international money to educate municipal governments to the difficult art of making public choice has been missed. True, in many cases municipal governments were too young and too weak to practice this art; but it seems that the Funds have not tried very hard to improve the situation in this respect.

Third, the anti-urban bias in the Funds matching grants allocation procedures has led to relative overinvestments in rural areas and underinvestments in urban areas. This is evidenced by the data presented in Table 12. In the key area of education, smaller, that is mostly rural, communes have been favoured by the Funds to an incredible amount, with the result that the number of pupils per classroom is now 3 or 4 times higher in the large cities than in smaller, more rural, communes. Not only is this grossly unfair for the present, but this unfairness is likely to increase in the future, because the most deprived communes are precisely those where the number of pupils increases faster because of rural-urban migration. It is difficult not to find here a serious misallocation of resources. The Funds specific grants in education did not go to the areas where they were most needed.

**Table 12 - Pupils per Classroom, Larger and Smaller Communes, 1999**

	Pupils/classroom
Larger communes	
La Paz	72
Santa Cruz	77
El Alto	80
Cochabamba	71
Oruro	63
Sucre	55
Potosi	55
Average larger communes	72
Smaller communes	34
Bolivia	49

Source: Ministry of Education and Census of Municipal Governments

### *Borrowing*

Municipal governments, and also Prefectures, finance part of their expenditures by borrowing. We have already discussed above lending by FNDR. FNDR is the most important source of borrowing for municipal governments in Bolivia, but it is not the only one. Information on municipal borrowing operations is scarce and unreliable. A serious effort is presently undertaken to throw light on this important issue. Table 13 presents probably comparable data for five large municipal governments.

**Table 13 – Municipal Governments Debt, 1998 or 1999**

	La Paz 1998	Trinidad 1998	El Vinto 1999	Sucre 1998	El Alto 1998
Short-term debt					
Wages	3,338	159	77	-	6,431
TFSE	10,753	79	14	136	-
Social Security	19,085	20	38	-	-
Suppliers	30,840	1,728	420	1,847	9,430
Debt service	88	-	-	-	3,451
Total	64,250	1,986	571	1,944	19,312
Long-term debt					
FNDR	113,880	27,129	4,227	10,849	16,475
Other	264,653	2,059	292	38,052	-
Total	378,533	29,188	4,520	48,901	16,475
Total, debt	442,783	31,175	5,090	50,846	35,787
Budgetary resources	340,837	20,782	5,564	60,409	110,340

Source: FNDR files

This sample suggests three points about municipal debt. First, the total indebtedness of municipal governments is of the same order of magnitude as their yearly budgetary resources. Except in the case of El Alto, it represents between 90% and 130% of yearly resources. Second, the long-term debt is about 10 times larger than short-term debt. Third, FNDR is the most important source of long-term credit for municipal governments: indebtedness to FNDR represents between 30% and 100% of long term indebtedness.

All long-term loans benefit from a guarantee on block grant (*coparticipacion*) and or other resources. The maturity of loans varies from 5 years to 15 years. Interest rates also vary, from 6% to 13%, with FNDR lending at about 7%. There are also loans made at concessionary, or even zero, rates, for certain types of projects.

## Section VI - Three Key Sectors: Education, Health and Transport

To get a better understanding of the relative importance of municipal governments in the entire public sector, of the main financial and decision-making mechanism, and more generally of the decentralization process in Bolivia, we selected three important sectors. Table 14 present incomplete data that nevertheless gives and idea of the relative importance of these sectors. It suggests that the three sectors account for about half of total public expenditures in terms of investments. The three sectors are examined in turn.

**Table 14 - Relative importance of Education, Health and Transport, 2000**

	Investment expenditures (in M Bls)	Operating expenditures <sup>b</sup> (in M Bls)
Education	550	1750
Health	415	1005
Transportation <sup>a</sup>	1255	40
sub-total	2220	2800
Other	1590	nd
Total	3850	nd

Sources and notes: <sup>a</sup>Air and river transport not included; <sup>b</sup>Mostly fees and salaries, with health benefits included but pensions excluded in the health sector.

### *Education*

Education as a public service can be characterized by two general objectives: it is welfare oriented, and it is a mean to fight against poverty. It is therefore one of the most important priority of every government. It is also a local service in that it has to go to the people and respect their localization constraints. For that reason, the question of distribution of the service over the territory is central.

Education involves several levels of the politico-administrative system: the sub-ministry of Primary Education at the ministry of Education, with deconcentrated districts and sections; prefectures with a departmental direction of education; and municipal governments. The Decentralization Law gives different responsibilities to each level.

Ministerial services, comprising about 160-180 people in La Paz, are in charge of overall policies, such as curricula, teachers training and hiring, what is referred to as "norms" (*normas*). Since 1999, the sub-minister is implementing a special program to coordinate the efforts, and investments of municipal governments. International aid has now to keep to the ministry investment priorities. Education districts are essentially concerned with technical assistance to teachers and establishments, and provide them with teaching equipment. Teachers are appointed by the Home secretary, and paid out of the national budget, without any control by the sub-minister of Primary Education.

Prefectures do not have a large competence in the sector. We have already mentioned that they pay the teachers, without any power of intervention. But they have some responsibility in the appointment of teachers, within the allocation of the central administration. They are essentially involved in assistance to municipal governments on infrastructure projects. It seems that they often compete rather than cooperate with education districts and municipal governments.

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Municipal governments are responsible for education infrastructure: they have to built and maintain schools. Although they are in principle initiated by local councils, most of investments, which are largely financed by the FIS, are managed without municipal government involvement.

Education expenditures account for more than 2290 MBls in 2000. Out of this total, 1740 MBls are salaries and 550 MBls are investments. Municipal governments contribute about 130 MBls (23% of investments and 5% of total expenditures) in the form of direct investments and of counterpart payments to the Funds, particularly the FIS that finance the remainder of investments, for about 420 MBls.

Financially, therefore, the sector is heavily dependent upon the central government and international assistance. Central administration is primarily concerned with the number of teachers and the corresponding amount of money. In recent years, however, it is also more and more concerned with both quality and effectiveness of the service provided. An information system aiming at improving efficiency is being implemented. It is based on surveys of both parents and teachers, and on educational tests of students. International agencies pursue their own aims in terms of equipment all over the territory. The Ministry is overtaking part of the control of international funds through his new program. It focuses on 195 selected municipalities and tries to orientate funds towards the less endowed communes (in term of pupils/classrooms).

Generally speaking, the process is very much top-down, with little attention paid to local demand or needs. However, a bottom-up process is being developed. First, it is now explicit that the Funds cannot finance projects that have not been given priority by municipal governments, with the approval of the civil society organizations -the so called O.T.B. Second, the new program initiated by the ministry aims at involving local partners -communal councils, teachers, parents- on such issues as cultural homogeneousness in class, pedagogic coordination between teachers and schools, optimization of resource allocation. Local partners can meet in local educational organization called "nucleos" that can gather five or six schools in a commune. They receive assistance from the minister in order to meet contractual objectives.

The investment effort undertaken during the last decade has endowed most of the communes with the infrastructure required for education. Nevertheless, allocation criteria used by the Funds have led to serious inequalities between communes. As mentioned above, big cities suffer from a lack of classrooms. In El Alto, for instance, children go to school by turn, in the morning or

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in the afternoon. Small municipal governments have been generously financed for school constructions. They now have to cope with school equipment and with maintenance, and many will find it difficult to finance both. Similar differences can be found within inside large cities: the number of pupils per classroom is two or three times larger in city centers than in city suburbs.

### *Health*

Public health service objectives are not very different from education ones, and the organization is designed on the same pattern. Although the service appears to be more centralized. It largely depends on technology and medical experts.

As for education, health is provided at the levels of the ministry, of prefectures and of municipal governments. The ministry of Health has deconcentrated services, at the levels of districts and sections (called areas). Each prefecture has a departmental health service. In addition, there is a financial institution, Las Cajas de Salud, under the control of the ministry, to re-allocate care costs, and a Social Security Nation Institute to support a system of free care for the old. The ministry of Health is also responsible for national epidemic prevention programs that often benefit from international assistance.

In practice, it appears that the health system remains highly centralized. First, a 1998 health reform introduced an interesting system of monitoring and control of prefectures and municipal governments. "Management contracts" (*compromisos de gestion*) including such targets as infant mortality rates, or annual number of medical consultations per capita, are negotiated and signed with sub-national agencies. Sanctions are supposed to be taken in case of non-achievement. Such contracts have already been signed with all prefectures and with several municipal governments. Second, central government services assist municipal governments, together with OTBs, in the preparation of investment projects. Third, part of municipal block grant -6.4% of the investment share of the block grant (*coparticipacion*), that is 5.4% of the block grant- is affected to health care, which guarantees the availability of money for health expenditures.

As a result, it would seem that some equality in health coverage has been achieved. According to the 1997 Census of Municipal Governments, all (but 13) communes have at least one medical care center, and the number of medical staff per person at the commune level is relatively constant<sup>14</sup>. This does not mean that the quality

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<sup>14</sup> There is a good linear correlation between the number of medical staff (Y) per commune and the population (X) of communes :  $Y=0.003*X-17$ , with  $R^2=0.85$

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of health care do not vary from commune to commune. The number of consultations per medical staff, for instance, varies greatly over communes, with less consultations in small, rural communes; but it is hard to distinguish here between a demand effect (people living in small, rural, communes do not want to consult often) or a supply effect (medical staff is less efficient in these small, rural, communes).

### *Transport*

Unlike health and education, which are social sectors, with prices equal to zero or highly subsidized, transport is an economic sector that can to a large extent pay for itself, but must however be regulated. We shall limit our discussion to the case of road transport, which is the dominant mode, and the one that lends itself best to some form of decentralization. It is useful to distinguish between (i) the provision of roads, and (ii) the utilization of roads.

*Road Categories* - The Bolivian road network, of about 50,000 km, has been divided into three categories of roads. There are national roads, called the fundamental network (red fundamental), which are under the direct responsibility of the central government and its agencies, and accounts for about 10,000 km. There are "departamental" roads, for about 15,000 km, which are under the responsibility of the prefectures. Other roads are under the responsibility of municipal governments. The quality of the Bolivian road system is particularly poor. Less than a third of the "fundamental network" is asphalted. The Transport Regulatory Agency (*Superintendencia de transportes*) refers to the Bolivian road network as "something we will not comment on, as the truth would command us to say that it hardly exist as an adequate network".

