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THE ROLE OF MUNICIPAL COUNCILS IN SOCIAL EXPENDITURE:
How does politics determine social expenditure?

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1 INTRODUCTION

In 1994, Bolivia, one of the poorest countries in Latin America with an important percentage of indigenous people, started a decentralisation process that transferred responsibilities and resources to local governments: the municipalities. Nowadays, municipalities constitute important actors within the development process of Bolivia since they are in charge of the provision of public services and of strengthening the local economy. Social expenditure in Bolivia has been prioritized due to its effects over human and social development.

In Bolivia, municipalities spend 14.4% of the total national expenditure and 16.2% of the total social expenditure. Municipalities are rapidly growing in importance mostly because of the large additional funds that they started to receive since 2005 as consequence of the tax reform in oil sector. Besides, some municipalities have been changing Mayor often using a recall procedure (censorship vote) which has harmed their management capacity. Based on those problems some positions have arisen, claiming that municipalities are not strong enough for receiving additional money since their institutional capacity is poor. However, others claim that even with their problems, municipalities constitute an important mechanism to bring local and regional authorities the capacity of solving problems related to the needs of the people, but at the same time as a way to strength legal authority, legitimacy and sovereignty of the State.

Moreover, since 2005 not only political parties can run for elections but also citizens and indigenous groups, this has changed the political dynamics at the municipal level. It has increased the participation of different political groups and added more pluralism to the political system. This pluralism can prompt political fragmentation or support political competition that later on may affect decisions about prioritisation of social expenditure. Additionally, in 1997 a gender quota system was introduced, which increased participation of women in national political system as well as in municipalities. More women are now in municipal councils facing discrimination and other problems but on the other hand they are also changing the priorities in municipalities relocating resources towards social expenditure.

It is a fact that those changes in political participation are been reflected in the composition of municipal councils and in the social expenditure of municipalities. Subsequently, it becomes important to understand how composition of municipal councils might affect the prioritisation of social expenditure and the capacity of municipalities for spending money in social services.

Regarding this, the objective of this paper is to analyze how composition in municipal council (political party and gender composition) can influence municipal social expenditure. One way of direct influence is by defining the priorities; this will be reflected in the amount of money that each municipality

spends in social expenditure as a proportion of total expenses (percentage of social expenditure). That shows the priority that each Mayor, municipal council and the civil society gives to social expenditure. Those priorities are set up in the annual municipal plan which determines the percentage of social expenditure to be spent.

The other way that municipal council influences social expenditure is through the decision of changing the Mayor (censorship vote). This may harm the management capacity of the municipality to spend more money in social expenditure (per capita social expenditure), this capacity can be measured by per capita social expenditure.

General studies about public expenditure have focused in the analysis of two kinds of determinants: The first group pays more attention to the role that government plays during periods when risk increases (Rodrick, 1996; Shelton, 2007); the effect of population size and social fragmentation (Alesina and Spolaore, 1997; Alesina and Wacziarg, 1998); the effect of ethnic fragmentation (Alesina, 2003; Alesina, Baqir and Easterly, 1999; Easterly and Levine 1997); income level (Shelton, 2007); income inequality (Meltzer and Richard, 1981) among others. The second group pay more attention to political rights, institutions of government and others aspects related to the behaviour of elected officials. In this group are included theories such as rent seeking approach (Beniers and Dur, 2007:30); interest groups theory (Kimenyi, 1989:339-40); the presence of lobbies (Besley and Coate, 2001); local elites (Chattophadyay and Duflo, 2004); faction models (Persico, Rodriguez and Silverman, 2007); among others and more recently political competition (Alesina ,1998; Boyne, 1998; Persico, Rodriguez and Silverman 2007); and political culture (Beniers and Dur (2007).

Precisely the focus of this paper lays on the second group of studies. As starting point, I am going to estimate the effect of changing a Mayor in per capita social expenditure. Afterwards, I am going to show how the spread of votes among political parties (political fragmentation) will increase the probability of changing a Mayor. This result will be used to solve a simultaneity problem that exists between per capita social expenditure and the probability of changing a Mayor. This problem emerges because the change of a Mayor may cause a lower per capita expenditure, whilst a lower per capita expenditure may increase the pressures for changing a Mayor as well. This problem is solved using political fragmentation as an instrumental variable for probability of changing a Mayor. I will prove that political fragmentation do increase pressures for changing Mayor, and when that occurs per capita social expenditure will be lower. However, the effect is smaller when the simultaneity problem is solved.

Furthermore, I will analyze how political party composition may affect priorities of social expenditure (percentage of social expenditure), by estimating how the power that the Ruler party has in the municipal council (percentage of councillors) leads to more or less percentage of social expenditure in a certain municipality. A weak Ruler party shows more fragmentation of the political council and leads to a smaller percentage of social expenditure due to the incentives among politicians in order to behave opportunistically. More concentration of power hold in the Ruler's party hands but with some degree

of political competition gives the serenity for concentrating in municipal management. This is reflected in an increase of percentage of social expenditure. However, too much power concentrated by the Ruler increases the influence of factional groups and the incentives to shift expenditure towards targeted groups; as a consequence, the percentage of social expenditure will decrease.

Finally, I will estimate how participation of women in municipal council affects preferences and priorities in the definition of social expenditure in municipalities. Participation of women in municipal council does affect priorities in municipalities and this increases the percentage of social expenditure spent by municipalities.

This paper is organized in six chapters. The second one explains the context of municipalities in Bolivia. Besides how they are organized politically and institutionally, and it shows important some political features about them. The third one contains a discussion about the determinants of social expenditure, theories about political behaviour, political competition and culture. That chapter ends up building a theoretical explanation about the interaction among political behaviour, preferences and social expenditure. The fourth chapter describes the methodology that it was used to prove the assumptions of this research. The fifth chapter contains the analysis of the data y provide measurable support for arriving to the conclusions that are showed in the sixth chapter.

TABLE 1
Economic and social indicators

Indicators	Bolivia	Latin America & Caribbean countries
World position according to Human Development Index (HDI) *	115	-
Human Development Index (HDI) *	0.692	0.795
Poverty level measured by local poverty line **	60.6	39.8
Life expectancy at birth, total (years) ***	65.5	72.9
Iliteracy rate (%) **	11.7	9.5
Net enrollment ratio in primary education (%) **	95.2	94.9
GDP US$ Billions ***	11.2	2,945
GDP per capita (PPP US$) ***	1,033	7,964
GDP per capita (US$ Current) 2006 (*)	1,059	4,347
Population (millions) ***	9.3	559.9
Population growth rate (%) ***	1.8	1.3

Source: Elaborated based on Cepal (2006) and Wold Bank databases in http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:20535285~menuPK:1192694~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html

Note: * (2004), ** (2005) and *** (2006).

2 MUNICIPALITIES IN BOLIVIA

2.1 Socio-economic situation

Bolivia is one of the poorest countries in Latin America and the Caribbean. Bolivia's poverty and income levels are far behind the average of the region. However the social indicators tell a different story as Bolivia has made some progress and the country's social indicator are near the average of the region (Table 1). Bolivia is constituted by a central government, 9 regional governments and 327 municipalities.[1]

Bolivia's economy is based mostly on gas resources, services and industry sector. It is often argued that the current system does not promote linkages between productive actors, and does not create employment or distributes incomes. The democratic system reflects the economical and social changes which have occurred in the past few years, as regional, ethnic groups, social movements and partisan pluralism have been integrated in the political system. Bolivia has always been a multicultural country, with 35 indigenous groups, however only recently this condition was accepted openly (PNUD, 2007:120).

During the last years, the political process in Bolivia has been characterized by permanent social conflicts at the national, regional and municipal levels. At the national level the conflicts have resulted in the replacement of three presidents during the period of 2002 and 2005. The last election took place in December 2005 and Evo Morales Ayma, the coca farmers' leader, won the election with more than 54% of the votes, and assumed the presidency in January 2006 as the first indigenous president of Bolivia. The same year nine governors of the regions were elected for the first time. It is now acknowledged that regional and indigenous autonomies can be important to bring local and regional authorities the capacity to address peoples' needs, but also to strength legal authority, legitimacy and sovereignty of the State (PNUD, 2007).

2.2 Decentralization process

Decentralization started in 1994, year in which the Law called "Popular Participation – (PP)" which gave more responsibilities and resources to municipalities was implemented[2]. Before the implementation of this Law, only 24 out of 311 municipalities were receiving resources to invest in their own necessities (FES-ILDIS, 2004). Nevertheless, through that process the national government has relocated 20% of the national tax revenues towards municipalities in order to address their local necessities, based on the number of people who lives in each municipality. The national government has also

[1] It includes ministries, universities and other decentralized institutions under direct tuition of Central Government (national enterprises and other institutions).
[2] During the implementation of the Law there were 311 province sections legally constituted which were denominated municipalities through Law 1551. (FES-ILDIS, USAID, 2004:9)

transferred the property of education, health, sports, local roads and watering infrastructure to the municipalities which now have the responsibility of managing, preserving and renewing them (Law 1551, 2004:1-8). Since then, the municipalities have been in charge of developing a local economy and seeking human and social development. For the first time elections were carried at the municipal level, and local governments became the main unity for sustainable development (Riveros, 2004:271).

Moreover, in 1995 began the administrative decentralization that gave regional governments the authority for planning regional development plans and coordinating municipal ones in their jurisdiction. They received additional revenues for supporting investments in municipalities (Law 1654, 1995). Later on, in 1999, the Municipality Law that confirmed municipal competences and set new rules for municipal management was implemented (Riveros, 2004:292).

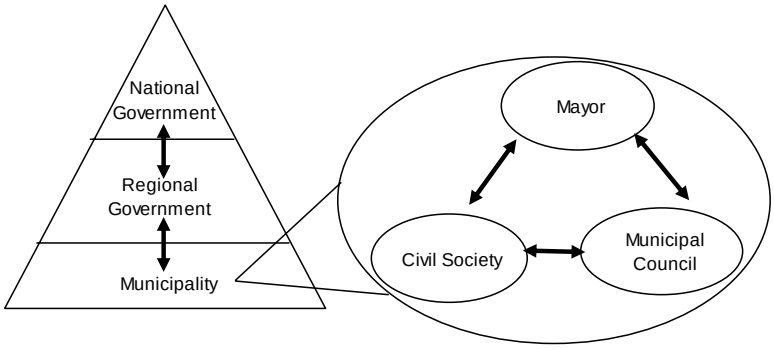
This process was strengthened in 2000 when the World Bank and the International Monetary Fund approved Bolivia's Poverty Reduction Strategy Paper (PRSP) and Bolivia was allowed to receive the debt relief offered through HIPC II (Highly Poor Indebted Country) initiative (ISS, 2003). This allowed the country to reallocate resources that were being used to pay external debt towards the funding of social expenditure such as education, health and productive infrastructure until 2015 (Law 2235, 2001). Most of those resources were transferred to the municipalities according to the number of poor people living in each municipality. Ever since, the municipalities have become important actors for development process because they have more responsibilities and resources to plan, coordinate and implement public policies related to the provision of social services and to strengthen local economy.

The decentralization process has been an attempt to improve the access of the whole population to public goods. There is no doubt that the provision of social services has improved, at least in terms of distribution of resources. However this process has caused that, some municipalities, especially the smallest and poorest ones, have not had enough resources to fulfil the basic necessities of their population. As municipalities have become important actors for the development process, it is important to understand how they work and how they accomplish their tasks with respect to the provision of social services.

2.3 Institutional organization of the municipalities

Bolivia is organized in Central, regional and municipal governments. In this scheme each level is in charge of planning development programs at their respective level, coordinating plans with the lower levels and assuring that the programs are consistent with the priorities of the National Plan (Figure 1). The planning processes at the municipal level are carried out with the participation of three actors: the Mayor (executive), the municipal council (legislative) and some civil society organisations (social control). Those actors define the municipal plan ("Plan de Desarrollo Municipal" - PDM) through a participatory method. This plan has to include the provision of public goods such as education, health, community roads, among others but also has to strengthen the local economy (Law 1551, 1994).

FIGURE 1
Institutional organization in Bolivia



Source: Elaborated based on Law 1551 (1994).

2.4 Municipal responsibilities and funding sources

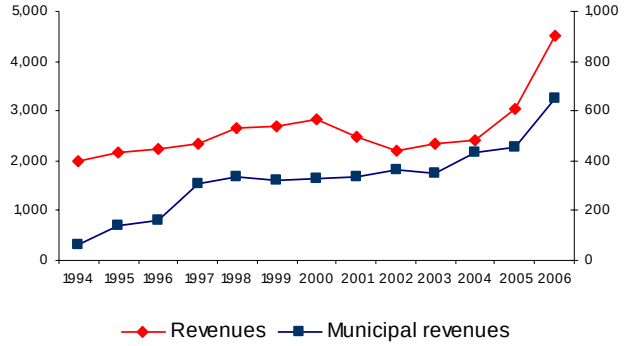
The main responsibilities of the municipalities in Bolivia are: to build, renew and repair education, health and basic services infrastructure. They are also in charge of school breakfast programs and other educational and health programs which look for the improvement of the services. As far as the education is concerned, the municipalities' responsibilities include primary, secondary and technical education but not tertiary (universities). Moreover, they are responsible for the maintenance of the local and secondary roads, as well as, the collection of municipal taxes and patents. In relation to economic development they can support production projects and others programs related to social assistance, human development and environmental programs (Law 1551, 1994; Law 2028, 1999).

In order to accomplish their responsibilities, the municipalities receive transfers from the national government but they also use resources from the collection of local taxes (own resources) and loans, transfers and credits from international sources. National transfers include resources from Popular Participation, HIPC and oil taxes. Transfers from PP represent 20% of the total national revenues, and they are transferred to municipalities based on population criterions. The HIPC resources come from the debt alleviation program and municipalities started to receive them since 2001, based on poverty and population criterions. Finally, oil taxes revenues are distributed among municipalities considering the size of their population.

As a result, municipal revenues have increased considerably from US$ 62.9 millions in 1994, to US$ 328.8 millions, in 2000 and US$ 649.8 millions, in 2006. Those represent 1.1% of GDP in 1994; 3.9% in 2000; and 5.8% in 2006. The increase of municipal revenues is explained mainly by the transfer of new resources to the municipalities (HIPC) rather than the increase in the national

revenues[3]. Thus, municipal revenues have incrased with respect to the national revenues from 3.1% in 1994 to 11.6% in 2000 and to 14.4% in 2006[4] (Figure 2).

FIGURE 2
National and municipal revenues in US$ millions
(1994-2006)

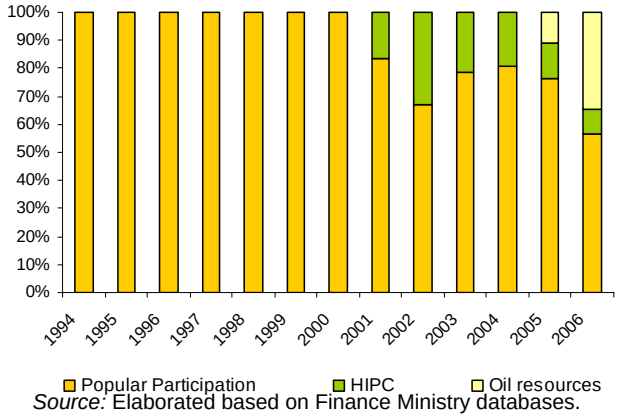


Source: Elaborated based on Finance Ministry databases and Udape (2007).

