THE IMPACT OF FISCAL DECENTRALISATION ON ACCOUNTABILITY AND PUBLIC ENTREPRENEURSHIP: A CASE OF RURAL LOCAL GOVERNMENTS IN MEXICO

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THE IMPACT OF FISCAL DECENTRALISATION ON ACCOUNTABILITY AND PUBLIC ENTREPRENEURSHIP: A CASE OF RURAL LOCAL GOVERNMENTS IN MEXICO

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Abstract

Decentralisation, meaning the delegation of responsibilities from central to lower government levels is generally assumed to improve the delivery of local public services. The theoretical assumption is that local authorities are encouraged by decentralisation to behave in a more accountable and entrepreneurial fashion. At the same time, accountability and (public) entrepreneurship are distinct concepts and may even be considered to involve conflicting behaviours. Therefore, decentralisation outcomes may vary depending on which behavioural pattern predominates.

Previous research has focused on using large data sets to examine the impact of decentralisation on outcomes such as economic growth, disparities, poverty reduction and government performance. But there is also a need to better understand how decentralisation, and specifically fiscal decentralisation, may promote accountability and public entrepreneurship in specific settings.

To contribute to closing this gap, this dissertation examines both fiscal decentralisation policies and contemporaneous changes in political arrangements. It identifies the incentives these changes create for Mexican local authorities to behave in more accountable and entrepreneurial ways and which may lead to differences in government performance. The study focuses on rural municipalities where achieving the predicted decentralisation outcomes is highly challenging.

A mixed methods research design was used with two phases. In the first stage, the relationship between fiscal decentralization and changes in government accountability and entrepreneurship was investigated through statistical analysis based on fixed effects estimation using a sample of 505 rural municipalities. For that purpose a longitudinal dataset was developed, comprising municipal level information between the years 1990 and 2009, including indices for accountability and public entrepreneurship. Phase two
involves multiple case studies of individual municipalities that were selected based on performance.

The empirical evidence suggests that decentralisation policy has tended to work against accountability but has increased entrepreneurial behaviour in rural municipalities, highlighting the potential tension between the two. The extent to which these effects occur seems to depend on the particular fiscal arrangement. In addition, political competition seems to reinforce accountability and has an impact in entrepreneurship in a different way to the effects expected theoretically, though the effects are not as strong as with fiscal decentralisation. This study advances the public entrepreneurship literature and expands the understanding of fiscal decentralisation. Additionally, it provides suggestions for which policy arrangements are likely to promote accountability and entrepreneurial actions by public authorities.

**Keywords**: decentralisation; democracy; intergovernmental transfer; tax system; political variables; accountability; public entrepreneurship.
ABSTRACT .......................................................................................................................... 2
LIST OF TABLES .................................................................................................................. 7
LIST OF FIGURES ................................................................................................................ 8
ABBREVIATIONS ................................................................................................................ 10
ACKNOWLEDGEMENT ........................................................................................................ 11
CHAPTER 1 – INTRODUCTION .......................................................................................... 13
  1.1 BACKGROUND ................................................................................................................ 13
  1.2 RESEARCH APPROACH ................................................................................................. 16
  1.3 ORGANIZATION OF THE THESIS ............................................................................... 17
CHAPTER 2 - ON THE THEORY OF DECENTRALISATION ...................................................... 19
  2.1 THE DEFINITION OF DECENTRALISATION .................................................................. 19
  2.2 HISTORICAL EVOLUTION ............................................................................................. 23
  2.3 THEORETICAL FOUNDATIONS OF FISCAL DECENTRALISATION .................................. 29
    2.3.1 Potential benefits .................................................................................................... 30
    2.3.2 Potential dangers ................................................................................................. 35
  2.4 EMPIRICAL EVIDENCE .................................................................................................. 45
  2.5 THE MECHANISMS OF FISCAL DECENTRALISATION ..................................................... 51
  2.6 SUMMARY AND CONCLUSIONS .................................................................................. 54
CHAPTER 3 - BEHAVIOURAL APPROACHES: ACCOUNTABILITY AND PUBLIC ENTREPRENEURSHIP .............................................................. 59
  3.1 ACCOUNTABILITY ........................................................................................................... 59
    3.1.1 Accountability concept and evolution .................................................................... 60
    3.1.2 Fiscal decentralisation and Accountability .............................................................. 63
    3.1.3 The political mechanisms for accountability under fiscal decentralisation .......... 67
  3.2 PUBLIC ENTREPRENEURSHIP ..................................................................................... 68
    3.2.1 Public entrepreneurship concept and evolution ..................................................... 69
    3.2.2 Fiscal decentralisation and Public Entrepreneurship .............................................. 74
    3.2.3 The political incentives for Public Entrepreneurship under fiscal decentralisation .. 78
  3.3 THE DRIVERS OF PERFORMANCE ................................................................................. 80
  3.4 SUMMARY AND CONCLUSIONS .................................................................................... 82
CHAPTER 4 - COUNTRY CASE STUDY: RURAL LOCAL GOVERNMENTS IN MEXICO ........ 85
  4.1 MEXICAN DEMOCRACY IN CONTEXT ......................................................................... 85
  4.2 STRUCTURE OF PUBLIC ADMINISTRATION AND FINANCE IN MEXICO .................. 88
  4.3 THE 1997 REFORM- A WATERSHED FOR LOCAL GOVERNMENT INCENTIVES .......... 102
  4.4 ANTECEDENTS AND MOTIVATIONS OF MEXICAN DECENTRALISATION ................ 104
  4.5 SUMMARY .................................................................................................................... 111
CHAPTER 5 – RESEARCH METHODOLOGY ....................................................................... 112
  5.1 RESEARCH PARADIGM AND APPROACH ..................................................................... 112
  5.2 RESEARCH DESIGN AND STRATEGIES ....................................................................... 116
    5.2.1 Phase 1- Panel data analysis .................................................................................. 120
    5.2.2 Phase 2- Sub-Case Studies .................................................................................... 121
  5.3 PILOT STUDY ................................................................................................................ 125
  5.4 SUMMARY .................................................................................................................... 126
List of Tables

TABLE 2.1 DECENTRALIZATION TYPOLOGIES BY DUBOIS AND FATTORE (2009, 710).................. 20
TABLE 3.1 DEFINITIONS OF ENTREPRENEURSHIP WITHIN PUBLIC SECTOR ORGANIZATIONS .......... 72
TABLE 4.1 ALLOCATION OF GOVERNMENT RESPONSIBILITIES FOR KEY PUBLIC SERVICES ........ 90
TABLE 4.2 CROSS-TABLE OF LOCAL PUBLIC SERVICES BY FORMS OF DELIVERING THE SERVICE IN 2009.................................................................................................................. 95
TABLE 6.1 MISSING DATA AND OUTLIERS............................................................................. 138
TABLE 6.2 DESCRIPTIVE STATISTICS OF LOCAL REVENUES (IN PESOS PER CAPITA BASED ON REAL VALUES 2010) BY CATEGORY IN A SAMPLE OF RURAL MUNICIPALITIES FROM 1990 TO 2008 ................................................................................................................................. 146
TABLE 6.3 DESCRIPTIVE STATISTICS OF FINANCIAL VARIABLES USED AS INDICATORS IN THE ACCOUNTABILITY INDEX ................................................................................... 159
TABLE 6.4 ACCOUNTABILITY INDICATOR............................................................................... 161
TABLE 6.5 DESCRIPTIVE STATISTICS AND STATISTICAL SIGNIFICANCE CHANGE ACCOUNTABILITY INDEX ................................................................................................................................. 162
TABLE 6.6 DESCRIPTIVE STATISTICS OF ACCOUNTABILITY INDICATORS ............................... 166
TABLE 6.7 DESCRIPTIVE STATISTICS OF FAIR DISTRIBUTION OF RESOURCES ................. 167
TABLE 6.8 DESCRIPTIVE STATISTICS OF THE FINANCIAL VARIABLE USED AS AN INDICATOR IN THE PUBLIC ENTREPRENEURSHIP INDEX ........................................................................... 173
TABLE 6.9 PUBLIC ENTREPRENEURSHIP INDICATORS ......................................................... 174
TABLE 6.10 DESCRIPTIVE STATISTICS AND STATISTICAL SIGNIFICANCE CHANGE IN PUBLIC ENTREPRENEURSHIP INDEX ................................................................................... 175
TABLE 6.11 DESCRIPTIVE STATISTICS OF PUBLIC ENTREPRENEURSHIP INDICATORS ............ 177
TABLE 6.12 DESCRIPTIVE STATISTICS AND STATISTICAL SIGNIFICANCE OF POLITICAL COMPETITION BEFORE AND AFTER 1997 REFORM .............................................................. 180
TABLE 6.13 DESCRIPTIVE STATISTICS OF POLITICAL COMPETITION ................................ 181
TABLE 6.14 DESCRIPTIVE STATISTICS OF COVERAGE OF BASIC LOCAL PUBLIC SERVICES .... 192
TABLE 7.1 STATISTICAL ANALYSIS MODELS OF ACCOUNTABILITY .................................... 198
TABLE 7.2 STATISTICAL ANALYSIS MODELS OF PUBLIC ENTREPRENEURSHIP .................. 208
TABLE 8.1 STATISTICAL ANALYSIS MODELS OF GOVERNMENT PERFORMANCE AND ACCOUNTABILITY ................................................................................................................................. 221
TABLE 8.2 STATISTICAL ANALYSIS MODELS OF GOVERNMENT PERFORMANCE AND PUBLIC ENTREPRENEURSHIP ........................................................................................................... 226
TABLE 9.1 MODELS OF GOVERNMENT PERFORMANCE PRE AND POST-REFORM ................. 236
TABLE 10.1 DESCRIPTION OF PARTICIPANTS ......................................................................... 249
TABLE 11.1 PERFORMANCE INDICES OF SELECTED CASE STUDIES .................................... 259
TABLE 11.2 PSEUDONYMS FOR MUNICIPALITIES AND PARTICIPANTS .............................. 260
TABLE 14.1 ENTREPRENEURIAL ACTIONS’ DEFINITIONS AND DIMENSIONS ....................... 317
TABLE 14.2 ENTREPRENEURIAL ACTIONS BY TYPE OF FISCAL ARRANGEMENTS AND OPERATIONALIZED VARIABLES .................................................................................................................. 321
List of Figures

FIGURE 2.1 THEORETICAL IMPLICATIONS OF FISCAL DECENTRALISATION ............................................. 55
FIGURE 2.2 BEHAVIOURAL IMPLICATIONS OF FISCAL DECENTRALISATION ........................................ 57
FIGURE 3.1 THEORETICAL FRAMEWORK ..................................................................................................... 84
FIGURE 5.1 MIXED METHOD DESIGN MATRIX WITH MIXED METHOD RESEARCH DESIGN SHOWN IN THE
FOUR CELLS (SOURCE: JOHNSON AND ONWUEGBUZIE, 2004, 22) .......................................................... 117
FIGURE 5.2 OVERVIEW OF THE SEQUENTIAL RESEARCH MODEL FOR THIS STUDY ............................... 120
FIGURE 6.1 PERCENTAGE OF LOCAL REVENUES ACCORDING TO ORIGIN ............................................. 141
FIGURE 6.2 REVENUES BY CATEGORY IN A SAMPLE OF RURAL MUNICIPALITIES FROM 1990 TO 2008 .......... 142
FIGURE 6.3 THEORETICAL FRAMEWORK AND RESEARCH QUESTIONS ................................................... 144
FIGURE 6.4 POLITICAL COMPETITION 1990-2008 IN THE WORKING SAMPLE OF RURAL
MUNICIPALITIES ........................................................................................................................................... 179
FIGURE 6.5 NUMBER OF MUNICIPALITIES GOVERNED BY PARTY ON THE WORKING SAMPLE OF
RURAL MUNICIPALITIES FROM 1990 TO 2008 ....................................................................................... 184
FIGURE 6.6 STATE-LEVEL OPPOSITION ON A SAMPLE OF RURAL MUNICIPALITIES IN MEXICO FROM
1990 TO 2008 ............................................................................................................................................. 187
FIGURE 6.7 COVERAGE OF WATER AND SEWAGE FROM 1990 TO 2008 IN THE WORKING SAMPLE .... 191
FIGURE 7.1 RESEARCH QUESTION 1 AND 2 IN THE THEORETICAL FRAMEWORK .................................... 195
FIGURE 8.1 RESEARCH QUESTION 3 (PART 1) AND THE THEORETICAL FRAMEWORK ............................. 219
FIGURE 9.1 RESEARCH QUESTION 3 (PART 2) AND THE THEORETICAL FRAMEWORK ............................. 232
FIGURE 10.1 LOCATION OF STATES ON THE MAP OF MEXICO ................................................................. 248
FIGURE 11.1 REVENUE STRUCTURE AS A % OF TOTAL REVENUES GPT .................................................... 261
FIGURE 11.2 OWN REVENUES IN CURRENT PESOS (2010) GPT PER YEAR ............................................ 262
FIGURE 11.3 COMPETITIVE ELECTION INDEX GPT .................................................................................. 264
FIGURE 11.4 REVENUE STRUCTURE AS A % OF TOTAL REVENUES EPT .................................................. 265
FIGURE 11.5 OWN REVENUES IN CURRENT PESOS (2010) EPT ............................................................... 266
FIGURE 11.6 COMPETITIVE ELECTION INDEX EPT .................................................................................. 267
FIGURE 11.7 REVENUE STRUCTURE AS A % OF TOTAL REVENUES APT .................................................. 268
FIGURE 11.8 OWN REVENUES IN CURRENT PESOS (2010) APT ............................................................. 268
FIGURE 11.9 COMPETITIVE ELECTION INDEX APT .................................................................................. 269
FIGURE 11.10 REVENUE STRUCTURE AS A % OF TOTAL REVENUES PPT .............................................. 269
FIGURE 11.11 OWN REVENUES IN CURRENT PESOS (2010) PPT ............................................................. 270
FIGURE 11.12 COMPETITIVE ELECTION INDEX PPT .................................................................................. 271
FIGURE 11.13 REVENUE STRUCTURE AS A % OF TOTAL REVENUES AVPT ........................................... 272
FIGURE 11.14 OWN REVENUES IN CURRENT PESOS (2010) AVPT ....................................................... 272
FIGURE 11.15 COMPETITIVE ELECTION INDEX AVPT ............................................................................... 273
FIGURE 15.1 THEORETICAL FRAMEWORK RESULTS: UNCONDITIONAL FUNDS AND BEHAVIOURAL
PATTERNS .................................................................................................................................................. 340
FIGURE 15.2 THEORETICAL FRAMEWORK RESULTS: CONDITIONAL FUNDS AND BEHAVIOURAL
PATTERNS .................................................................................................................................................. 341
FIGURE 15.3 THEORETICAL FRAMEWORK RESULTS: POLITICAL COMPETITION AND BEHAVIOURAL
PATTERNS .................................................................................................................................................. 346
Figure 15.4 Theoretical framework results: Behavioural patterns and government performance ................................................................. 348
Figure 15.5 Theoretical framework results: Government performance and political competition before and after the 1997 fiscal decentralisation reform .......... 350
Abbreviations

**AVP:** Accountable Performer Town
**AvPT:** Average Performer Town
**-C:** Councillor
**CBPS:** Coverage of Basic Public Services
**CIDAC:** Centre for Research in Development
**EPT:** Entrepreneurial Performer Town
**FAISM:** Municipal Social Development Fund
**FD:** Forms of Public Service Delivery
**FDR:** Fair Distribution of Resources
**FENAMM:** National Federation of Municipalities in Mexico
**FORTAMUN:** Fund for Municipal Strengthening
**GDP:** Gross Domestic Product
**GPT:** Good Performer Town
**IIIMS:** Investment inside Municipal Seat
**INAFED:** National Institution of Federalism and Municipal Development
**INEGI:** Mexican National Institute of Statistics and Geography
**IOMS:** Investment outside Municipal Seat
**LPS:** Local Public Services
**-M:** Mayor
**NPM:** New Public Management
**PAN:** Partido Accion Nacional (National Action Party)
**PANista:** Member of PAN
**PNA:** Partido Nueva Alianza
**PPT:** Poor Performer Town
**PRD:** Partido de la Revolucion Democratica
**-PRE:** Key Political Actor with Pre-reform Experience
**PRI:** Partido Revolucionario Institucional
**PRIista:** Member of PRI
**PRONASOL:** Programa Nacional de Solidaridad (National Solidarity Programme)
**SEDESOL:** Ministry of Social Development
**SGTs:** Second Generation Theories of Fiscal Decentralisation
**SIMBAD:** Municipal System Database
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Chapter 1– Introduction

1.1 Background

In 1988 Daniel Bell wrote an article in the Washington Post with the heading – Previewing Planet Earth in 2013. In this article the following quotation stood out:

“The nation-state is becoming too small for the big problems of life and too big for the small problems of life. It is too small for the big problems because there are no effective international mechanisms to deal with such things as capital flows, commodity imbalance, the loss of jobs….It is too big for the small problems because the flow of power to a national political centre means that the centre becomes increasingly unresponsive to the variety and diversify of local needs. In short there is a mismatch of scale“

Now in 2015, this statement still resounds. But, the answer to some of Daniel Bell’s concerns in 1988 was already in the policy arena, i.e. decentralisation. Tiebout (1956) presented fiscal decentralisation as a “market-place mechanism" in the public sector that would ensure efficient provision of public goods and Oates (1972) reinforced this argument with his theorem of decentralisation based on efficiency arguments. He considers decentralised provision of public goods more efficient than centralized planning of public goods.