*Road Financing* - Resources available for road infrastructure provision come from three different sources. The most important, accounting for a little more than half of the total, is foreign aid. It takes the form of "soft" loans, with very low (2%) concessionary interest rates. The main lenders are the CAF (*Corporacion Andina de Fomento*) for about 150 MBls per year, the World Bank (for about 100 MBls), the IADB (for about 75 M Bls), and various bilateral donors such as KWF (Germany), OECF (Japan) as well as OPEP. A second source is constituted by the proceeds of the tax on hydrocarbons (IEH), for about 25% of the total. Although, this tax is not earmarked by law, it is used to fund road investments at the national level, and (for the part which is allocated to prefectures) at the regional level. The third source of road financing is to be found in the specific funds which have been created for that purpose, such as the Toll Fund, fed by a levy on that part of the national roads network

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which is in reasonably good conditions, for about 130 M Bls per year. Two-thirds of the proceeds of this Toll Fund accrues to the central government, and one-third to the prefectures.

*Decentralization, then Recentralization* - Road construction and maintenance had traditionally been delegated to a public national Road Agency (*Servicio Nacional de Caminos*, or SNC), that was funded by the central government (with the sources of funds just described) but enjoyed a substantial managerial autonomy. This Road Agency was not particularly effective. In 1996, it was decided to regionalize it. The national Road Agency was dismantled, and replaced by nine regional Road Agencies, one in each region (*departamento*). There is a general agreement that this reform was a failure. Administrative and overhead costs were very high; in most regions, overall management was poor; the allocation of funds was questionable: only 10% of available scarce resources were allocated to the national road network (*red fundamental*) that represents 25% of total roads and a dominant share of traffic. This decentralization therefore precipitated the deterioration of the badly needed national road network.

Two years later, in 1998, it was decided to eliminate the nine prefectural agencies, and to re-create a strengthened and (it is hoped) more effective national Road Agency (*Servicio Nacional de Caminos*). This Agency, with the help of the sub-ministry of Transport, is presently identifying priorities. A national highway master plan is currently being prepared. Its main priorities will be as follows: (i) the improvement of international and interregional linkages, referred to as "corridors"; (ii) a dramatic improvement in the maintenance of the national network; (iii) the creation of an adequate legal and administrative framework to attract private investments in road construction and operation; (iv) the definition of a priority program for the regional and municipal networks. The institutional recentralization has already led to an investment recentralization. In 1999, 75% of road investments have been allocated to the national network (*red fundamental*).

*Road utilization* - The availability of road infrastructure is only the first step to the provision of road transport services. The utilization of roads, at least for public (in the sense of: open to the general public) transportation, has to be regulated. In principle, this is the business of a Transport Regulatory Agency (*Superintendencia de transportes*) created under the umbrella of the 1994 Law on the Sectoral Regulation System. In practice, however, the Law on Transportation that should specify the responsibilities of this Agency has not yet been finalized, and this introduces some uncertainty as to who should do what. In order to operate

a transport road service, an entrepreneur needs potentially three elements: (i) a license or permit, giving him the right to enter the market; (ii) an agreement on routes and frequencies; (iii) constraints on prices and tariffs. Table 15 indicates who is presently responsible for these kinds of regulation.

**Table 15 - Regulatory Responsibilities in Interurban and Urban Transport**

	Interurban	Urban
License to operate	Vice-ministry	Municipal governments
Routes frequency	Vice-ministry	Municipal governments
Prices and tariffs	No regulation	Superintendencia, or municipal government

As far as urban transport is concerned, there is a debate going on. The Regulatory Agency (*Superintendencia de Transportes*) maintains that a political institution, such as municipal governments, should not set up prices and tariffs. The municipal governments concerned (Santa Cruz, La Paz, etc) disagree, and expect that the Law to be issued will recognize their right to regulate urban transport entrepreneurs in all aspects, including prices.

*Privatization* - In both road provision and utilization, Bolivia is engaged in privatization. It has been much influenced by the experience of Chile, where a successful concession program has significantly contributed to the development and operation of the road network. Currently, three sections of the Bolivian national network are in the process of being opened for concessions: (i) the four highways linking La Paz, Oruro and Cochabamba to the Chilean border, with connections to the Chilean harbors of Arica, Iquique and Mejillones, for 1,130 km; (ii) the central loop between Cochabamba and Santa Cruz, for 1000 km); and (iii) the east loop to Santa Cruz, with possible further connection to Curitiba and Santos in Brazil. The economic conditions that will prevail will be determined by the roads Regulatory Agency (*Superintendencia de Transportes*).

## Section VII - Evaluation and Options

This section tries to evaluate summarily the progress achieved by the decentralization effort undertaken in Bolivia, to highlight the areas where changes could be considered, and to provide a discussion of (some of) the options available in each of these areas.

### *Criteria for Evaluation and Options*

To evaluate –and to try to improve– this decentralization process, it is important to discuss the many objectives that are assigned to it or that it has to accommodate. They constitute the set of criteria that must be used to assess past and future decentralization efforts. One can identify at least six such objectives that appear directly or indirectly in official laws and declarations:

*Promote public participation* - The major objective of decentralization is political, not economic. It is not to improve allocative and productive efficiency –as assumed in fiscal federalism textbooks. It is to promote and facilitate the involvement of all Bolivians in public affairs. It is not by accident that the basic Decentralization Law is entitled: Popular Participation Law (*Ley de participacion popular*).

*Reduce poverty and interpersonal inequality* - The reduction of poverty, and of interpersonal inequality, both of which are important in Bolivia, is a second objective to which decentralization, or decentralization policies and institutions, are expected to contribute. This objective is imposed by internal political considerations as well as by the international community.

*Reduce interregional inequality* - There is a general consensus in Bolivia that spatial (that is both interregional and intraregional) inequalities, which are great in Bolivia, should be reduced. Income, opportunities, public services levels vary greatly from place to place, and in particular between rural and urban areas. Decentralization is expected to bridge this gap.

*Promote efficiency and hence economic development* - There is also a general agreement that economic development must be stimulated and achieved. As a matter of fact, this agreement is more implicit than explicit. The public debate in Bolivia puts the emphasis on social issues much more than on economic issues, on redistribution than on growth, on equity than on efficiency. Many people seem to believe that wealth is the product of exploitation rather than of productivity. This is quite apparent in the National Dialogue (*Dialogo Nacional*) engaged about HIPC II, that is the best use of the public resources to be freed by the forgiveness of part of Bolivia's public international debt: the vast majority of ideas and suggestions relate to short-term poverty alleviation, not to growth promotion, as if economic growth was not the safest road to poverty reduction in the medium and long term. Nevertheless, it is obvious that nobody is against growth, and it is expected that decentralization, by promoting the efficiency of the public sector, will contribute to economic growth.

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*Conduct national policies* - The central government and its agencies believe in the role that the central government must have in choosing national priorities and in conducting macro-economic and sectoral policies. Decentralization is not expected to do that, of course, but it is expected to assist (or at least not to contradict) these policies.

*Accommodate donor's wishes* - For reasons of their own, multilateral and bilateral donors have views and wishes on how the money they are ready to give (or to lend) to Bolivia should be spent. Decentralization, and decentralization institutions must be designed in a fashion that makes it possible to take these views into consideration.

The mere listing of these objectives shows that they are many and in many cases contradictory. Add to this the low level of income of the country, and the high degree of politicization. The task appears an impossible one. It is simply not possible to design a decentralization system that will contribute to or accommodate all of these objectives simultaneously. Nevertheless, because these goals are all legitimate and desirable, it is important to keep them in mind when considering past efforts and possible changes in the decentralization system or process.

#### *Decentralization in Bolivia: a Tentative Assessment*

The shift from a highly centralized country to a well-functioning decentralized one is obviously a long and difficult process. After only six years of efforts in this direction, Bolivia cannot be expected to have achieved all of its objectives in this area.

The first one, promote public participation, has largely been reached. It is true that municipal governments (*gobiernos municipales*) remain weak, politically, administratively, and financially. But they have taken roots. Mayors are increasingly known and often popular, probably more so than ministers. Civic organizations control them. The electorate censors them, or re-elect them. Municipal governments try to improve their performance. They get together in groupings (*mancomunidades*) or in regional associations. They participate as such in the public debate. In the National Dialogue about the use of HIPC public money, for instance, mayors and their associations seem to play a clear and key role in articulating the demands of civil society. Nobody suggests that the importance of municipal governments should be curtailed. The debate is only about how they should be strengthened. On the other hand, a key feature of a healthy political process, namely local taxation, is often missing. The debate is more on how to spend money

coming from above than on deciding the appropriate mix of taxes cum public services, as it should be.

It is not clear that decentralization has reduced poverty and interpersonal inequality. The allocation criteria of the block grant (*coparticipacion*), namely the number of people in each commune in 1992, cannot do much in this respect. It gives municipal governments the same amount per capita, irrespective of whether incomes are low or high in the commune. The choice of 1992 population numbers, however, may have a positive (although probably undesigned) redistributive impact. It favors (relative to current year population numbers) communes that are losing population, at the expense of communes that are gaining population. The former (the losers) are likely to be poorer than the latter (the gainers), and the system is redistributive, to the (limited) extent that local public expenditures are a substitute for personal income.

The decentralization process may have contributed to the third objective, the reduction of interspatial inequality. Those rural areas that were not unincorporated, and were not receiving block grant (*coparticipacion*) money are now part of communes, and as such are entitled to block grant money<sup>15</sup>. More significant, the empirical analysis of specific grants and loans by the funds suggests that poorer communes and poorer municipal governments have been favored by the system. This stems mostly from the planned concentration of FIS investments (or grants) in rural areas. Because the more rural communes also turn out to be the poorer, FIS money has been allocated to the poorer communes.

Has the system promoted efficiency and economic development? Probably not. One could argue that public money spent at the local level is spent more efficiently, because of a better knowledge of local realities and a better social control. But there is no evidence that this happened in Bolivia. There are example of waste and corruption at the local level just as there are at the national level. More importantly, perhaps, local development has not been a major objective of municipal governments. They have been mostly concerned with social objectives. In this, they have been encouraged by the Funds. The spatial allocation of Funds money has certainly not favored economic development either. In education and health, the most important areas of Funds investments, it has been heavily biased towards rural areas. As a result, as has been shown, rural areas now enjoy a much higher level of infrastructure endowment (at least in health and education) than urban areas. Migration movements can only

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<sup>15</sup> One should not forget, however, that these unincorporated areas were, before the 1994 changes, "managed" by prefectures, and that public expenditures on, say, education or housing, in these areas were taking place. The comparison, often made, on transfers before and after is therefore not justified and not meaningful.