The resources collected from local taxes in the 9 main capital cities plus El Alto (the most populated cities) represent 80% of those revenues. However for most municipalities such resources do not represent an important source of funding as they depend mainly on national transfers[5]. Excluding local resources, revenues from PP are the main source of funding for municipalities, accounting for more than 70% of the transfers in 2005 and for 57% in 2006 (Figure 3). The last year (2006) the oil revenues have increased significantly because of the tax reform in the oil sector[6] which was approved in 2005. As a result, in 2006 the oil revenues represented approximately 35% of the total revenues (US$ 172 millions). Regarding HIPC resources those have been losing relative importance since they only accounted for 8.5% of the transfers in 2006. Therefore, municipal revenues have been increasing considerably, especially because municipalities have been acquiring more responsibilities to address basic necessities and to work on local development strategies.

[3] This is true for the whole period except for the last two years when national revenues increased significantly as a consequence of the increase of oil revenues.
[4] These results were calculated using information available at www.udape.gov.bo and Finance Ministry databases.
[5] Except for the 10 cities whose their own resources are the main source of funding.
[6] This process was called by the government nationalization of the oil resources; nonetheless it did not mean a real nationalization but changes in taxes structure in oil sector and changes in contracts with international oil companies.

FIGURE 3
Composition of municipal revenues by funding sources (1994-2006)



Source: Elaborated based on Finance Ministry databases.

2.5 Political parties and municipal councils

Since 1999 the municipal councillors are elected for a period of five years. The Mayor is elected directly once his political party obtains the majority of the votes (more than 50 per cent). If this does not happen, the election is made between the first two more voted candidates. The councillors are elected according to the number of votes that each party has (Law 2028, 1999:23). In terms of the participation of the political parties, in 1999, 15 political parties had representation in municipal councils. The first three parties obtained 67% out of the 1.700 councillors in all the country. Since 2004, citizens and indigenous groups are allowed to participate in elections. As a result, 195 political groups (among party, citizens and indigenous groups) had representatives in municipal councils. In spite of this large participation of political groups, the vote was still concentrated and the four first groups obtained 50% of the councillors in all the municipalities in the country[7].

It is important to highlight the following three features: first, citizens and indigenous groups obtained 23% of the councillors and are therefore becoming an important political force; second, the representatives of the majority parties which had majority in 1999 decreased significantly in 2004. Nevertheless they are still in the first fourth places. Third, MAS (Movement towards Socialism), the political party of the current president of Bolivia increased significantly their number of councilors from 5% in 1999 to 25% in 2004. Hence, the changes in municipal councils show that political preferences and views did change considerably when comparing the two terms. These changes did influence the priorities inside municipal council, so that they are important in the analysis of social expenditure.

[7] All the data was elaborated based on Enlared (2007).

2.6 Women in municipal councils

Before 1994 a large number of women were in charge of municipalities, in part because those institutions did not have any clear role or resources to support public policies. When municipalities started to become an important unit for development process, with resources and responsibilities, men displaced women from the municipalities[8]. 'In the past, when the municipalities were less powerful, women could work there as a form of social service for the community. However when the municipalities began to receive resources, men began to see the importance of municipalities for the community. The involvement of women was then contested: *mamita*[9] *go back to the kitchen!*'[10]. Therefore, the number of women dropped dramatically and in 1996 only 128 women (7%) were councillors out of 1700 in all the country.

In 1997, in response to international pressures to promote women's participation in politics, Bolivia introduced a gender quota system that committed political parties to put in their list of candidates at least 30% of women for participating in elections. In 1999, the number of women in municipal councils increased to 256 councillors (15%) twice the number of 1996, and to 339 in 2004, (18.8%). How can this change switch priorities at municipal level? 'Women have more predilections for social investment. This could be because they do not care about their popularity for the next election, maybe because of their political inexperience[11]'

Therefore, if women have different preferences for social investment, it is possible that the changes in gender composition in a municipal council would lead to changes in the priorities in the expenditure.

2.7 Censorship vote

A Mayor can be removed from his/her office if he/she looses the confidence of the municipal council. However a Mayor cannot be removed in the first and in the last year of his/her term. The procedure for changing Mayor is called *censorship vote*[12], and it can be done if three fifths of the councillors decide to apply it (Law 2028, 1999:23).

This procedure was created to solve the conflicts at local level. In the past the conflicts with municipal executives were sent to the National Senate or the Judiciary system and most of the times they were not solved[13]. The censorship vote then constituted an alternative in order to avoid long and ineffective processes. However, during 1995 and 1999 the application of censorship vote was a negative experience in some municipalities. In some cases, the Mayor

[8] Personal communication with Norma Duran and Diego Ayo (Annex I).
[9] Mamita is a word that it is used as synonym of mother, wife or woman but in a sweet way.
[10] Personal communication with Diego Ayo (Annex I)
[11] Personal communication with Norma Duran (Annex I)
[12] In Spanish v*oto constructivo de censura*
[13] By the time the process was known by the Senate, Mayor had ended up his term.

was changed every year and in other extreme cases more than once in a year[14]. During that period 58 municipalities removed their Mayors (Lujan, 2004:172). In the period between 2000 and 2004, 71 Mayors out of 314 were withdrawn or forced to resign (65 were withdrawn), and between 2005 and 2007, 54 Mayors out of 327 (Enlared, 2007).

Some positions argue that the recall procedure would affect considerably the management capacity of municipalities for providing public services. If this is true, it could be better to avoid that process because of the negative consequences for expenditure capacity.

3 SOCIAL EXPENDITURE AND POLITICS

3.1 Social expenditure and research objectives

Municipalities have become important actors for the development process in Bolivia. Their main responsibilities can be summarized in two points: first to provide public goods and second, to support local economic development projects. The provision of public goods is important for the reduction of poverty since it has significant effects over human and social development. The literature discusses how investments in human capital can promote social development and lead to significant economic growth. it is not necessary go into details here because it is not the objective of this research. Nonetheless, evidence of several studies proved that social expenditure does constitute investments in human capital. Such investments do have a strong relationship with growth, productivity and the increase of capabilities (see Psacharopoulos and Woodhall, 1985; Romer, 1994; Sen, 1999 among others).

Moreover, since 2005 the political dynamics at the municipal level has changed considerably as political parties can run for elections as well as citizens and indigenous groups. It has increased the participation of different political groups and created a pluralist political system. This pluralism can prompt political fragmentation or support political competition that later on may affect decisions about prioritisation of social expenditure. Additionally, in 1997, a gender quota system was introduced, which increased participation of women in national political system as well as in municipalities. More women are now in municipal councils facing discrimination and other problems but on the other hand they are also changing the priorities in municipalities relocating resources towards social expenditure.

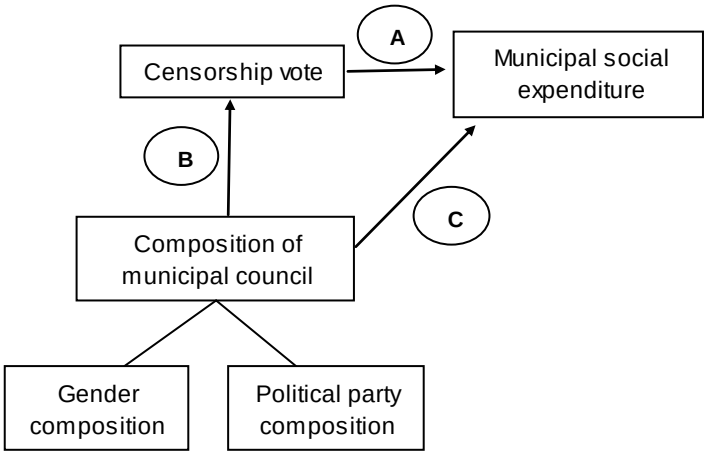
It is a fact that those changes in political participation are reflected in the composition of municipal councils and in the social expenditure of municipalities. Subsequently, it becomes important to understand how composition of municipal councils might affect the prioritisation of social expenditure and the capacity of municipalities for spending money in social services.

[14] At the beginning there was no regulation for the application of censorship vote, so that it could be applied at any moment during the year and more than once a year.

Accordingly, the objective of this paper is to analyze how composition in municipal council (political party and gender composition) can influence municipal social expenditure. One way of direct influence is through the definition of priorities (C Figure 4). This will be reflected in the amount of money that each municipality allocate to social expenditure as a proportion of total expenses (percentage of social expenditure). This reflects the priority that each Mayor, municipal council and the civil society gives to social expenditure. Those priorities are set up in the annual municipal plan which determines the percentage of social expenditure to be spent.

The other way in which the municipal council influences social expenditure is through the decision of changing the Mayor (B Figure 4). This may harm the management capacity of the municipality to spend more money in social expenditure (per capita social expenditure). That can be measured by per capita social expenditure (A Figure 4).

FIGURE 4
Analytical scheme



Source: Elaborated based on Law 1551 (1994).

3.2 Definition of social expenditure

In this section it is developed briefly two definitions of social expenditure. In Adema (2005:7) social expenditure is defined as[15]:

> The provision by public and private institutions of benefits to, and financial contributions targeted at, households and individuals in order to provide support during circumstances which adversely affect their welfare, provided that the provision of the benefits and financial contributions constitutes neither a direct payment for a particular good or service nor an individual contract or transfer. Social benefits include cash benefits (e.g. pensions, maternity payments, social

[15] This is the definition that OECD accepts.

assistance), social services (e.g. childcare, care for the elderly and disabled) and tax breaks with a social purpose (e.g. tax expenditures towards families with children, or favourable tax treatment of contributions to private health. Two main criteria have to be simultaneously satisfied for an expenditure item to be classified as social. First, the benefits have to be intended to address one or more social purposes. Second, programmes regulating the provision of benefits have to involve either a) inter-personal redistribution, or b) compulsory participation.

On the other hand, Martínez and Espíndola (2007) claim that social expenditure is 'the amount of money for funding social plans, programs and projects. Its main objective is to spring up a positive impact in a social problem, without differentiating the functions of the administrative entity or sector which spend the money (health, education, nutrition, social security, social assistance, work, housing, water and sanitation), neither the funding sources (public, private donation or external donation) nor the destiny of the resources (current and capital expenditure)'.

The first definition is related with the concept of pro-poor expenditure[16] since it considers only those expenditures that support individuals in positions in which their welfare is affected adversely (i.e. poverty). As a consequence, it fails to consider the spending which poor people do not receive. As Mosley (2006) said 'OECD concept of social expenditure register the net social expenditure' (i.e. pro-poor expenditure).

Under this definition expenditures from pension funds and tertiary education expenditures (universities) are not considered pro poor because they do not contribute to the direct reduction of poverty (World Bank, 2004:48). Unlike the first one, the second definition includes all the public goods and services.

However, in the case of municipalities no matter which concept is being used, both include all the responsibilities that municipalities have, since they do not spent money in tertiary education neither in pension funds.

3.3 Determinants of social expenditure

The literature about the determinants of government expenditure includes authors who consider that political issues play a secondary role for policy choices and authors who assert that their role is important (Mulligan, Gil and Sala-i-Martin, 2004).

In the first group, some studies focused on geographic and economic variables as determinants for size of the government. For instance, Rodrik (1996) shows that an open economy leads to a bigger government (i.e. larger expenditure) because open economies face more external risk. In such

[16] This definition tries to measure the expenditure which is targeted to poor people (Udape and Unicef, 2006) and it derives from pro-poor growth theories that emphasize the idea that 'promoting growth theories requires a strategy that it is deliberately biased in favour of the poor so that the poor benefit proportionally more than the rich' (Kakwani and Pernia, 2000:3).

circumstances, government consumption plays an insulating role insofar as the government sector is considered a safe sector in terms of employment and purchases from the rest of the economy when compared to other sector of activities. In the municipal context, this theory helps to explain the role that central, regional and municipal government have when there is an increase in risk (economic and social crisis). Thus, governments tend to increase employment and social expenditure to absorb the negative effects of the shock (especially in less developed countries, Shelton, 2007: 5).

Population size also plays an important role in the determination of public expenditure. There is a trade-off between population size and cost of social heterogeneity in large populations. A big country has returns of scale when providing social services and public goods to a large population. Then, large countries have a lower per capita cost of provision services, therefore a smaller per capita social expenditure. However, a large country has the added difficulty of dealing with the heterogeneity population and the complexity to satisfy their different preferences and necessities (Alesina and Spolaore, 1997:1029). Although these trade offs exist, Alesina and Spolaore (1997) and Alesina and Wacziarg (1998) found that the size of country is negatively related with social expenditure i.e. the effect of increasing returns prevails over the effect of the heterogeneity of the population.

Moreover, cultural and social diversity would lead to a lower public expenditure because of the difficulty of reaching agreements. Some studies went deeper into this matter and showed that fragmentation in a society is associated negatively with the provision of public goods (Shelton, 2007:6). Easterly and Levine (1997) and Alesina, Baqir and Easterly (1999) argued that expenditure in some public goods are inversely related to ethnic fragmentation. More ethnic fragmentation encourages rent-seeking behaviours and it is difficult to reach a consensus for the provision of public goods due to the diversity of interests. 'When people persistently identify with a particular group, they form potential interest groups that can be manipulated by political leaders, who often choose to mobilize some coalition of ethnic groups to the exclusion of others' (Alesina, et al, 2003).

Furthermore, Meltzer and Richard (1981) say that the size of the government depends on the relation of the mean income and the income of the decisive voter. Then, if there are high levels of income inequality the mean income is higher than the mean income of the decisive voter, this will create pressures for redistribution through taxes or expenditure. The critique to Meltzer and Richard is that they do not consider the fragmentation that income inequality can produce and its effects on the provision of public goods. Income inequality can harm the provision of public goods because in an environment with fragmentation it is difficult to reach agreements, especially during the definition of which public goods have to be prioritised (Alesina, Baqir and Easterly, 1999:1259-1261).

Additionally, income levels determine the size of the government. Studies in this matter are related with Wagner's Law. These studies argue that when a State becomes wealthier it turns into a more complex system. The needs for public regulatory and protective action also increase. The demand for certain

public goods such as education and culture enhancement which are considered to be luxury goods also increase with level of income (Shelton, 2007:7).

Finally, among those studies which claim that political issues play an important role in the determination of the public priorities there are some which pay more attention to political rights and institutions of government, whilst others to aspects related to behaviour of elected officials.

3.4 Political Behaviour

Theories about political behaviour explain how behaviours of the politicians will have consequences for public choices and then for social expenditure.

Several theories pertaining to political behaviour claim that policy choices are affected either by politicians' care about their private rents from holding office or by their desire to represent the interest of a particular group of voters. The rent seeking approach claims that politicians are selfish, thus they look for their own interest when they are running for elections (opportunism) (Beniers and Dur, 2007:30). In such cases, public policies are determined by the pay that politicians can receive because of their acts (in terms of power, money, prestige).