Decentralisation is both a popular recommendation and an important trend in today’s world. Due to theoretical reasons, a lot is expected of decentralisation; among them good government performance, economic growth, regional development, and welfare enhancement. This in turn increases our expectation in the government and in public authorities. In respect to government performance, which is the focus of this research, local authorities are expected to improve basic service delivery and thereby to enhance the standards of living for citizens.
Equally, other theorists highlight possible downsides of decentralisation; among them the weakening of central government stabilization functions; the worsening of regional redistribution due to unequal competition; and of particular importance for this study, corruption and administrative deficiencies.

There are different types of decentralisation, various ways to decentralize and varying degrees of decentralisation. This research is interested in fiscal decentralisation, without which there is not much genuine decentralisation of power. Moreover, this research focuses on local governments, particularly rural municipalities, which represent the small jurisdiction at the lowest level in the governmental architecture.

At present there is a large literature that is either theoretical or uses large data sets to examine the relationship between decentralisation and the variety of important benefits mentioned above. In contrast, this study will focus on how decentralisation might or might not achieve the expected results in government performance.

This research operationalizes two constructs reflecting the actual activity of decentralised units (in this case rural local governments) and these constructs are used to carry out statistical analysis. In this way, this research contributes to the literature both conceptually and empirically. In addition, this study also contributes to the research in decentralisation by examining, through case studies, whether the findings of the statistical analysis are consistent with what actually has happened over a period of progressive decentralisation.

This research was carried out on rural municipalities specifically. Since they are neglected in the literature, it is important to understand whether the fiscal decentralisation process did benefit them. In addition, from the methodological point of view, it is helpful to delimit this research to a homogenous group in order to comprehend what is actually taking place. In this way some factors that cannot be observed otherwise might be, to some extent, identified and isolated.
The key constructs of this research are accountability and public entrepreneurship. These constructs were selected and developed because they allow operationalizing arguments made in the theoretical literature about productive and allocative efficiency. More precisely, the theoretical framework of this study is based on the general assumption that delegation of financial resources encourages some changes in the behaviour of local authorities related to both allocative and productive efficiency and these changes, in turn, lead to better government performance.

In this research it is argued that productive and allocative efficiency changes are related to concepts of accountability and public entrepreneurship. Therefore, accountability and public entrepreneurship are mediating factors connecting decentralisation policies and outcomes, and are the main objects of direct study.

Although both accountability and public entrepreneurship are highly desirable, there are some concerns that they may be incompatible (Bellone and Geoerl, 1992; Borins, 2000; Bovens, 2010).

At the same time, this study emphasises that researchers conducting research of this kind should be aware that what they observe may be a consequence of political, rather than fiscal changes. In this sense, the theory of democracy also claims that democracy promotes better government performance not only due to the right to ballot, but also because political competition is thought to promote better behaviour of politicians if they or their party want to continue in office.

This research duly focuses on political changes as well as fiscal decentralisation. It explores the effects of political variables such as political competition, state-level opposition and political party affiliation.

Thus, in the light of demands for better understanding of how fiscal decentralisation influences performance, the following research questions seem relevant and will be addressed for rural municipalities in Mexico:
1. Has fiscal decentralisation been associated with changes in patterns of accountability and public entrepreneurship?

2. Have differences in the level of political competition had a major effect on patterns of accountability and public entrepreneurship following fiscal decentralisation?

3. To what extent is fiscal decentralisation in rural local governments associated with measurable changes in local government performance?

If there is evidence that fiscal decentralisation has a marginal influence on changes in accountability and public entrepreneurship, the following research questions also seem pertinent:

4. What are the identifiable changes affecting accountability and public entrepreneurship in rural local government?

5. In which ways has fiscal decentralisation encouraged accountability and public entrepreneurship in rural local governments?

1.2 Research approach

This research takes the form of a country case study. The case study is Mexico. Mexico has experienced mainly expenditure decentralisation. Expenditure decentralisation is a “partial fiscal decentralisation” and it is a common type of decentralisation process around the world (Borge et al, 2014). Therefore, there is scope to extend some of the findings to other similar settings.

In addition, recently Mexico has been engaged in important political transformation, which makes it a rich case study for lesson-learning.

The methodology selected is a mixed methods approach, where information will be collected in two stages; each one using a different research method. In the first stage, research questions (1), (2) and (3) will be tested empirically running different statistical models using longitudinal estimation techniques. In the
operationalization of concepts for this stage, indices for accountability and public entrepreneurship are developed and they are used for the selection of cases studies for the second stage.

In the second stage, research questions (4) and (5) will be analysed based on semi-structured interviews. As described earlier, the unit of study will be rural local governments and the focus group are local government authorities; among them mayors, councillors and key political actors in the municipalities. The municipalities selected are mostly “deviant cases” based on the indices of accountability and public entrepreneurship built for the purpose of this study. Deviant cases will benefit this research as they may broaden and confirm patterns emerging from the data.

**1.3 Organization of the thesis**

The remainder of this document is organized as follows:

Chapters 2, 3, will be a review of the literature and to identify gaps in our understanding of fiscal decentralisation; the concepts of accountability, public entrepreneurship; and political incentives of fiscal decentralisation. Based on this discussion, the theoretical framework used in this study will be built and justified.

Chapter 4 gives a rich description of the process of fiscal decentralisation and the political landscape of the country case study, Mexico.

Chapter 5 gives a description and justification of the methodology and research design selected for the study, namely mixed research design.

Chapters 6, 7, 8 and 9 describe the research methods employed in the first stage which involves longitudinal statistical analyses and it presents the discussion of the empirical findings. In addition, it summarizes the findings from
the quantitative analysis in the first stage of this study and connects them to the research question to be addressed in the second stage.

Chapters 10, 11, 12, 13 and 14 describe the qualitative research methods employed in the second stage, which involves interviews with local authorities in selected rural local governments with deviant performance in accountability and public entrepreneurship. In addition, they present a discussion of the empirical findings.

Chapter 15 integrates and summarises the findings for the research questions, presents areas of contribution in relation to new knowledge and policy application, discusses the limitations of the study and, lastly, outlines areas for future research.
Chapter 2 - On the theory of decentralisation

This chapter introduces the general theory of decentralisation so as to frame the discussion of fiscal decentralisation in particular. It first defines decentralisation and discusses its different typologies. Subsequently, it presents a brief historical development of the decentralisation theory highlighting the importance of its policy and academic relevance.

2.1 The definition of decentralisation

There are various definitions of decentralisation and some of them are more frequently cited than others. An often-cited definition is Litvack and Seddon (1999, 2). They define decentralisation as:

“The transfer of authority and responsibility for public functions from the central government to subordinate or quasi-independent government organizations or the private sector—covers a broad range of concepts”

As broadly said in the previous quote, it is highly important to recognize that such transfer of authority and the types of responsibilities take a number of forms and therefore, contain different elements of analysis. Fiscal decentralisation, which is the central attention of this research, is only one form of decentralisation. Table 2.1 presents several examples of typologies. But, in light of the particular interest of this research- fiscal decentralisation- the next paragraphs analyse in detail only four selected typologies from this table.
First, a well-known and useful classification is Rondinelli et al. (1983, 14). This classification differentiates between delegation, de-concentration, devolution and privatisation. They define **delegation** as the transfer of authority and responsibilities for the provision of public goods and services to semi-autonomous organizations such as public enterprises, which are indirectly controlled by the central government. **De-concentration** is the shift of
responsibilities from central government officials working in capital cities to those working in regions or provinces but under central supervision. In this case, sub-national officials are appointed by the centre and are responsible to higher authorities. **Devolution**, on the other hand, is the transfer of authority and responsibilities to lower government levels such as municipalities, which enjoy a full or high degree of discretion over most local affairs. Finally, **privatization** is the transfer of government functions such as public service provision and social protection to voluntary organizations or private companies.

This typology makes the case for different degrees of administrative autonomy by differentiating types of sectorial arrangements. In particular, fiscal decentralisation is often referred to as devolution- in this case of taxing and spending power- because it represents high levels of delegation of control. Despite this, full discretion is not usually passed down.

Manor (1999) presents a similar classification as Rondinelli et al. (1983) adding default **decentralization and fiscal decentralisation**. Default decentralisation occurs when non-governmental organizations and civil societies- such as voluntary organizations- undertake public functions themselves due to central government’s failure to deal with such. In those cases, the resources are obtained by non-governmental organizations. This category corresponds to a type of decentralisation that may be considered unintended because it emerges out of the government’s failure to undertake the task rather than as a means of achieving efficiency (Manor, 1995, 4). In contrast, the remaining categories fall into a type of decentralisation considered intentional. In addition, Manor acknowledges the importance of delegating financial resources and therefore, includes **fiscal decentralisation** as a form of decentralisation and makes a clear differentiation between delegating administrative responsibilities (de-concentration) and, delegating financial resources (fiscal decentralisation). Moreover, Manor emphasises the importance of democratization so as to achieve actual decentralisation on both de-concentrated agencies, such as executive agencies in UK that carry out executive tasks discharged by the central government, and devolved agencies, such as local governments in Mexico, which are lawfully autonomous and with legal personality. He quotes a World Bank report (1995, pp. 2) that “the decentralisation of resources and
responsibilities without... (democratizing) political reforms would have been incomplete and, probably, not conducive to socially effective results".¹

Litvack et al. (1998, 6) and Falleti (2005) classifies decentralisation into Administrative, Political and Fiscal. **Administrative decentralisation** comprises the delegation of administrative and social services duties. **Political decentralisation** is the delegation of political authority and electoral capacity to local authorities and **fiscal decentralisation** refers to the transfer of policies related to raising revenue to achieve fiscal autonomy. However, Falleti (2005) views fiscal decentralisation only in terms of control over revenues and categorises expenditures under the administrative category whereas Litvack et al. (1998) includes both, revenues and expenditures under the label of fiscal decentralisation (Dubois and Fattore, 2009, 712). Hence, in contrast to Falleti (2005), Litvack et al.’s (1998) definition implies that it is important to study fiscal arrangements that result in higher expenditure assignments even if revenues are not collected locally and have some degree of restriction by other government agents.

There are important insights drawn from these typologies in terms of analysis. First, the degree of autonomy varies depending on the type of agent under study. For this research in particular, the unit of analysis, local governments, are expected to have a degree of autonomy. Second, fiscal decentralisation is bound up with decentralisation in other domains. A successful decentralisation requires some fiscal and some administrative decentralisation because: a) fiscal decentralisation supplies the financial resources and administrative decentralisation supplies the bureaucratic resources that are necessary for policy implementation or b) administrative decentralisation entails more responsibilities that need to be accompanied by financial resources. In either case, political decentralisation is relevant. As noted in the previous discussion, democratization appears as an important element for a successful policy implementation. These types of decentralisation may occur simultaneously or

This study is interested particularly in fiscal decentralisation. Throughout the remainder of this study, I will look at reforms which involve fiscal decentralisation as defined by Litvack et al. (as in table 2.1). In other words, I will analyse the decentralisation reform in the case study, Mexico, by looking at the delegation of not only decision-making (i.e. administrative decentralisation) in revenue collection through taxes, but also decentralisation of revenues through conditional and unconditional funds which increases the expenditure decisions that can be made by local governments.

Following the lesson learnt in the previous discussion, this study intends to take into consideration elements of all decentralisation domains that are important for analysis of, specifically, fiscal decentralisation. Next, I will present a brief historical evolution of the decentralisation trend in general before turning to a new chapter that presents the theoretical foundation of fiscal decentralisation in particular.

### 2.2 Historical evolution

The move from centralisation toward the empowering of local governments is considered by Rodriguez-Pose and Sandall (2008, 54) as a ‘reversal of the nation and empire-building projects’. They consider that decentralisation has challenged ‘…constitutions, ideologies and institutions which, in some cases, had been relatively stable for centuries’.

By 2000, the World Bank stated that 95% of democratic countries have decentralised to some degree as well as other non-democratic countries such as China (Rodriguez-Pose and Sandall, 2008, 54). Since then several dozens of developing and developed countries have embarked on new or extending decentralisation reforms (Faguet, 2012 cited in Faguet, 2015, 2).
In the same fashion, Lessmann (2009) found that between 1982 and 2000, in most OECD countries, the degree of decentralisation had increased, with exception of the United Kingdom. His findings suggest that Switzerland, Canada and the United States have decentralised revenue (including the taxes that local governments can determine autonomously) and expenditure - what he calls competitive fiscal federalism. In contrast, Germany has strongly decentralised revenue and expenditure but has maintained central control over tax rate. He refers to this degree of decentralisation as co-operative federal systems.

Similar analysis was previously carried out by Liu (2007). His findings suggest that Mexico is a highly decentralised country similarly to Austria, Bolivia, Brazil, Germany, India, Italy, Korea, Mongolia, Norway, Poland, Russia, Spain and Taiwan. These countries possess high levels of revenues and expenditures which are assigned based on fiscal decentralisation indicators at the country level. However, decentralised institutions lack taxing power, taxing revenues and borrowing power.

Therefore, it can be argued that one of the most common types of decentralisation is “partial fiscal decentralisation” where local governments rely heavily on transfers or funds from central governments for their provision of basic public service duties. Borge et al. (2014, 36) reports that in the studies carried out by Shah (2004) in a large sample of developing countries, 42% of sub national revenue (local and provincial) came from transfers. In another study by Shah and Shah (2006) they showed that in a sample of ten lower-income countries, 51% of their total revenue comes from central government transfers. In contrast, OECD countries have a smaller transfer share of 34%.

Thus, the case study used in this research, Mexico, presents a common case of fiscal decentralisation and therefore, some findings of this research can contribute to the understanding of the decentralisation process in other countries. Chapter 6 will present the reader with a more detailed discussion of the Mexican decentralisation reforms.
Turning now to the historical evolution of fiscal decentralisation, the trend towards decentralisation can be traced to the 1970s, at the time when the failure of top-down and state driven economy to achieve growth and equity led to the promotion of market economy and welfare state reduction (Agrawal and Ostrom, 1999 and Rodriguez-Pose and Bwire, 2004 cited in Rodriguez-Pose and Sandall, 2008, 68).

Many factors account for the trend of decentralisation. Tanzi (1995, 296) considers that the breakdown of socialism in Europe and Asia is one of these factors. This breakdown required new fiscal arrangements and the passing down of responsibilities to sub-national governments due to diversity of ethnic, culture and economic composition especially in countries such as Russia. In Canada, the demand of some provinces for independence led toward decentralization; in China, the necessity of control over national public revenues led to fiscal reorganization. Similarly, major adjustments on revenues and expenditures were required during the economic crisis of the 1980’s in Argentina, Brazil, Nigeria and India. These countries were often limited by legal arrangements on policy choice.

In addition, Tanzi (1995, 296) adds as a factor the development of the European Union in the 1990’s. The EU members had to decide the extent of economic power delegated to the central Union on issues previously managed by the member states. Functions such as income distribution and stabilization policies had to be re-assigned among state members and the European Union. In this case, the redistribution of assignments is from member states to a higher level (central union). This is different to the type of decentralisation discussed previously and it might be considered centralisation of functions. However, it ultimately represents a transfer of responsibilities and resources.

Tanzi (1995) also explains that at the political level, in the 1980’s and 1990’s there was a shift to conservative attitudes. The conservatives became suspicious of central government management on distribution of income, reduction of poverty and unemployment. Therefore, they promoted a smaller central government and favoured open market economy as well as the
empowering of lower government levels. However, this conservative political trend did not always result in a smaller government. An example is the United Kingdom during Margaret Thatcher’s government. Margaret Thatcher’s conservative government advocated a smaller government and ended up with a highly centralised administration. That is the Thatcher’s administration paradox. However, she strongly advocated a specific form of decentralisation, privatisation.

Last but not least, an important factor accounting for the trend of decentralisation is the support of decentralisation policies by the World Bank and other international organizations.

This historical overview leads to the question of the underlying motivation of decentralisation. Rodriguez-Pose and Sandall (2008), in their study of the evolution of decentralization, identify identity, democracy and economic growth as the principal discourses or arguments. The rhetoric behind the identity discourse is that the differences in identities, lifestyle and modes of interaction of the minorities can be preserved under decentralisation (Knight, 1982 cited in Rodriguez-Pose and Sandall, 2008, 56) while under centralization, homogeneity weakens the legitimacy of national or regional movements to the point of losing their distinctiveness (Massey, 1999 cited in Rodriguez-Pose and Sandall, 2008, 56). Hence, in territories where there is a highly diversified culture, decentralisation can satisfy preferences better than a centralised government. It is also a tactic to maintain territories and groups with distinctive cultural heritage together.

The democratic discourse has two perceptions depending on the political stand. The neoliberal theorists, on the right side of the political spectrum, consider decentralisation a solution to the problems caused by central government intervention. On the other hand, the left wing perceives decentralisation as a tool for empowering the poor left behind under centralised power (Rodriguez-Pose and Sandall, 2008). Both political strands consider decentralisation as ‘anticorruption’ and as an improver of accountability (Shah, 2000 and Bardhan and Mookherjee, 2005 cited in Rodriguez-Pose and Sandall, 2008, 56). The
mechanisms which are posited in these arguments relating to anti-corruption and accountability will be discussed in more detail in Chapter 3.