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aggravate this gap. The differences are so large that this can only be described as a serious misallocation of resources. One should note that this misallocation is not a consequence of decentralization *per se*, but of the specific grants (*cofinanciamento*) system.

The last two objectives –conduct national policies, and accommodate donors' wishes– are not so relevant to an assessment of decentralization policies. They are rather constraints that have been met. The 1994 decentralization has not prevented the central government from conducting the macro or sectoral policies it wanted to pursue. The amount of money allocated to municipal governments and to prefectures remain modest (a little more than 20% of all tax income), and corresponds to investments that were largely undertaken by the central government budget before the 1994 changes. Donors' money has mostly been channeled via the Funds, and the funds sectoral and spatial allocation of resources has been agreed upon by the main donors.

The first steps of decentralization in Bolivia therefore call for a prudent but not negative assessment. Much remains to be done, however, to improve the decentralization system. Five areas for possible or potential change have been identified. The options that could be considered in each of these areas are discussed in turn below, but they are not unrelated: the choices that will be made in one area impact upon other areas. Decentralization is a system, and should be seen as such.

#### *Options for Block Grants (Coparticipacion)*

Presently, municipal governments and prefectures do receive substantial amounts of money from the central government in the form of block grants (*coparticipacion*) that they can use rather freely. The present block grant system could certainly be improved. A block grant system includes two main components: (i) the definition of the total amount of grant (how much of central government income should be given to subnational governments?), and (ii) the allocation formula (how should this total be distributed to each subnational unit ?).

*Definition of the total amounts* – The present system defines the block grant to municipal governments as 20% of certain national taxes, and the block grant to prefectures as natural resources royalties and a share of the tax on hydrocarbons. These definitions are not the only ones possible, and not necessarily the best ones. Other definitions must be considered.

Assuming there should be a prefectural block grant (which is not obvious, as we shall see), the present prefectural block grant base, or bases, is particularly questionable. The hydrocarbon tax has two characteristics.

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It is one of the most buoyant taxes at the disposal of the central government, because the elasticity of fuel consumption to GDP is much higher than one. When GDP increases by 10%, gasoline or diesel consumption increases by much more than 10%. The other characteristic is that the tax rate can and is manipulated by the central government to soften marked fluctuations in international oil prices. When oil increases by 30%, the government may for legitimate reasons lower the tax rate to increase pump prices by much less than 30%. These two characteristics make the hydrocarbon tax a bad base to define a block grant. The first one means that the total amount allocated to prefectures will generally increase faster than other economic or public finance magnitudes. This is very hard to justify. Why should prefectures income increase faster than municipal governments income or central government income? The second characteristic means that the total amount of the block grant may be erratic. The general trend, as mentioned, will be upwards, but with wide fluctuations caused by changes in international oil prices. This introduces a most unpleasant uncertainty for prefectures. It makes it difficult for them to plan their expenditures.

The same is true of royalties (*regalias*). We understand that in Bolivia regions (*departamentos*) consider royalties on the exploitation of natural resources located on their territory to be "their own", and that it is politically very difficult to change this attitude. This is no reason not to say that both theory and common sense view the matter differently. Natural resources are distributed without regard to the merits or the needs of the various regions of a country. They make a very poor and unfair subnational tax base, and—as pointed out by public finance textbooks—should be made a central government tax base. At the extreme, natural resources, and the attached royalties, could happen to be located in a scarcely populated region (such as Beni in Bolivia) that would end up having enormous tax resources per capita whereas other, more populated, regions would have nothing or next to nothing. For reasons of equity, and also of efficiency, this could not be justified. For long, the problem was not very acute in Bolivia, because most regions had access to some sort of royalties: from mining in certain regions, from oil and gas in others. This balance, however, is not likely to persist: mining royalties tend to decline, whereas oil and gas royalties increase rapidly. As a result, the distribution of *per capita* royalties by region becomes more and more unequal. Even in Bolivia, the unfairness and inefficiency of allocating royalties to the region where they are "produced" has been (in part) recognized: the law has introduced a compensation mechanism that redistributes royalties to the regions less endowed in natural resources. In addition, royalties are not stable in the long run. The total amount collected is a function of: the

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quantities of natural resources extracted, that can vary greatly; the international price of these resources, that fluctuates constantly; the percentage obtained through negotiations by the Bolivian government, that can also change.

There is not justification for defining the total amount of the block grant for prefectures as the product of only one or two taxes, particularly volatile taxes like the tax on hydrocarbons and the royalties.

For both municipal governments and prefectures, the total amount of the block grant should be as stable and predictable as possible. It could and probably should be the same for both. It could be defined as a share of all taxes collected by the central government, including the tax on hydrocarbons and royalties.

Two questions remain open for discussion. One is: should the total amount of the block grant be automatically defined as a legally fixed percentage of tax proceeds, or should the central government retain some discretion in determining that percentage? The other question is: should subnational governments be protected from a downward shift in the total amount of the block grant?

On these two questions, the (equally legitimate) interests of subnational governments and of the central governments diverge. Subnational governments would prefer an automatic, i.e. non-discretionary, system, and one that would guarantee a floor in block grant transfers. They suffered in 1999, when the recession led to a decline in taxes collected and therefore in the total amount of the block grant. It can be argued that the central government is in better position than subnational governments to deal with the ups and downs of tax resources generated by the business cycle. Subnational governments are helpless. The central government can more easily borrow. This would justify the idea that the fluctuations of the total amount of the block grant should be eliminated or at least softened. It could be made not to decline (in real terms) even when total taxes decline, and to increase less than total taxes when total taxes increase rapidly. On the other hand, central governments, which are responsible for macro-economic policy, prefer to retain maximum flexibility and freedom, that is a discretionary system, and one that does not impose a floor on the total amount of the block grant to subnational governments.

Some middle of the road solutions could probably be negotiated and arrived at. One could trade, for instance, the idea of a floor (the total amount of the block grant will not decline) against the idea of a limited discretion (the total amount of the block grant will be between 18% and 22% of total taxes). In many countries, such as India,

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Australia or France, such solutions are prepared and proposed by a high-level independent commission, which is also competent to discuss changes in the allocation formula of the block grant.

*Allocation formula* - Once the total amount of the block grant is defined, it must be allocated to the various municipal governments and/or prefectures. If, as suggested, the same amount is used for municipal governments and prefectures (assuming prefectures receive a block grant), one must first divide it into two parts: one for municipal governments, and one for prefectures.

This allocation between prefectures and municipal governments is the simplest, because it is largely arbitrary and political. Percentages of total taxes could be such that the total amount of block grant for municipal governments and prefectures would not be different from what they are presently; or they could be such that the block grant for municipal governments be increased and that of prefectures diminished, relative to their present levels.

More important is the allocation formula for municipal governments. The present formula is very simple: the allocation is made *prorata* the 1992 population of each commune. Such a formula has the advantage of simplicity, and of political expediency. But it also has serious disadvantages: (i) it does not compensate for differences in tax bases, (ii) nor for differences in needs, and (iii) the 2001 census will create an impossible situation. Let us consider these three issues in turn.

It is extremely desirable that allocation formulas compensate, at least in part, intercommunal differences in *tax bases*. Whatever the local taxes used, some municipal governments will have larger tax bases per capita than other municipal governments. With a given tax effort, they will raise more tax income. This is both unfair and inefficient. One of the potential benefits of decentralization is that municipal governments compete with each other, to attract enterprises, to please their citizens. But for this competition to be meaningful or even possible, municipal governments must compete on a more or less equal basis. Differences in tax raising potentialities must be eliminated, or at least reduced. This can be done by introducing tax basis per capita in the block grant (*coparticipacion*) allocation formula. All other things equal, the smaller the tax base per capita of a given municipal government, the larger the block grant allocated to this municipal government.

Note that what must be compensated for are not differences in tax income, but differences in tax bases. Tax income is the product of a tax base by a tax rate. A low tax income can result from a low tax rate as much as

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from a low tax base. Compensating for differences in tax income would reward municipal governments with low tax efforts, and encourage all municipal governments to lower their tax efforts in the future. It would tend to eliminate local taxation altogether.

The introduction of tax bases in the allocation formula, however desirable, implies the knowledge by the central government of the tax bases (mostly the rental value of buildings) of each municipal government. This condition is not met presently. Tax bases are now assessed by each municipal government. This is done in a very inefficient fashion, as mentioned above. Above all, it is done in a hazardous fashion, with some municipal governments assessing their tax base better than other. Using the present tax bases would be grossly unfair and inefficient. It would reward those municipal governments that presently underassess, and encourage all municipal governments to underassess in the future. Developing a set of *municipal cadasters* in each municipal government would not solve this difficulty. Different municipal governments would assess property values differently in their cadasters. They would quickly realize that low valuation means high transfer income, and consequently underassess systematically. A possible solution, worth exploring quickly, would be to include in the 2001 census of population one or more question on the rental value of buildings; there are already questions on housing, as in most census; this might provide a vehicle to assess the rental value of buildings in the entire territory. A second, probably better, solution is to have the central government evaluate local tax bases all over the country, or to put it otherwise, operate a *national cadaster*.

A national cadaster would have two main advantages. Many smaller municipal governments are and will remain in the foreseeable future unable to assess properly local tax bases/manage a cadaster. This is both technically and politically very difficult. A national cadaster would do it for them, and ensure that tax bases are known. The second advantage is that the assessment would be done in a uniform fashion and could therefore serve as the basis for tax bases compensation. It is often claimed that a national cadaster would have a major disadvantage, namely that it would deprive municipal governments of their "tax rights". This claim is not valid. What matters, and defines the tax rights of municipal governments, is the power to decide tax rates. Presently they do not have this power; the tax rate is set (at 6% for the property tax) by the central government. A natural corollary of a national cadaster would be to give municipal governments the power to increase or decrease their tax rate -between limits (for instance between 4% and 8% for the property tax) at least at the beginning.

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There is a second criteria that is often introduced in allocation formulas: the "needs" of the various communes. The idea is to give more per capita to those communes that have greater "needs". Needs can be defined in terms of infrastructure endowments (communes with more infrastructure need less) , in terms of the relative importance of targeted sub-groups (communes with relatively more children need more in education expenditures), in terms of geographic characteristics (communes in a hostile physical environment might need more), etc. The difficulty with needs-related criteria is that they are very difficult to define in a simple and politically acceptable fashion. In addition, the specific grants to be distributed by the Funds are explicitly designed to incorporate a needs element, in the form of infrastructure endowment. It might be more reasonable not to try to introduce needs criteria in the Bolivian block grant allocation formula, at least for the time being.