Another approach is the interest groups theory which claims that public policy outcomes are the result of the interplay between the concentrated interests of groups seeking transfers and the more diffuse interests of groups that supply those transfers. Once in power the leaders of the interest groups can capture some artificially created rents (rent-seeking) whenever government actions creates differentially advantageous position for some people, groups or firms. Another possible form of rent seeking behaviour is when leader of the interest group transfers more benefits to the members of the group with the intention of maintaining his leadership. The problem with this behaviour is that it implies a waste of resources because these transfers are not used to create value (Kimenyi, 1989:339-40). Therefore, these theories emphasize that politicians are selfish and only follow their own interest or the interest of the group that they belong.

Other theories pay attention to the influence that other groups have over politicians' decisions. For instance lobby theories have been used to explain the influence that a group can exert over policy makers. Various analyses have claimed that lobbying wastes resources and leads to inefficient policy choices (Besley and Coate, 2001). Another similar approach is that decentralized government is captured by local elite that will determine the allocation of the resources following its own interest (Chattophadyay and Duflo, 2004:1416). In addition, factional models affirm that the power of delivering resources resides largely outside the individual candidate of formal office-holder, and specifically in party factions and/or at the higher echelons of the party. Then at election time, all faction members have an interest in working to direct the pork to the constituents of their faction's candidate (Persico, Rodriguez and Silverman, 2007). At municipal level the factional theory explains the influence that the national party or central government exert over priorities at municipal level.

Other theories assert that the behaviour of politicians reflects preferences of the electorate. Theories such as citizen candidates' theory which tries to

explain how citizen candidates, who can not commit policy choices in advance, decide to become candidates for public office (Besley and Coate, 2001:67). Once elected the officers try to implement their preferred options; however, this model argues that citizens know other citizens' preferences and can influence the final outcome though their choice of whom to elect (Chattophadyay and Duflo, 2004:1415). Related to this approach median voter theory says that if the decisions are made by representative democracy, then the positions near the median preferences will win, so that all public decisions can be analyzed in terms of the demand of median voter and his preferences (Mathis and Zech, 1989).

Basley and Coate (2001) combine lobbying theory and citizen-candidate approach to see how other groups can influence policies. According to general public choice tradition all political actors are self-interested citizens, nevertheless Basley and Coate identified some circumstances where lobbying has no effect over policy outcomes.

All the theories explained in this section help to explain and predict the behaviour of the politicians and the influence of such behaviour in public policies (priorities). However, those models consider that politicians are homogenous and do not analyse the competition that can occur among political parties. Theories about political competition and political culture take into account those aspects in the analysis.

3.5 Party competition, motivations and political culture

Party competition implies that 'governments will not be self perpetuating and that elections can, and in some cases do, lead to the replacement of one set of officials with another set. The chance, or probability, of turnover is perhaps the most salient feature of this system of accountability. Therefore if competition works then ruling party has fear of loss the office and seeks to produce policies that satisfy the electorate. The struggle for electoral support leads rival parties to adopt moderate policies which reflect median voter preferences' (Boyne, 1998:210). This model shows that a self-seeking politician will tend to satisfy the median voter preferences because of the fear to lose the election. This consequently introduces the idea that political competition can change the behaviour of politicians. Consequently, strong competition among political parties can be expected to reduce the effect of party ideologies on policies, while weak competition reinforces this effect.

Alesina also discusses how political competition leads to the satisfaction of the median voter's preferences (1998). Politicians are not only selfish but also interested in the application of policies preferred by their constituencies. It considers that an individual at the end of his political career will not only be stimulated to satisfy the median voter preferences but also to follow his own preferences. However, since his political party will be interested to continue running for elections during long time, the interest of the younger generations of politicians will enforce policies which are beneficial for the party in the long run which will be closer to the median voter preferences. Therefore, the competition of different preferences inside a political party will change average preferences for the whole party.

Persico, Rodriguez and Silverman (2007) discuss a factional model in presence of political competition. In their model, factions are most cohesive when the party is relatively insulated from political competition. In such cases decisions about public expenditure will tend to go to constituencies whose representatives are member of powerful factions, rather than to politically swing constituencies.

Additionally Beniers and Dur (2007) introduced the different motivations of politicians, competences and the political culture in the analysis. They define political culture as the beliefs of politicians about other politicians' behaviours and motivations. They build a model where politicians are not only purely policy-oriented nor purely office-motivated (opportunist). In such circumstances, politicians care equally about the preferences of the electorate and their own motivations. Policy choices will be determined based on how much politicians value those preferences and motivations. When there competition within parties, politicians care about the effects of their acts for future elections. For instance, if they apply a bad policy and they decide to reverse it before the elections, this is a clear signal about the competence of the leader. Such actions will affect their possibilities of being re-elected. If all politicians are more office-oriented (they care more about payments than the quality of the policies) they have an incentive not to reverse the bad policy. As a consequence the beliefs about the behaviour of other politicians will determine their own behaviour. Therefore political culture is reinforcing the political behaviour and it is possible that behaviour of politicians change often (multiple equilibrium).

In a nutshell, politicians have different motivations to run in elections. However, the behaviour of politicians will be influenced not only by their own motivations, but also by the presence or absence of political competition, by the pressures of organized groups and by the political culture among all the politicians.

3.6 The application of the censorship vote and its influence over social expenditure

According to this theory, if there is opportunistic behaviour among councillors that situation may increase the pressures for changing Mayor. There will be motivation for changing the Mayor when politicians are rent-seeking or because of the participation of interest groups (Goldsmith, 1987:472). The pressures to change the Mayor will be most likely to arise when the votes are spread among several political parties (political fragmentation). The fragmentation will reflect different preferences (sometimes extremely different) that interact in municipal council. Such interactions make it difficulty to reach agreements and in turn that would affect the capacity of spending money in a municipality. This is especially strong when politicians believe that the others are rent-seeking motivated (political culture). Then, there will be more possibilities to behave opportunistically since politicians would be unconfident about the behaviour of the other group. Thus, under opportunistic behaviour all of them will try to prioritize their own preferences and this would lead to

uncoordinated actions of the different groups that will prompt lower output and higher bribes (Easterly and Levine, 1997).

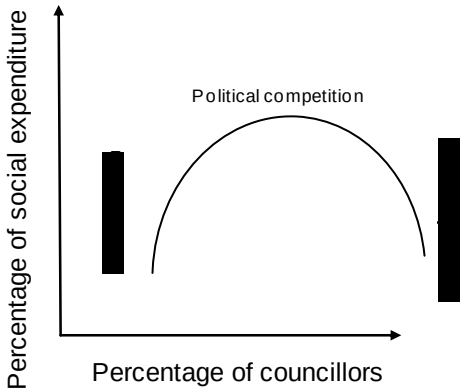
However, if a Mayor is changed because he is corrupt or incompetent (rent-seeking approach), this would force next Mayor to show that he will not have the same behaviour. The new Mayor will then tend to consider carefully the preferences of the electorate (political competition). The effect of changing Mayor over capacity of spending social expenditure is not clear, and it will depend on the level of political fragmentation, the behaviour of politicians and the political culture in a municipality.

Another explanation comes from Alesina et al (1992) and Alesina and Perotti (1993) who assert that change in the head of the government may increase the risk of investing, therefore public and private investment may be harmed. Nevertheless, the sign of the effect is not clear because while a change in the head would lead to an increase in the uncertainty and then to a lower public investment, at the same time if the Mayor was corrupt a change would been seen as a decrease in the uncertainty and then social expenditure would increase (Alesina, et al, 1992:5).

3.7 Party composition in municipal councils

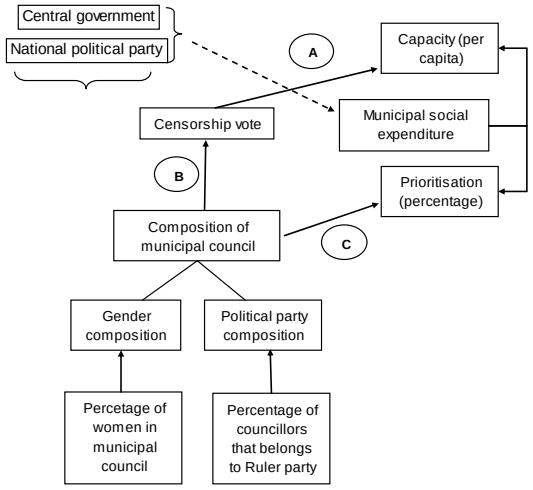
Political competition is important for defining public choices. The most straightforward measure of competition is the percentage of total council seats held by the ruling party (Boyne, 1998:207). Councils with small majorities will moderate their ideological preferences, whilst councils with large majorities will be free from this constraint. Then, let's analyse three possible scenarios: The first one when Ruler party is weak in terms of number of councillors. The second when there is competition among political parties, that means ruler party has relatively majority but enough opposition for moderating its ideological preferences (Boyle, 1998). And the third one, when ruler party has large majority and there is no political competition.

FIGURE 5
Political composition of municipal council and percentage of social expenditure



In the first case, there is a high level of fragmentation and politicians will tend to behave opportunistically (Beniers and Dur, 2007). That means politicians will behave in the way that they can obtain either rents, prestige among others benefits. The ruler party is more willing to accept alliances with parties with different motivations and preferences. Then, it will be more likely to behave opportunistically since politicians would be unconfident about the behaviour of the other group. Thus, under opportunistic behaviour all of them will try to prioritize their own preferences and this would lead to uncoordinated actions of the different groups that will prompt lower output and higher bribes (Easterly and Levine, 1997). In Figure 5 this is represented in left part of the curve.

FIGURE 6
Analytical scheme



In the second scenario, the municipal council is not fragmented, or at least the winning party has enough power to be elected on its own or through the formation of alliances with parties with similar preferences.[17] Even if politicians have different motivations, that means they are rent-seeking or policy motivated, the competition among political parties will lead to consider the preferences of the electorate when public choices are set (Alesina, 1998 and Boyne, 1998). This does not mean that preferences can not be manipulated or that government can not choose which part of the plan will implement, but at least it means that the fear of loosing the power will template partisan and personal preferences. In Figure 6 it is the section of political competition, when social expenditure reaches its maximum level. In general it is assumed that expenditure in social expenditure does not benefit a particular group so that it will tend to reflect preferences of the society for better conditions (Boyne, 1998; Beniers and Dur, 2007).

[17] This is true because winning party can choose their alliances since its participation in municipal council permit some manoeuvrability.

Finally, the last scenario depicts a situation in which the ruler party does not need to make alliances because it has large majority in the municipal council. In this case political competition does not play any role. However, influence of the parties becomes important as well as motivations of politicians, since it is expected that strong competition among political parties can reduce the effect of party ideologies on policies, whilst weak competition reinforces this effect (Boyne, 1998). In this case factional models can help to explain the behaviour of politicians. Here, party preferences will influence priorities that mean that allocation of public expenditure will tend to go to constituencies whose representatives are member of powerful actions reducing social expenditure and increasing more targeted expenditures (right part of the curve, Figure 6). Nonetheless, motivations can play a role, if officials are policy-oriented then lobbying (or factional pressures) would not affect the preferences (Boasley and Coate, 2001), then it can be expected that behaviour will be the same than when exist political competition.

3.8 Gender composition in municipal councils

The gender composition in municipal councils has changed after the application of the gender quota system strengthening women political participation. It is possible to argue that this could lead to change in preferences among municipal councils, and therefore change in priorities at municipal expenditure. If there is a difference between men and women about costs for running in elections both will have different utility functions and then different preferences about public choices (Chattophadyay and Duflo, 2004). Then, if the number of women councillors increases is logically to assume that preferences will move towards aspects that women care about, this prediction works in the same way that predictions under Median Voter Model.

But what is the base to say that men are women have different preferences? To answer this first we have to see if there are different cost and constraints that men and women face for running in elections. Women face more costs and constraints when they decide to run in an election. This is a realistic assumption if we consider the double role that women play when they decide to run for elections (i.e. mother and councillors at the same time), without considering problems of violence and political pressure that they face as well[18]. Therefore, because of the different roles in the society (different utility functions) and different costs that they face (constraints) women will have different preferences in comparison to men.

Moreover, in municipal council the average preferences will be pro-male, first because men dominate participation in municipal councils, but also because the powerful groups (political parties, interest groups, groups that can do lobby) are in general dominated by men (Chattophadyay and Duflo, 2004).

[18] Some women faced political and family pressure to resign and even physical violence. In west part some women were hit and in east part there are other forms of pressure. Personal communication: Norma Duran (Annex I).

Therefore, the increase in participation of women in municipal councils would change preferences towards more pro-female ones, and these would affect priorities in municipalities.

4 METHODOLOGY

4.1 Analytical scheme

There are now enough elements to explain i) how changes in political composition in municipal council would affect the application of the censorship vote (B Figure 5) ii) how the application of that procedure would affect the capacity of spending social expenditure (A Figure 5) iii) how changes in political party and gender composition would affect the priorities regarding social expenditure (C Figure 5). All these dynamics are influenced by external pressures from central government and the echelons of political parties.

4.1 Definition of the variables

Several works are used per capita social expenditure as a measure of the capacity of the municipality for deliver resources to the population (see Alesina, Wackziarg, 1998; Alesina Spolaore, 1997 among others). The advantage of this measure is that allows to control the size of the population and then gives a better measure about how much money each individual is receiving. More per capita expenditure will reflect more capacity of municipality to cover the necessities of their population.

Other works like Alesina, Baqir and Easterly (1999) tried to explain how it is decided the allocation of resources among several kind of goods. Then they decide to use percentage of social expenditure as a measure of the prioritisation of public goods.

Then:

$$pc\_se_i = \frac{se_i}{pop_i} \qquad \text{1) Per capita social expenditure}$$

$$perc\_se_i = \frac{se_i}{te_i} \qquad \text{2) Percentage of social expenditure}$$

Where: pc_se_i is the per capita social expenditure, se_i is the total social expenditure, pop_i is the size of population, $perc\_se_i$ is the percentage of social expenditure and te_i is the total expenditure in a municipality.

4.2 Estimating the impact of political fragmentation over censorship vote and its influence over per capita social expenditure

It was argued that the spread of the votes among political parties in the municipal council (fragmentation) may influence indirectly the capacity of the municipality of spending money in public services. First, more fragmentation

increases the probability of applying recall procedure against the Mayor of a municipality, and that will harm per capita social expenditure. The effect of the application of censorship vote and the change in the capacity of delivering resources to the population (per capita social expenditure) is given by:

3) $$\Delta pc\_se_{it} = \alpha_1 mun_{it} + \alpha_2 \Delta transfers_{it} + \alpha_3 size_{it} + \alpha_4 \Delta censorship_{it} + \alpha_5 reg_{it} + u_{it} + e_{it}$$

Where: mun_i is a matrix of variables which includes all the characteristic of the municipalities such as: poverty level (Shelton, 2007:7), income inequality (Meltzer and Richard, 1981) and ethnic fragmentation (Easterly and Levine, 1997) that do not change so much in each municipality. $\Delta transfers_{it}$ captures all the transfer that municipality receives from central government and they will vary over year, but not among municipalities because they are transferred under fixed criterions (factional pressures). $size_i$ will include a set of dummy variables according to number of persons who live in each municipality (Alesina and Spolaore, 1997). reg_i is matrix with all the control variables for regions and years, and finally the dummy variable censorship that is 1 when municipality changed Mayor through recall procedure and 0 otherwise; u_i is the unobservable variables and e_i the error term.