Finally, the economic argument suggests that through decentralisation, territories involved in the globalisation game will benefit by becoming more adaptable to economic changes. By having freedom and flexibility, regional authorities may develop more appropriate projects leading to better economic results in the regions (MacLeod and Goodwin, 1999 cited in Rodriguez-Pose and Sandall, 2008, 58). This argument is heavily associated with the neoliberal economic theory which depends on concepts of flexibility, competitiveness and innovation (Johnson, 2003 cited in Rodriguez-Pose and Sandall, 2008, 58). These arguments imply a more proactive role by local authorities in term of innovation, risk taking and proactiveness, all of which are aspects of the general concept “public entrepreneurship” which will be discussed in detail later.

Rodriguez-Pose and Sandall (2008) also contend that the economic argument seems to be the current leading argument of decentralisation. Even though identity seems to be important in countries such as Spain with the Basque and Catalan states, and the United Kingdom with Wales and Scotland, the identity argument for devolution has not been consistent over time and in all settings. For instance, in Spain, the first argument in favour of decentralisation for the Basque governments was identity due to the differences in religiosity. However, it gradually shifted toward the economic argument. Eusko and Jauraritza (2004) presents an analysis of a policy document called “Economic Reasons for a New Institutional Framework” (cited in Rodriguez-Pose and Sandall, 2008, 60). In this document, the Basque government argues that the Basque regions did not grow economically due to the limited autonomy granted by the Spanish 1978 Constitution which prevented the regions from adapting to modern economic challenges. This was the argument put forward for more devolution, not identity.

In the United Kingdom, the Nationalists movements in Scotland and Wales, (as well as other less familiar movements such as Cornwall, Wessex and North Devon) often campaign for devolution arguing differences in cultural identity (see Bennett’s study of 1985 about regional movements in Britain). But,
Rodriguez-Pose and Sandall (2008) argues that even with its remarkable differences in identity, the Scottish advocacy for devolution since the late 1960’s and early 1970’s appears to be highly motivated by economic factors mainly the North Sea oil rather than identity. This is also observed in the recent debate for the 2014 referendum on Scottish independence where the economic reason predominates. Rodriguez-Pose and Sandall (2008) also claim that in Wales, the shift of relevance from identity to economic arguments also appeared but not until the late 1990’s. Bradbury (2002) presents as evidence Labour’s 1997 White Paper. In this document, identity was not mentioned at all (as cited by Rodriguez-Pose and Sandall, 2008, 62). Hence, Rodriguez-Pose and Sandall (2008) warn not to exaggerate the importance of identity and point out that the economic argument predominates nowadays.

In addition to decentralisation’s motivation, which the previous discussion suggests to be volatile in some cases, the country's cultural and social background are relevant factors as to analyse the success or failure of policy implementation in general, and fiscal decentralisation in particular. This aspect was investigated by Putnam (1993). Similar to the aim of this research, Putnam analyses the performance of decentralisation policies but he studies the reasons behind uneven performance in the north and south of Italy in the wake of decentralisation policies introduced in 1970. He argues that ‘civic community’ is the most important performance indicator, and it is, in fact, embedded in the historical background of the regions. By civic community, he means the civic engagement, the political equity, solidarity, trust, tolerance and the number of associations of all sorts present in the community.\(^2\) The north, which is the most developed economic area of Italy, presents a higher indicator of civic community while the south exhibited the opposite. The difference in civic community between the North and the South- and therefore, the difference in the decentralisation results- is that the South historically presents high vertical social and political relations owing to its historical autocratic governments. In contrast, central and north Italy became engaged in issues of self-governing

\(^2\) Civic community is related to social capital. The elements of civic community, namely civic engagement, political equity, solidarity, trust and tolerance and network of civic participation are the products of social capital. Social capital’s elements are trust, norms of reciprocity and networks of civic participation. It is suggested that norms come from networks and trust comes from both norms and networks.
earlier and, therefore, nowadays it presents a more horizontal collaboration in public affairs.

Similar findings on the importance of history for policy outcomes were found by North et al. (2000). They studied the reason for uneven economic development of North America and Latin American countries. Although North and Latin America share similar experiences on constitutional reforms, abundant resources and similar international opportunities, North et al. argue that their different development dates from their colonial legacy. While the United States benefits from a decentralised parliamentary English patrimony, Latin-American countries inherited a centralised and authoritarian system from late medieval Spain. In Putnam’s words regarding North’s evaluation, North America engages with civic traditions while Latino America is highly vertically dependent. Although this analysis is not based on issues of decentralisation, it draws an important insight in regard to the relevance of historical context for policy outcomes, and therefore, a call to be considered for analysis.

In the previous discussion, we have seen that decentralisation is an important international trend and most countries have decentralised to some extent or at some point. In addition, it was discussed how decentralisation is driven by factors such as identity, democratic and economic arguments and how the countries’ historical and cultural background play a role in the success of the policy. In the following section, arguments associated with fiscal decentralisation in particular will be looked at in depth, which are built up from the decentralisation theory in general. The arguments are largely discussed in the context of economic arguments as opposed to identity and democratic discourses.

2.3 Theoretical foundations of fiscal decentralisation

In this section the theoretical arguments in favour of and against fiscal decentralisation will be presented. The discussion of these theoretical arguments is divided into allocative and productive efficiency to help to frame the theoretical framework for this study. In addition, it presents the evolution of
the decentralisation theory from the classical theories to the so called Second Generation Theories (SGT).

2.3.1 Potential benefits

From a normative perspective, there are two economic arguments in favour of fiscal decentralisation. These arguments are based on efficiency grounds and it is often argued that fiscal decentralisation promotes both allocative and productive efficiency. Allocative efficiency refers to the mix of goods and services that matches the goods and services desired by the local citizens and productive efficiency refers to the production of public goods at the lowest possible cost (i.e. minimising the cost of producing the goods and services that people want). The next section outlines the theoretical arguments that have been advanced for and against fiscal decentralisation in both forms of efficiency.

A. Allocative efficiency

There are two major arguments in favour of the proposition that fiscal decentralisation advances allocative efficiency:

*Greater allocative efficiency because of responsiveness to preferences*

In the classical literature of fiscal decentralisation, Tiebout (1956)’s famous study of mobility where the *model of local public good provision* was presented, considers that ‘by voting with their feet’, citizens select the community that best matches their preferences. He suggests that citizens will select the community based on the public services a local government provides and their own preferences; this increases the efficiency of resource allocation. This is considered by Tiebout (1956, 388) as a pricing mechanism in the public sector.

‘Just as the consumer may be visualised as walking to a private market place to buy his goods, the prices of which are set, we place him in the
position of walking to a community where the prices (taxes) of community services are set. Both trips take the consumer to market. There is no way in which the consumer can avoid revealing his preferences in a spatial economy. Spatial mobility provides the local public-goods counterpart to the private market’s shopping trip’

Under this classical approach, Oates (1972)’s decentralisation theorem also suggests that the most suitable level of government for the provision of public services is the one with comparative advantage in the provision of public services and in the satisfaction of diversified preferences. In this sense, central government should be left with functions relative to macroeconomic stabilization and income distribution, owing to the fiscal and financial constraints inherited by local governments. Under a centralised system, the provision of public goods and services is more likely to be uniform raising concerns about responsiveness to preferences. Oates (1972) claims that the efficient level of output in the local governments is likely to differ across jurisdictions. Two communities differ in terms of likes, hence, have different demands. Therefore, if public services are not delivered in accordance with local demands, the welfare of the citizens is damaged.

This classical literature claims that fiscal decentralisation improves allocative efficiency in the public sector due to trade-off between preference matching and externalities. However, the theory is based on two important assumptions: first, each level of government is benevolent and second, the provision of public goods under centralization is uniform.

Greater allocative efficiency because it is easier to collect information

Another relevant argument embedded in the classical literature is that central government has more disadvantages in acquiring local information regarding preferences (Oates, 1972; 1999). More decentralised countries may have better knowledge of their citizens’ preferences either because they have access to information that is denied to the central government or because they are closer to their citizens. Hence, decentralisation will benefit public service provision
because local governments benefit from first-hand information. In the development literature, better information is considered a tool for implementing better development policies. By being well informed of the weaknesses and strengths of the city, officials can provide better policies than the central government (Lessmann 2009).

The benefits of better collection of information, according to Hayek (1945), go beyond the problem of information transmission. He considers that the problem with information is its effective use. Small relevant changes should be faced immediately and some information cannot be captured in statistics. Hence, given the rapid changes in society in particular circumstances of time and place, decision-making is better left to the people who are familiar with the setting. In this way, they can work out better the rapid changes and solve problems more efficiently by knowing the resources available to them. Hence, in a manner, local governments may use the information more efficiently and better information favours the fiscal decentralisation arguments.

**Greater allocative efficiency because of inefficiencies in centralised decision making**

Evolving from the classical approach, a second stream of theories have emerged in the last decades. The SGTs also claim fiscal decentralisation improves allocative efficiency but instead of attributing the efficiency gains to the matching preferences, information and externalities, the theories hinge on the inefficient outcome of the centralised decision-making process (Oates, 2005, 4).

Oates (2005) recognizes that the classical theory assumptions are not entirely realistic because voters and officials have their own objectives and respond differently to institutional incentives. Hence, the SGTs relax the decentralisation’s assumptions of benevolent behaviour and policy uniformity.

Lockwood (2002) explains that the problem of inefficiencies is not policy uniformity, but inefficient choice of projects in the legislative bargaining process.
Thus, inefficiencies of centralisation are essentially because of the outcome of the bargaining process that in equilibrium is driven by cost-minimisation. This most likely leads to the selection of the cheapest provision of public goods instead of selecting provision of public goods based on the highest benefit. Thus, in balance, centralisation provides a level of public good below the efficient level (when externalities are small) or in other words, decentralisation, in some cases, is more desirable.

Similarly, Besley and Coate (2003) also advances that decentralisation is more efficient than centralisation but their argument is based on the strategic choice of delegates by voters. They argue that heterogeneity creates conflicts of interest between citizens of different jurisdictions because voters would try to balance the public good provision towards their regions and this may affect the selection and behaviour of representatives, leading to poor legislative performance in public policies.

B. Productive efficiency

There are two major arguments in the association between fiscal decentralisation and productive efficiency:

*Greater productive efficiency because of competition*

One of the arguments of the classical theory of decentralization is that it promotes horizontal competition (Tiebout, 1956, Tanzi, 1995). By delegating more authority to lower government levels with regard to revenue and expenditure, local governments are able to compete with each other in order to seek better economic performance and therefore, improve public service provision. Productive efficiency is achieved by promoting competition for investment and revenues as well as by allocating expenditures in a more efficient way than other jurisdictions.

Another mechanism to improve productive efficiency is through the *leviathan hypothesis* proposed by Brennan and Buchanan (1980). They argue that the
central government does not promote welfare and tends to monopolize the control over economic resources. The introduction of fiscal decentralisation creates competition under the assumption of households and firms' mobility. This is thought to curb expansionary tendencies of government because it splits up the central government into smaller jurisdictions avoiding inefficiencies.

Competition also improves regional development. Autonomy is assumed to provide local officials with instruments to compete for investment by applying attractive policies to businesses. Undeveloped regions have more advantages in a competitive environment because they can apply attractive investment conditions such as flexible labour markets and fewer welfare states. This was the case in the United States after the Civil War that left behind the Southern part of America. To overcome this, the South promoted flexible labour policies and other economic development policies. This improved the economy of the South (Qian and Weingast 1997). One other example is Ireland, which given its location's disadvantage decided to levy much lower taxes than other European regions resulting in rapid economic growth in the 1990s (Lessman, 2009, 4).

In addition, Jin and Zou (2002) state that fiscal decentralisation downsizes central government and spreads power away from the centre and thus, decreases territorial imbalance (citied in Ezcurra and Pascual 2008, 1188). The relationship between downsized central government and territorial balance is based on the argument that a centralised system may favour politically important regions creating an unequal distribution of public resources. Hence, less central government power means more influence for undeveloped regions. This weakens favouritism, creates fair competition among regions and results in less territorial imbalance.

**Greater productive efficiency because of experimentation**

Another main argument from the classical literature is that decentralisation can promote ‘experimentation’. According to Tanzi (1995), successful local policies can be learnt and transferred into other municipalities. However, policy transfer is not as easy as it seems. Transferred policies do not always lead to successful
results because of differences in economic development and institutional capabilities among local governments. Hence, careful adaptation is essential. But the core argument of experimentation is that productive efficiency is enhanced by correcting, improving and establishing new methods of service delivery and, in the context of fiscal decentralisation, revenue generation.

2.3.2 Potential dangers

Decentralisation is not without criticism. The counter-arguments, as the theoretical benefits, have not been entirely proved and they are not exclusive to one form of efficiency, allocative or productive efficiency. The next section details these counter-arguments according to both forms of efficiency as in the previous section.

A. Allocative efficiency

Citizens’ preferences are not the drivers of public service allocation, but local priorities

In the often-cited article “On the dangers of decentralization”, Prud’homme (1995, 208) states that the model of fiscal federalism assumes that the main differences among local governments is their preferences or tastes. However, in reality communities are different from each other due to household income or, more specifically, potential tax base. He argues that the problem for local authorities in developing countries is not about revealing preferences, but satisfying ‘basic needs’, which are mostly known. Therefore, the potential gains from matching preferences are not large.

The local services are not drivers for mobility, but other factors

The argument that citizens move from one jurisdiction to another in order to receive the public services they prefer does not consider ‘switching costs’. Switching costs is the cost of moving out from one city to another leaving
behind friends and family (Oates 1972). This argument puts in doubt the mechanisms (mobility and competition) used under decentralisation to promote allocative and productive efficiency. Under decentralisation, mobility is expected to enhance allocative efficiency by matching citizen’s preferences with the range of public services delivered by the local government.

Similarly, mobility expects to improve productive efficiency based on the assumption of a competitive environment. Mobility is assumed to open alternatives for citizens to compare and judge local government performance. However, if preferences are not the drivers of mobility, then, mobility may not be a relevant pricing mechanism. The substantial effect of mobility may be outstripped by the switching costs. Consequently, by relying on mobility, there is a risk of under or over provision of public services which damage allocative efficiency.

Some recent research on migration factors from the US suggests that property tax burden and sales tax burden increase the migration rate. This relationship is not significant for income tax. The explanation is that state personal income tax in the United State is only a small portion of the Federal income tax; therefore, individual behaviour is not highly affected. In contrast, local tax and sale taxes represent a large portion of the State and Local Government taxes. This leads to higher immigration rate among states (Chen, 2005 and Gius, 2011).

Local governments are more prone to corruption and administrative drawbacks

Prud’homme (1995) and Tanzi (1995) state that local bureaucracies are often characterised as poorly motivated, unqualified and unresponsive staff. The first two adjectives are explained by Prud’homme (1995) by comparing central and local career opportunities. He states that a central government attracts more qualified people than local governments because central government offers better professional career and promotion. In this regard, Murphy et al. (1991) (cited by Tanzi, 1995, 302) argue that talented individuals are likely to choose a profession with better opportunities to advance in the long run.
Nevertheless, the educational standard of the country might play a major role. In a country with a high educational standard, local governments are more likely to have professional employees than in countries where the standard is low. For instance, Tanzi (1995, 302) states that subnational governments in Germany and Scandinavian countries are likely to have employees who are as competent as employees at the national level.

Following the same argument, Prud’homme (1995) suggests that in the case of poor motivation and poor qualification, local bureaucrats are more prone to corruption. Under these circumstances, the problem of the principal-agent relationship is more apparent because even if the principal (mayors) want to satisfy the citizens’ preferences, a mayor still needs to persuade the local officials (the agent) to support the bill.

Nonetheless, there is not conclusive evidence that poor qualifications measured as a level of education are associated with corruption. Research about corruption shows different perspectives at the macro and micro level of analysis in terms of qualification. At the macro level, some evidence suggests that education is highly correlated to less corruption. It means that most corrupt countries have less social capital stock (Svensson, 2005). However, other studies at the micro level or at the individual level-as in Gatti et al. (2003)- do not find a correlation between corruption and education. However, their evidence suggests that wealthier individuals are more prone to corruption.

More specifically for this research, an investigation of the decentralisation process carried out in Bolivia by Faguet (1997) suggests that decentralised local governments and bureaucrats seem to be more honest than the central government officials. This behaviour is more evident in small rural municipalities where the level of education is expected to be lower. The reasons, he argues, are incentives and co-operation. Local bureaucrats have incentives to perform better and honestly because their relatives, friends and family are directly benefited- or affected- by their behaviour. Moreover, in rural municipalities it is easy to “wear the same shoes”, therefore, co-operation is facilitated.
Hence, Faguet (1997) points out that while central government can reach better productive efficiency in public services in the presence of economies of scale, local governments might be better on allocative efficiency. If local bureaucrats are fully accountable to local officials, they have a professional incentive to perform honestly. Central bureaucrats might lack such local incentives because their constituencies are broad and diverse.

This argument opposes Tanzi’s (1995, 301) view that local governments may be more prone to corruption because of a contiguity factor. Contiguity means that a close relationship is developed by local employees because they have known each other all their lives. Consequently, decisions might favour certain individuals or groups and public resources might be diverted to them. However, he acknowledges that the opposite can also be true.