A third criteria might also be envisaged: tax effort. All other things equal, municipal governments that tax more, relative to the tax base, could get more in block grant. This idea is contentious. It can be argued that the central government has no reason to influence the effective tax rate decided by municipal governments, and to distort their choices. The counter-argument is as follow. The higher the share of grants in total municipal resources, the smaller the inducement of municipal governments to raise local taxes. Think of a municipal government that raises 10 in taxes and 90 in grants. Doubling the effective tax rate, to raise 20 in taxes, will bring total resources to 110. This is a 10% increase in expenditures coupled with a 100% increase in local taxes: not a politically attractive proposition. This is why we observe that when the share of taxes in total resources goes below a certain threshold, local taxes tend to disappear altogether. This justifies the introduction of tax effort in an allocation formula. This introduction does not distort choices, it corrects a distortion.

In any case, the present criteria, the 1992 Census population, will become untenable when the results of the 2001 Census are made public. The new Census will show great changes. In some urban communes, population will have increased by 40 or 50%. In some rural communes, it will have stagnated and even declined. Ignoring the new figures will be politically impossible. Using the new figures will mean a large increase for some (which will not create political problems) and a large decrease for other, that will be politically quasi impossible to introduce. Something will have to be done. This sets the stage for a reform of the allocation formula, along the lines suggested above.

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### *Options for Specific Grants (Cofinanciamento)*

Specific grants are grants made for specific purposes or projects. In Bolivia, they have taken the form of matching grants made by the "Funds", and they have largely been financed by bilateral and -above all- multilateral aid. The shortcomings of the Funds, which have been discussed above, are widely recognized, and they are presently being corrected. Appointments to top managerial positions will be made or prepared by an independent consulting firm. The unrealistic division of labor between a fund that makes grants to rural areas (FIS) and one that makes grants to urban areas (FNDR) will be abolished. The confusion between grants and loans made by the same institution (FNDR) will be eliminated. There will be only one institution, called FIS or otherwise, in charge of making matching specific grants to municipal governments. All this is very desirable. There remains the question of how it will operate. The problem is to fill a 315x8 matrix, with 314 municipal governments lines, 7 sectors<sup>16</sup> rows, one "total" line and one "total" row, and the cells indicating how much money will be granted to each municipal government for investments in each sector (with many empty cells, of course). The Bolivian government is presently looking for a procedure to fill this matrix, for a "model" of operation. This model calls for a few comments.

The first is that much, perhaps too much, is asked of the model. It must respect donors' wishes and governmental priorities as regards sectoral allocation. In other words, the "total" line of the matrix is given. The model must be as automatic, transparent, objective as possible, and at the same time simple and easy to understand, so as to eliminate any belief of politicization and favoritism. The model must also contribute to responsabilize municipal governments, by encouraging or forcing them to make choices. It is also expected to prevent bad projects from being aided, because this is a waste of scarce public resources, and because the financing of bad projects would jeopardize the reputation of the Fund. The model should also produce an allocation of resources between municipal governments in line with governmental objectives; these objectives are not very clearly defined, but they include giving more money to the most deserving communes (fairness) and to those that will make the best use of it (efficiency). It is not sure that there exist a model that can achieve all that simultaneously. Some of these constraints or objectives are contradictory. Even when they are not, it is a basic principle of policy that several instruments

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<sup>16</sup> The seven sectors considered are: health, education, water and sanitation, rural roads, rural development, rural energy, municipal institution building (*fortalecimiento institucional*).

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(not just one) are usually needed to achieve several objectives.

The model presently under consideration introduces the key concept of "relative prices". What is meant by relative prices is that the matching share (*contraparte*) of the cost of a given project to be paid by a municipal government should vary, with each municipal government and each sector. A given municipal government would be faced with a 10% matching share (or price) for education and a 30% matching share for health, whereas another, richer or better endowed, municipal government would be faced with 50% for education and 40% for health. Another way to put it is to say that the Fund should produce a 314x7 matrix of relative prices. Faced with its set of relative prices, and with its own financial constraints, each municipal government would ask for a set of matching grants, or for none.

The concept of relative prices is basically a good idea. It achieves two or three things simultaneously. It forces municipal governments to think, to consider what they need or want, and to make choices: as such, it contributes to educate and to strengthen municipal governments. Relative prices also make it possible (depending on how they are calculated) to introduce equity, and perhaps even efficiency, concerns in the allocation of resources. If relative prices are lower for those municipal governments that are poorer, or that have less infrastructure, it will be less costly, and therefore easier, for those municipal governments to ask for—and to obtain—matching grants. Third, relative prices, if they reflect the sectoral scarcity of grant money (if they are, on average, higher for education because education is no longer a donors or central government priority, for instance), are a mechanism to accommodate potentially diverging central and municipal priorities. As a matter of fact, it is this third dimension of relative prices which is usually stressed in local public finance textbooks.

Much, therefore, will depend upon the calculation of relative prices. In its present form, the model envisages to base relative prices upon infrastructure endowments, or lack of (*carencias*). For education, for instance, the indicator would be something like the ratio of school age children to the number of classes, or the percentage by which this ratio should be increased to reach agreed norms. This is an interesting criteria, but it has two weaknesses. One is that this criteria is difficult to implement in practice. Either one uses data from the 1992 Census, or more recent data supplied by the sectoral ministries. In the first case, the data is politically beyond dispute, but it is obsolete. In the second case, the data is fresher, but it is politically suspect. More important is the other weakness of this criteria, namely that it is only one criteria, that it ignores other

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criteria that could be utilized. Two such criteria come naturally to mind: differences in tax bases, differences in central government sectoral priorities.

In its present form, the proposed model does not differentiate between tax-rich and tax-poor municipal governments. If these differences were compensated by the block grant, as suggested above, this would not create any serious difficulty. But if they are not compensated by the block grant, as is presently the case, the proposed system will favor tax-rich municipal governments. Imagine two municipal governments A and B that have the same infrastructure endowments but different tax bases, with A having a much larger tax base than B, and therefore, with the same tax effort, much larger tax resources. A and B will be faced by the same set of relative prices. But A will be able to put more matching money on the table, and to ask for more matching grants than B. It will obtain more such grants. The system will therefore give more to the richer municipal government. Admittedly, such cases may not be very numerous. In practice, the richer municipal governments (in the sense of having high tax bases) will often also turn out to be those that have the best infrastructure endowment. But there will be many exceptions. As we have seen, in education, rural –and poorer in terms of tax bases– areas often have substantially more classes than urban, and richer, areas. Differences in tax potentials should either be corrected by means of the block grant allocation formula (this is our preferred solution), or they should be introduced as a criteria in the specific grants allocation model, or else the system will remain unfair.

In its present form, the model does not differentiate either between sectors with high priority (and therefore important amounts earmarked for specific grants) and sectors with low priority. Relative prices are based only on relative infrastructure endowments. This is likely to lead to imbalances between the sectoral demand for specific grants money and the sectoral supply of specific grants money. It could happen that the total demand of municipal governments for grants for rural roads would be much greater than the total supply of grants for rural roads, whereas the opposite would happen for education. An interesting system of contests (*concurros*) is being developed to handle these gaps between supply and demand of specific grants money. Contests might be good for efficiency (they make it possible to eliminate bad projects), but they will be bad for transparency. In principle, there is a set of relative prices that would solve the problem, and produce, for each sector, a demand for grant money that would be equal to the supply. Admittedly, such a set of prices would in practice be difficult to estimate, particularly in the first years of operation of the system. But this is no reason not to aim at this set of prices, and in particular not to try to

reflect the relative sectoral priorities of the donors and central governments in the relative prices offered to municipalities. If education is a donors/central government priority, with large amounts of money available to finance specific grants to municipal governments for education, then, relative prices for education matching grants should be relatively low, all other things equal<sup>17</sup>.

#### *Options for Subnational Borrowing*

Municipal governments, and to a lesser extent, prefectures, have been borrowing in the recent past. The issue of borrowing by prefectures, which are part of the central government and have no fiscal autonomy of their own, is somewhat odd, and will be discussed below. Municipal governments have borrowed from commercial banks, from abroad (in particular from the Corporacion Andina de Fomento), from their suppliers, and above all from the FNDR, which in turn obtained its money from the donors community. There are in principle norms regulating the indebtedness of municipal governments, but they are not effective. The question of default and responsibility is not clear. The indebtedness of municipal governments is not reported accurately, but is known to be large in several cases. The entire sector needs attention and restructuring.

*Scope for municipal borrowing* – A starting point might be a discussion of the scope for municipal governments borrowing. This scope is not as large as is often thought and said. Borrowing is not a "natural" fashion of financing municipal governments, like taxation or transfers. It is only justified in two cases.

First, municipal borrowing might be justified to finance revenue-producing investment projects, such as a toll bridge, or a parking garage. If the discounted value of the revenue stream to be produced by the project is larger than its costs, or more precisely if the financial rate of return of the project is greater than the interest rate, then it is desirable and healthy that it be financed by borrowing. In such a case, a municipality is like a commercial enterprise, and borrowing is not dangerous. Subject to liquidity constraints, and to a margin of protection from the uncertainties and risks of financial rates of return analysis, one can even say that borrowing for such projects is highly desirable. The more a

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<sup>17</sup> There are also some more technical choices of the proposed model that could be questioned. One is that the relative infrastructure endowments (*carencias*) are normalized for all sectors simultaneously, rather than sector by sector. This introduces an implicit equal weighting of all sectors that is quite unwarranted. Another one is the grouping of communes into five "classes", because of similarities, and for the sake of simplicity. We believe that this will in fact complicate the picture, and confuse the essence of the system: the key role given to relative prices reflecting differences in infrastructure endowments, or/and, as we suggest, additional criteria.

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municipal government borrows for such projects (with a high financial rate of return), the better. They will provide the money to repay interest and principal. The only question that should be asked is: should not such projects be undertaken by private companies rather than by municipal governments? The *a priori* hypothesis is that private companies will be more efficient than municipal governments at managing such projects, and that the projects should rather be privatized –with public control and supervision when and where appropriate. There may be cases, however, when control or supervision are considered too difficult or/and too costly, and when public ownership is an option. This does not seem to be often the case in Bolivia, where privatization seems the rule rather than the exception.