However, per capita social expenditure and the application of censorship vote are determined simultaneity (Alesina and Perotti, 1993; Alesina et al, 1992). That means both variables will affect each other and the normal estimation will produce biased results.

Then:

4) $$corr(censorship_i e_i) \neq 0$$

To correct this is necessary to use instrumental variables. It will be used 2 the two steps least squares procedure. The method consists in applying an instrument ($politicalfrag_i$ eq. 5) that is not correlated with the error term (e_i) in the main equation (eq. 6). And later on, use the estimation of the instrumented variable ($censorship\_est_i$) and put it in the main regression (eq. 6)

5) $$\Delta prob(censorship\_est)_{it} = \beta_1 mun_{it} + \beta_2 \Delta transfers_{it} + \beta_3 size_{it} + \beta_4 \Delta politicalfrag_{it} + \beta_5 reg_{it} + u_{it} + e_{it}$$

6) $$\Delta pc\_se_{it} = \alpha_1 mun_{it} + \alpha_2 \Delta transfers_{it} + \alpha_3 size_{it} + \alpha_4 \Delta censorship\_est_{it} + \alpha_5 reg_{it} + u_{it} + e_{it}$$

It is used political fragmentation as instrumental variable since it captures the spread of the vote in a municipality. If there is more political fragmentation (less value in the index) there will be more difficulties to reach agreements and the probability of having problems with the Mayor will be higher (Alesina, Baqir and Easterly, 1999).

The definition of political fragmentation is given by:

7) $polfrag_i = \sum (perc\_coun_i^2)$

Where: $politicalfrag_i$ is the index of political fragmentation, and $perc\_coun_i$ is the percentage of councillors that each political party has. Notice that when there are more political parties with representatives in the municipal council, the index will tend to 1, whilst if there are few political parties in the municipal council, then the index will tend to 0 (Alesina, 2003[19]).

The expected value of the coefficient of political fragmentation is negative ($\beta_4 < 0$) because the index will be higher while there is less political fragmentation, and that will be related with more per capita expenditure.

Later on, the sign of $\alpha_4 < 0$ in equation 6, if that process harm management capacity, but as it was discussed in chapter 3, the coefficient can be $\alpha_4 > 0$. It will depend on the behaviour of the politicians and the political competition that they face. For this part it will be used data from 2000 and 2004 the initial and the last year of a complete term of government.

According to theory the expected value of the coefficient of poverty level is positive, since a since a wealthier State requires more complex public regulatory and protective action, then as a consequence their expenditure will increase with level of income (Shelton, 2007:7). The expected sign of the coefficient for income inequality is uncertainty. Since high level of inequality can increase pressures for redistribution level of expenditure may be incremented (Meltzer and Richard, 1981). On the other hand it can reflect social fragmentation that may turn difficult reach agreements and that will decrease expenditure (Alesina, Baqir and Easterly, 1999). Regarding ethnic fragmentation[20], the expected sign is positive because more ethnic fragmentation encourages rent-seeking behaviour and it is difficult to reach consensus for the provision of public goods (Alesina, et al, 2003).

The coefficient of the population size is expected to be negative. However there is a trade off between having increasing returns in the provision of public goods and the cost of heterogeneity of the population in large cities (Alesina and Spolaore, 1997:1029). Besides, it will be considered all the transfers that government gives to municipalities in order to consider the factional influences that central government will have over municipalities, at least those related to the provision of social services. Moreover, they will reflect the way that changes in transfers can change municipal expenditure.

[19] In Alesina (2003) another version of this index was used.

[20] En Alesina et al, 2003 ethnic fragmentation was defined by: $ethnic_i = 1 - \sum (perc\_pob_i^2)$. This index will be 1 when there is high level of fragmentation.

4.3 Estimating the impact of political composition over percentage of social expenditure

For the explanation of the percentage of social expenditure are included the same explanatory variables than in equation for per capita social expenditure. The literature did difference between priorities and capacities for spending money but include the same explanatory variables with similar theoretical support.

$$8)\quad \Delta perc\_se_{it} = \gamma_1 mun_{it} + \gamma_2 \Delta transfers_{it} + \gamma_3 size_{it} + \gamma_4 \Delta perc\_ruler_{it} + \gamma_5 \Delta perc\_ruler^2{}_{it} + \gamma_6 reg_{it} + u_{it} + e_{it}$$

But in this case composition of political council will affect preferences and it will determine priorities. The concept that is important is the degree of political competition that a municipality has. The most straightforward measure of competition is the percentage of total council seats held by the ruling party (Boyne, 1998:207). The square term is included to test the inverted U shape relation that is assumed between political composition and social expenditure. (Benies and Dur, 2007).

Therefore:

$$perc\_ruler_i = \frac{Nconc\_ruler_i}{totalcounc_i}$$

Where: $perc\_ruler_i$ is the percentage of councillors that belongs to winning party, $Nconc\_ruler_i$ is the number of councillors that belongs to winning party and $totalcounc_i$ the number of total councillors.

The expected signs of the coefficient are:[21]

$\gamma_4 > 0$
$\gamma_5 < 0$

4.4 Estimating the impact of gender composition over percentage of social expenditure

Chattophadyay and Duflo (2004) show that man and women face different costs and constraints when they decide to run in a election. This is a realistic assumption if we consider the double role that women play when they decide to run for elections (i.e. mother and councillors at the same time), but also violence and political pressure that they face in municipalities. Therefore, women will have different preferences in relation of men.

[21] See section 3.7

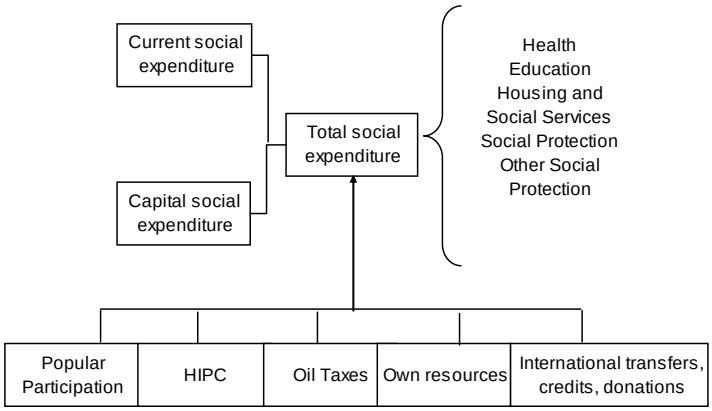
As a consequence, the increase of the percentage of women in municipal councils would change preferences towards more pro-female, and these would affect priorities in municipalities.

9) $$\Delta perc\_se_{it} = \phi_1 mun_{it} + \phi_2 \Delta transfers_{it} + \phi_3 size_{it} + \phi_4 \Delta perc\_women_{it} + \phi_5 reg_{it} + u_{it} + e_{it}$$

The expected sign of $\phi_4 > 0$ since more presence of women will lead to changes in preferences towards more social expenditure.

The data for testing changes in political and gender composition will consider two terms of government. The information is available for 2000, 2004 and 2005. However, because of the accuracy of the data, it will be preferred the use of the years 2004 and 2005. Nevertheless, in the Annex there were calculated all the regressions including the year 2000. The results did not change significantly for that it was decided to work with 2004 and 2000.

FIGURE 7
Components of social expenditure



Source: Elaborated based on UDAPE, UNICEF (2006).

5 COMPOSITION OF MUNICIPAL COUNCILS AND SOCIAL EXPENDITURE

5.1 Trends of social expenditure in Bolivia

Social expenditure includes all the current and capital expenditure in health, education, housing, basic sanitation and social protection programs. It is funding by national transfers (Popular Participation, HIPC, oil resources), own resources and external transfers, credits and donations (Figure 7). The national, regional and municipal governments as well as decentralized institutions spend in social expenditure according to their responsibilities.

TABLE 2
Social expenditure in US$ millions dollars, as a percentage of total expenditure, and as percentage of total government social expenditure (2000-2005)

		2000	2001	2002	2003	2004	2005
Central Administration	US$ Millions	635.76	666.03	644.48	634.67	653.46	702.72
	% of total expenditure	39.4%	40.2%	38.0%	37.2%	35.7%	34.5%
	% of gov. soc. expenditure	48.4%	48.1%	47.4%	44.7%	43.9%	43.3%
Regional governments	US$ Millions	378.49	383.53	381.16	417.97	459.07	504.94
	% of total expenditure	75.8%	70.4%	74.1%	81.0%	79.0%	75.9%
	% of gov. soc. expenditure	28.8%	27.7%	28.0%	29.4%	30.8%	31.1%
Municipalities	US$ Millions	156.34	178.11	166.82	213.18	263.85	263.05
	% of total expenditure	51.8%	52.7%	55.3%	58.1%	58.5%	59.6%
	% of gov. soc. expenditure	11.9%	12.9%	12.3%	15.0%	17.7%	16.2%
	Number of municipalities included	258	216	187	264	308	326
Social Security	US$ Millions	133.07	140.99	139.17	127.84	90.22	146.33
	% of total expenditure	100.0%	99.9%	99.9%	99.7%	99.9%	99.8%
	% of gov. soc. expenditure	10.1%	10.2%	10.2%	9.0%	6.1%	9.0%
National enterprises	US$ Millions	11.18	17.39	28.47	26.62	22.11	6.43
	% of total expenditure	1.6%	4.0%	18.4%	15.7%	14.3%	15.7%
	% of gov. soc. expenditure	0.8%	1.3%	2.1%	1.9%	1.5%	0.4%
Total	**US$ Millions**	**1,314.84**	**1,386.04**	**1,360.10**	**1,420.28**	**1,488.71**	**1,623.47**
	% of total expenditure	**40.3%**	**44.6%**	**48.5%**	**49.2%**	**47.9%**	**48.7%**
	% of gov. soc. expenditure	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: Elaborated based on Finance Ministry databases.

National social expenditure was increasing almost every year. Nevertheless, in 2005 it increased 9%, almost twice the increment then previous years. Regarding the municipal social expenditure, it increased permanently so that in 2005 it represented 16.2% of the total social expenditure in the country[22]. Unlike regional governments, municipalities have changed the priorities of the expenditure towards more social expenditure, and in 2005 it was almost 60% of its total expenditure (Table 2).

[22] However, part of the increment is driven by the increase in the number of municipalities that were considered in the Finance Ministry databases.

TABLE 3
Social expenditure in US dollars, per capita social expenditure, and percentage of total expenditure by level of poverty in municipality (2000, 2004, 2005)

Poverty level	Municipalities	2000		
		Total social expenditure	Per capita expenditure	Percentage of Social Expenditure
Greater than 90%	132	17,765,107	12.69	55.8%
Between 80% and 90%	89	29,649,343	14.73	62.5%
Between 70% and 80%	63	16,213,001	15.50	50.1%
Between 60% and 70%	30	17,682,581	19.28	46.3%
Less than 60%	13	75,116,010	24.61	49.4%
Total	327	156,426,042	18.56	51.8%

Poverty level	Municipalities	2004		
		Total social expenditure	Per capita expenditure	Percentage of Social Expenditure
Greater than 90%	132	32,337,803	21.90	53.4%
Between 80% and 90%	89	51,338,181	23.05	53.9%
Between 70% and 80%	63	26,063,182	23.03	54.9%
Between 60% and 70%	30	30,438,985	29.00	57.1%
Less than 60%	13	123,548,780	36.98	63.6%
Total	327	263,726,931	28.58	58.5%

Poverty level	Municipalities	2005		
		Total social expenditure	Per capita expenditure	Percentage of Social Expenditure
Greater than 90%	132	30,465,177	20.38	52.2%
Between 80% and 90%	89	56,888,176	24.93	61.9%
Between 70% and 80%	63	25,933,827	22.49	53.2%
Between 60% and 70%	30	26,179,581	24.15	52.3%
Less than 60%	13	123,436,811	36.17	64.3%
Total	327	262,903,572	27.89	59.6%

Source: Elaborated based on Finance Ministry databases.

Social expenditure is concentrated in large and rich municipalities, because they receive more transfers and also they have more resources from local taxes. However, per capita social expenditure[23] increased considerably because municipalities have received more transfers during the last years. Though, it seems that bigger and richer municipalities spend more in per capita terms.

About the percentage of social expenditure, there is no clear relationship between this variable and level of poverty. However, in the last years bigger cities prioritized social expenditures more than others (Table 3).

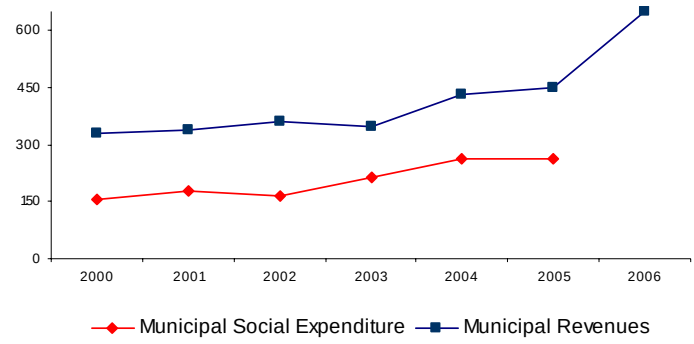
[23] A measure about how well municipality cover its population's necessities.

Hence, municipalities have increased their importance in the definition of public policies; now they have more responsibilities but also more resources. Moreover, municipal social expenditure was increasing its participation in the total social expenditure. It is likely that this trend will continue increasing due to the additional oil resources that municipalities receive. This situation prompted a huge debate in Bolivia regarding the role of the municipalities and its institutional capacities. The Central Government tried to centralise part of the municipal resources claiming that municipalities do not have the capacities to ensure the correct use of them. However, it can not be denied that municipalities improved their technical capabilities and they became and important political actor for developing and implementing policies.

5.2 Central government, transfers and municipal social expenditure

Municipal social expenditure is determined mainly by the amount of transfers that they receive (Figure 8). This happens because most of the municipalities do not have revenues from local taxes. Then, central government may influence how municipalities have to spend the money. Actually, half of the transfers have to be spent considering priorities determined in advance.

FIGURE 8
Municipal revenues and municipal social expenditure in US$ millions dollars (2000-2006)



Source: Elaborated based on UDAPE (2007).

For instance HIPC resources have to be spent 20% for education, 10% for health, and 70% for economic development. Another way that national government can influence social expenditure in municipalities is through the payment of salaries in health, education and other sectors. Those payments can

influence municipal expenditure through two channels[24]: First, if central government increases number of teachers this can pressure municipalities to spend more in education facilities (books, schools, and others). However, other times it can be an obstacle, when central government does not give enough teachers to the municipality then municipality will not have any incentive to spend money in education. When those payments are done without clear criterions and the central government uses them for rewarding some behaviour of the municipality, then municipal social expenditure may be influenced. During 2007, central government transferred funds to municipalities without clear criterions. This may influence the priorities in municipality if Mayors consider those transfers as permanents, so that they could change their policies or behaviour considering the government's preferences. Such influence is what the factional models try to explain, and it has to be taken into account because of the probability to influence spending in municipalities.