Another issue is administrative capability. Tanzi (1995) states that local governments, mainly in developing countries, suffer more from administrative flaws in accounting and budgeting, which are important when allocating resources. For instance, in the 2009 survey of local governments in Mexico, 778 out of the total number of 2456 local authorities claimed that one of the main financial issues faced by the municipality was related to administrative capacity, including human resources and training. Other issues involved municipal economic limitations and intergovernmental transfers issues. The consequence of poor finance administration is that it might restrict efficiency on resource allocation and it can potentially affect the collection of revenues.

B. Productive efficiency

*Centralisation generates higher productive efficiency due to economies of scale and externalities*

There are certain characteristics of public goods and services which distinguish them from private ones. The Economic theory suggests that in a capitalist system, due to market failure, some goods might not be supplied by the private sector in the same way as private goods. These are called 'public goods' in the
public finance literature. Some of their characteristics are: first, non-rivalry which means that they cannot exclude citizens from consuming them, or one person’s consumption of the goods does not reduce the amount available to others. As a consequence, public goods are more prone to suffer from free-riders. Second, non-excludability means that there is no way of preventing the consumption of these goods by people that do not pay. The cost of public goods based on consumption is difficult to assign and there are positive or negative spill-over effects that may not be taken into account in the private sector. These characteristics have two implications:

First, the presence of externalities and economies of scale imply that central government can supply public goods more efficiently because of the high level of cost-saving through uniform provision (Oates, 1972, 1999). Oates, however, claims that few local public services demonstrate economies of scale. On the other hand, a decentralised local government is considered as an efficient supplier because of closeness to the recipients. Opponents consider that local governments may have the incentive to under-provide collective goods. The reasons being that the level of revenue required for the provision of certain public goods is high and there are positive externalities spread outside their jurisdictions which are either not considered - or politically considered- when taking decisions regarding public service provision (Oates, 1999). As a result, productivity is damaged.

Second, the word ‘public’ in public goods does not necessarily mean “State” provision. Since its creation, the Bloomington School (Aligica and Boettke, 2009) opposed the argument that a centralised organization was the problem solver to the metropolitan chaos of public service provision. As a result, its members developed the theory of public economy. They argue that public is not a synonym for government but collectiveness. They added as a characteristic of collective goods, co-production. Co-production means that production and consumption cannot be separated (for instance, the educational product is influenced by the effort of the student as users of educational services). Based on the last condition, associations of individuals can ensure the provision of collective goods. They call these associations, ‘collective consumption units’.
The collective consumption units can solve the problem of provision and, consequently, negative externalities. However, “collective consumption units” do not necessarily deal with production. In this case, they argue that provision and production can be separated. This gives the scope for different institutional arrangements where the private sector interacts. These institutional arrangements mean more decentralised decision-making. They also argue that concepts of market discipline (industry and entrepreneurship) can be adapted to collective goods, for instance, competition among producers’ and citizens’ voice, as a ballot box, rather than exiting, as in ‘voting with their feet’.

*Unequal competition worsens regional redistribution*

As re-distributor, the government can change the allocation of income, wealth or other indicators with the aim of balancing the inequalities among regions as well as individuals. In this regard, central government is widely considered more efficient.\(^3\) The reason being that in the case of a local government or even a state government having freedom to tax, (with freedom to impose their tax rate), then tax payers have the option to move out from one jurisdiction to another to take advantage of lower tax rates. This disadvantage is stronger on local governments but it applies to both state and local levels (Kee, 2003). This disadvantage, however, can be seen from another angle. It may enable people to discover and express their preferences about their preferred combination of taxes and quantity/quality of public services as discussed earlier.

Another challenge for local governments is tax competition. High tax rates drive capital away and reduce the local tax base; therefore, local governments may be reluctant to tax at a higher rate and this results in under-provision of public services. In case of co-operation among communities, the setting of a common rate may not have any fiscal effect according to the fiscal decentralisation rationale (Brueckner, 2004).

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\(^3\) It is argued that local government engages on re-distribution policies when it works on health, welfare and education (expenditure side) and imposition of tax law, for instance ‘exceptions’ or ‘exemptions’ (revenue side). Hence the degree of intervention through redistribution policy depends on the decentralization degree in terms of autonomy and decision-making. Moreover, it is important to note that local governments can be easily influenced by central government via intergovernmental transfers. See more on Bahl et al. (2002) States and Local government choices in fiscal redistribution. *National Tax Journal*, 55 (4) 723-742.
The weakness of fiscal decentralization as a means of redistribution is well-explained by Prud'homme (1995, 19). He points out that it is a:

“vicious circle… richer jurisdictions will have larger tax base (whatever the tax base chosen). Their tax rates will be either equal to the tax rate of the less rich jurisdiction or lower. In the first case, they will have more tax income and therefore provide more local public services. In the second case, they will offer the same services with lower tax rates. In both cases, these jurisdictions will be more attractive to households and enterprises…” Hence, equity among jurisdictions may even deteriorate under decentralisation. However, the assignment of major taxes is important because it defines the financial power of any government level. Thus, assignment of low burden taxes to local governments also provokes disparities”.

Prud'homme (1995) considers that a central government promotes regional redistribution by allocating resources from richer to poorer regions. This is supported by other scholars claiming that in a decentralised environment, developed local governments with better administrative and economic situation are likely to benefit (Rodriguez-Pose and Ezcurra, 2010; Martínez-Vázquez and McNab, 2003). Developed cities are more attractive to mobile factors and they have larger tax base because of larger economic activities. The economic activities, in turn, increase the collection of revenues (Lessmann, 2009). Then, developing cities are left behind and become weak competitors for attracting capital, foreign direct investment and also skilled employees. As a consequence, the country ends up with large regional disparities. The relationship between fiscal decentralisation and regional inequalities has been largely studied and it presents more conclusive arguments of potential negative effects in developing countries. Empirical studies seem to show that decentralisation is harmful for developing countries and inconclusive for the developed world when the US, for instance, presents diverse results. The use of different methodologies adds to these contrasting findings. It seems that case
studies tend to be more pessimistic, while cross country analysis more optimistic for developed countries (see Section 2.4 for more details).

**Weakening of central government stabilisation function**

In the classical literature of fiscal decentralisation, attention was devoted to the assignment of tax responsibilities due to concerns of economic distortion. The stabilisation function of government is how the government intervenes in the overall economic activity through fiscal and spending policies. In broad economic terms, changing the burden of taxation has a direct impact on aggregate demand.\(^4\) Hence, a fall in the burden should increase aggregate demand. It also affects competitive conditions among individual markets and industries; people’s patterns of work and saving; and industries’ investment and expansion. Central government is generally in charge of stabilisation policies. This implies the necessity of significant taxing power.

Oates (1999) points out that provincial, state and local governments lack monetary and exchange rate control mechanisms and Prud'homme (1995) warns that central government scope for macroeconomic intervention can be damaged by fiscal decentralisation because macroeconomic instruments, such as monetary and fiscal policy, require significant financial power to manipulate the overall demand through taxes and expenditures. If this power is already committed to decentralised agents, taxes cannot be easily increased and expenditure reduced. Prud'homme (1995, 21) explains it as follows:

> “Consider a country in which total government spending represent 30% of GDP. Assume that the central government can, for stabilization purposes, increase or decrease its expenditures by 10%...Then, in a decentralised country with local government accounting for 60% of total government spending, the central government will be able to increase or decrease total demand by about 1.2%. In a centralised country, with local

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\(^4\) The use of counter-factual policies is challenged by the theory on Real-business cycle by Prescott (1986). This theory considers that government policies do not have an impact on the overall economy and attributes economic growth to the rise, above average, of productivity, called Total Factor Productivity. This theory actually suggests negative impact on economic growth when using counter-cyclical policies. Real-business cycle theory, however, has not been proved and approved completely by economists.
government accounting for 10% of total government spending, the central government margin of action will represent 2.7% of GDP. The difference between 1.2% and 2.7% may well be the difference between an ineffective macroeconomic policy and an effective one”.

Thus, a high level of decentralisation might weaken central government power to implement effective macroeconomic policies. An example is the United Kingdom during Margaret Thatcher’s government. While central government was trying to reduce public expenditure, local governments were increasing them, frustrating the central government effort. As a measure for curbing local government expenditures, a tax poll was imposed (Perlof, 1985) (cited in Prud’homme, 22). The consequences are well-known.

**Fiscal decentralisation may promote negative fiscal incentives**

While in the classical literature on fiscal decentralisation scholars focused on the “tax assignment problem”, the SGTs put more emphasis on fiscal performance and fiscal incentives (Oates, 2005, 361).

In the classical literature, the recognition that poor tax assignment could lead to vertical and horizontal imbalance motivated classical scholars to address the issue of equalizing, lump-sum grants transferred from the central government to lower government levels as a means to avoid tax migration patterns and assist the poorer regions (Oates, 2005, 352). However, in the presence of those sharing mechanisms, other kinds of problems are created. The SGTs address these issues.

Fiscal effort may be damaged. Raich (2003) defines fiscal effort as ‘the own-source revenue that local treasury collects’. He explains in a rational model that a rise in transfers may reduce the tax effort due to ‘fiscal laziness’ because of political and administrative cost. It means that the local government might collect fewer revenues from local taxes and might prefer to rely on central government funds. There are two reasons to advance this argument. First, it is politically painful to put pressure on the collection of taxes, and second, it is
expensive to force collection and compliance and the financial benefit is not as significant compared with the revenues obtained via transfers. Argentina has been cited as a case of fiscal perversity by Prud'homme (1995, 22). In 1986, provincial expenditure increased rapidly but revenues dropped from 5.6% to 5% of GDP. Central government financed provincial levels through transfers and borrowing. However, this led to a large central government deficit in the end.

Raich’s (2003) research of Mexican municipalities with the case study of Puebla State found partial support for the theory of ‘fiscal laziness’ in the fiscal effort of 217 municipalities with data from 1993 to 2000. He points out that small municipalities tend to diminish fiscal effort while bigger and more developed municipalities do not.

Another problem is the so called ‘flypaper effect’. The flypaper effect is the explanation of why local governments increase total expenditure without increasing tax collection. The theory suggests that money sticks where it hits like a fly to flypaper or that government grants increase local expenditures more than an equivalent dollar through tax collection. Melo (2002) shows the presence of the flypaper effect on the regional and local government in Colombia. The results show that the effects differ depending on fiscal structure, autonomy to collect taxes and manage resources. In other words, when there is a high dependency on central government transfers, the flypaper effect is also high, specifically, when the transfers account for more than 50% of total revenues. The opposite is observed when regional and local governments depend on taxes rather than transfers. Another interesting finding in Melo’s (2002) study is that a reduction in per capita transfer seems to lead to a drop in public spending when the main source of revenue is taxes. In contrast, sub-national governments tend to cover the reduction of transfer by using other sources.

In addition, fiscal decentralisation may promote bailout incentives. Rodden (2002) investigated the effects of fiscal and political institution in the incentives of subnational government to ask for bailout from the federal government. Rodden (2002) argues that poor fiscal discipline is not entirely driven by
transfer-dependency. Instead he suggests that specific fiscal arrangements play an important role. On the one hand, long term balanced budgets seems to persist (if either) if any of the following hold: the centre imposes borrowing restrictions; sub-national governments have both own tax revenues and borrowing autonomy; borrowing is based on competitive capital markets (Rodden and Eskeland, 2003, 438-450) or if there is oversight by higher government levels (Rodden, and Eskeland, 2003, 450-455). Conversely, a large deficit is more prone to occur in sub-national units that are highly dependent on intergovernmental transfers and have freedom to borrow (Rodden, 2002); where distributions of responsibilities are unclear; where subnational governments are responsible for the provision of national goods; or where there are weak or fragmented political institutions (parties) (Rodden and Eskeland, 2003, 447-448). In addition to fiscal arrangements, there are political incentives related to the credibility of central government with respect to bailouts. Rodden (2006) explains that some rich subnational governments (e.g. states in a federal system) may think that they are too big to fail (asymmetric jurisdiction size) or interregional bargains may lead state officials to have high expectations for bailout because of distributive politics and legislative representation.

### 2.4 Empirical evidence

The potential benefits of decentralisation suggest that fiscal decentralisation might have a positive influence on economic growth, regional disparities, and government performance. Some empirical studies have attempted to prove whether the potential benefits of decentralisation have empirical foundations or whether the dangers are more plausible. However, many of the theories are difficult to operationalize and some of them are highly contradictory. Furthermore, empirical evidence in regard to government performance is actually quite thin compared to the research of other potential benefits. The following section presents some empirical findings on the topic.
1. Fiscal decentralisation and economic growth

The empirical evidence suggests that fiscal decentralisation does not have positive results on economic growth in developing countries and it is inconclusive regarding whether it is negative or non-associated for the developed world. In the United States, some research using country case-studies have found a positive association between fiscal decentralisation and economic growth at the state level (Akai and Sakat, 2002) and for metropolitan (Stansel, 2005; Hammond and Tosun, 2009). Hammond and Tosun found that the economic impact is not revealed on non-metropolitan cities. In China, Lin and Liu (2000) found positive effects in economic growth at provincial level, and in Russia, Desai et al. (2005) also found a positive association in sub federal units. Thießen (2003) in a cross-country comparison for developed countries found that decentralization is positive until it reaches a peak and turns negative. This result was also found by Lim (2005) for developing and developed countries.

Other empirical research has found contrasting results. Zhang and Zou (1998), Zhang and Zou (2001) and Jin and Zou (2005) found a negative relationship between decentralisation and economic growth at the province level in China. Similar findings were presented Xie et al. (1999) for the three levels of governments in the United States. In cross-country research, Woller and Phillips (1998) and Davoodi and Zou (1998) found negative effects on economic growth for developing countries but non-relation for developed countries. Other researchers did not find a correlation between decentralisation and economic growth (or statistically insignificant effect). Thornton (2007), Baskaran and Feld (2013) and Hammond and Tosun (2009) did not find an association in OECD countries neither Xie et al. (1999) in the United States who, in fact, suggested that further decentralization may even be detrimental. Equally, one of the often-cited studies regarding macroeconomic impacts, Fukasaku and DeMello (1998), is not optimistic about the impact of fiscal decentralisation in developing countries (but is more so in developed OECD countries), arguing that it generates fiscal and monetary imbalances that impede economic growth. The reason is the weakening of the fiscal position of the central government. Thus,
with regard to macroeconomic impacts, there is not enough evidence to prove either effect. Hence, decentralisation is not the magic solution for promoting economic growth. Others pre-requisites, such as the previous level of development, seem to play a major role.

2. Fiscal decentralisation and regional disparity

The relationship between fiscal decentralisation and regional inequalities presents more conclusive arguments of potential negative effects in developing countries. Empirical studies seem to show that decentralisation is harmful for developing countries and inconclusive for the developed world. Research using a case study approach such as Silva (2005) for the Philippines; Bagchi (2003) for India; Bonet (2006) for Colombia; Hill (2008) for Indonesia; Pike and Tomaney (2009) for the United Kingdom; Warner and Pratt (2005) for the USA; and West and Wong (2005), Tsui (1993), Dayal-Gulati and Husain (2000), Kanbur and Zhang (2005) and Qiao et al. (2008) for China found a positive correlation between fiscal decentralisation and regional inequalities. Hence, more decentralization is correlated with larger regional disparities. A negative correlation is presented by Calamai (2009) for Italy. In cross-country research, for developed countries, Ezcurra and Pascual (2008), Gil et al. (2004), Rodriguez-Pose and Ezcurra (2010), and Lessmann (2009) show a negative correlation while this is the opposite for the developing world (Rodriguez-Pose and Ezcurra 2010). Rodriguez-Pose and Gill (2004) in an study of China, India, Mexico, Spain, US and Brazil found that fiscal decentralization rises inequalities in all the mentioned countries except Brazil. Shankar and Shah (2001) found that it is more likely for a negative correlation to be found in Federal countries than in unitary.

3. Fiscal decentralisation and government performance

The way to assess government performance varies greatly because it has evolved alongside public administration doctrines. In the 1970’s, “good administration” was based only on the idea of traditional “military bureaucratic ideas” or Weberian style bureaucracy. The emphasis was on hierarchies and
elimination of duplication and overlap. Later, with the development of New Institutional Economics, the administrative reforms shift emphasis to user choice, transparency and incentive structure (Hood, 1991, 5). This was followed by a wave of support for business type management indoctrinated by the New Public Management (NPM). NPM is citizen-centred and advocates more decentralised structures. In addition to the public administration doctrines, there has recently been a shift from government to governance and similar to the NPM, governance is a move away from centralized hierarchies but, in this case, the delegation of authority moves towards civic society and citizens.