The case of non revenue-producing investment projects of municipal governments, such as schools or hospitals, is completely different. Such investments do not have a positive rate of financial return. There is no interest rate, not even zero, which is such that non-existent revenues will cover investment and maintenance costs. Such projects may well have a high rate of economic return, and be fully justified in economic and social terms. A school, for instance, may contribute to increase the knowledge and the marginal efficiency of its former users, and produce much more than its cost, in welfare or even in GDP terms. But this does not justify borrowing financing. A municipality can finance only projects with very high rates of economic (as opposed to financial) return, and yet go bankrupt. The reason is that the benefits of such investments are not fully internalized by the municipal government. Inasmuch as these benefits are reflected in an increase in GDP<sup>18</sup>, the municipality will only capture a tiny part of it; technically, it will capture the product of the GDP increase by the marginal rate of local taxation. This marginal rate, often equal to the average rate, is usually very low: 1-3%. It is certainly very low in Bolivia. Think of a municipal investment of \$100 in a school project that will yield \$20 in additional GDP every year, and assume it is financed by a loan at 8%. This would be a very desirable investment in economic and social terms. Let us further assume that local taxation represent about 2% of GDP (the figure for Bolivia is below this ratio). Every subsequent year, our municipality will pay \$8 in interest, pocket an additional \$0.4 ( $=\$20*2\%$ ), and thus lose \$7.6. With a few of such loan-financed highly desirable investments, our municipal government will soon go bankrupt.

For these types of investments, borrowing financing will only be justified by a constant increase in the flow

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<sup>18</sup> This is an optimistic assumption; in practice the welfare gain taken into consideration in cost-benefit analysis is usually larger than the GDP gain that goes with it.

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of local taxes and transfers, not by the quality of investments. If local taxes and transfers increase sufficiently fast, they will provide the income necessary to pay interest and repay capital on municipal borrowing. The future flow of taxes depends upon the future tax base per capita, the future population, and the future tax effort (or rate) in the municipality. The future block grant income depends upon future central government taxes and upon the allocation formula. Of key importance here is the future population of each commune. In a rapidly urbanizing country like Bolivia, the population of many communes increases rapidly, at 4-6% per year. The tax base (the rental value of properties) per capita should increase faster than GDP in the urbanization period, because increased productivity associated with city size is normally capitalized in property values. A 4-6% increase in tax base per capita should therefore be expected in the fastest growing cities. This makes an 8-12% yearly increase in the tax base of these cities, assuming a constant tax effort. If tax efforts, which are presently very low, were to increase by 2% per year, a moderate increase, tax revenues would increase by 10-14% per year. Here is the justification for municipal government borrowing. The enormous investments needed to day could be financed by loans, that would be repaid out of these increases in own revenues to-morrow. Note, however, that this is only valid for some communes, and for a limited period of time. It is not justified for the many predominantly rural communes that are not expected to grow, but only for the large and medium-size urban communes that will develop in the coming years. Even for the latter communes, it will not last forever. The period of rapid urbanization is only temporary. When most people live in cities, and when total population growth tapers off, the growth rate of cities necessarily declines, and with it the justification for municipal borrowing. But it is precisely during this period of rapid urban growth that investment needs are largest: it is when borrowing is most needed that it is easiest.

*Risks associated with municipal borrowing* - Lending (to municipal governments just as to commercial enterprises) is and should be risky. Lenders must be at risk of not being paid interest and capital, if we want them to discriminate between potential borrowers. This in turn is highly desirable to induce borrowers to behave efficiently. The fear of being cut off from future borrowing is a powerful instrument to discipline municipal governments, just as it is a powerful instrument to discipline private firms. Simultaneously, the risks of overlending should protect lenders from the temptation to lend indiscriminately or of lending too much.

This virtuous circle of risk and discipline has not functioned well in Bolivia. For one thing, the distinction between municipal governments and central governments was

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not very clear. It was widely believed that the central government would intervene if municipal governments were overindebted, and bail them out. Municipal governments have benefited (and still benefit) from an implicit sovereign guarantee. For another thing, lenders, including the FNDR, used to take block grants (*coparticipacion*) flows as a guarantee. If a municipal government did not pay interest or capital, the lender would pay itself on the block grant. This was lending with interest but without risk. No wonder it led to overlending, which is another name for overborrowing and excessive indebtedness.

The Bolivian government should consider the introduction of risk in lending to municipal governments. As in many countries, the central government should make it clear that it will not bail out overindebted municipal governments. It should try to prevent or to limit guarantees based on transfers or own taxes.

*Regulatory regime and institutions* - The Bolivian government can and should control municipal governments borrowing and indebtedness, just as it controls commercial enterprises borrowing and indebtedness. Municipal borrowing may potentially have macro-economic consequences, as it contributes to global demand, and macro-economic management is a responsibility of the government and of the central bank. In addition, overindebtedness of municipal governments may prevent them from providing much needed public services; even if these services are by law under the responsibility of municipal governments, the central government cannot ignore what happens with them, and must protect the public, just as it must protect the public in the case of commercial banks and enterprises bankruptcies. Some sort of regulatory regimes and institutions are therefore necessary.

The first step has to do with information. Presently, nobody knows exactly the indebtedness of municipal governments. A private consulting firm is about to be hired to audit municipal accounts (of a certain number of municipal governments) and to assess municipal indebtedness. The FNDR is developing a system of reporting and analysis that, when fully operational, will provide much-needed data. This is probably not enough. Municipal accounts data should be systematically reported and analyzed, on a continuous basis. Prefectures, which are the hands of the central government in the regions (*departamentos*), could play a role in this monitoring. So could regional associations of municipalities. Another option would be to have a regulatory agency (*superintendencia*) in charge of it. There are already three regulatory agencies in the financial sector, including one in charge of banks. The functions of the latter could perhaps be extended to cover municipal governments indebtedness; or a new one could be created.

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The second step is to introduce specific regulations, and to make sure they are respected. There are presently two such regulations: the ratio of debt service to total income is not allowed to go beyond 20%; and the ratio of total debt to total income is not allowed to go beyond 200%. These constraints may be reasonable. They appear to be a bit crude, particularly in the light of what was said above about the dynamic nature of municipal government sustainable indebtedness. At any rate, they are not presently enforced, partly because of data limitation, and partly because of the lack of sanctions. Here again, a regulatory agency (*superintendencia*) armed with an appropriate law might be an option.

*Municipal governments bank(s)* - The FNDR is a *de facto* public municipal development bank. The experience with such banks is mixed, at best. This is because they are at the same time banks and development institutions. As banks, they try to lend on a commercial basis, to those municipal governments that can repay. As development institutions, they try to help all municipal governments, by making loans at concessionary rates dictated by (legitimate) development goals as much or more than by commercial goals. It is not sure that these two functions can and should be fulfilled by one single institution.

One can argue, on the contrary, that a clear distinction should be made between two types of municipal governments. There are those that can borrow, because they have a sizable, and growing, tax base, properly harnessed, and also because they are clearly and efficiently managed. There are also those municipal governments that cannot borrow, because they have none of these characteristics.

The latter cannot be subjects of credit. They must, and should, be aided. But there is no reason why this aid should take the form of loans, or rather of pseudo-loans, because these loans will generally not be repaid. These municipal governments must benefit from grants, be they block grants or specific grants.

The former, on the other hand, can and should be subject of credit, on a commercial or quasi-commercial basis. There are basically three options for lending to these creditworthy municipal governments: (i) the development of a municipal bond market, (ii) lending by all and any bank, and (iii) the development of one (or more) specialized banks.

The first option, the bond market, is very attractive in theory. Municipal governments float bonds on the market. Rating agencies study the behavior and the prospects of these municipal governments, and give them ratings. Those that have good ratings can float bonds at relatively low interest rates. Those that have bad ratings cannot, or only at prohibitively high interest rates.

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Virtue is thus rewarded, and therefore encouraged. In practice, this beautiful and efficient system requires a large financial market, effective rating agencies, sophisticated financial institutions, and relatively large borrowers. It only functions well in a few highly developed countries like the USA or Canada. It is not realistic to imagine that it could be developed in Bolivia in the near future.

The choice is therefore between options (i) and (ii), between specialized banks and ordinary banks. The recourse to ordinary banks offers the advantages of competition, because there are many "ordinary" banks in Bolivia. On the other hand, lending to municipal governments is a highly specialized task, very different from lending to ordinary commercial enterprises, for reasons discussed above. It requires an understanding of municipal accounting, an appreciation of municipal behavior, a knowledge of the long-term trends in communal development, municipal taxation and central government transfers. Not many banks have such specialized skills, and it could be that no Bolivian bank is interested by such a market –assuming that it is not a risk free business, and that steps have been taken, as suggested above, to introduce commercial risk in municipal lending.

Option (iii), the development of a specialized institution might be a safer bet. It would of course not pre-empt option (ii), and commercial banks willing to lend to municipal governments should remain free to do so. But a special effort would be made to develop a bank equipped to lend to municipal governments. Such a bank would operate on a commercial basis, without guarantees and subsidies. It could and probably should be private. FNDR, but a FNDR completely restructured and largely restaffed, would be an obvious candidate. Private and even foreign capital could be brought in, together with the specialized expertise that is necessary. An example of such an institution is provided by INCA in South Africa, which is described in some detail in Annex F. INCA is subject to market discipline, as it gets its money on the financial market, and has therefore a vital incentive to remain creditworthy, that is to make good loans to municipal governments. It therefore imposes market discipline to its client municipal governments. INCA does not lend money to all municipal governments in South Africa, but only to those that have simultaneously a sufficient tax base and a serious management. But for these, it plays a very useful role. As INCA claims, it "has made municipal development bancable".

*Subsidized loans?* – Another important issue is: should loans to municipal governments benefit from concessionary rates? There are pros and cons. On the "yes" side, one can note that only a handful of municipal governments will, in to-day's Bolivia, be in a position to

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borrow at market rates. Subsidized loans could substantially increase that number. One can also note that society at large benefits from many municipal investments. As mentioned above, these benefits are in the nature of externalities, with municipal governments recuperating only a (small) share of the additional welfare created by their investments. As in all cases of positive externalities, a subsidy is justified. As a matter of fact, subsidized loans to municipalities have been utilized in many now developed countries, particularly when they were urbanizing. This has been the case in France until the 1970ies. One could even say that this has been for long the case in the USA: interests on municipal bonds were exempt from the federal income tax, which made it possible for municipalities to borrow at below market rates.