5.3 Censorship vote and municipal social expenditure

The censorship vote is applied when municipal council does not trust anymore in the Mayor. Sometimes that procedure may affect the management of the municipality for deliver services to the people (Abdiwelli, 2001). Nonetheless in other cases where the Mayor was corrupt or not capable, the change has improved the capacity of the municipality to provide services (Alesina, et al, 1992).

TABLE 4
Percentage of municipalities that removed their Mayors by term

Poverty Level*	Number of municipalities (2007)	Change of Mayor (2000-2004)**	Change of Mayor (2005-2007)***	Population
Greater than 90%	132	19.3%	13.6%	1,530,398
Between 80% and 90%	89	24.7%	18.0%	2,390,543
Between 70% and 80%	63	27.0%	14.3%	1,195,266
Between 60% and 70%	30	23.3%	23.3%	1,154,799
Less than 60%	13	15.4%	15.4%	3,556,522
Bolivia	327	22.6%	16.5%	9,827,528

Source: Elaborated based on Enlared, 2007, Udape, INE (N.d.), Udape, INE (2002).

Notes: * Calculated based on domestic poverty line. See details in Udape, INE (N.d.). ** In this period there were only 314 municipalities. *** Two municipalities were not considered because they do not have measurement for poverty level.

[24] The expenditures in teachers' salaries were included separately because they represent an important part of those transfers considering number of students in a municipality

In Table 4 we can see the application of the process in two terms. There is a slight difference between the poorest municipalities (those above 80%) and the richest[25] (those below 60%). Nevertheless, the difference becomes important for those groups between 60% and 70% level of poverty. Therefore, we can not say that there is a strong relationship between the change of a Mayor and the level of poverty in a municipality, although for some groups it seems to be true.

In municipalities where Mayor was changed the per capita social expenditure was lower. Besides, the last years the difference it seems to be larger. Two things have to be highlighted. The first one is that the first years of each term (2000 and 2005) a initial lower expenditure is associated with more probabilities to have conflict in the following years. The second thing is that during 2000 and 2004, one complete term, the difference in per capita social expenditure has increased. This could be evidence that the application of the recall have affected the capacity of deliver social services. This could happen because a lower per capita expenditure may produce tensions that could lead to change the Mayor either because people think Mayor is corrupt or not capable, but at the same time the application of the procedure will lead to lower social expenditure.

TABLE 5
Statistics by change of The Mayor (2000, 2004, 2005)

Year	Population	Mean percentage of councillors that belong winning party	Number of municipalities	Per capita social expenditure	Percentage of social expenditure	Political fragmentation
2000						
No change	6,756,198	45.0%	256	19.13	51.8%	0.36
Change	1,671,592	41.0%	71	16.26	51.9%	0.32
2004						
No change	7,416,449	45.0%	256	30.53	59.5%	0.36
Change	1,810,057	41.0%	71	20.60	53.4%	0.32
2005						
No change	7,950,448	50.0%	272	29.70	61.1%	0.4
Change	1,215,207	41.0%	54	18.24	50.4%	0.32

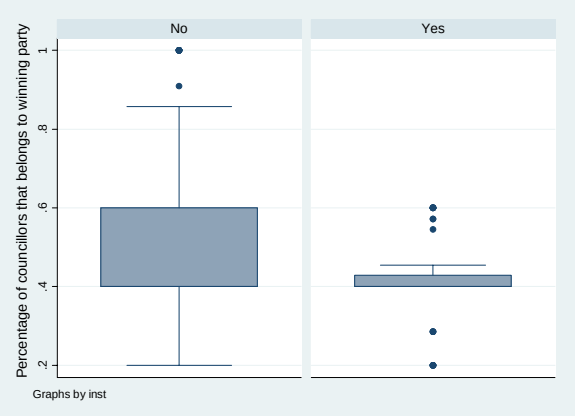
Source: Elaborated based on Enlared, 2007, Udape, INE (N.d.), Udape, INE (2002), Finance Ministry.

About political composition, in municipalities where Mayor was changed, the winning party had in average 41% of the councillors in both terms. In other municipalities, this participation is higher 45% in the first period and 50% in the second one. Even if the differences are not so large, this shows that one possibility to avoid that change is having more representatives in the council. Looking at political fragmentation, in the first period the difference is

[25] In fact, they are not rich they still have huge levels of poverty. However, we could say that they are relatively rich comparing to the other groups.

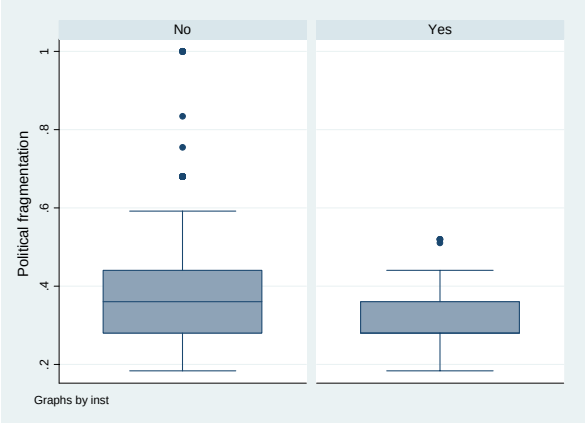
not so high, but in the second it increased[26]. More fragmentation in the council is related with more possibility to change the Mayor. The priorities measured by percentage of social expenditure are also different among those groups, but this may be the reflection of the political fragmentation rather than the application of the recall (Table 5)

FIGURE 9
Percentage of councillors that belong to the winning party by the application of censorship vote (2005-2007)



Source: Elaborated based on Enlared (2007).

FIGURE 10
Political fragmentation and censorship vote (2005-2007)



Source: Elaborated based on Enlared (2007).

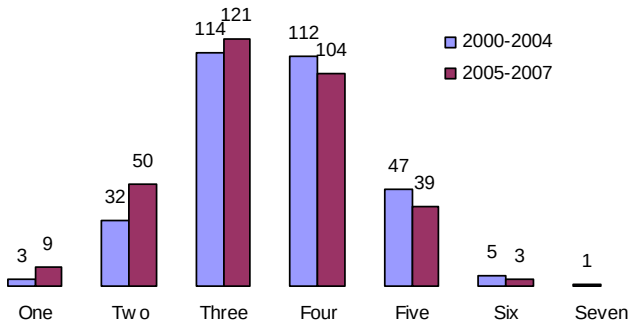
[26] This index will tend to 1 when there is only one political party in the council (no fragmentation) and to 0 when there are lots of political party with political representation (more fragmentation).

In municipalities where Mayor was changed the average of representation of the wining party is 40% that means they did not have the majority. However, in other municipalities the wining party remained in power even with less levels of representation (Figure 9). This could be evidence about the diversity of motivations that politicians have. In Figure 10, there are some municipalities with high degree of fragmentation (index near to 0) but where they did not apply the censorship vote. But one thing is clear, in municipalities where Mayor was changed the winning party did not have the majority and in average they have more political fragmentation. This means that different preferences and priorities would increase the probability of changing Mayor.

5.4 Political composition of municipal council and social expenditure

The party composition in municipal councils did not change much in the last two elections, in terms of number of political parties that have representatives in each municipality. In most of the municipalities there are three or four parties with political representation, showing some degree of political competition. However, about 45 municipalities out of 327 have five or more political parties which can be considered too much since the maximum number of councillors is 11. In about 59 cases there is lack of competition since they have one or two political parties in the municipal council (Figure 11).

FIGURE 11
Number of municipalities by party composition of municipal councils (2000-2004 and 2005-2007)



Source: Elaborated based on Enlared (2007).

Table 6 shows that there is no clear relation between the percentage of councillors from the ruler party with per capita social expenditure neither with percentage of social expenditure. Actually, the results are mix. For instance, when the wining party has less than 30% of representatives, it seems that per capita social expenditure and percentage of social expenditure are greater than the other groups.

TABLE 6
Percentage of councillors that belong to the winning party and basic statistics (2000, 2004, 2005)

Winning party participation	Population	Numer of municipalities	Municipalities which applied censure	Per capita social expenditure	Percentage of social expenditure	Differences in per capita social expenditure 2004-2000	Differences in percentage of social expenditure 2004=2000
2000							
Less than 30%	2,129,969	51	16	22.67	56.7%		
Between 30 and 50%	3,821,717	176	39	15.54	49.2%		
Between 50 and 80%	2,137,178	68	15	20.28	50.4%		
Greater than 80%	338,926	19	1	15.96	53.3%		
2004							
Less than 30%	2,237,196	51	16	33.58	61.5%	10.91	4.7%
Between 30 and 50%	4,240,013	176	39	25.88	60.6%	10.34	11.4%
Between 50 and 80%	2,382,157	68	15	30.28	54.6%	10.00	4.2%
Greater than 80%	367,140	19	1	18.39	44.3%	2.43	-9.0%
2005							
Less than 30%	2,129,264	36	11	27.42	65.1%		
Between 30 and 50%	3,068,899	163	32	21.09	52.0%		
Between 50 and 80%	3,739,491	97	11	34.63	63.5%		
Greater than 80%	489,168	30	0	21.01	45.0%		

Source: Elaborated based on Enlared, 2007, Udape, INE (N.d.), Udape, INE (2002), Finance Ministry.

Is this evidence that political composition in municipal councils do not affect social expenditure? If we see the differences in period 2000-2004, between the beginning and the end of the term, the per capita social expenditure will increase in the same way in all the municipalities, except when winning party has a huge majority. However, the priorities towards more social expenditure (percentage of social expenditure) will increase when party have enough power to avoid political problems but still need do alliances for reaching majority (30%-50%). In municipalities where the Ruler have large majority the change of that percentage turns negative. Moreover, when party is too weak or have majority but not the total control of the council, social expenditure will increase but less than in the intermediate scenario.

To test this properly we have to compare two terms, this will be done further with the appropriate econometric techniques, however so far, we have some evidence that political competition matters for determining changes in priorities at municipal level, and when the ruler party is so strong priorities changes against social expenditure, maybe because they do not need to care about preferences of the electors and they can carry out their own agendas.

5.5 Gender composition of municipal council and priorities

The gender quotas system assured that more women participate in the Bolivian political process. However it is agued that women face a lot of discrimination and their capacity to influence policies is limited. 'There is discrimination problem against women. There is a hierarchy where men have the power.

Women are in charge of things without importance, but men are in charge of economical committee where the important decisions are made[27]'.

Then, is there any effect in social expenditure because of the change in gender composition in municipalities? If they do not have any influence in municipal councils, then it does not matter how many women are in municipal councils, their preferences will not be considered.

TABLE 7
Percentage of women councillors and basic statistics (2000, 2004, 2005)

Woman participation	Population	Numer of municipalities	Municipalities which applied censure	Per capita social expenditure	Percentage of social expenditure	Differences in per capita social expenditure 2004-2000	Differences in percentage of social expenditure 2004=2000
2000							
Less than 20%	2,623,992	145	37	26.69	52.3%		
Between 20 and 40%	5,371,274	135	27	40.68	52.0%		
Greater than 40%	432,524	34	7	30.76	46.3%		
2004							
Less than 20%	2,801,175	145	37	41.11	55.1%	14.42	2.8%
Between 20 and 40%	5,951,295	135	27	52.80	59.7%	12.11	7.7%
Greater than 40%	474,036	34	7	44.78	60.3%	14.01	14.0%
2005							
Less than 20%	2,417,746	119	23	37.82	53.4%		
Between 20 and 40%	6,396,566	153	22	50.28	62.3%		
Greater than 40%	612,510	54	9	45.66	49.1%		

Source: Elaborated based on Enlared, 2007, Udape, INE (N.d.), Udape, INE (2002), Finance Ministry.

Table 7 shows that participation of women in politics did not cause any effect on those variables related to social expenditure (Table 7). Nonetheless, analyzing the difference between 2004 and 2000, clearly more women in municipal council are related with bigger changes in percentage of social expenditure (changes in priorities). In municipalities with less than 20% of women, the change is low (2.8 percentage points), but in municipalities where participation is greater than 40% the change is important (14 percentage points).

Even if it is argued that citizens will elect women when population is more willing to spend in social expenditure, these results show that the quantity of women in municipal council will change preferences in municipalities. However, a more accurately comparison will be given by econometric models considering two terms in further sections.

5.6 Political variables and the effect in social expenditure

Bolivia has 327 municipalities, the financial information is available for 258 in 2000, but for 2004 includes almost all the municipalities (304) as well as in

[27] Personal communication: Diego Ayo (Annex I).

2005 (326). There are some municipalities with huge levels of per capita social expenditure. The regressions were done without those extremes cases and the conclusions did not change at all, although the significance of the variables of interest is stronger in all the cases. However, although those extreme cases represent around 5 municipalities per year, it was preferred to show the results with the whole sample since the conclusions are not affected by this exclusion. But most important it will be avoided the increment of bias due to exclusion of more municipalities (bias selection).

The level of poverty in municipalities is about 83% measured by local poverty line. Gender participation incremented from 14% to 18%, and the mean of the percentage of power that ruling party has increased from 44% to 48% in the last two terms.

Table 9 shows the correlation among the variables of interest. For instance more poverty level will be related with less per capita expenditure, but more prioritization in terms of percentage of social expenditure. But this result is highly correlated with cities, that are the biggest and richest among the municipalities, therefore there are mix of effects that have to be separated in order to obtain the correct correlations.