Hence, the empirical literature of fiscal decentralisation presents variation in regard to the delimitation and definition of government performance. For instance, some studies have focused on demonstrating whether decentralisation is only associated with citizens’ welfare which is a sign of good performance. These studies test the preference-matching hypothesis. For instance, Strumpf and Oberholzer-Gee (1999) explain preferences heterogeneity in the United States over the period 1934-1970. Their research was based on the selection of liquor regulation policy by individual States. The States were left with the decision to retain decision making on regulation or decentralizing it to local governments. Hence, questioning the reason of such a decision, and considering an association with preference heterogeneity, Strumpf and Oberholzer-Gee (1999) concluded that there is a strong association in the sense that States with more heterogeneous preference were more prone to decentralize decision making. Azfar et al. (1999), in an study of provincial and local government in Uganda and Philippines, questioned whether citizens differ on preferences between and among countries. They evaluated whether public officials were aware of their constituents’ preferences. The study was performed by surveying both citizens and officials. The results were a significant variation in preferences between countries at the municipal level in the Philippines but not in Uganda. In terms of matching preferences, they did not find consistency. They found awareness of the local governments in regard to preferences, but the research also showed that the resources and procedures constrained them from being responsive. Another case study that empirically demonstrates links between fiscal decentralization and citizens’
welfare in Bolivia is Faguet (1997). Faguet explains that the pattern of investment in social services and human capital changed significantly after the fiscal decentralization reform of 1994. He found that investment in eight different sectors (education, water and sanitation, agriculture, transport, urban development and communication, health and energy) changed significantly after fiscal decentralization reform, and these changes were strongly and positively related to objective indicators of needs. Oates’ preference matching hypothesis seems relatively well supported and the studies show that local governments, who are closer to the citizens, are more aware of citizens’ needs. Nonetheless, this does not prove that awareness of needs is materialized in the policy process.

Other investigations focus on the role of fiscal decentralisation to combat corruption or use the wider concept of governance which includes different dimensions. Huther and Shah (1998) assess the relationship between fiscal decentralisation and quality of governance of 80 countries. The governance index is composed of several dimensions including citizens’ voice and exit (citizens’ participation); government orientation; social development and economic management. The findings suggest that only the dimensions of citizen’s participation and government orientation were statistically positively correlated to quality of governance. DeMello and Barenstein (2001) studied the relationship between fiscal decentralisation and governance of 78 countries. He found similar findings as Huther and Shah. Fiscal decentralisation is associated with different dimensions of governance such as less corruption, rule of law, voice and accountability, political instability and quality of bureaucracy. His findings suggest that the highest the share in total subnational revenues, the stronger the correlation.

Fisman and Gatti (2002a), Gurgur and Shah (2005) and Arikan (2004), Altunbas and Thornton (2012), Ivanyna and Shah (2011) and Padovano et al. (2011) found that fiscal decentralisation is correlated with lower levels of corruption. Fisman and Gatti highlight the importance of the origin of a country’s legal system (for instance: English Common Law; French Commercial Code; German Commercial Code, etc.). Gurgur and Shah claim that the effects are stronger in
Unitary than in Federal countries and argue that corruption is caused by lack of service-orientation in the public sector, weak democratic institutions, colonial past, deficient internal control and centralised decision-making.

Enikolopov and Zhuravskava (2007) test the theory that the results of fiscal decentralization depend on the level of the countries' political centralization. They found that the fiscal decentralization combined with strong national parties significantly improves the quality of government and public goods provision (as well as economic growth). Fan et al. (2009) found that fiscal decentralisation reduces corruption but this depends on the number of government tiers and more government tiers increase corruption. Kyriacou and Roca-Sagales (2011) found that fiscal decentralization in OECD countries has a positive impact on government quality. However, this positive effect is reduced in the presence of regional elections and multi-tier government structures. Adam et al. (2014) found a reverse U-shaped relationship between government efficiency in providing health and education services and fiscal decentralization.

An interesting paper is Treisman (2002) in which Treisman challenged Fisman and Gatti’s study (2002a). Treisman uses similar data than Fisman and Gatti but includes eight different measures of corruption. Treisman found that in countries with more tiers of government, the ones with strong legislative upper house and smaller local jurisdictions are associated with higher perceived corruption. Treisman points out that once religion (share of Protestants in the population) is controlled for, the relationship between fiscal decentralisation and corruption is no longer significant. This highlights the sensitivity of adding different measures and controlled variables to this methodological approach.

The previous discussion is not an exhaustive review and this research is delimited to the study of the relationship between fiscal decentralisation and government performance. Therefore, it is beyond the scope of this research to prove major economic relationships (economic growth and regional disparities). Nevertheless, the revision of the empirical literature presents meaningful insights of unattended issues and methodological considerations.
The revision of this literature shows that, in particular, the findings on government performance are inconclusive and, the use of different methodology and measurements yields contrasting results. In addition, most studies have focused on testing fiscal decentralisation and the expected outcomes such as government performance at the macro/country wide-level. There is a gap in the literature in regard to the mediating changes fiscal decentralisation is assumed to encourage. These mediating changes are accountability and public entrepreneurship. Each behavioural pattern might be more related to one form of efficiency, allocative or productive efficiency and therefore, the impact on the outcomes may differ.

In addition, the empirical literature covers mostly fiscal decentralisation and allocative efficiency and there are fewer studies looking at productive efficiency (Barankay and Lackwood, 2007). The reason for this is that productive efficiency is particularly difficult to separate and quantify.

2.5 The mechanisms of fiscal decentralisation

In this section the types and characteristics of fiscal decentralisation mechanisms that this research intends to evaluate will be outlined and explained.

As noted in the above discussion under the title dangers of fiscal decentralisation particularly productive efficiency arguments, devolving significant taxing power to local governments is not generally advised due to fear of weakening central government actions in macroeconomic policies, but also because, particularly for undeveloped areas, there is a danger that competition may worsen redistribution.

Taxing power is a mechanism used to materialize the theoretical virtues of fiscal decentralisation, but it is not the only one. Indeed, taxing power is the mechanism that ticks key requirements for a successful (theoretical)
decentralisation process aiming at fiscal incentives; namely, financial autonomy, discretion, and a sense of financial responsibility.

However, given the “dangers” it may cause and in order to fill the gap between revenues and expenditures created due to poor decentralisation of taxing power, most countries have adapted sharing mechanisms or intergovernmental transfers. The decentralisation of expenditure with lack of taxing power, taxing revenue and borrowing power, is a type of decentralisation close to what Lessmann (2009) refers to as the co-operative federal system.

Fiscal transfers become relevant as a way of avoiding vertical and horizontal government disparities. Vertical imbalance is created when expenditure responsibilities at lower government levels do not match their revenue raising power. Horizontal imbalance means disparities on collection among different government units giving their public service responsibilities.

Norregaard (1997) considers that intergovernmental transfers enhance budgetary action of local governments and, in some cases, the fiscal arrangements might drive fiscal incentives. For instance, he claims that if the assignment of revenues is based on tax-benefit considerations, incentives are created.

Therefore, an increase in intergovernmental transfer is also a mechanism of decentralised fiscal responsibilities in the sense that it delegates expenditure responsibilities and it is likely to be a mechanism driving fiscal incentives. It should be noted that sharing mechanisms can be formulated in many different ways. For the purpose of this study (rural local governments), I will refer to two broad categories.

*Unconditional funds* are a set of revenue sharing funds assigned to lower government levels without labelled or controlled expenditures. Unconditional grants are created to deal with regional inequity (horizontal imbalance) when they are calculated considering economic differences. The important aspect of
unconditional funds is that local governments receive higher revenues and local authorities are granted with control in allocation of resources or high discretion.

In contrast, conditional funds are revenue sharing with tied expenditure assignments. They are created in order to promote national standards by conditioning the funding to federal expenditure priorities. In this case local governments are granted with expenditure and redistribution power but they enjoy less discretion than under unconditional funds. There are different types of conditional funds and each type presents different levels of discretion. In this research, two types of conditional fund will be referred to because of their specific and separate relevance to the Mexican context: mandatory conditional funds and extraordinary conditional funds.

**Mandatory conditional funds** are earmarked funds regularly and lawfully distributed among lower government levels. They do delegate some degree of discretion but to a lesser extent than unconditional funds. This type of funds is assigned to broad expenditure categories. On the other hand, **extraordinary conditional funds** are discretionary funds for specific expenditures, which are not regular or repeated year after year. They are typically heavily regulated and delegate less discretion in allocation of resources than mandatory conditional funds. They are nonetheless a source of sporadic revenue for investment for local governments.

Hence, what it is important to learn from this discussion is that fiscal decentralisation uses different mechanisms to delegate financial responsibilities, and each mechanism along with the fiscal policy arrangements and fiscal conditions drive different fiscal incentives.

The level of revenues collected through taxes in rural local governments in Mexico is not significant with regard to total local revenues. Therefore, taxing power does not represent as high a fiscal incentive as intergovernmental transfers. This research will therefore focus on intergovernmental transfers as drivers of incentives, although use of taxing power will also be integrated in the
analysis when examining and measuring municipalities’ levels of public entrepreneurship. This will be explained in more detail later in Chapter 8.

2.6 Summary and conclusions

To sum up, there are different definitions and typologies of decentralisation. This research is interested in fiscal decentralisation, particularly in the delegation of revenue and expenditure to local governments. However, for the purpose of analysis, different elements of all decentralisation domains should be considered.

Decentralisation is an enduring international trend which has transformed itself. It initiated as a way to maintain together different “identities” and it has been transformed into a powerful economic argument embodying high expectations.

Fiscal decentralisation is argued to achieve two major forms of efficiency, allocative and productive efficiency. During the previous discussion, I presented the arguments for and against decentralisation based on forms of efficiency to make a point to distinguish them. This will be the base for developing later an argument that justifies the theoretical framework of this study.

The theoretical arguments suggest that fiscal decentralisation might have a positive influence on economic growth, regional disparities and government performance. However, there are concerns that decentralisation is not automatically the driver of such benefits nor the solution for government efficiency and that the damage might outweigh the benefits. Fiscal decentralisation in particular is thought to a) worsen competition and redistribution among regions derived from existing uneven development; b) weaken central government power to stabilize the economy via macroeconomic policies; c) exacerbate corruption and inefficiencies due to administrative drawbacks at lower government levels; and d) it may weaken fiscal effort. These arguments are based on the economic discourse discussed in section 2.2.
Taxing power is one of the main mechanisms of fiscal decentralisation, but it is not the only one. Intergovernmental transfers such as conditional and unconditional funds are also mechanisms that may drive fiscal incentives. However, the fiscal arrangements in each type of transfer create different fiscal issues and might drive different fiscal incentives.

Figure 2.1 presents a visual representation of the theoretical relationships observed in the previous discussion. It focuses especially on how decentralisation might, in theory, promote positive outcomes, since this research intends to contribute to the decentralisation debate by examining one key possible outcome: changes in government performance.

The key theoretical arguments are that fiscal decentralisation, in the form of increased conditional funds and unconditional funds, will promote increases in both allocative and productive efficiency. These forms of efficiency positively influence outcomes in several areas including government performance.

![Figure 2.1 Theoretical Implications of Fiscal Decentralisation](image)

Most studies have focused on testing fiscal decentralisation and the expected outcomes such as government performance at the macro/country wide-level. By contrast, this study will analyse the mediating changes, namely accountability and public entrepreneurship, which fiscal decentralisation is
assumed to encourage. These behavioural patterns will be operationalized separately to test their association with fiscal decentralisation and their impact on government performance. This analysis will be undertaken in the lowest government level and in the most vulnerable group, rural municipalities.

There is a call to analyse these mediating changes because the empirical research tends to analyse outcomes but not the process leading to such outcomes. The relevant point here is that allocative and productive efficiency are distinct forms of efficiency and they are likely to result from different behavioural patterns. Of particular relevance, as discussed in Section 2.2, are behaviours related to accountability and behaviours related to public entrepreneurship.

Productive efficiency is more likely to be related to public entrepreneurship than to accountability because it introduces elements of innovation, pro-activeness and risk taking. On the other hand, allocative efficiency is more likely to be related to accountability-related behaviours because it denotes responsiveness and responsibility to citizens’ preferences. These are not absolute differences: productive efficiency may also, to a lesser extent, be a consequence of accountability behaviour. But the differences are likely to be important.

The relevant theoretical implication here is that, if the arguments which posit positive outcomes are correct, then fiscal decentralisation will encourage changes (improvements) in both forms of behaviour, accountability and public entrepreneurship. These behaviours, in turn, might lead to higher allocative and productive efficiency. Although both types of behaviour are highly desirable, the extent of the benefit of each behavioural pattern might differ significantly and affect the two forms of efficiency differently, and therefore affect the outcomes. Hence, there is a call for analysing these behaviours separately.

In pure economic terms, accountability and public entrepreneurship might be simultaneously pursued without any problem. However, from a political point of view, these forms of behaviour may have contrasting and, perhaps, incompatible elements. The next chapter will develop this argument further.
The literature review seems to present a lot of theoretical information simply based on very general observations and very little empirical evidence operationalizing behavioural patterns, in particular public entrepreneurship. In order to contribute to closing this gap in the literature, this research intends to shed light on how fiscal decentralisation encourages either/both accountability or/and public entrepreneurship and in which ways (if at all) these behavioural patterns are likely to affect government performance. These propositions are under the plausible assumption that local government performance is influenced differently by each form of efficiency. Figure 2.2 graphically illustrates these propositions.

![Figure 2.2 Behavioural Implications of Fiscal Decentralisation](image)

In addition, this research is delimited to studying rural municipalities. As noted earlier, research focused on rural municipalities can contribute substantively and methodologically to fiscal decentralisation research.

The inconclusive findings in the empirical revision are a consequence of methodological limitations. On the one hand, quantitative approaches fail to capture historical contexts such as the process of decentralisation in a specific country, the reasons behind the implementation of decentralisation policies and the actual degree of decentralisation, to name but a few. This is also true for behavioural analysis. Different incentives might appear depending on the group of actors under study such as rural local authorities in rural municipalities. On the other hand, qualitative research does not present a strong generalization of
findings because they depend on small samples and therefore it is often criticized in the methodology literature as being incapable of reaching a conclusion.

This calls for different research instruments in order to balance the disadvantages of each methodological approach.

Next, in Chapter 3, the researcher will define and discuss the key concepts and relationships composing the key part of the theoretical framework that this study intends to evaluate.
Chapter 3 - Behavioural approaches: Accountability and Public Entrepreneurship

The possible outcomes of fiscal decentralisation put forward by theorists, and discussed in Chapter 2, are not in themselves sufficient to explain what occurs under decentralised settings. More recent approaches to fiscal decentralisation hypothesise that the delegation of financial functions creates incentives that foster local authorities to behave in ways to allow allocative and productive efficiency to be achieved. Hence, it is important to understand whether and in which ways these behaviours may be encouraged, especially given the inconclusive nature of current empirical research. The next section concentrates on two concepts which were identified in Chapter 2 (see Section 2.2) and that can be operationalized and measured with some success: accountability and public entrepreneurship.

The likelihood that accountability and public entrepreneurship behaviour are different and therefore affect differently decentralisation outcomes has been highly neglected in the empirical work. This research will evaluate whether decentralisation promotes a) accountability and b) public entrepreneurship.

3.1 Accountability

In the context of this research, accountability is defined as the virtue of local authorities to behave according to public expectations that further improve efficiency. By public expectations it means transparent, responsive, and responsible government which matches citizens’ preferences. Efficiency is both allocative and productive and refers to government performance.
Accountability can take a variety of meanings and each meaning can suggest different drivers and forms of assessment. This research aims at evaluating the incentives related to the personal values and actual behaviour of local authorities. Therefore, this study focuses on local authorities' virtues within the public sphere. The next section presents how the concept of accountability has evolved and discusses some of the forms it may take.

3.1.1 Accountability concept and evolution

Similar to others' definitions in social science, there is not a single concept of accountability owing to the nature of public institutions and the continuous development of the public administration literature.\(^5\)

A consensus, according to Kluvers and Tippett (2010, 46) is that accountability involves “rendering of an account and therefore provision of information”. At the present time, the term accountability used in public administration literature is far from its bookkeeping accounting roots. Some scholars agree that this transfer of meaning - from bookkeeping to public accountability - is somehow connected to the introduction of New Public Management discourse (Bovens, 2007; Funnell, 2003, Kluvers and Tippett, 2010).

Accountability is sometimes referred to as responsibility, because both denote a sense of duty. However, accountability and responsibility entail different aspects of analysis. Therefore, a key issue is to differentiate whether accountability is studied as “a concept” or as “a part of a concept”. For instance, Mulgan (2000) states that while accountability used to be considered part of responsibility as an external aspect (scrutiny), recently, ____________

\(^5\) See Mulgan (2000) for a detailed discussion of accountability definitions.
it has shifted to responsibility being part of accountability, as an internal aspect individual morality.

A similar distinction is presented by Bovens (2010). He claims that accountability can be conceptualised as a virtue or as a mechanism. Accountability as a virtue is related to the actual behaviour of the public agent. It is viewed as a positive quality. Bovens (2010) argues that this distinction leads to a different research agenda and “deficits” or inefficiencies. The research agenda as a virtue evaluates behavioural patterns. In other words, it analyses the factors that lead to being accountable. On the other hand, accountability as a mechanism is more concerned with the relationship between an agent and “a forum” to which the agent is obliged to explain and justify his behaviour. Bovens (2010) argues that both concepts are important for democratic governance, but for different reasons. Accountability as a virtue encourages legitimacy and public confidence based on transparent, responsive, and responsible governments. As a mechanism, accountability is only an instrument to keep politicians virtuous.