On the "no" side, it can be said that subsidized loans tend to evict out non subsidized loans: why would a municipal government take a loan with an interest rate of 8% if it can have access to a loan with an interest rate of 4%? Discriminating within municipal governments (identifying those that will benefit from subsidized loans and those that will not) is technically difficult, and inefficient in the sense that it does not induce beneficiary municipal governments to improve their situation and to "graduate". Subsidized loans can also be unfair. The lower interest rate is a subsidy that will be distributed *pro rata* the amount of borrowing. The more a municipal government borrows, the more it receives in subsidies. But those that borrow most are usually the richest. Subsidized loans amounts to a subsidy to the rich. Subsidized loans are also criticized because they can distort resource allocation. If and when utilized by municipal governments to finance revenues-producing investments, subsidized loans will increase the financial rate of return of the project. This may promote projects that should not be undertaken because they have neither a sufficiently high rate of return nor positive externalities -at the expense of other, more socially desirable, projects. Finally, there is the question of financing the subsidy. Even if this is done with foreign resources, it will be done with resources that have an opportunity cost, and could have been utilized to other -equally or more useful- purposes.

#### *Options for municipal governments revenues & accountability*

Presently, many -indeed most- municipal governments are poorly funded, poorly managed, and not very accountable. There is plenty of room for much needed improvements.

*Local elections rule* - A first prerequisite is to increase the stability of mayors and governing majorities

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in municipal councils. The most democratic, and probably also the most efficient, control mechanism is the popular vote. In a well functioning decentralized system, the electorate is given from time to time the option to re-elect the major if it likes what he/she has done during his/her mandate, or to fire him/her if it does not like what he/she has done. The fear of not being re-elected is a powerful incentive for mayors to perform. For this mechanism, and this incentive, to function, several conditions must be met. The mandate of the mayor must be long enough: four years is a minimum; five should be considered. The mayor must be re-electable; this condition is now met in Bolivia, but for one mandate only; extending it to an additional mandate should also be considered. Thirdly, the mayor and his majority should be protected from political reshuffles during each term of office<sup>19</sup>. This is not the case presently, and a mayor can be disposed of by a vote of no confidence (the badly named vote of "constructive censorship"). There are municipal governments that change mayor every year or so. How could the electorate form and express an opinion on a mayor in such conditions? There are ways to prevent this from happening. One is to give the absolute majority in the municipal council to the party that has the largest number of voices. Other parties are represented, and can make their views heard, but they cannot change the mayor by forming new coalitions.

*Local bureaucracies* - A second prerequisite is the development of stable municipal bureaucracies. Presently, many or most municipal employees change when a new mayor comes in. This makes institution building nearly impossible. Such a system is unlikely to attract the best people. It frustrates training. It prevents the institution from keeping the memory of issues, projects, procedures, accounts, and more generally of learning by doing. It is an inducement to corruption. It spreads the idea that "government" is only a matter of politics, and not also a matter of competence and knowledge. For sure, a newly elected mayor must be able to bring in a few key persons, to help him define and implement his policies. But half a dozen such persons, comprising his private office, should suffice, even in a large municipal government. The rest of the employees, who should be apolitical, and recruited and promoted on the basis of merit, must remain in place, and be loyal to their new master -just as in the case of a private enterprise. The challenge here is first to define a set of rules and guarantees for municipal governments employees (that should not be too rigid and protective), and second to manage the change from the present system to this new one.

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<sup>19</sup> This is not to say that there should not be some judicial procedures to impeach a mayor in extreme cases of incapacity, or corruption, or madness.

*Local taxation* - The issue of local taxation comes next. It is essential for a healthy development of municipal democracy. Decentralization cannot be: "you, central government, raise the money, and we, local governments, spend it". A significant part of municipal governments resources must come from true local taxes. A true local tax is a tax that can be increased (or decreased) by a locally elected government. This government will have to compare the political benefits of spending more with the political costs of taxing more, and chose the level of taxation-cum-expenditures that best satisfies its electorate. This model does not function well in Bolivia presently.

Part of the problem comes from tax bases. Bolivia is fortunate in having basically good municipal tax bases: a property tax, an automobile tax and a business tax (*patente*). Some improvements, however, could be introduced. The distinction between urban and rural properties, that antedates the 1994 reform, has become obsolete. There is no reason why a given property in a given commune should be subject to the property tax if it is located in an urban area, and exempt from the property tax if it is located in a rural area. Similarly, eliminating the many legal loopholes in land taxation would be very desirable, even if politically very difficult.

The problems are more in tax base assessment than in tax base definition. Assessing the tax base is presently a municipal task. It is a difficult task everywhere, particularly for the property tax. It is clearly a task beyond the means of most municipal governments in Bolivia. It is politically difficult, because it means making friends and relatives pay taxes. It is also technically difficult, because it means keeping track of all properties and modifications to properties, and putting a monetary value on each of them. A cadaster is a necessary tool for this task. We discussed above the issue of a national cadaster versus 314 municipal cadasters, and concluded that the national cadaster was a better option - particularly because it makes it possible to introduce differences in tax bases per capita in the allocation formula of the block grant (*coparticipacion*).

Tax rates are presently defined by the central government. This is depriving municipal governments of a key policy instrument, for no clear benefit. The central government may decide on upper and lower limits to tax rates (between 4% and 8% instead of a uniform 6%, for example), if it does not trust municipal governments and political mechanisms and fears that some municipal governments would go beyond such limits. But it should give municipal governments the freedom to decide on tax rates.

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The grants system should not discourage tax efforts (that is tax collection and increases in tax rates). It should therefore not be based upon tax receipts, but upon tax bases. One could even imagine, as discussed above, a grants system that would encourage tax efforts, giving more, all other things equal, to those municipal governments that display higher effective tax rates.

*Accounting and auditing procedures* - The way in which municipal governments accounts are recorded, presented and disseminated, leaves much to be desired. In principle, there is a formal reporting system, and municipal governments are supposed to send their accounts to the ministry of Finance every year before March 31. In practice, however, this system does not work well. The format is very complicated, and does not facilitate an understanding of financial policies and position of municipal governments. There is little or no *ex post* systematic auditing, and it is not sure that specific expenditures (or revenues) are allocated to the appropriate accounts in a consistent fashion. Allocation practices often do not make much economic sense. The habit of counting as municipal investment expenditures only the matching part of the specific grant (the *contraparte*) seriously underestimates municipal investments. Conversely, the habit of counting as investments up to 85% of the block grant (*coparticipacion*) amount, grossly overestimates municipal investments. Loans accounting is such that nobody knows exactly what the indebtedness of municipal governments is. The numbers reported by municipal governments to various institutions (ministry of Finance, FNDR, etc) often differ (for the same concepts), either out of malice or, more generally, of ignorance. A great effort would be necessary to (i) streamline the system, (ii) ensure that it is correctly utilized, by means of audits, (iii) improve the reporting to central government ministries and agencies, (iv) introduce penalties for municipal governments that do not comply. Prefectures, or perhaps regional associations of mayors could be utilized to play a role in this transparency effort, because they are closer to municipal governments than central government units. The generalization of internet can and should also facilitate this process (see Box 3).

Box 3 - Municipal Governments Fiscal Transparency Through Internet

Municipal governments produce information on their tax collections, expenditures, and indebtedness. They communicate it to central government ministries and agencies (such as FNDR), either directly or through Prefectures. It appears that the numbers communicated to these various agencies are always similar.

The Institutional and Financial Analysis Unit (Unidad Analisis Institucional Financiera, or UAIF) of the FNDR is one of the main receiver and processor of the fiscal information information provided by municipal governments. It has decided to open an internet site that will make this information available to all. Other ministries or

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agencies will thus be able to compare numbers sent to them with similar numbers sent to FNDR. Citizens or citizens groups will have access to the main descriptors of the financial situation of their own municipal government, and be able to compare it with that of other municipal governments. Established or prospective businessmen or bankers will do the same.

### *Options for prefectures*

The present situation of prefectures (*prefecturas*) is not very satisfactory. They now serve two different purposes: fulfilling the responsibilities of the central government in their respective region (*departamentos*), and fulfilling the (ill-defined) responsibilities of a regional level of government. For reasons exposed above, they do neither properly. In general, these two functions can, in many cases, contradict each other, and cannot properly be fulfilled by one single entity. Four basic scenarios of change can be imagined. They are based on the answers given to two major and partly interrelated issues: (i) should a regional (*departamental*) level of government be created in Bolivia?, and (ii) how should central government responsibilities in each region (*departamento*) be fulfilled? These two issues are discussed in turn.

*Decentralization at the regional level?* – Many people believe that Bolivian regions could and should be turned into full-fledged subnational governments. As such, they would be managed by directly elected councils and/or governors. These new institutions would have the resources of all subnational governments: taxes, subsidies and loans. They would control their own budgets, and have specific, well defined responsibilities. In cases they do not deliver, the electorate would have the opportunity to vote out the leaders. The formula has the benefit of clarity. But it is not without costs.

First, having three levels of government in an 8 million people country is very much of a luxury. The UK, with 60 million people, has only two levels of government (the central government, and local governments). In Germany, there are indeed three levels of government (the central government, lander, and municipal governments), but the comparison should be with the average land, which is about the population size of Bolivia, and there is no additional level of government between the land and municipal government.

Second, Bolivia is a country with strong regional feelings, and even centrifugal forces, and it is doubtful that it would be very wise to encourage such tendencies.

Third, a full-fledged level of government must have its own taxes, not live merely of grants and subsidies, if the benefits of decentralization are to be reaped. The famous motto "no taxation without representation" can be turned around: "no representation without taxation". One

cannot suggest transforming regions into subnational governments without suggesting what taxes they should raise. This is very difficult to do. Most of the "good" taxes only make sense at the national level. The value-added tax cannot be a subnational tax. The same is true of import or export duties, and also of the corporate income tax. Natural resources taxes would be too unfairly distributed over the country to qualify. Property taxes could be regional taxes, but they are already taken by municipal governments.

Fourthly, regional (*departamental*) governments would not eliminate the need to have representatives of the central government in each region (*departamento*). The central government has responsibilities and functions to discharge over the entire territory. Law and order is the most conspicuous, but it is not the only one. In the areas of transportation, trade, health, environment, education, for instance, the need for *national* policies is obvious. The central government must have appointed officials in each region to carry these policies. An elected governor would not replace an appointed prefect: it would complement it. The idea, often voiced, that "prefects could be elected" is misleading. The head of a regional executive could indeed be elected, but this would not eliminate the need to have an appointed central government representative. The former, (that we call governor) could be called "prefect", and a new name be invented for the latter (the present prefect), but this would be confusing and not very helpful.

*Deconcentration at the regional level?* – The second issue of relevance to the future of prefectures is: how could and should central government responsibilities in each region (*departamento*) be fulfilled? Deconcentrated units can in theory operate in one of two ways.