TABLE 8
Basic statistics (2000, 2004, 2005)

Variable Year 2000	Obs	Mean	Std. Dev.	Min	Max
Per capita SE	314	13.7028	11.3642	0.0000	82.6250
Perc. SE	258	0.5471	0.1696	0.0110	0.9202
Poverty level	314	0.8374	0.1187	0.4300	0.9990
Income inequality	314	0.2535	0.1237	0.0520	0.6310
Ethnic fragmentation	314	0.7504	0.1737	0.5000	1.0000
Perc. Women	314	0.1466	0.1488	0.0000	0.8000
Perc. winning party	314	0.4405	0.1571	0.2000	1.0000
Perc. square winning party	314	0.2187	0.1625	0.0400	1.0000
Political fragmentation	314	0.3508	0.1347	0.1837	1.0000
Transfers PP	327	0.5837	1.9666	0.0000	21.8261
Transfers OR	267	0.5173	3.3628	0.0000	43.3342
Transfers HIPC	327	0.0000	0.0000	0.0000	0.0000
Transfers IDH	327	0.0000	0.0000	0.0000	0.0000
Transfers education	306	0.3057	0.8494	0.0010	8.6361

Variable Year 2004	Obs	Mean	Std. Dev.	Min	Max
Per capita SE	314	21.2628	13.2986	0.0000	111.4577
Perc. SE	309	0.5218	0.1484	0.0000	0.9404
Poverty level	314	0.8374	0.1187	0.4300	0.9990
Income inequality	314	0.2535	0.1237	0.0520	0.6310
Ethnic fragmentation	314	0.7504	0.1737	0.5000	1.0000
Perc. Women	314	0.1466	0.1488	0.0000	0.8000
Perc. winning party	314	0.4405	0.1571	0.2000	1.0000
Perc. square winning party	314	0.2187	0.1625	0.0400	1.0000
Political fragmentation	314	0.3508	0.1347	0.1837	1.0000
Transfers PP	327	0.6569	2.3541	0.0000	29.4805
Transfers OR	296	0.5635	4.0509	0.0000	48.1917
Transfers HIPC	327	0.1546	0.2734	0.0000	3.6696
Transfers IDH	327	0.0000	0.0000	0.0000	0.0000
Transfers education	326	0.3854	1.0501	0.0013	12.0378

Variable Year 2005	Obs	Mean	Std. Dev.	Min	Max
Per capita SE	314	21.1308	14.3070	0.0000	122.4839
Perc. SE	326	0.5202	0.1178	0.1089	0.9044
Poverty level	314	0.8374	0.1187	0.4300	0.9990
Income inequality	314	0.2535	0.1237	0.0520	0.6310
Ethnic fragmentation	314	0.7504	0.1737	0.5000	1.0000
Perc. Women	326	0.1837	0.1490	0.0000	0.6000
Perc. winning party	326	0.4852	0.1720	0.2000	1.0000
Perc. square winning party	326	0.2649	0.1964	0.0400	1.0000
Political fragmentation	326	0.3898	0.1618	0.1837	1.0000
Transfers PP	327	0.7051	2.5186	0.0062	31.5574
Transfers OR	325	0.4573	3.1686	0.0000	42.9877
Transfers HIPC	327	0.1195	0.2082	0.0019	2.8353
Transfers IDH	327	0.1015	0.2706	0.0007	2.5769
Transfers education	307	0.4109	1.0866	0.0013	12.1336

Source: Elaborated based on Enlared, 2007, Udape, INE (N.d.), Udape, INE (2002), Finance Ministry.

TABLE 9
Correlation Matrix

	Per capita SE	Perc. SE	Poverty level	Income inequality	Ethnic fragmentation	Perc. Women	Perc. winning party	Perc. square winning party
Per capita SE	1							
Perc. SE	0.4591	1						
Poverty level	-0.1801	0.0149	1					
Income inequality	-0.1081	0.0474	0.8494	1				
Ethnic fragmentation	0.1125	0.0164	0.1529	0.2903	1			
Perc. Women	0.0644	0.0752	-0.2015	-0.1508	0.1032	1		
Perc. winning party	0.1004	0.0214	-0.069	0.022	0.1811	0.3785	1	
Perc. square winning	0.0844	0.0045	-0.0631	0.0174	0.1669	0.3532	0.9733	1
Political fragmentation	0.0865	0.0188	-0.0424	0.0273	0.1754	0.3608	0.9444	0.9661
Transfers PP	0.1377	0.0672	-0.3412	-0.1805	-0.0512	0.1245	0.0154	0.0171
Transfers OR	0.1534	0.0639	-0.3354	-0.1767	-0.0326	0.1197	-0.0028	-0.0019
Transfers HIPC	0.1652	0.0401	-0.1359	-0.0454	-0.0096	0.0662	0.0625	0.064
Transfers IDH	0.1514	0.0474	-0.2303	-0.1424	0.0077	0.1176	0.076	0.0722
Capital City + El Alto	0.1876	0.0273	-0.3634	-0.2085	-0.0355	0.1774	0.0693	0.0718
Transfers education	0.1382	0.0603	-0.3529	-0.2006	-0.0689	0.1325	0.026	0.0282

	Political fragmentation	Transfers PP	Transfers OR	Transfers HIPC	Transfers IDH	Capital City + El Alto	Transfers education
Political fragmentation	1						
Transfers PP	-0.0015	1					
Transfers OR	-0.0129	0.9299	1				
Transfers HIPC	0.0402	0.6655	0.4998	1			
Transfers IDH	0.0563	0.5247	0.4031	0.4489	1		
Capital City + El Alto	0.0515	0.719	0.6357	0.5111	0.4819	1	
Transfers education	0.0031	0.9847	0.8798	0.7265	0.5235	0.7595	1

Source: Elaborated based on Enlared, 2007, Udape, INE (N.d.), Udape, INE (2002), Finance Ministry.

5.6.1 The effect of censorship vote in social expenditure

In this section it will be tested the effect of applying censorship vote over the capacity that municipality has for delivering social expenditure (per capita social expenditure). In Table 10, applying simple OLS and adding each time a number of control variables, the results are quiet stable. It has been added all the main variables that theories about social expenditure consider important for explaining that expenditure. Then, it was included poverty level, a measure of income inequality, a measure of ethnic fragmentation, size of the population, transfers that government gives to municipalities, separately expenditure in teachers' salaries (transfers education) because those are given considering student size criterion, the own revenues, regional control variables and a Dummy variable to measure the application of the censorship vote (recall procedure).

In column 1, the results show that less poverty is related with more per capita expenditure. This is related with Wagner's Law that claims a wealthier municipality will need more complex and new services; as a consequence the level of social expenditure per capita will increase (Shelton, 2007:7). Income inequality is related positively with social expenditure, and it seems that inequality is pressuring for redistribution as it was argued by Meltzer and Richard (1981), more than prompting social fragmentation as Alesina, Baqir and Easterly asserted (1999:1259-1261).

Ethnic fragmentation starts having a positive relation with per capita social expenditure, however when more control variables were added, it became insignificant but with the expected sign. Once controlled by other regional and transfers variables ethnic fragmentation becomes negative, that means more ethnic fragmentation will complicate to reach agreements and this will harm per capita social expenditure (Alesina, et al, 2003).

Transfer resources are included to consider the factional influences that central government will have over municipalities, at least those related to the provision of social services. They will also reflect the way that changes in transfers change municipal expenditure. Some of the transfers are related positively with more social expenditure and others negatively with it. This may be the reflection of the criterions to distribute those resources, for example revenues from Popular Participation (PP) that are distributed based on population size are negatively related with social expenditure. Then, this variable maybe is capturing that characteristic, and that is why the variables that measure size of the population are not significant when they are controlled at the same time with population size. Remember that bigger cities will have increasing returns of scale in the provision of social goods, therefore bigger cities would spend les per capita resources (Alesina and Spolaore, 1997:1029). However all the transfers become insignificant when we add regional controls that capture in a better way the characteristics that municipalities have.

The dummy variable for city and the one for own revenues are large and reflect some characteristics of the big cities like more institutional capacity for spending and the facility to obtain credits and loans from other sources to support their expenditure.

TABLE 10
Regressions of per capita social expenditure

	OLS (1)	OLS (2)	OLS (3)	OLS (4)
Poverty level	-40.2358***	-29.7370**	-18.0477	-7.7727
	(11.9545)	(13.2825)	(13.5876)	(14.7947)
Income inequality	26.5902**	13.8923	8.2658	6.1828
	(11.8017)	(12.4026)	(12.3503)	(16.5020)
Ethnic fragmentation	7.6883*	7.4401	7.4705	-4.9126
	(4.4515)	(4.6926)	(4.6233)	(5.8797)
Censorship vote	***-4.3129****	***-3.7658****	***-3.6479****	***-4.7249*****
	(1.7437)	***(1.8174)***	***(1.7992)***	***(1.8208)***
Transfers PP		-4.2974*	-5.1583**	-0.5777
		(2.2036)	(2.1994)	(4.0873)
Own revenues		2.0397**	2.1542**	2.0408**
		(0.9629)	(0.9507)	(1.0078)
Transfers HIPC		17.2478**	12.367	19.8612**
		(8.1058)	(8.3072)	(9.9789)
City =1			24.7583***	28.1056***
			(6.4242)	(7.0378)
Population between 5000 and 15000			-1.0276	-0.2589
			(2.0091)	(2.1264)
Population between 15000 and 50000			1.1814	1.0494
			(2.2664)	(2.4605)
Population < 50000			-1.0646	-0.8671
			(4.6924)	(4.8201)
La Paz =1				-8.3485***
				(3.1050)
Cbba =1				-0.8571
				(3.0230)
Oruro =1				-5.0996
				(3.5781)
Potosi =1				-5.1659
				(3.2045)
Tarija =1				9.9445**
				(5.0310)
Santa Cruz =1				0.4532
				(3.0662)
Beni =1				0.4259
				(4.7930)
Pando =1				6.6324
				(6.2357)
Transfers education				-11.7228
				(8.2850)
Constant	43.4222***	37.9010***	30.1981***	33.9643***
	(8.8028)	(9.9007)	(10.2507)	(10.9431)
Observations	314	283	283	282
R-squared	0.0693	0.087	0.1385	0.2431

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

The variable of interest, in this case the application of the censorship vote will affect significantly the level of per capita social expenditure. When a Mayor is changed through this process municipality will tend to spend US$ 4.7 less than if they would not apply that process (column four). This result is highly significant. This could be explained because a change of the Mayor has

consequences in municipal management harming municipal projects, but also when this process is applied there are some problems between council and Mayor that caused delays in the implementation of plans. Besides, there are some simultaneity problems, because when a Mayor is changed there would be effects over per capita expenditure, but at the same time it would be that lower per capita expenditure will prompt pressures for changing Mayor.

For solving this problem it will be used the method of Instrumental Variables. The variable political fragmentation affects the application of the censorship vote. If there is more political fragmentation there will be more difficulties to reach agreements and the probability of having problems with the Mayor will be higher (Alesina, Baqir and Easterly, 1999). Thus, that variable can be used to solve the simultaneity problem.

Table 11 shows the changes in the probability of changing Mayors when political fragmentation changes. It is clear that political fragmentation affects the probability of changing Mayor. Less value in the Index (more fragmentation) is related with an increase in the probability of applying the recall process, therefore, a more fragmented council will mean the interaction of different preferences that can increase the difficulty of reaching agreements. But at the same time from political competition theories it is possible to say in fragmented municipal councils there is a tendency to have an opportunistic behaviour. Then, it is more likely that politicians in order to remain in power try to share management with other politicians even which those with different preferences. This would harm the management and this will increase the probabilities of changing Mayor because voters will assume that it is because of the lack of capabilities of the Mayor. As a conclusion fragmentation of municipal council do affect probabilities of changing Mayor.

However, simultaneity problem is not the only one. There are some unobservable characteristics that would affect the level of per capita expenditure. Those characteristics can be institutional capacities that are not observables and those for sure will influence the level of expenditure. Others like the presence of lobby or elite groups that exert pressures are not observables either as well as the political culture migration, and others demographic and geographic conditions that could explain the variation in per capita social expenditure, as well. Since there are evidence that some unobservable characteristics like geographic conditions will not vary over time, but among observations, and that others will vary among municipalities but not over time, it is possible that the best model is random effect model, however this will be tested in order to identify the most accurately procedure.

The results are in Table 12. The coefficients of the application of censorship vote are smaller when it is corrected by IV. Something that grabs the attention is that size of the coefficient decreases from US$ 3.9 to US$ 1.5 when IV is used. In both cases those are significant. This means that the effect of censorship vote considering simultaneity will be related with a decrease in US$ 1.5 per capita social expenditure. This smaller effect could be explained by the fact that in some municipalities the Mayor was corrupt or not capable to increase this expenditure, then after the change municipalities started to increase that expenditure.

TABLE 11
Probit model for the application of censorship vote

	Probit Random Effect
Years of schooling	-0.1735**
	(0.0879)
Poverty level	-2.0895
	(1.4244)
Income inequality	-1.2687
	(1.5931)
Ethnic fragmentation	-0.4624
	(0.5629)
Political fragmentation	***-2.3756******
	(0.6495)
Transfers PP	-0.0173
	(0.5531)
Own revenues	-0.1985
	(0.2011)
Transfers HIPC	-0.7968
	(1.2962)
Transfers IDH	0.427
	(0.8843)
City =1	0.7301
	(0.8590)
Population between 5000 and 15000	0.2518
	(0.2064)
Population between 15000 and 50000	0.4116*
	(0.2376)
Population < 50000	0.2718
	(0.5103)
La Paz =1	-0.0573
	(0.2913)
Cbba =1	0.8550***
	(0.2817)
Oruro =1	0.4136
	(0.3465)
Potosi =1	0.6518**
	(0.3137)
Tarija =1	0.2829
	(0.4534)
Santa Cruz =1	0.3979
	(0.3190)
Beni =1	-0.0767
	(0.4881)
Pando =1	-5.9148
	(7,901.5922)
Transfers education	-0.322
	(0.7241)
Population size	0.00001
	(0.00001)
Observations	307
Log likelihood	-234.31618

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

TABLE 12
IV procedure, pooled data, fixed and random effects of censorship vote on per capita social expenditure

	OLS (1)	OLS IV (2)	Pooled Data (3)	Pooled Data IV (4)
Censorship vote	***-4.7249******	***-3.5495***	***-3.9272****	***-1.5682****
	(1.8208)	***(2.6373)***	***(1.6315)***	***(0.7727)***
Durwin-Wu-Hausman p		0.280		0.094
Observations	282	225	530	473
R-squared	0.2431	0.2306	0.2118	0.218

	Fixed Effects (5)	Fixed Effects IV (6)	Random Effects (7)	Random Effects IV (8)
Censorship vote	***-3.7828***	***-1.0007***	***-3.9272****	***-1.5682****
	(2.5863)	***(0.8327)***	***(1.6315)***	***(0.7727)***
Hausman test p value	0.980	0.335		
Durwin-Wu-Hausman p		0.357		0.093
Observations	305	248	305	248
R-squared	0.1357	0.1329		

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Note: The rest of the variables are included in the regresion but they are not showed here to keep simple the explanation, however the complete table is in the Annex

Therefore, to change the Mayor does harm per capita social expenditure, however, the effect is not so high when we correct by simultaneity using political fragmentation as instrumental variable. The results can be summarized in: First political fragmentation does affect the probability of changing Mayor, and this harm management and the capacity to provide services, and then per capita expenditure decreases.

5.6.2 The effects of changes in the power of ruler party in social expenditure

Political competition changes the way that politicians behave in a municipality, and then will determine public choices. The most straightforward measure of competition is the percentage of total council seats held by the ruling party (Boyne, 1998:207). The square term is included to test the inverted U shape relation that is assumed between political composition and social expenditure. When the Ruler party have less power and it is weak to continue on power (in terms of municipal councillors) there is a high level of fragmentation and politicians will tend to behave opportunistically (Beniers and Dur, 2007). That means politicians will behave in the way that they can obtain either rents, prestige among others benefits. It would be possible that politicians have more incentives to behave opportunistically because since it is necessary to have majority to be Mayor, winning party can share the power with others. But in a fragmented scenario the winning party would be more willing to accept alliances with parties with different motivations and preferences. Thus, under opportunistic behaviour all of them will try to prioritize their own preferences

and this would lead to uncoordinated actions of the different groups that will prompt lower output and higher bribes (Easterly and Levine, 1997).