Some scholars have advanced that the ambiguity and multiplicity of the concept derives from the fact that accountability is an Anglo-Norman concept. Therefore, it does not have an equivalent meaning in other languages such as French, Portuguese, German, Dutch and more importantly, Spanish which is the language used in data collection in this research. Hence, there is no semantic distinction between “responsibility” and accountability” (Bovens et al, 2008, 226). In particular, in the Spanish language the word “rendimiento de cuentas” (render an account) is used as the closest word to “accountability”. However, it has two implications. First, it is a translation from “rendering an account”, the core accountability meaning. Nevertheless, it is not only used as a mechanism, but as a virtue; second, “rendimiento de cuentas” is only used as a noun, not as an adjective. The closest adjective used in this case is “responsable”, which is the translation for responsible.
The ambiguity of the accountability concept is not without consequences. Scholars argue that it may undermine the organization’s performance, if the public agents are accountable in the wrong sense or in every sense, ending as a dysfunctional organisation (Koppell, 2005); it has prevented empirical progress in the topic (Bovens, 2010, 947); it is an “ever-expanded concept” which has weakened its core meaning of external scrutiny and always requires a definition and categorization (Mulgan, 2000, 555).

Thus, the concept has evolved into two different branches (although many categorisations exist in the literature). One branch maintains its accounting origins of stewardship and external scrutiny and the second branch relies on aspects related to responsibility- morality and personal values.

These definitions of accountability yield a separate theoretical perspective of the drivers and forms of assessment and the concept calls for a clear definition and delimitation according to the research interest.

For the purpose of this research, accountability as a virtue or as a concept that includes responsibility as an internal aspect is more appropriate because it aims at analysing policy incentives- at the personal level- rather than evaluate the effectiveness of the policy in place (for example, loopholes). In this sense, “being held to account” is one of the dimensions of accountability. Hence, in this research accountability is defined as the virtues of local authorities to behave according to public expectations that further improve efficiency.

By public expectations this research means the different dimensions that measure/ describe the concept of accountability. For the purpose of this research, three (out of the five) dimensions proposed by Koppell (2005, 96) have been used, transparency, responsibility and responsiveness. These dimensions were also described by Bovens (2010) when discussing
the concept of accountability as a virtue. Each dimension responds to the following questions:

Transparency- Did the organization reveal the facts of its performance?
Responsibility- Did the organization follow the rules?
Responsiveness- Did the organization fulfil the substantive expectation demand/need?

Liability and controllability have been excluded because both denote internal scrutiny and relationship within government agencies. This research is more interested in the external scrutiny and the relationship with citizens.

3.1.2 Fiscal decentralisation and Accountability

Fiscal decentralisation might lead to greater accountability in terms of transparency, responsiveness and responsibility because delegation of financial resources to local authorities permits responsiveness to preferences through a constant communication with citizens and better information, but also because citizens can relate actions to performance and politicians might be encouraged to satisfy citizens’ needs and desires in order to maintain their political position. In this sense, local authorities deliver the mix of goods and services in accordance with the goods and services desired by the local citizens. This can potentially lead to greater allocative efficiency, but also, to some extent, gains in productive efficiency resulting in good government performance. However, because fiscal decentralisation involves higher levels of financial resources, there is skepticism that accountability improves under decentralisation and the opposite is feared to occur.

In the next paragraphs, arguments and some empirical findings will be discussed which shed light on whether or not fiscal decentralisation
increases accountability. Country and local government case studies are considered as these are the foci of the present research.

a) Fiscal decentralisation increases accountability

Faguet (1997) investigated the decentralisation reform in Bolivia. He found evidence that small-rural municipalities present higher Local Government Effectiveness. Based on these findings, he proposes an incentive-based local-leadership theory: in a context of mobile politicians and diversity of municipalities in regard to size and resources, corrupt politicians will select wealthy municipalities leaving small-rural ones with honest politicians. In a recent article, Faguet (2014) argues that the effects of decentralisation are the sum of local-level effects. In an empirical study of local governments in Bolivia and Bangladesh, he presents evidence that the outcomes of fiscal decentralisation are the result of underlying social and economic characteristics of the municipalities as well as the local political dynamics. However, at the aggregate level, he claims, decentralisation may improve government accountability and outcomes if there are more local governments with the characteristics leading to better competition and entrepreneurialism.

Blair (2000) shows how decentralization improved the quality of democratic governance in both large cities and small towns in India, Bolivia, Mali, Honduras, India, the Philippines and Ukraine due to improvements in participation and accountability mechanisms.

Rowland (2001) using a comparative case study between Mexico and Bolivia found evidence that the effects of decentralisation in small (rural) municipalities are different to the ones expected for urban municipalities because of patterns of participation and local public finance. This implies that the outcomes between rural and urban municipalities are likely to differ. Therefore, it is important to study them separately. This is based on
the presumption that it is plausible to generalise Rowland’s suggestion (2001) at least in similar countries.

In Colombia, Escobar-Lemmon and Ross (2014) examine the extent to which three types of decentralization are perceived to lead to more accountable actions according to citizens. They found that administrative decentralization and fiscal empowerment is more important for improving the perception of accountability than political decentralization is.

In Brazil, Gonçalves (2014) analysed the impact of Participatory Budgeting (PB) on service provision. Using a panel data of municipalities in Brazil, she found evidence that municipalities which adopted PB not only spend more on health and sanitation, but they also experience a drop in infant mortality. Therefore, she suggests that citizens’ direct participation in the budgeting decision-making and close interaction between users and elected officials can influence spending patterns and living standard outcomes.

In Mexico, Díaz-Cayeros et al. (2014) analysed a particular kind of decentralization, traditional collective choice methods (or usos y costumbres in Spanish) which is a self-government approach used by native Mexican communities to administer local governments. Their findings suggest that municipalities using traditional collective choice method present higher improvements in electricity provision, sewerage and education than local governments elected through political parties, because of higher civic engagement. This is in spite of the negative influence expected from local elite capture.

b) Fiscal decentralisation worsens accountability

A quantitative analysis of 50 states in the US by Fisman and Gatti (2002b) exhibited an increase in corruption. Their findings show a positive association between conviction rates for the abuse of public office and
dependency on central transfers or larger federal transfers. Hence, their findings suggest that if decentralisation is not accompanied by revenue generating, corruption is likely to occur.

In India, Jha (2002) found that high dependency of rural local government on government transfers were followed by issues of political influence by the state government using funds to control rural local governments. In addition, the budget data analysis suggests that fiscal effort in rural municipalities decreased or in other words, the share of their own revenues in total income has declined. However, the data also suggests that on average, revenue dependency in this group of municipalities has declined, implying that there are other sources of income being used, presumably shared taxes and loans.

Kolstad and Fjeldstad (2006, 6 - 7) mentioned two case studies with malevolent behaviour caused by fiscal decentralization. In Tanzania during the period 1996 to 2003, local governments were granted discretionary fiscal power and local authorities used coercion for raising taxes. The reasons were deficient fiscal system and oversight. Similarly, Henderson and Kuncove (2004) claimed that in Uganda corruption surged along with decentralisation of power and authority to local governments (cited in Kolstad and Fjeldstad, 2006, 7). Thus, these studies suggest that the fiscal arrangements matter for accountability incentives. Kolstad and Fjeldstad (2006) also analysed how citizens perceived different government levels in regard to corruption. They found that in both cases, rural municipalities were perceived less corrupt than other higher government levels.

In Mexico, Herrera (2014) studied the commercialization of water and sewage provision in three local governments. The findings suggest that decentralisation and commercialization practices have been unsuccessful in poor municipalities because it is politically challenging to finance these services and make the necessary increases in fees. Contrarily, in rich
cities the policies are more successful because of the presence of a strong middle class and a consumer base that provides self-financing.

Thus, the empirical work suggests that fiscal arrangements may lead to different incentives. In addition, it advises that the effects in rural municipalities are different to the effects in bigger municipalities. Therefore, studying only rural municipalities controls for some (but not all) municipal characteristics and standardises to some extent political dynamics.

The empirical findings are mixed, but there are some studies suggesting better accountability particularly in this group of municipalities due to closeness to citizens. This might suggest that the link between fiscal decentralisation and accountability is likely weak and its enforcement depends on citizens' involvement and participation. Therefore, the level of accountability might be conditional on the level of political development.

The next section discusses the association between fiscal decentralisation and public entrepreneurship.

3.1.3 The political mechanisms for accountability under fiscal decentralisation

The relationship between democratisation and the potential of decentralisation to increase accountability is straightforward and has received considerable attention. However, there are also some counter-arguments.

- The optimistic view

The literature illustrates that local authorities become more financially accountable because their performance can directly affect their reputation and further re-election (Shaw and Qureshi, 1994 cited in Tanzi 1995). Hence, politicians try to satisfy the median voter through improving
democracy and financial accountability. Being more accountable to the people is argued to decrease lobbying by interest groups. Lobbying is thought to distort policy choice and allow wastage of public funds (Barankay and Lockwood, 2007).

Wehner and Renzio (2013) identified two important actors for budgetary disclosure in democratic countries, citizens and legislators. They tested the importance of these actors for budgetary disclosure in democratic countries compared to non-democratic countries. In the case of citizens, their findings suggest that the ballot box is a mechanism that empowers citizens to demand disclosure of information and this in turn may have an influence on accountability, and in particular, fiscal transparency.

- The pessimistic vision

Prud'homme (1995) argues that under fiscal decentralisation, democratization can also lead to poor accountability and damage allocative efficiency due to increases in corruption. In addition, the presence of the political cycle- which means raising taxes after election and increasing expenditures before election- leads to negative externalities. Moreover, Bardhan and Mookherjee (2000, 135) point out that in the presence of decentralisation, capture by local elites is prone to occur, which may compromise the advantages of decentralisation.

3.2 Public entrepreneurship

“Entrepreneurship occurs in the public sector where there is an uncertain environment, a devolution of power, and at the same time re-allocation of resource ownership, to unit management level. It is driven by those individuals, particularly susceptible to the “manipulation” of their stakeholders and with a desire for a high level of social “self-satisfaction”, who have the ability to spot market
opportunities and who are able through followers’ “manipulation” to act on them (Boyett, 1997) (cited in Kearney et al, 2009, 28).

The previous quote highlights that public entrepreneurship is a distinctive behavioural pattern. It also shows that devolution of power may be a means to promote this behaviour. This research argues that fiscal decentralisation theory implies entrepreneurial behaviour by local authorities which leads to efficiency of both forms, allocative and productive efficiency (see Section 2.2, p. 28). This assumption has been neglected in the empirical work related to fiscal decentralisation. Therefore, this research intends to contribute to the fiscal decentralisation research by evaluating whether decentralisation promotes public entrepreneurship, and how it does it.

This research defines public entrepreneurship as the behaviour of local authorities to act in ways that improves efficiency. The entrepreneurial behaviour includes innovativeness, risk taking and proactivity. The next Section presents how the concept of entrepreneurship has evolved and discusses why this definition was selected.

3.2.1 Public entrepreneurship concept and evolution

The concept of ‘entrepreneurship' was coined in 1734 in the work of Cantillon, who defines entrepreneurship as self-employment with uncertain return (Sharma and Chrisman, 1999, 1). However, the work of the Austrian economist Joseph Alois Schumpeter (1934) is often referred to as the foundation of modern entrepreneurship with its depiction of entrepreneurship as a driver of innovation (Antoncic and Hisrich, 2001, 495; Zerbinati and Souitaris 2005, 48; Hederer, 2007, 2). Since then, theoretical and empirical work has been built.

Drucker (1985, 177) in his well-cited book “Innovation and Entrepreneurship” states that:
“Public-service institutions such as government agencies, labour unions, churches, universities, schools, hospitals, community and charitable organizations, professional and trade associations and the like, need to be entrepreneurial and innovative fully as much as any business does. Indeed, they may need it more. The rapid changes in today’s society, technology, and economy are simultaneously an even greater threat to them and an even greater opportunity”.

However, he also acknowledges that in the public sector innovation is far more difficult.

Theoretical discussion in regard to public-private differences in general, and entrepreneurship in particular has been timely in academia. These differences are considered by Drucker as obstacles to innovation.⁶

Public entrepreneurship has been studied from different perspectives and research fields. The political science literature advanced the concept of political or policy entrepreneurship, which focuses on the politician’s motivation and policy agenda formation. Lately, the public administration literature has shifted its research toward public managers. On the other hand, the business literature focuses on local public figures and regional developers. Although they explain the phenomenon from different angles, they coincide at a fundamental point, that financial rewards, in the public sector, are not the ultimate and only aim.

There is not yet a consensus on the extent and aspects of public entrepreneurship. Table 3.1 shows some existing definitions. These definitions present some common elements that confirm a move from a definition of economic maximisation toward innovation and creativity. Many definitions include the words innovation, risk-taking and pro-activeness such as the definitions of Currie et al. (2008); Roberts (1992); Stone

⁶ See Zampetakis and Moustakis, 2007; Teixeira and Silva, 2012; Klein et al, 2010; Meller, 2003; Kearney et al, 2009 for discussion about these differences.
(1992); Morris and Jones (1999), Morris et al. (2008) (see Table 3.1). In addition, some definitions recognise that wealth creation is less important in public entrepreneurship than other types of rewards, such as political re-election, social recognition and positive results for public institutions. This includes Zerbinati and Souitaris (2005); Kearney et al. (2007) in the same table.
### Table 3.1 Definitions of Entrepreneurship within Public Sector Organizations

<table>
<thead>
<tr>
<th>Author(s) and Year</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ramamurti (1986, 143)</td>
<td>“Individuals who undertake purposeful activity to initiate, maintain, or aggrandize one or more public sector organizations”</td>
</tr>
<tr>
<td>Shockley et al. (2006, 205)</td>
<td>“Public sector entrepreneurship occurs whenever a political actor is alert to and acts on potential profit opportunities, thus moving the system in which the actor is embedded toward equilibrium.”</td>
</tr>
<tr>
<td>Kearney et al. (2007, 277)</td>
<td>“Public sector entrepreneurship, which for the purpose of this research refers to state enterprise/civil service, is defined as an individual or group of individuals, who undertakes desired activity to initiate change within the organization, adapt, innovate and facilitate risk. Personal goals and objectives are less important than the generation of a good result for the state enterprise/civil service.”</td>
</tr>
<tr>
<td>Robert (1992, 56)</td>
<td>“Public entrepreneurship is defined as the generation of a novel or innovative idea and the design and implementation of the idea into public sector practice.”</td>
</tr>
<tr>
<td>Currie et al. (2008, 989)</td>
<td>“[…], entrepreneurship is seen as the process of identifying and pursuing opportunities by individuals and/or organizations. Further, this process is often characterized by innovativeness, risk-taking and pro-activity (Miller 1983; Covin and Slevin 1991; Morris and Sexton 1996; Morris and Jones 1999).”</td>
</tr>
<tr>
<td>Morris and Jones (1999, 74–87)</td>
<td>“Public sector entrepreneurship is the process of creating value for citizens by bringing together unique combinations of public and/or private resources to exploit social opportunities.” (based on Bellone and Goerl, 1992; Linden, 1990; Osborne and Gaebler, 1992) “Entrepreneurship implies an innovative, proactive role for government in steering society toward improved quality of life. This includes generating alternative revenues, improving internal processes, and developing novel solutions to inadequately satisfied social and economic needs.”</td>
</tr>
<tr>
<td>Morris et al. (2008, p. 103)</td>
<td>“Organizations can be characterized, then, in terms of their entrepreneurial orientation or intensity, which is a reflection both of how many entrepreneurial things they are doing, and how innovative, risky, and proactive those things tend to be. The basic steps in this process identified [in the private sector] should be no different in a non-profit or public sector context.”</td>
</tr>
<tr>
<td>Osborne and Gaebler (1992, xix)</td>
<td>“[Entrepreneurial institutions/public entrepreneurs] use resources in new ways to maximize productivity and effectiveness.”</td>
</tr>
<tr>
<td>Roberts and King (1991, 149–150)</td>
<td>“Public entrepreneurship” is a process of introducing innovation to public sector practice.”</td>
</tr>
<tr>
<td>Stone (1992, 31-32)</td>
<td>“An organizational process involving innovation, risk and pro-activity which results in a disjuncture from standard operating procedures and responses by current systems in order to achieve public purposes”</td>
</tr>
<tr>
<td>Carpenter (2001, 30)</td>
<td>“The incremental selling of new program ideas”</td>
</tr>
<tr>
<td>Marcias (2000, 52)</td>
<td>“The risky use of public resources in the creation of value for the people”</td>
</tr>
<tr>
<td>Gansler (2003, 37)</td>
<td>“The development of separate fee-for-service entities operating within a governmental agency”</td>
</tr>
<tr>
<td>Edward, Jones, Lawton, and Llewellyn (2002, 1548)</td>
<td>“Driving the process of utilizing the energy and creativity of the community to support managers to identify needs and solutions to meet those needs”</td>
</tr>
<tr>
<td>Zerbinati and Souitaris (2005, 61)</td>
<td>“Discovery and exploitation of rewarding opportunities (and not only profit-making opportunities), without current control of the required resources”</td>
</tr>
</tbody>
</table>
Most importantly, for the interest of this research, Osborne and Gaebler (1992, p. xix) recognise an association of public entrepreneurship and productive efficiency and allocative efficiency:

“[Entrepreneurial institutions/public entrepreneurs] use resources in new ways to maximize productivity and effectiveness.”

In Osborne and Gaebler’s definition, public entrepreneurship is related to both forms of efficiency, productivity or productive efficiency and effectiveness, or allocative efficiency. In this research productive efficiency is considered mainly public entrepreneurship behaviour and allocative efficiency mainly accountability behaviour. However, this research recognizes the blurred boundary between accountability and public entrepreneurship. However, this research assumes that entrepreneurship might have a higher impact on productive efficiency than on allocative efficiency. As a consequence, the extent of the benefit of public entrepreneurship in the outcomes might be larger. For this reason, it is important to analyse accountability and public entrepreneurship separately.