In one model, each ministry has a deconcentrated representative in each region (*departamento*). There is a representative of the ministry of Agriculture, of Finance, of Transportation, etc. and they fulfill the functions of the central government in the region, with the funds allocated to them by their own respective ministry. In this model, which is basically the French model, the role of the prefect is first to ensure law and order and then to oversee, harmonize and coordinate the activities of the representatives of all other ministries. He does at the prefecture level what the chief of the government does at the national government, and he has the authority to do so. In this model, the prefect (just as a Prime Minister) does not have, and does not need to have, a large staff and an important budget.

In a second possible model of deconcentration, the prefecture is the executive agency of the central government. The prefect receives the money allocated to

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the area, allocates it to the various sectors of central government responsibilities, and appoints people to spend it. He does so in relation with the sectoral ministries, who can assist him, and he follows national directives in the allocation of funds. But he remains basically responsible for all central government activities in the region, and he can be fired if and when things go wrong.

None of these models is perfect. In the first model, there is a risk of conflicts between the prefect and the regional representatives of the various ministries. In the second model, the task of the prefect is heavy, and the system can make it difficult for sectoral ministries to pursue policies. But both models have their own internal consistency.

*Three scenarios* - Based upon these analyses, one can construct three scenarios for the future of prefectures. Scenario (1) is the *decentralization scenario*, the creation of a new level of government. Scenario (2) is the *deconcentration scenario*, with its two variants, variant (2a) in which the prefect is a mere coordinator of the action of the various ministerial representatives in the region, and variant (2b) in which the prefect allocates resources between various sectors on behalf of the central government. Note that in (2) the prefect is only the representative of the central government, not of regional political forces. This implies that the prefect does not originate from the region. It also implies that there is no need for an elected council. In this scenario, the prefecture, which is a mere deconcentrated hand of the central government, is not allowed to borrow, and does not have anything like own taxes. It may have a budget, particularly in variant (2b), but this budget is strictly controlled by the ministry of Finance, and remains part of the central government budget, not an addition to it. Scenario (3) is a *hybrid scenario*, that borrows features from the other two scenarios. It is a different form of the present state of affairs.

The decentralization scenario, scenario (1), is but a dream. It is dreamed by many Bolivians, but for the reasons expressed above, it is not a very realistic alternative, at least for the time being. The deconcentration scenario (2) would probably be rather desirable. The central government needs to be strengthened, in general, and in the regions in particular. We are being told that in its pure form this scenario is politically unconceivable. Regionalism is so strong in Bolivia that regional (*departamental*) political forces and parties have to be involved in central government action in the regions.

We are therefore left with scenario (3), the status quo improved. The question then becomes: how could the present state of things be modified and improved? First,

and assuming there should be one, the "representation" of each region could be improved. Presently, the regional council (*consejo departamental*) is elected by municipal councils: its members represent specific communes and communal interests, not the interests of the region at large. A more representative regional council could be created, that would represent the various forces and groups of the region, as they are represented in the "Dialogue" created to discuss the use of HIPC-related public funds. Members of such a council could be chosen by the prefect from lists of names submitted by interest groups. Second, prefectures should not be allowed to be subjects of credit, particularly subsidized credit. Third, the prefect should have the explicit task of coordinating the representatives of the various ministries in his region (*departamento*). Fourth, as mentioned in the discussion of block grants, prefectures should have grants based upon all national taxes, and allocated prorata the population of each region (*departamento*); some other criteria, such as GDP per capita, or a moderate lump sum per prefecture, could also be introduced.

## VIII - Conclusion

Everywhere, decentralization is an ongoing process. There is no country in the world that is fully satisfied with its system of intergovernmental relationships. These systems aim at achieving simultaneously so many objectives that they never succeed completely. There is always something to be modified, and "decentralization reforms" are on the agenda in practically all countries. What is true in countries that have been decentralizing for decades or centuries is bound to be even truer in a country like Bolivia that has been decentralizing for only a few years.

Since 1994, Bolivia has gone a long way on the decentralization road. Communes have been created, elections have been held, popular participation has increased, a transfer system has been developed, municipal actions have been taken. For sure, this is only a beginning. Municipal governments remain weak, local taxes are embryonic, the transfer system is imperfect, local borrowing is excessive, municipal accounts are unsatisfactory, and the role of prefectures is unclear. This paper has attempted to analyse the present system, and to identify options for change.

The block grant system (*coparticipacion*) is an easy target for improvement. The total amount to be allocated to communes, and to prefectures (if they are to receive block grants at all) should probably be based on the total amount of taxes collected by the central government. There

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is no justification for excluding certain taxes (the tax on hydrocarbon) from the pool on which the total amount allocated to communes is defined. There are even less justification for retaining only one or two central government taxes (royalties -*regalias*- and the hydrocarbon tax) to define the amount allocated to prefectures. Then, the criteria used to distribute this grant money to communes and to prefectures, which are presently very crude (population), could and should be refined. In any case, the 2001 Census of Population will introduce new numbers and major changes, and provides a good opportunity to introduce a reform of allocation criteria.

The specific matching grant system (*cofinanciamento*), largely based on the operation of the "Funds", can and should also be modified -and this modification is under way. There is no justification for the present distinction between urban and non-urban areas, that has led in education and health to a serious misallocation of resources in favour of rural areas. There is little justification for having a single entity (FNDR) engaged in making grants and making loans at the same time. The idea of "relative prices" of grants -a counterpart to be contributed by municipal governments that varies with the type of investment and the characteristics of the commune- is basically a good idea. It will make it possible to reconcile the legitimate national (and international) priorities, on the one hand, with the equally legitimate municipal priorities, on the other hand.

Subnational borrowing can and should also be much improved. The present situation is neither satisfactory nor sustainable. It should be made clear that lenders to municipal governments run risks, because it is precisely this risk, and the fear of losing money that will discipline lenders, and then borrowers. The questions of whether there should be one municipal development bank, of whether it should be public or private, of whether FNDR could and should be this bank, of whether there should be subsidized loans, etc. are open.

Communes should be strengthened. This is a massive task, that will take a long time. It will involve changing some of the election rules presently in force. It will involve creating stable and competent local bureaucracies, and eliminating or limiting the present spoils system at the local level. It will involve major improvements in tax assessment and collection, and in particular the development of a land cadaster; we believe that the option of a national cadaster is superior to the option of municipal cadasters. It will involve also serious improvements in accounting and auditing procedures. The counterpart to increased municipal freedom is or should be increased municipal government democracy and increased central government auditing.

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The issue of the status and future of prefectures is the most delicate. Presently, prefectures are hybrid creatures, partly deconcentrated units of the central government and partly decentralized units at the regional (*departamental*) level. This is not satisfactory. But it seems that drastic reforms here are politically unacceptable. We certainly believe that creating an additional level of government at the regional level, with an elected prefect and an elected council, is a luxury that Bolivia, an 8 million people country, can ill-afford. Anyway, it would not eliminate the need to have deconcentrated representatives of the central government at the regional level. The only realistic scenario seems to be the improvement of the status quo.

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## ANNEXES

## Annex A – Regional Socio Economic Disparities in Bolivia

Disparities within regions are great in Bolivia. They are illustrated in Table A-1 below, that indicates regional averages for three indicators: the GDP per capita in 1994, expressed in US\$ in PPP, the value of a "human development index" (*Indice de Desarrollo Humano* or IDH) developed by UNDP for 1992, and the values of an index of infrastructure needs (NBI).

**Table A-1 – Regional Socio-Economic Disparities in Bolivia, 1992**

	GDP/capita	IDH	NBI
La Paz	1610	0.51	72
Santa Cruz	2810	0.60	61
Cochabamba	1780	0.49	71
Chuquisaca	1260	0.40	80
Potosi	860	0.35	81
Tarija	1620	0.50	69
Beni	2120	0.53	81
Oruro	1310	0.46	71
Pando	1620	0.48	84
Average (unweighted)	1800	0.50	71
Standard error	556	0.07	7.5
Dispersion coefficient	0.33	0.15	0.10

Notes: IDH is equal to 1 when welfare is maximal and to 0 when it is minimal; NBI is equal to 100 when infrastructure needs are all met, and to 0 when none of them is satisfied.

Table A-1 shows that interregional dispersion is much greater for GDP per capita than for IDH, and greater for IDH than for NBI.

## Annex B - Intercommunal Disparities

The 314 Bolivian communes (municipios) are very diverse, in terms of size, income, welfare, infrastructure and services, etc. This diversity or heterogeneity is illustrated in the following Tables B-1 and B-2. Table B-1 provides a summary description of the distribution of communes in terms of GDP per capita (in PPP) in 1994, of index of human development (IDH) in 1992, and of taxes raised per capita in 1996. Table B-2 provides the same description of the distribution of communes relative to four health indicators.

For each of these indicators, we provide the values of the 9 deciles. For each indicator, communes are ranked. The value given under "1st decile" is the value of the commune such that 10% of the communes have a lower value, or in other words, the value of the commune ranked 32. The value of given under "5<sup>th</sup> decile" is the value of the commune such that 50% of the communes have a lower –and a higher– value: it is the median, or to put it otherwise, the value of the commune ranked 157. The value given under "9<sup>th</sup> decile" is the value of the commune ranked 283, such that 10% of the communes have a higher value.

In addition, also for each of these indicators, we indicate the non-weighted communal average, the standard error, and the coefficient of dispersion.

**Table B-1 – Distribution of Communal GDP per Capita, Communal Human Development Index, and Communal Local Taxes Raised per Capita, Various Years**

	GDP/cap 1994 (Bls)	HDI 1992 (Index)	Taxes/cap 1996 (Bls)
1st decile			
2 <sup>nd</sup> decile			
3 <sup>rd</sup> decile			
4 <sup>th</sup> decile			
5 <sup>th</sup> decile (median)			
6 <sup>th</sup> decile			
7 <sup>th</sup> decile			
8 <sup>th</sup> decile			
9 <sup>th</sup> decile			
Average (unweighted)	8336	0.50	74
Standard error	4284	0.12	69
Dispersion coefficient	0.51	0.24	0.93

Table B-1 shows evidence of a great dispersion of communes. The dispersion is particularly marked for taxes

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per capita, with a standard error nearly as large as the average. It is also large for GDP per capita.