When municipal council is not fragmented, or at least winning party have enough power to be elected by its own or doing alliances with parties that do not differ so much about its preferences, there are two possible motivations. Either politicians will have an opportunistic behaviour or will be policy motivated. If they are policy motivated they will try to apply policies that they believe are the correct for the municipality. There will be a high correlation between those motivations and the preferences of the population, because as Alesina (1998) and Boyne (1998) asserted when there is some kind of equilibrium among forces there will be a tendency to consider the preferences of the electorate when public choices are set. This makes sense considering that municipalities have been strengthening participative planning processes with the inclusion of some organization from civil society that would ensure to take into account the preferences of the electorate. This does not mean that preferences can not be manipulated or that the government can not choose which part of the plan will implement, but at least means that if civil organizations can control effectively municipalities then the actions of the government will reflect their preferences.

Finally when political party does not need to do alliances because it is strong enough in terms of municipal councillors, the political culture will not play an important role. However, motivations of politicians will be important. Here influence of the party becomes important in the analysis, since it is expected that strong competition among political parties can be expected to reduce the effect of party ideologies on policies, while weak competition reinforces this effect. Factional models would help us to explain the possible behaviour. Here, party preferences will influence priorities that mean that allocation of public expenditure will tend to go to constituencies whose representatives are member of powerful actions. Nonetheless, motivations can play a role, if officials are policy oriented then lobbying (or factional pressures) would not affect the preferences (Boasley and Coate, 2001), then it can be expected that behaviour will be the same than when exist political competition.

Those scenarios will be modelled introducing the variable percentage of councillors that belongs to ruler party and the square term. The sizes of the coefficients are stable when we use two periods of time. The jointly test for both variables tells that they are significant at 15% using Random Effects[28]. The Hausman test confirms that Random Effects model is the most efficient model. The results are: first if percentage of councillors of the ruling party increases in 10 percentage points, the percentage of social expenditure will increase in 2.78 percentage points[29], but at the same time there will be a negative effect measured by the square term that it will be important when the percentage of councillors increases very much. That means in a municipality

[28] Excluding the extreme they are significant at 10%.

[29] It is used for the explanation the coefficient of the Random Effects model; the coefficients of the other models did not differ so much from this one.

with 11 councillors[30] if percentage of councillors belonging to ruling party changes from 9.1% to 18.2% (from 1 to 2 councillors) percentage of social expenditure will change from 2.3% to 4.3% (1.9 percentage points) (Figure 12 and Figure 13). The change in percentage of social expenditure will decrease while ruler is having more councillors. And it starts to turn negative (-0.1 percentage points) when it pass from 54.5% to 63.6% (from 6 to 7 councillors)

TABLE 13
OLS, pooled data, fixed and random effects of percentage of councillors belonging to the winning party on percentage of social expenditure

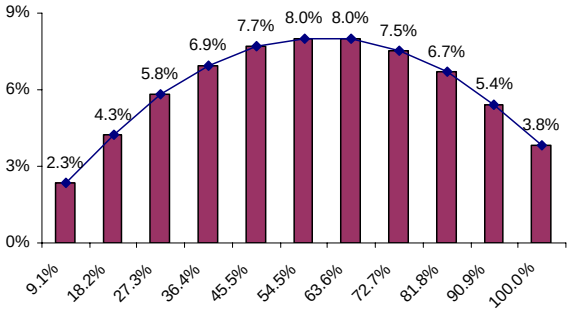
	OLS	Pooled OLS	Fixed Effects	Random Effects
Percentage of councillors (winning party)	***0.1924***	***0.3025*****	***0.2017***	***0.2780****
	(0.2576)	***(0.1470)***	***(0.1872)***	***(0.1420)***
Percentage of councillors square (winning party)	***-0.155***	***-0.2533****	***-0.2021***	***-0.2400****
	(0.2592)	***(0.1356)***	***(0.1756)***	***(0.1312)***
Hausman test p value			0.604	
F test for interest variables p value	0.668	0.115	0.511	0.152
Observations	281	586	310	310
R-squared	0.1012	0.0722	0.0167	0.0709

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

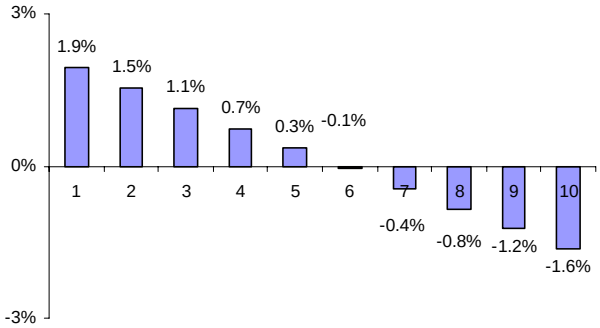
Note: The rest of the variables are included in the regresion but they are not showed here to keep simple the explanation, however the complete table is in the Annex

FIGURE 12
Percentage of municipal council from winning party and its effects on percentage of social expenditure



[30] According to the population size municipal councils can be 5, 7, 9 or 11. However, this results are similar for each kind of municipality.

FIGURE 13
Changes in percentage of municipal council from winning party and its effects on changes in percentage of social expenditure



Those results confirm the fact that political behaviour of the ruler party will change according to the power that has in municipal council, and those aspects seems to interact with political culture that exists in municipality.

5.6.3 The effects of changes in gender composition in municipal council over changes in social expenditure

Regarding women participation in municipal council, a change in 10 percentage points in the participation of women in municipal council will lead to a change in 0.7 percentages points in percentage of social expenditure. This result is highly significant and Hausman test recommends the use of Random Effects models to estimate this effect.

TABLE 14
Percentage of women in municipal council on percentage of social expenditure

	OLS	Pooled OLS	Fixed Effects	Random Effects
Percentage of councillors (women)	***0.0393***	***0.0904*****	***0.0419***	***0.0779*****
	(0.0663)	***(0.0392)***	***(0.0479)***	***(0.0377)***
Hausman test p value			0.3714	
Observations	281	586	310	310
R-squared	0.0996	0.0735	0.0145	0.0716

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Note: The rest of the variables are included in the regresion but they are not showed here to keep simple the explanation, however the complete table is in the Annex

Since men and women have different preferences because they face different costs and constraints for running in elections (Chattophadyay and Duflo, 2004), is logically to assume that more women in municipalities will move priorities towards aspects that women care about. This prediction works in the same way that Median Voter Model. Besides, in municipal council the average preferences will be pro-male, first because men dominate participation

in municipal councils, but also because the powerful groups (political parties, interest groups, groups that can do lobby) are in general dominated by men. Therefore, the increase in participation of women in municipal councils would change preferences towards more pro-female ones, and these would affect priorities in municipalities towards more prioritization of social expenditure.

6 CONCLUSIONS

Since the last years, political party and gender composition has changed in municipal councils in Bolivia, which leads to changes in preferences about the priorities in social expenditures that each municipality has.. Although political parties still concentrate the majority of the councillors in the country, the participation of citizen and indigenous political groups in elections changed the political composition of municipal councils. As result of the elections held in 2000, for the first time in political party history in Bolivia, citizens and indigenous political groups obtained 23% of the total amount of councillors of the country. Besides this, the three political parties that owned majority in 1999, as result of the elections in 2004, lost many of their representatives, whilst a political party that until then didn't played such an important role at municipal level as in 1999 it just obtained 5% of the councillors, while in 2004 it obtained 25% of the representatives.

Moreover, the gender participation in municipal councils has increased since the implementation of the gender quota system in 1997. Therefore, more women have been elected in municipalities (18.8%).

In average, in Bolivia the political fragmentation did not change in municipalities, considering the last two political terms, and most of these municipalities are working in conditions of relatively political equilibrium. In both terms (2000-2004 and 2005-2007) the majority of municipalities (70%) had three or four political parties within the municipal council. This guaranteed a relatively political competition in municipalities. However, the rest 30% of municipalities have either low level of competition (one or two political groups are in the council) or to much fragmentation (five or seven political groups). These features did not vary among the last two terms of government.

Additionally, political fragmentation in municipalities does increases the probabilities of applying censorship vote (recall procedure) against Mayors and such a process harm management capacity to provide social services, so that per capita social expenditure decreases. The more political fragmentation, the more probabilities to change Mayors as a more fragmented council has the presence of different preferences interacting, which turns more difficult to reach the agreements. When a Mayor is changed the per capita social expenditure decreases US$. 3.9. However the decrease is smoothed when it is taken into account the simultaneity problems between per capita social expenditure and censorship vote so that the effect of applying that procedure is US$. 1.5, it is less than a half of the first calculated effect. This implies that: a lower per capita expenditure causes more probability to change a Mayor, but also when a Mayor is changed the per capita social expenditure is lower. If this effect is not included, the final results are biased.

In addition, changes in the political party composition in municipal councils do change the priorities in relation to social expenditure. The change of the power that the Ruler party has in the municipal council (percentage of councillors) leads to increase or decrease the percentage of social expenditure in a certain municipality.

A weak Ruler party shows more fragmentation of the political council and leads to a smaller percentage of social expenditure due to the incentives among politicians in order to behave opportunistically. More concentration of power hold in the Ruler's party hands but with some degree of political competition, gives the serenity for concentrating in municipal management and this is reflected in more percentage of social expenditure. However, too much power concentrated by the Ruler party, increases the influence of factional groups and the incentives to shift expenditure towards targeted groups; as a consequence, the percentage of social expenditure decreases.

Which means that if the percentage of ruling party changes from 9.1% to 18.2% (from 1 to 2 councillors out of 11) the percentage of social expenditure will change from 2.3% to 4.3% i.e. it will increase 1.9 percentage points. The optimal point for supporting social expenditure is reached when power of the Ruler is 54.5% (6 councillors out of 11), since additional councillor will decrease the percentage of social expenditure. In the extreme case that the Ruler party holds all the power which means that it has no political competition, the social expenditure will be smaller in 4.2 percentage points in relation to the maximun point.

Finally, more women are now in municipal councils changing the priorities in municipalities by relocating resources towards social expenditure. Even if they face discrimination and other problems, participation of women in municipal council has increased and it affects priorities in municipalities towards more social expenditure. Having an additional woman in the municipal council will cause a change in percentage of social expenditure about 0.7 percentage points. Although the effect seems to be small it is related to the kind of role that women have in municipal councils, they are more likely to be present in human development committee but not in the economical, legal one where the big decisions are taken, However, in spite of those problems the evidence shows that women do change preferences in allocation of resources in municipalities in Bolivia.

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ANNEX I
Persona communications from August 8th to 22nd, 2007. La Paz - Bolivia

Name	Institution	Position	Date
Iván Arias	Consultant	Municipal expert, former Vice Minister of Popular Participation Vice Ministry	August 9th, 2007. La Paz - Bolivia
Adalberto Ticona	AMDEPAZ		August 10th, 2007. La Paz - Bolivia
Diego Ayo	Consultant	Municipal expert, former Vice Minister of Popular Participation Vice Ministry	August 20th, 2007. La Paz - Bolivia
Roque Chavarría	Santa Cruz prefecture	Member of municipal support department	August 21th, 2007. La Paz - Bolivia
Norma Durán	AMDECRUZ	Executive Director of AMDECRUZ	August 21th, 2007. La Paz - Bolivia
Rubens Barbery	CEPAD	Director	August 22th, 2007. La Paz - Bolivia

ANNEX II-a
OLS, IV, pooled data, fixed and random effects of censorship vote on per capita social expenditure (2000-2004)

	OLS	OLS IV	Pooled Data	Pooled Data IV	Fixed Effects	Fixed Effects IV	Random Effects	Random Effects IV
Poverty level	-7.7727	-1.5015	-3.5434	0.7876			-3.5434	0.7876
	(14.7947)	(18.0078)	(9.9908)	(10.8496)			(9.9908)	(10.8496)
Income inequality	6.1828	5.5978	5.5481	4.5548			5.5481	4.5548
	(16.5020)	(19.5464)	(11.0217)	(11.8992)			(11.0217)	(11.8992)
Ethnic fragmentation	-4.9126	-11.1444	-5.9064	-8.8968**			-5.9064	-8.8968**
	(5.8797)	(7.0519)	(3.9541)	(4.2883)			(3.9541)	(4.2883)
Censorship vote	***-4.7249****	***-3.5495***	***-3.9272****	***-1.5682****	***-3.7828***	***-1.0007***	***-3.9272****	***-1.5682****
	(1.8208)	***(2.6373)***	***(1.6315)***	***(0.7727)***	***(2.5863)***	***(0.8327)***	***(1.6315)***	***(0.7727)***
Transfers PP	-0.5777	2.5506	-0.2324	0.7017	-1.2318	-0.5119	-0.2324	0.7017
	(4.0873)	(5.0135)	(2.6427)	(2.7992)	(4.1991)	(4.2691)	(2.6427)	(2.7992)
Own revenues	2.0408**	0.9863	1.1051*	0.8521	1.5113	1.2984	1.1051*	0.8521
	(1.0078)	(1.3645)	(0.5786)	(0.6145)	(1.7068)	(1.7313)	(0.5786)	(0.6145)
Transfers HIPC	19.8612**	16.1336	7.1792*	6.9301*	10.1279	9.5573	7.1792*	6.9301*
	(9.9789)	(11.4472)	(3.7057)	(3.8621)	(7.7042)	(7.7492)	(3.7057)	(3.8621)
City =1	28.1056***	28.8102***	20.2164***	20.7009***			20.2164***	20.7009***
	(7.0378)	(7.7062)	(4.6353)	(4.7864)			(4.6353)	(4.7864)
Population between	-0.2589	-0.2988	0.1399	-0.0742			0.1399	-0.0742
	(2.1264)	(2.8184)	(1.3835)	(1.5023)			(1.3835)	(1.5023)
Population between	1.0494	2.562	2.0592	2.3249			2.0592	2.3249
	(2.4605)	(3.3877)	(1.5312)	(1.6495)			(1.5312)	(1.6495)
Population < 50000	-0.8671	-0.6277	-0.2644	-0.5459			-0.2644	-0.5459
	(4.8201)	(5.5621)	(3.1593)	(3.3556)			(3.1593)	(3.3556)
La Paz =1	-8.3485***	-7.3438**	-7.7385***	-7.1064***			-7.7385***	-7.1064***
	(3.1050)	(3.5540)	(2.0368)	(2.1515)			(2.0368)	(2.1515)
Cbba =1	-0.8571	0.543	-3.7415*	-3.5070*			-3.7415*	-3.5070*
	(3.0230)	(3.6169)	(1.9821)	(2.0512)			(1.9821)	(2.0512)
Oruro =1	-5.0996	-3.9862	-7.7474***	-7.7248***			-7.7474***	-7.7248***
	(3.5781)	(4.2298)	(2.3764)	(2.5257)			(2.3764)	(2.5257)
Potosi =1	-5.1659	-2.8658	-5.8119***	-4.7338*			-5.8119***	-4.7338*
	(3.2045)	(4.4655)	(2.2175)	(2.5551)			(2.2175)	(2.5551)
Tarija =1	9.9445**	12.7815**	3.3491	4.3164			3.3491	4.3164
	(5.0310)	(5.6100)	(3.2940)	(3.4162)			(3.2940)	(3.4162)
Santa Cruz =1	0.4532	0.8754	-2.3434	-2.2339			-2.3434	-2.2339
	(3.0662)	(3.4379)	(2.0413)	(2.1371)			(2.0413)	(2.1371)
Beni =1	0.4259	2.5756	1.5779	3.2804			1.5779	3.2804
	(4.7930)	(5.7975)	(3.1604)	(3.4331)			(3.1604)	(3.4331)
Pando =1	6.6324	-13.2335	4.0285	-0.0699			4.0285	-0.0699
	(6.2357)	(18.1399)	(3.8410)	(4.6841)			(3.8410)	(4.6841)
Transfers education	-11.7228	-14.8894	-5.3486	-6.6912	-9.688	-9.8353	-5.3486	-6.6912
	(8.2850)	(9.7146)	(5.1379)	(5.4436)	(13.3851)	(13.4051)	(5.1379)	(5.4436)
year 2004=1			5.6859***	3.7137**	5.7519***	3.9246**	5.6859***	3.7137**
			(1.1840)	(1.4593)	(1.4129)	(1.5271)	(1.1840)	(1.4593)
Constant	33.9643***	28.3679**	26.4328***	24.9719***	20.0085***	20.2321***	26.4328***	24.9719***
	(10.9431)	(13.1683)	(7.2635)	(7.8646)	(3.5129)	(3.7261)	(7.2635)	(7.8646)
Hausman test p value					0.980	0.335		
Durwin-Wu-Hausman p value		0.280		0.094		0.357		0.093
Observations	282	225	530	473	305	248	305	248
R-squared	0.2431	0.2306	0.2118	0.218	0.1357	0.1329		