In Zerbinati and Souitaris’s definition (2005) (see Table 3.1) the entrepreneurial motivation is assumed to emerge due to the lack of control over resources. This is opposite to this research purpose which intends to observe behaviour when resources are delegated. This research is more interested in the entrepreneurial motivation that emerges due to room for entrepreneurial actions.

In Table 3.1, some definitions rely highly on innovation such as Robert, (1992); Robert and King (1991); and Carpenter (2001). Others omit innovation i.e Ramamurti (1986), or they emphasize pro-activeness; for instance Shockley (2006) and Holcombe (2002). All these dimensions are likely to be observed when delegating greater resources to local governments. The extent of each one is likely to vary considerably and overlapping is likely to occur. This study only intends to observe whether
fiscal decentralisation facilitates these actions. It includes these three dimensions for analysis but it is beyond the scope of this research to quantify their importance.

Thus, this research defines public entrepreneurship as the behaviour of local authorities to act in ways that improve efficiency. These actions include innovation, pro-activeness and risk-taking behaviour.

3.2.2 Fiscal decentralisation and Public Entrepreneurship

This research is based on the assumption that local politicians can be incentivised and enabled to undertake entrepreneurial actions because of greater financial autonomy and discretion in decision-making as fiscal decentralization implies. Public entrepreneurship involves proactiveness, experimentation to improve/create new programmes and undertake projects that involve higher levels of risk. This can potentially lead to greater productive efficiency, and might also lead to gains in allocative efficiency resulting in improved government performance.

It is important to notice that the risk taking dimension of public entrepreneurship might improve efficiency only in cases of successful outcomes and it might, in fact, have negative implications. This research is concerned with behavioural patterns rather than mechanisms towards successful outcomes but it does consider the negative implications of risk taking.

As mentioned earlier, research in fiscal decentralisation tends to focus on accountability and in elements of allocative efficiency. Few empirical works have advanced knowledge on productive efficiency and to my knowledge, there is no empirical and theoretical work particularly targeting the association of fiscal decentralisation and public entrepreneurship and differentiating between accountability and public entrepreneurship.
Public entrepreneurship has been studied mainly from the organizational behaviour perspective or for specific programmes. There are three issues from the empirical investigations that are relevant for this research: delegation of resources, autonomy in decision-making and entrepreneurship in rural municipalities.

1) Incentives for delegation of resources in public entrepreneurship

There are two distinct views. On the one hand, delegation of resources under fiscal decentralisation may encourage public entrepreneurship because it gives room for entrepreneurial actions. For instance, Schneider and Teske (1992) surveyed municipal clerks of 1400 suburban communities across the US to test the most likely local conditions that are necessary for the rise of an entrepreneur. Their findings suggest that the most important condition for the rise of an entrepreneur is the freedom to allocate the public funds. The reason being that politicians can pursue their preferred policies. Similarly, Meynhardt and Diefenbach (2012) explore the impact of organization antecedents in entrepreneurial orientation at the department-level in the Federal Labour Agency in Germany. Their findings indicate that work discretion (or giving the flexibility to incumbents to decide on how to carry out their work) and resources have a high influence on entrepreneurial orientation among others. Therefore, they provide evidence that financial resources can drive public entrepreneurship in public organisations.

On the other hand, fiscal constraints might also encourage public entrepreneurship because under these conditions (pressure), public entrepreneurs need to maximise efficiency in public services by innovating in order to achieve more, with less. For instance, Bartlett and Dibben (2002) investigated innovation and public entrepreneurship using an inductive analysis of 12 case studies of selected local governments in the
UK. Their findings suggest that local authorities are engaging in innovative enterprises due to fiscal pressure.

This research is based on the assumption that fiscal decentralisation encourages entrepreneurship due to delegation of financial resources rather than due to fiscal constraints.

2) Autonomy in decision-making

Kim (2010) evaluates the relationship between organizational characteristics and public entrepreneurship. He surveyed heads of state government departments in 48 U.S states. The study investigates how some organizational characteristics are defined by three dimensions- risk taking, innovativeness and proactiveness influencing entrepreneurial behaviour. His findings suggest that empowering employees by delegating more autonomy and participatory decision-making stimulates risk taking and innovativeness. However, this does not encourage proactive behaviour. The most significant characteristics are accountability and flexibility. While flexibility drives public entrepreneurship, accountability is associated only as a useful tool for legitimizing entrepreneurial activities. Hence, these findings suggest that there might be an overlapping and contending relationship between public entrepreneurship and accountability.

3) Entrepreneurship in rural local governments

Mack et al. (2008) took as a case study an innovative health care system called Telemedicine in the US which aims at providing better patient care and lowering costs through the use of audio-visual and portable medical equipment. Two rural centres were selected. Their findings suggest that connection to local communities, domain expertise and networking are
statistically significant dimensions of public entrepreneurship while other variables which were expected to be related, such as age, gender and level of education are not.

This is a relevant finding for this research because if the level of education is not a key variable in entrepreneurship, then public entrepreneurship in rural municipalities, which on average have a lower levels of education, might take place. These findings also suggest that public entrepreneurship in rural municipalities may be largely motivated by local politicians and authorities' close connection with the community.

Similar findings are presented by Teixeira and Silva (2012). They studied the factors that determine public entrepreneurship in 108 local governments in Portugal. Their findings suggest that both individual conditions (such as gender, previous occupational status, age and managerial competencies of the mayor) and contextual conditions (such as communication accessibilities, population educational endowments, and the share of medium and large firms in the municipality) are important determinants of public entrepreneurship.

To sum up, the empirical research shows that there are individual, organizational and contextual factors that are likely to drive public entrepreneurship. But more importantly, these studies present evidence demonstrating that increases in resources and discretion in decision-making can also be important drivers of public entrepreneurship. These studies support the argument that fiscal decentralisation may lead to public entrepreneurship and this research is interested only in the factors derived from fiscal decentralisation theory, discretion and decision-making.

In addition, the empirical studies mentioned above demonstrate that there is scope for entrepreneurial changes in rural municipalities and that accountability and public entrepreneurship may be intertwined but contending.
3.2.3 The political incentives for Public Entrepreneurship under fiscal decentralisation

As argued in this study, fiscal decentralisation might also contribute to changes in behavioural patterns that might lead to public entrepreneurial actions. And these entrepreneurial actions may or may not be reinforced in the presence of political competition. This section develops further this argument. However, it is important to point out that theoretically, the relationship between political variables and public entrepreneurship seems weaker than for accountability.

A) The optimistic vision

Faguet (2014, 6) explains:

"If decentralization is to improve governance in a democracy as its proponents claim, then at least part of the chain of causality must involve political competition. Decentralization might recenter (some) competitive political discourse on local – as opposed to national – concerns, or increase levels of political entrepreneurship or heterogeneity by lowering the costs of entry, or provoke changes in the internal characteristics of political parties. Any one of these could lead to improvement or degradation in governance outcomes”.

In addition, Faguet also claims that in spite of its importance this has not been at the core of the literature. The point of the argument is that in a competitive environment, citizens can compare the performance of their politicians with the performance of politicians in other jurisdictions (yardstick competition) in respect to public service quality, economic prosperity and judge them electorally (Barankay and Lockwood, 2007). Therefore, political competition may prompt politicians to behave in a more
entrepreneurial manner as a way to differentiate themselves from other local politicians and for achieving re-election.

B) The pessimistic vision

Some scholars are doubtful that public entrepreneurship benefits government performance. They worry about conflicting elements between the democratic values that lead to accountability and public entrepreneurship.

Bellone and Goerl (1992, 131) in their article “Reconciling public entrepreneurship and democracy” compare democratic values with the three common traits of entrepreneurship. First, they argue that entrepreneurship demands autonomy and discretion and, conversely, democracy promotes more accountability. Accountability is based on the notion of citizens’ approval and therefore, damages autonomy and discretion. Second, entrepreneurship calls for secrecy as a sense of competition while democracy promotes openness and public scrutiny. Finally, the last trait, risk-taking, is argued to conflict with democratic stewardship. Stewardship encourages high prudence of public trust in regard to public actions. Likewise, Terry (1993) (cited in Zerbinati and Souitaris, 2005, 45) states that entrepreneurship cannot be adopted in the public sector because it includes antidemocratic characteristics such as reliance on domination and coercion, enthusiasm for extreme changes and disrespect for traditions.

Some other contending elements can be found in Borins (2000, 498-499) in his empirical analysis over merits of public sector entrepreneurship. He summarises the counterarguments with three adjectives that describe entrepreneurs: rule breaking, self-promoting and unwarranted risk takers. These behavioural characteristics can damage honesty, fairness, benevolence and justice, which oppose accountability virtues.
Bovens (2010, 956) contends these opposing elements but from a different angle. He claims that extensive democratic control and emphasis on corruption control is likely to damage creativity and efficiency in public organisation because it encourages bureaucratization and proceduralism.

3.3 The drivers of performance

The general theory of democracy per se is associated with better accountability and, at least theoretically, public entrepreneurship.

The “retrospective vote theory” hypothesises that the performance of government influences the vote of citizens. As votes are used as a performance indicator, then good performance might lead to re-election. Therefore, political competition leads to responsiveness to citizens in order to maintain political power during elections (in Moreno-Jaimes, 2007, 133). As in the case of fiscal decentralisation, it can be argued that performance might take the form of more accountability and/or more entrepreneurial actions. Political competition is thought to decrease private rents available to public officials since the opposition can cut the use of political favours (Ades and Tella, 1999) or democracy can make corruption less appealing as it might reinforce the undesirable perception of corruption in the society and this could make corruption less appealing for corrupt politicians (Kolstad and Wiig, 2011).

However, political competition is also related to clientelism and elite capture which are claimed to interfere with democratic development in terms of political participation and accountability (Bardhan and Mookherjee, 2000). Small municipalities are more prone to be captured by “elites” who keep control of elected politicians.

As noted in the previous discussion, political competition is a key driver of both behavioural patterns. In addition, other democratic mechanisms derived from the level of political competition at the national level and state
level that may affect performance are the political counter-balance of power, which from now will be referred to as state-level opposition, and party affiliation.

State level opposition has been analysed in the Mexican literature. A vertically divided government may be encouraged to invest in infrastructure in order to differentiate themselves from others and gain advocates for their parties (Moreno-Jaimes, 2005a, 27). However, party clientelism can also occur and state-party oppositions may divert resources only to their party peers.

There is not a clear association between political party affiliation and changes in accountability, public entrepreneurship or performance. However, in the political science literature, it has been argued that changes occur not only at the political system level, but also at the political party level (Harmel and Janda, 1994). There are different models that explain “party change”. The basic theory suggests that there are internal and external stimuli or “shocks” that may drive political parties’ change. For instance for political parties that are voters’ maximizers (or a political party that is motivated by the number of votes and seats rather than policy maximization), significant election failures may trigger a change in political tactics (i.e., holding public meetings), organizational structure (i.e. change its centralisation of power), issue orientation (i.e. political issues and ideology), organizational identity (i.e. emerging with another party) or organization death (Janda, 1990, 17).

It is beyond the purpose of this study to test this theory. Nonetheless, the theory of party change suggests that performance may have been driven from the party level as a consequence of “a shock”. In the Mexican case, “a shock” happened in the 2000 elections when the hegemonic party lost power. Although PRI’s political power had been in decline since the 1980s, this, along with previous changes in the fiscal arrangements, may represent an incentive for party change leading to better performance for
a) the political party under threat, PRI, and b) the political parties that benefited from the “shock”- such as opposition parties which might gain the opportunity to demonstrate their capacity and good performance during alternation. Hence, it makes sense to explore the relationship of party affiliation to performance and observe the difference among parties.

3.4 Summary and conclusions

In conclusion, this section confirms the unattended issues in the literature of fiscal decentralisation and the contribution of this study. To fully understand the benefits of fiscal decentralisation, it is necessary to inquire into the incentives it promotes. It is important to look into the “black box” of the actions of the people that produce the results of fiscal decentralisation.

Chapter 2 showed that fiscal decentralisation may have either positive or negative outcomes. In this chapter it is argued that there are two variables that affect the extent of success of those outcomes. These two variables are accountability and public entrepreneurship. The literature illustrates an association between them and both productive and allocative efficiency. If decentralisation increases either or both, the effects on government performance will tend to be positive. However, it may also be the case that behavioural responses to decentralisation are reinforced by political variables, in particular the level of political competition.

There are clear channels of interaction between democratic mechanisms and fiscal decentralisation in regard to accountability and weaker but still important channels for public entrepreneurship. The political mechanisms for both behavioural patterns include mainly political competition, but also other mechanisms derived by the level of political competition at the national and state level such as state level opposition and party affiliation.

Thus, political competition may be a key variable. I hypothesise that it may either reinforce the impact of fiscal decentralisation, or it may, irrespective
of fiscal decentralisation, be a major independent factor that explains changes in behavioural patterns, as well as local government performance.

Figure 3.1 illustrates the research framework. Fiscal decentralisation may be reinforced by political competition and encourage accountability and public entrepreneurship or these behavioural patterns may be reinforced by the presence of political competition in the municipality regardless of fiscal decentralisation. In this regard, there is a clear association between political competition and accountability because democratization is at the core of the accountability argument whereas for public entrepreneurship the relationship is rather weak.

The relationship between accountability and public entrepreneurship depicted in Figure 3.1 is that there are conflicting elements between accountability and public entrepreneurship. Accountability behaviour may impede the development of entrepreneurial actions. This clashes with the values of accountability, due to its close association with democratic values. This may have a negative impact on performance.

Local authority’s behaviour, in turn, should impact on government performance by means of gaining allocative and productive efficiency. The extent of government performance may vary depending on the type of behaviour that predominates and the trade-off between both behavioural patterns given their conflicting elements.
Figure 3.1 Theoretical Framework

There are sufficient theoretical grounds to associate fiscal decentralisation and both behavioural patterns, accountability and public entrepreneurship and there is also theoretical support for interaction between fiscal decentralisation and political competition.

In addition to the theoretical foundations, we learnt in the revision of the empirical research that background and context matter. Hence, it is important to bear in mind that the decentralisation process might impact differently local governments with a particular level of development. Rural local governments face more challenges to achieve financial soundness. But, it is also the best scenery to observe both citizens’ participation and the benefits of politicians’ closeness to their constituents.

As discussed in the literature review, citizens' participation and closeness to citizens are the cornerstones of fiscal decentralisation theory. Hence, more delimited research is needed in selective groups within the same level of government and level of development in order to understand clearly decentralisation outcomes.

The next chapter presents the background and antecedents of the fiscal decentralisation reforms of the case study.
Chapter 4 - Country case study: Rural local governments in Mexico

Democratisation and decentralisation reforms have swept through federal countries. However, real democracy is not easily achievable and decentralisation of expenditures tends to prevail. Mexico is one such case and recently has been engaged in important political transformations, which makes it a rich case study for lesson-learning.

This chapter aims at giving the reader a contextual background of the case study. The first section gives a historical description of the Mexican democracy at the national and local (rural) level; the second section describes the government structure and public finance composition in Mexico; the third section discusses the 1997 fiscal reform, which is the point of reference in the empirical chapter and the fourth section presents the antecedents and motivations of the Mexican decentralisation reform.

4.1 Mexican democracy in context

Mexico is a multi-level federal country. Power is divided into independent executive, legislative and judicial branches. It is divided into 32 states, a federal district (with 16 delegations) and consists of 2,438 municipalities with a total population of 112 million. Municipalities- or local governments— are by law “autonomous”. This research is delimited to rural municipalities. Rural local governments, in this study, mean municipalities with less than 30000 inhabitants and where the primary sector predominates. A total of 1074 municipalities fit these criteria.

Rural municipalities in Mexico are ruled similarly to other non-rural local governments.

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7 The terms local government and municipality have been used interchangeably.
Mexico’s democratic institutions were subject to a long period of democratic appearance. Elections were held routinely at all levels of government but for 70 years, political control was held in the hands of a single political party- *Partido Revolucionario Institutional* (PRI). The PRI was the ruling party in the country from 1929 until 2000 when, for first time in history, it handed over the presidency to the opposition party, *Partido Acción Nacional* (PAN).

During the period the hegemonic party was in power, the president of Mexico used to have arbitrary political power. He was de facto leader of his party, the PRI, and presided over decisions about political candidacies for the next presidential election, governors in all states of the Republic, deputies and senators at the national level; as well as the Supreme Court. Due to the lack of political competition, these candidacies took the form of almost direct appointments. At the state and local elections, the president’s party had control over all elections (Moreno-Jaimes, 2005b, 5; Mizrahi, 2004, 142). In this scenery, party loyalty was the only means of political life.

This political power gradually decreased. Moreno-Jaimes (2005b, 5, 6) advances two reasons: first, the constitutional reforms of 1977 and 1986; and second, PRI’s internal fracture in 1986.