**Table B-2 - Distribution of Communal Health Indicators, 1997**

	Medical establishments/ 1000 inh.	Medical staff/ 1000 inh.	Medical staff/ Doctor	Consultations/ medical staff
1 <sup>st</sup> decile				
2 <sup>nd</sup> decile				
3 <sup>rd</sup> decile				
4 <sup>th</sup> decile				
5 <sup>th</sup> decile (median)				
6 <sup>th</sup> decile				
7 <sup>th</sup> decile				
8 <sup>th</sup> decile				
9 <sup>th</sup> decile				
Average (unweighted	0.30	1.9	18.2	632
Standard error	0.37	1.6	10	2196
Dispersion coefficient	1.2	0.85	0.56	3.5

Source: Primer Censo de Gobiernos Municipales

In the area of health, communal disparities are even larger than in the areas of GDP or HDI. The number of medical establishments, and of medical staff, on a per capita basis, varies greatly from one commune to the other. So do indicators of the quality and quantity of medical services delivered, such as the ratio of doctor to staff, or the number of medical consultation per medical staff.

## Annex C - Local Taxes Evasion

In Bolivia, a substantial share of local taxes are not paid. Estimates of the number of existing (and taxable) buildings and vehicles, the two most important tax bases, can be compared with the number of buildings and vehicles that are assessed, defining a tax assessment ratio  $\alpha$ , and with the number of buildings and vehicles for which taxes are effectively collected, defining a tax collection ratio  $\chi$ , as well as a tax effectiveness ratio  $\alpha*\chi$ .

**Table C- 1 – Tax Assessment, Tax Collection and Tax Effectiveness Ratios, Selected Cities**

	Effectiveness number (1)	Effective number (2)	Assessed number (3)	Collected ratio $\alpha=(2)/(1)$	Assessment ratio $\chi=(3)/(2)$	Collection ratio $\alpha*\chi=(3)/(1)$
Potosi (2000) Buildings	40,000	na	20,000	na	na	0.50
La Paz (1998) Buildings	207,000	166,000	128,000	0.80	0.77	0.62
Vehicles	124,000	103,000	80,000	0.83	0.78	0.65
Trinidad (1998) Buildings	25,000	7,500	4,300	0.31	0.57	0.17
El Vinto (1999) Buildings	3,900	3,300	1,800	0.85	0.55	0.47
Vehicles	1,300	1,000	700	0.76	0.70	0.54
Sucre (1998) Buildings	45,000	39,000	29,000	0.87	0.74	0.64
El Alto (1998) Buildings	184,000	160,000	104,000	0.87	0.65	0.57

Source: FNDR files and field trip

Table C-1 suggests that only about half of buildings and vehicles that should be paying local taxes actually do. Because this data is in number of units, and does not take into account their size and quality, it is not possible to estimate the amount of taxes due but not recovered.

## Annex D – Structure of Expenditures of Municipal Governments

The exhaustive Census of Municipal Governments conducted in 1997 had questions on the expenditures of municipal governments. The answers to these questions, for all municipal governments, appear in Table D-1 below.

**Table D-1 - Expenditures of Municipal Governments, by Type, 1996**

	In MBIs	in %
Health	48	10
Education	62	13
Communications	15	3
Markets, slaughter houses, etc	59	12
Seguro Materno Infantil	3	1
Other	297	61
Total	483	100

*Source: Primer Censo de Gobiernos Municipales, 1998, cuadro 44-5*

## Annex D - Explaining Tax Efforts of Bolivian Municipal Governments

Let:

$T_i$  = taxes raised in commune  $i$ ;  
 $B_i$  = Tax base in commune  $i$  (unknown);  
 $\rho_i$  = Tax effort in commune  $i$  (unknown);  
 $Y_i$  = Estimated GDP in commune  $i$ ;  
 $P_i$  = Population of commune  $i$ ;  
 $U_i$  = Urbanization rate in commune  $i$ ;  
 $\alpha$  = a coefficient.

We have, by definition:

$$T_i = \rho_i * B_i$$

Let us assume that the tax base  $T_i$  is a linear function of GDP  $Y_i$ :

$$B_i = \alpha * Y_i$$

We have:

$$T_i = \alpha * \rho_i * B_i$$

$$\alpha * \rho_i = T_i / B_i$$

It is not possible, nor useful, to distinguish between  $\alpha$  and  $\rho_i$ .  $T_i/B_i$  gives us an indication of the tax effort of commune  $i$ , multiplied by a constant  $1/\alpha$ . We can then assume that this tax effort is a function of three explanatory variables: the population size of the commune ( $P_i$ ), the per capita income of the commune ( $Y_i/P_i$ ), and the urbanization rate of the commune ( $U_i$ ):

$$T_i/B_i = f(P_i, Y_i/P_i, U_i)$$

A least square regression analysis yields:

## Annex F - South Africa's INCA

The most interesting development in the area of subnational governments long term borrowing in South Africa is probably the creation and growth of INCA. INCA (Infrastructure Finance Corporation Limited) is a private sector financial institution that makes long term loans to municipalities. It can be seen as an alternative to the inexistent municipal bond market, and as such deserves some attention. INCA's function is very well described in the 1977 prospectus that it issued when it floated bonds: "INCA aims to create value for the investor by:

- applying consistent and expert credit evaluation techniques for the evaluation of potential borrowers so that credit risk can be accurately priced;
- utilizing, where possible, primary and/or secondary credit enhancement to provide security for the borrower;
- issuing INCA Bonds which are independently rated by IBCA as an investment opportunity for medium and long-term investors;
- providing a liquid market for INCA Bonds by listing them on the Bonds Exchange and through the use of market-making abilities of FNB (First National Bank) and
- operating with a capital structure designed to reduce further the risk for investors, of which a key feature will be subordinated Junior Debt".

*INCA's capital* - INCA was created in 1996. Its main shareholders are public-oriented but mostly privately owned and privately managed institutions: a major South African financial institution (First National Bank), two important insurance companies (Old Mutual, and Southern Life), a semi-public financial institution (Msele Financial Holdings), a women development institution (Women's Investment Portfolio), and four international partners: Dexia International (of France), Proparco (a subsidiary of Caisse Française de Développement, also from France), Deutsche Investitions und Entwicklungsgesellschafts (DEG, of Germany), and Commonwealth Development Corporation (of the United Kingdom). These international partners are taken very seriously by INCA. Their representatives sit on the board

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of INCA; They bring credibility, as well as expertise, to the undertaking.

*INCA's bonds* - INCA's business is to borrow on the capital market, and to lend the proceeds to local governments. The money lent by INCA is to be mostly raised by means of bond issues. One such bond issue has been arranged in 1977, the second private bond issue in South Africa in recent years<sup>20</sup>. The amount issued was 1.2 billion Rands (US\$ 240 million). The main features of this issue are presented in Box 1.

INCA had prestigious advisors (Deloitte & Touche and First National City Bank), issue managers (First National Bank of Southern Africa, and Msele Corporate and Merchant Bank), as well as a Placing advisor, a legal advisor, and auditors. More importantly perhaps, First National Bank was ready to buy what the market would not buy at the time of issuance, and to sell it afterwards. It did buy about half of the issue; part of these bonds were auctioned in the following year. A prospectus was prepared. It is a fairly complete document of about 40 pages that describes in detail INCA's background and profile, its lending process, its viability, its board of directors, and the particulars of the offer.

Box 1 - INCA Bond Issue, 1997

*Amount:* 1,200 million Rand (US\$ 240 m)

*Maturity:* 6 years (for 200 m 2003 bonds), 9 years (for 800 m 2006 bonds) and 14 years (for 200 m 2011 bonds)

*Interest rate:* 13.5% (for 2003 and 2006 bonds) and 14% (for 2011 bonds)

*Redemption value:* 100% of par value

*Interest payable:* semi annually

*Transferability:* by registration

*Credit rating:* by IBCA South Africa (Pty) Limited: AA-

Inca's bonds are tradable, and traded, but they are not very liquid.

The bond market is meant to be the main source of funds mobilization, but not the only one. INCA has also obtained several international loans: a FFR150 million (about US\$25 million) 10-years loan from Agence Française de Développement, and a R275 million (about US\$ 55 million) loan from the European Investment Bank. In addition arrangements have been made with USAID and Dexia to guarantee or underwrite bond issues on the US and

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<sup>20</sup> The first was placed by a brewery

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Eurobond markets, to be actually made when conditions are appropriate.

*INCA's Loans* - INCA's business is to lend to municipal governments. Its loans are general, not for specific projects. INCA is very rigorous, and only lends to local authorities that: (i) have sound economic and tax bases, and (ii) are sufficiently well managed. In so doing, it is helped by an interesting and sophisticated computerized risk assessment model. This model produces a sort of unofficial "shadow rating". It is important, because it is at the heart of the expertise that INCA is developing. The details of the model are not made public, but its basic structure is known (it is described in the *INCA 1977 Annual Report*, and also in the 1997 Bond prospectus). Box 2 presents this model.

**Box 2 - INCA's Credit Evaluation Model (CEM)**

The CEM uses statistical techniques to evaluate the risk profile of a borrower and measures this against a database of important national standards. This statistical analysis is then supplemented with additional information and perspectives flowing from a rapid appraisal process.

The five main risk categories that the CEM focuses on are as follows:

- financial position, including traditional solvency, liquidity, activity and profitability ratios, as well as unique ratios that apply specifically to the target market -the most important dynamic being the cash flow position of the borrower;
- economic environment, using such instruments as the Tress index, which tests economic diversification and the ability of the economy to absorb shocks resulting from external changes through examination of such factors as growth, natural resource levels and the condition of existing infrastructure;
- institutional capacity, comprising a review of management capability, as well as other key indicators of competence and efficiency, in addition to the ability displayed to resolve internal and external disputes;
- environmental management; and
- socio-political issues, such as unemployment, shortfalls in housing provision, the levels of service payments and infrastructure backlogs.

Each risk category is evaluated, weighted and scored. The evaluation process results in the allocation of an "internal rating" of the borrower based on its credit-worthiness. According to its internal rating the borrower is then placed in a particular category which determines the amount of capital INCA would require in order to undertake the lending, and the maximum amount that INCA can lend to the borrower.

With the help of this model, INCA has in only two and a half years of operation made loans to 48 local authorities, for a total amount of 1.4 billion rands

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(about US \$ 280 billion). INCA believes it can, on a sustained basis, lend about 700-800 million rands (140-160 million US \$) per year. This represents about 2% of total income of municipalities and 8-9% of their capital budgets.

These loans are too young for the interest payment experience to be very significant. It can nevertheless be mentioned that no default has taken place so far.

INCA's experience has been the most interesting recent development in local government access to capital markets in South Africa. The experience is not yet long, but it tends to show that it is possible to make municipal development bancable.

(184.000 car.)