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

ANNEX II-b
OLS, IV percentage of councillors belonging to the winning party on percentage of social expenditure (2004-2005)

	OLS (1)	OLS (2)	OLS (3)	OLS (4)
Poverty level	-0.2316*	-0.1288	-0.0564	-0.0963
	(0.1395)	(0.1516)	(0.1596)	(0.1773)
Income inequality	0.1979	0.1233	0.0811	0.1024
	(0.1367)	(0.1403)	(0.1435)	(0.1970)
Ethnic fragmentation	0.0411	0.0383	0.0445	-0.0132
	(0.0529)	(0.0538)	(0.0542)	(0.0692)
Percentage of councillors (winning party)	***0.3822****	***0.4254****	***0.4350****	***0.1924***
	(0.2311)	***(0.2350)***	***(0.2369)***	***(0.2576)***
Percentage of councillors square (winning party)	***-0.4059****	***-0.4260****	***-0.4191****	***-0.155***
	(0.2217)	***(0.2238)***	***(0.2268)***	***(0.2592)***
Transfers PP		0.0091	0.0087	0.0926*
		(0.0247)	(0.0253)	(0.0483)
Own revenues		-0.0009	-0.0002	-0.0022
		(0.0108)	(0.0109)	(0.0119)
Transfers HIPC		-0.033	-0.0797	0.0844
		(0.0909)	(0.0956)	(0.1176)
City =1			0.0112	0.1411*
			(0.0736)	(0.0832)
Population between 5000 and 15000			0.0102	0.0007
			(0.0234)	(0.0249)
Population between 15000 and 50000			0.0345	0.0176
			(0.0265)	(0.0291)
Population < 50000			0.0729	0.0616
			(0.0542)	(0.0572)
La Paz =1				0.0248
				(0.0367)
Cbba =1				0.0351
				(0.0350)
Oruro =1				-0.0144
				(0.0420)
Potosi =1				0.0026
				(0.0378)
Tarija =1				-0.0125
				(0.0598)
Santa Cruz =1				0.0815**
				(0.0361)
Beni =1				0.0649
				(0.0571)
Pando =1				-0.0296
				(0.0788)
Transfers education				-0.2374**
				(0.0982)
Constant	0.5551***	0.4790***	0.4069***	0.5186***
	(0.1192)	(0.1291)	(0.1368)	(0.1523)
F test for interest variables p value	0.168	0.164	0.180	0.668
Observations	309	282	282	281
R-squared	0.0262	0.0321	0.0423	0.1012

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

ANNEX II-c
OLS, IV, pooled data, fixed and random effects percentage of councillors belonging to the winning party on percentage of social expenditure (2004-2005)

	OLS	Pooled OLS	Fixed Effects	Random Effects
Poverty level	-0.0963	-0.1108		-0.1174
	(0.1773)	(0.1116)		(0.1245)
Income inequality	0.1024	0.0923		0.0991
	(0.1970)	(0.1235)		(0.1370)
Ethnic fragmentation	-0.0132	-0.0204		-0.0219
	(0.0692)	(0.0431)		(0.0482)
Percentage of councillors (winning party)	***0.1924***	***0.3025*****	***0.2017***	***0.2780****
	(0.2576)	***(0.1470)***	***(0.1872)***	***(0.1420)***
Percentage of councillors square (winning party)	***-0.155***	***-0.2533****	***-0.2021***	***-0.2400****
	(0.2592)	***(0.1356)***	***(0.1756)***	***(0.1312)***
Transfers PP	0.0926*	0.0194	0.1166	0.0217
	(0.0483)	(0.0218)	(0.1114)	(0.0219)
Own revenues	-0.0022	0.0034	0.0074	0.0028
	(0.0119)	(0.0052)	(0.0124)	(0.0053)
Transfers HIPC	0.0844	0.0705	-0.1131	0.0641
	(0.1176)	(0.0678)	(0.2572)	(0.0708)
Transfers IDH		0.034	-0.06	0.0234
		(0.0427)	(0.0636)	(0.0395)
City =1	0.1411*	0.019		0.0219
	(0.0832)	(0.0536)		(0.0587)
Population between 5000 and 15000	0.0007	0.0072		0.008
	(0.0249)	(0.0153)		(0.0169)
Population between 15000 and 50000	0.0176	0.0085		0.0099
	(0.0291)	(0.0179)		(0.0198)
Population < 50000	0.0616	0.0171		0.0208
	(0.0572)	(0.0374)		(0.0416)
La Paz =1	0.0248	-0.0033		-0.0051
	(0.0367)	(0.0228)		(0.0255)
Cbba =1	0.0351	0.0234		0.0236
	(0.0350)	(0.0225)		(0.0252)
Oruro =1	-0.0144	-0.0155		-0.0158
	(0.0420)	(0.0264)		(0.0296)
Potosi =1	0.0026	-0.0129		-0.012
	(0.0378)	(0.0239)		(0.0266)
Tarija =1	-0.0125	-0.0091		-0.0069
	(0.0598)	(0.0384)		(0.0429)
Santa Cruz =1	0.0815**	0.0563**		0.0562**
	(0.0361)	(0.0231)		(0.0260)
Beni =1	0.0649	0.0326		0.0348
	(0.0571)	(0.0359)		(0.0400)
Pando =1	-0.0296	-0.0369		-0.0315
	(0.0788)	(0.0454)		(0.0497)
Transfers education	-0.2374**	-0.0676	-0.0813	-0.0691
	(0.0982)	(0.0524)	(0.1553)	(0.0529)
Year 2004=1		0.0089	0.0047	0.0067
		(0.0116)	(0.0110)	(0.0100)
Constant	0.5186***	0.5077***	0.4391***	0.5211***
	(0.1523)	(0.0943)	(0.1638)	(0.1018)
Hausman test p value			0.604	
F test for interest variables p value	0.668	0.115	0.511	0.152
Observations	281	586	310	310
R-squared	0.1012	0.0722	0.0167	0.0709

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

ANNEX II-d
OLS, percentage of women councillors on percentage of social expenditure (2004-2005)

	OLS (1)	OLS (2)	OLS (3)	OLS (4)
Poverty level	-0.2286*	-0.1326	-0.0715	-0.1143
	(0.1380)	(0.1495)	(0.1565)	(0.1749)
Income inequality	0.2329*	0.159	0.1202	0.1225
	(0.1356)	(0.1394)	(0.1421)	(0.1943)
Ethnic fragmentation	0.0247	0.0277	0.0364	-0.0145
	(0.0521)	(0.0536)	(0.0540)	(0.0690)
Percentage of councillors (women)	***0.0595***	***0.0614***	***0.0695***	***0.0393***
	(0.0596)	***(0.0635)***	***(0.0643)***	***(0.0663)***
Transfers PP		0.012	0.0125	0.0974**
		(0.0247)	(0.0252)	(0.0485)
Own revenues		-0.0022	-0.0018	-0.0033
		(0.0108)	(0.0109)	(0.0119)
Transfers HIPC		-0.0451	-0.0914	0.086
		(0.0910)	(0.0954)	(0.1175)
City =1			0.0014	0.1377*
			(0.0742)	(0.0831)
Population between 5000 and 15000			0.017	0.0011
			(0.0229)	(0.0249)
Population between 15000 and 50000			0.0408	0.0173
			(0.0260)	(0.0292)
Population < 50000			0.0743	0.0586
			(0.0539)	(0.0569)
La Paz =1				0.0225
				(0.0366)
Cbba =1				0.0348
				(0.0349)
Oruro =1				-0.0153
				(0.0419)
Potosi =1				0.002
				(0.0377)
Tarija =1				-0.0094
				(0.0595)
Santa Cruz =1				0.0795**
				(0.0366)
Beni =1				0.0653
				(0.0576)
Pando =1				-0.0312
				(0.0735)
Transfers education				-0.2448**
				(0.0985)
Constant	0.6269***	0.5673***	0.5017***	0.5762***
	(0.1017)	(0.1116)	(0.1184)	(0.1300)
Observations	309	282	282	281
R-squared	0.0178	0.0225	0.0342	0.0996

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

ANNEX III-a
Pooled data, fixed and random effects of percentage of councillors belonging to the winning party on percentage of social expenditure (2000-2004-2005)

	Pooled OLS	Fixed Effects	Random Effects
Poverty level	0.0013		-0.0111
	(0.1023)		(0.1162)
Income inequality	0.0123		0.0138
	(0.1128)		(0.1280)
Ethnic fragmentation	-0.0252		-0.0221
	(0.0398)		(0.0454)
Percentage of councillors (winning party)	***0.2238***	***0.2433***	***0.2274***
	(0.1392)	***(0.1888)***	***(0.1412)***
Percentage of councillors square (winning party)	***-0.1734***	***-0.1882***	***-0.177***
	(0.1309)	***(0.1752)***	***(0.1324)***
Transfers PP	0.0068	0.0229	0.008
	(0.0214)	(0.0313)	(0.0219)
Own revenues	0.0032	0.0073	0.0031
	(0.0049)	(0.0100)	(0.0051)
Transfers HIPC	0.0529	0.0094	0.051
	(0.0432)	(0.0608)	(0.0412)
Transfers IDH	0.0643*	0.0325	0.0558
	(0.0387)	(0.0419)	(0.0363)
City =1	0.015		0.0148
	(0.0478)		(0.0540)
Population between 5000 and 15000	-0.0049		-0.0039
	(0.0139)		(0.0157)
Population between 15000 and 50000	0.0007		0.0017
	(0.0156)		(0.0176)
Population < 50000	-0.0249		-0.0218
	(0.0330)		(0.0375)
La Paz =1	-0.0024		-0.0043
	(0.0207)		(0.0237)
Cbba =1	0.0121		0.0109
	(0.0203)		(0.0233)
Oruro =1	-0.0490**		-0.0503*
	(0.0241)		(0.0275)
Potosi =1	0.0056		0.0042
	(0.0222)		(0.0252)
Tarija =1	-0.0646*		-0.0661*
	(0.0341)		(0.0392)
Santa Cruz =1	0.0354*		0.0343
	(0.0210)		(0.0241)
Beni =1	0.0378		0.0348
	(0.0324)		(0.0369)
Pando =1	-0.0691*		-0.0713
	(0.0397)		(0.0446)
Transfer education	-0.031	-0.0272	-0.0331
	(0.0461)	(0.0955)	(0.0478)
Year 2004=1	-0.0270*	-0.0192	-0.0258**
	(0.0139)	(0.0138)	(0.0129)
Year 2005=1	-0.0415***	-0.0290**	-0.0385***
	(0.0135)	(0.0133)	(0.0125)
Constant	0.5081***	0.4679***	0.5138***
	(0.0863)	(0.0537)	(0.0952)
Hausman test p value		0.013	
F test for interest variables p value	0.1755	0.3488	0.1834
Observations	832	311	311
R-squared	0.0638	0.0214	

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

ANNEX III-b
Pooled data, fixed and random effects of percentage of women councillors on percentage of social expenditure (2000-2004-2005)

	Pooled OLS	Fixed Effects	Random Effects
Poverty level	-0.0064		-0.0187
	(0.1016)		(0.1156)
Income inequality	0.0295		0.0316
	(0.1117)		(0.1270)
Ethnic fragmentation	-0.0267		-0.0237
	(0.0398)		(0.0453)
Percentage of councillors (women)	***0.0698****	***0.0683***	***0.0689****
	(0.0358)	***(0.0487)***	***(0.0364)***
Transfers PP	0.0062	0.0203	0.0069
	(0.0214)	(0.0312)	(0.0219)
Own revenues	0.0031	0.0086	0.0032
	(0.0048)	(0.0100)	(0.0051)
Transfers HIPC	0.0547	0.0134	0.0521
	(0.0431)	(0.0606)	(0.0412)
Transfers IDH	0.0658*	0.0387	0.0578
	(0.0386)	(0.0418)	(0.0362)
City =1	0.0074		0.0071
	(0.0479)		(0.0541)
Population between 5000 and 15000	-0.0046		-0.0035
	(0.0138)		(0.0157)
Population between 15000 and 50000	0.0013		0.0024
	(0.0156)		(0.0176)
Population < 50000	-0.0264		-0.0231
	(0.0328)		(0.0374)
La Paz =1	-0.0059		-0.0077
	(0.0207)		(0.0237)
Cbba =1	0.0117		0.0105
	(0.0201)		(0.0232)
Oruro =1	-0.0521**		-0.0537*
	(0.0240)		(0.0275)
Potosi =1	0.0017		0.0002
	(0.0221)		(0.0251)
Tarija =1	-0.0637*		-0.0650*
	(0.0340)		(0.0391)
Santa Cruz =1	0.0305		0.0295
	(0.0212)		(0.0243)
Beni =1	0.0334		0.0308
	(0.0327)		(0.0371)
Pando =1	-0.0684*		-0.0703
	(0.0386)		(0.0436)
Transfer education	-0.0294	-0.0312	-0.0307
	(0.0460)	(0.0950)	(0.0477)
Year 2004=1	-0.0266*	-0.019	-0.0254**
	(0.0139)	(0.0138)	(0.0129)
Year 2005=1	-0.0424***	-0.0302**	-0.0395***
	(0.0134)	(0.0133)	(0.0125)
Constant	0.5641***	0.5264***	0.5705***
	(0.0747)	(0.0226)	(0.0845)
Hausman test p value		0.0114	
Observations	832	311	311
R-squared	0.0642	0.0211	

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%