The constitutional reforms of 1977 and 1986 modified the total number of seats and the share of seats designated to proportional representation. These constitutional reforms were the answer to the economic and political situation at that period. The factors include a) an economic crisis that left the government with poor economic resources to satisfy the demand of the working and middle class; b) the creation of political parties that were not officially registered and unions that were not controlled by the government; and c) in general, the loss of confidence in the system (Carpizo, 1980, 40-41). These reforms accounted for the gradual political defeat PRI faced after 1988 when it lost the majority in the Chamber of Deputies.
The PRI’s internal fracture in 1986 led to the creation of a left-wing party, Partido de la Revolucion Democratica (PRD). The way this party was born is a must tell Mexican political anecdote. In 1986, PRI rejected Cuauhtémoc Cardenas’s candidacy and decided in favour of Carlos Salinas. Cuauhtémoc Cardenas is the son of a former president of Mexico Lázaro Cardenas; largely remembered for the expropriation and nationalization of Mexican oil and a significant and wide ranging agrarian reform. Cuauhtémoc, along with other prominent members of the PRI, left the party and Cuauhtémoc became the candidate of a left wing party coalition for the 1988 presidency election. He also became the author of the first competitive election for the presidency. During the count of votes, Manuel Bartlett- an eminent member of the PRI at that time, as well as in charge of the federal elections, announced “the fall of the system” at the very moment Cardenas was taking the lead. Salinas was declared the winner under the stigma of massive electoral fraud. Nevertheless, PRI lost the majority in the Chamber of Deputies. Later, Cuauhtémoc created the left party, PRD.

As a consequence of this loss of “legitimacy”, Mizrahi (2004, 142) argues that PRI gradually allowed opposition to gain spaces in the local governments as a way to deflect conflict away from national-level politics. However, this strategy did not favour PRI. Opposition proved to be successful and PRI was removed from power- eventually.

Moreno-Jaimes (2007) indicates that in 1990 almost 90% of the total population was under the mandate of local authorities coming from PRI membership and by 2001, more than half of this population was governed by opposition parties. At that time, PRI governed 62% of local governments (1,510 municipalities); PAN governed 19% (473 municipalities) and PRD 13% (322 municipalities). Today, 64% of the total population in local governments are governed by PRI, 23% by PAN, 9% by PRD and 4% by other political parties (FENAMM).8

Hence, Mexico has experienced an important political change in the last few decades. It turned from a country with a dominant party, to one where political competition is increasing constantly. This has changed the political games at all levels of government including rural municipalities.

In rural municipalities as defined here, PRI won 91% of the total municipal elections in 1992 and only 62% of the municipal elections in 2010. This includes all the coalitions in which PRI participated. Therefore, other political parties such as PAN have gained terrain. In 1992, PAN won around 2% of the local elections and in the 2010 it gained 25%.

Although far from perfect, the changes in the political landscape might represent an important source of incentives for public authorities. Therefore, political indicators are relevant for this study.

4.2 Structure of Public Administration and finance in Mexico

This section describes how Mexican local governments work.

a) Intergovernmental relations

The intergovernmental relations in Mexico are highly complex. Part of this complexity derives from the nature of federal systems where three levels of governments interact. The federal government is in charge of issues related to the whole country, macroeconomic policies, defence and development. State governments are in charge of matters related to education and health and local governments are responsible for some local public services (more details about the local public services shortly). However, federal and local governments are co-responsible for school building and implementation of social programmes. Similarly, all levels of government are co-responsible for poverty alleviation and water management (see table 4.1). These overlapping responsibilities do not
only make the system complex, but are also likely to discourage accountability and innovation (Caldera-Sánchez, 2013, 10-11).
## Table 4.1 Allocation of Government Responsibilities for Key Public Services

<table>
<thead>
<tr>
<th>Public Services</th>
<th>Federal</th>
<th>State</th>
<th>Local governments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health</strong></td>
<td>Regulations, standards and quality controls. Negotiation of salaries and employment conditions.</td>
<td>Organisation and operation of health care services for the non-insured population. Responsible for primary care for both rural and urban poor.</td>
<td>Administration and maintenance of hospitals for primary care that used to be operated by the federal Ministry of Health, as well as some state owned hospitals (for all care levels).</td>
</tr>
<tr>
<td></td>
<td>Financing of hospital Infrastructure.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Financing and operation of all hospitals belonging to the federal social security systems (IMSS, ISSSTE).</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>Controlling plans, programmes of study, assessment of education outcomes; training of teachers; determining teachers’ salaries; teachers’ training and evaluation; financing of education through transfers</td>
<td>Operation of basic education (preschool, primary and secondary levels), teachers’ training colleges and indigenous and special education.</td>
<td>Co-financing with other government levels and maintenance of primary schools and some construction concurrent with the state.</td>
</tr>
<tr>
<td><strong>Anti-poverty programmes</strong></td>
<td>Funding of social programmes</td>
<td>Implementation of social programmes in coordination with SEDESOL.</td>
<td>Implementation of social programmes</td>
</tr>
<tr>
<td><strong>Water</strong></td>
<td>Ownership of water resources, with the right to transfer titles to other parties. Co-financing of water infrastructure. Setting norms for compulsory standards for technical and operational aspects.</td>
<td>Tariff setting (through State congress or water commission); co-financing of water infrastructure; set state-level regulation, including tariffs, design criteria for water infrastructure construction, environmental and health standards for water infrastructure.</td>
<td>Water distribution, drainage and sewerage systems (also public lighting, garbage collection, public markets, public safety, cemeteries and public parks)</td>
</tr>
<tr>
<td><strong>Infrastructure and transportation</strong></td>
<td>Road construction and maintenance are split between the three levels, with the construction mainly executed by federal and state governments, and maintenance mainly being done by the state or municipalities. Parks and public transportation are split with all levels of government providing services that correspond to their geographic area, with public transportation only rarely being managed by municipalities.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Caldera-Sánchez (2013, 10) analysis based on Cabrera Castellanos et al. (2008), OECD (2012a); Cabrero and Martínez-Vázquez, (2000); Fernández Martínez (2011); Martínez-Fritscher and Rodríguez-Zamora (2011).
b) Local government structure

The structure of local governments is as follows. The municipality is headed by a mayor who is elected democratically for 3 years. Recently some states have extended the number of years to four years.\(^9\)

There is no immediate re-election but local authorities can be elected after one government period. The council is composed of *sindicatos* (councillors) and *regidores* (trustees). The majority of local governments elect the council by relative majority (plurality system) and proportional representation.\(^10\) Relative majority means that the winner in the election is the political party with the most votes during the election and proportional representation means sharing the seats proportionately to the number of votes received in the election. Trustees have a role as legal representatives of the local government and councillors have a legislative role.

Proportional representation was established in all local governments during Miguel de la Madrid’s government (1982-1988) with a constitutional reform in Article 115 (Madrazo, 1986).\(^11\) This, however, did not have a real impact. At that time, opposition parties had poor representation in most local governments. This was particularly true in rural local governments. This phenomenon has eventually changed and it will be discussed in Section 4.1.

The number of seats by relative majority and proportional representation for trustees and councillors, and the distribution of seats among parties vary according to state legislations. The council is responsible for approving the local government’s budget, their municipal development plan and other initiatives.

\(^9\) According to the National Federation of Mexican Municipalities in Mexico (FENAMM), this reform has been adopted by Coahuila (since 2006), Hidalgo (since 2012), and Veracruz (since 2014) and the initiative is under consideration in others states such as Estado de Mexico, Tlaxcala, Durango and Nayarit.

\(^10\) There is a small group of municipalities that elect their representatives by customs (for instance 418 municipalities in Oaxaca). These municipalities were dropped from the sample.

\(^11\) The first attempt to establish proportional representation at the local government was on 6th December 1977 in a constitutional reform of article 155, which promoted proportional representation at the state legislation and local government but this reform was aimed at local government with more than 300,000 inhabitants (For more historical background see Madrazo, 1986).
The council should represent a counter-balance of political power in the local government by means of overseeing the mayor’s work and legislation for minority groups. In reality, the electoral rules in most cases guarantee the mayor to acquire majority representation of his party in the council because the seats are distributed- in most cases- using first the proportional representation. It means that one seat is given to the parties that reach the minimum percentage of votes in the election. The rest is distributed according to the electoral ratio. It means that the party with the highest number of votes is assigned a second seat first, and then the remaining parties. In most cases few local and minority parties reach the minimum percentage of votes in local election. This ensures the winning party more seats in the council. In addition, minority parties are often controlled by the strongest political parties and are only used to get an extra seat. Recently, there has been a trend for party coalitions where the strongest party maintain political control.

Besides, for many decades the council was used as a means of rewarding the loyalty of party members from the hegemonic political party Partido Revolucionario Institucional, (PRI) as well as a means of negotiation within party groups. This was more rooted in rural municipalities where PRI had absolute power. Therefore, at large, the council’s role in rural municipalities has been limited to collect complaints and petitions for resources from their citizens and forward the request to the mayor who maintains absolute power.

c) Local government responsibilities

Since the 1983 constitutional reform of Article 115, local governments are responsible for drinking water, drainage, public lighting, refuse collection, cemeteries, streets, public parks, gardens, public safety, local markets and slaughter houses. Previously the main local public services such as water and drainage were the responsibility of federal agencies.

According to Pineda (2002), a historical overview of water and drainage service shows how these services were decentralised and then re-centralized. In 1980,
a reform decentralised the service to state governments but in 1982 a new federal agency was created and took the responsibility for infrastructure including water and drainage. The 1983 reform advanced decentralisation to local governments. However, it left open the opportunity for States to provide services in case it was “necessary”. As a consequence, the main local public services such as drinking water and sewage were not decentralised quickly. In fact, by 1988 only 11 states had decentralised these services. The remaining states had the public services under state administration (Pineda, 2002, 52). Nowadays, these services are mostly decentralised.

Another constitutional reform in 1999 clarified, to some extent, the responsibility of some local public services. For instance, sewage systems, treatment and disposal of waste water were added to the heading drinking water and drainage. Under the heading refuse collection, the service was modified to collection, transfer, treatment and disposal of waste. Under the heading street, gardens and public parks, the new reform added the “equipment” or infrastructure for these services (Fernandez, 2001, 273-274). More notably, the 1999 reform supresses state government intervention in local public services and confers decision making to local governments over such services (Perez, 2000). These are local governments’ duties and some of them are financed partly by conditional funds but not all. This will be explained shortly.

Still, collaboration between state and local government exists in the provision of public services. Local governments are entitled, to a certain extent, to decide whether they want to provide the local public services directly or prefer to make an agreement with other public entities such as state agencies or with private companies. Although they have a word in such decisions, they are constrained by regulations, mainly in regard to private sector outsourcing, which vary among states.

The majority of states have a law of municipal administration (29 States in 2010). These laws are applied to all local governments in each particular state. These laws and codes present the extent and limitations for private sector
outsourcing. For instance, 29 out of 31 states in 2010 did not permit public safety and traffic and road management to be outsourced to the private sector (Rivera, 2010, 36). In Table 4.2, it can be observed that by 2009, local governments delivered more than 74% of the services directly (cells highlighted in yellow) excluding local markets and slaughter houses. These services are also mainly delivered directly by local governments but the percentage appears low because of the large number of municipalities without these services (cells highlighted in yellow). The cells highlighted in green show that drinking water, sewage and drainage are the services with more forms of delivery- 36% with the agreement of the state; 22% by collaboration with the community and 32% by intergovernmental associations. 21% of cemeteries are provided by collaboration with the community and local markets are the service with most private outsourcing (42%) and public lighting with most association with the federal government (86% within forms of delivering).
### Table 4.2 Cross-Table of Local Public Services by Forms of Delivering the service in 2009

<table>
<thead>
<tr>
<th>Forms of delivering (FD)</th>
<th>Count</th>
<th>Direct</th>
<th>In agreement with the state</th>
<th>In collaboration with the community</th>
<th>Private allowance</th>
<th>Intergovernmental Association</th>
<th>In association with federal government</th>
<th>The service does not exist</th>
<th>Unknown</th>
<th>Missing data</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Drinking water, sewage and drainage</strong></td>
<td></td>
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</tr>
<tr>
<td>Count</td>
<td>1825</td>
<td>236</td>
<td>143</td>
<td>21</td>
<td>58</td>
<td>19</td>
<td>18</td>
<td>66</td>
<td>70</td>
<td>2456</td>
<td></td>
</tr>
<tr>
<td>% within LPS*</td>
<td>74.3%</td>
<td>9.6%</td>
<td>5.8%</td>
<td>.9%</td>
<td>2.4%</td>
<td>.8%</td>
<td>.7%</td>
<td>2.7%</td>
<td>2.9%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>% within FD</td>
<td>12.8%</td>
<td>36.2%</td>
<td>22.2%</td>
<td>6.5%</td>
<td>32.6%</td>
<td>5.4%</td>
<td>.4%</td>
<td>6.3%</td>
<td>11.1%</td>
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<tr>
<td><strong>Public lighting</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>1856</td>
<td>112</td>
<td>42</td>
<td>14</td>
<td>23</td>
<td>303</td>
<td>11</td>
<td>25</td>
<td>70</td>
<td>2456</td>
<td></td>
</tr>
<tr>
<td>% within LPS</td>
<td>75.6%</td>
<td>4.6%</td>
<td>1.7%</td>
<td>.6%</td>
<td>.9%</td>
<td>12.3%</td>
<td>.4%</td>
<td>1.0%</td>
<td>2.9%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>% within FD</td>
<td>13.1%</td>
<td>17.2%</td>
<td>6.5%</td>
<td>4.3%</td>
<td>12.9%</td>
<td>86.1%</td>
<td>.3%</td>
<td>2.4%</td>
<td>11.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Refuse collection</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>2054</td>
<td>37</td>
<td>88</td>
<td>72</td>
<td>20</td>
<td>5</td>
<td>91</td>
<td>19</td>
<td>70</td>
<td>2456</td>
<td></td>
</tr>
<tr>
<td>% within LPS</td>
<td>83.6%</td>
<td>1.5%</td>
<td>3.6%</td>
<td>2.9%</td>
<td>.8%</td>
<td>.2%</td>
<td>3.7%</td>
<td>.8%</td>
<td>2.9%</td>
<td>100.0%</td>
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</tr>
<tr>
<td>% within FD</td>
<td>14.5%</td>
<td>5.7%</td>
<td>13.7%</td>
<td>22.3%</td>
<td>11.2%</td>
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<td>2.2%</td>
<td>1.8%</td>
<td>11.1%</td>
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<tr>
<td><strong>Local markets</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
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<td>14</td>
<td>77</td>
<td>138</td>
<td>4</td>
<td>5</td>
<td>986</td>
<td>118</td>
<td>70</td>
<td>2456</td>
<td></td>
</tr>
<tr>
<td>% within LPS</td>
<td>42.5%</td>
<td>.6%</td>
<td>3.1%</td>
<td>5.6%</td>
<td>.2%</td>
<td>.2%</td>
<td>40.1%</td>
<td>4.8%</td>
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<td>100.0%</td>
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</tr>
<tr>
<td>% within FD</td>
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<td>2.1%</td>
<td>12.0%</td>
<td>42.7%</td>
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<td>24.3%</td>
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<td>11.1%</td>
<td></td>
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</tr>
</tbody>
</table>

Source: Own calculations from 2009 survey in local governments. This table includes all municipalities in Mexico (including the 16 delegations in Mexico City). * LPS stands for Local Public Services; the cells highlighted in yellow and green are the figures discussed above in the text. Yellow cells refer to percentages within local public services and green cells to the percentage within forms of delivery.

Table 4.2 continues on the following page.
## Country Case Study: Rural Local Government in Mexico

<table>
<thead>
<tr>
<th>Forms of delivering (FD)</th>
<th>Direct</th>
<th>In agreement with the state</th>
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<tr>
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d) Local government finance

Revenue collection for local governments can be classified as follows: taxes, user charges and ‘aprovechamientos’ (literal translation in English- exploitation). Local taxes are collected by local governments but they cannot determine the tax rate. State parliament has this function but they can consider suggestions from the local authorities. The local taxes consist of the following: property tax, real estate transfer tax and other indirect taxes on agriculture, industry and commerce. User charges are categorized into ‘derechos’ (literal translation in English- rights) and ‘productos’ (literal translation in English- product). The latter are the fees obtained via the provision of public services such as the fees that taxpayers pay for the consumption of water. The former are the revenues collected for the use and exploitation of public goods such as the sale of public land or the rent of space on public markets. ‘Aprovechamientos’ are all other revenues obtained which are not classified in the categories already mentioned. These are mainly fines and surcharges.

The 1983 reform entitled local governments to collect property tax and since then property tax is by far the most important source of revenue in most local governments. Cabrero and Orihuela (2002)’s analysis of local public finance describes the aftermath of the 1983 reform. From 1978 to 1983, the municipalities had a precarious financial situation. After local governments were given the ability to collect taxes in 1983 (property tax), the situation was slightly better. Their own revenue increased slightly overall up to 1989; and from 1989 to 1994, revenues increased modestly thanks to the full use of the property tax and users charges. However, from 1995 to 1998, own revenue collection fell. This fall in revenue could be attributed to the economic crisis of 1995 that curbed the collection of revenue but also to the 1997 reform which gave local governments conditional funds. The 1997 reform will be discussed in Section 4.3.

Although local governments are entitled to property tax, they have the option to transfer the collection of property tax to state governments or other
organisations. By 2009, roughly 83% of all municipalities collected property taxes themselves, 12% through an agreement with state government and 5% in other ways. In the case of rural local governments, roughly 83% collected property tax directly, 14% through agreement with the state government and 3% in other ways.

The main problem with property tax is updating information. In 2009, roughly 28% of all local authorities stated that they update constantly, 45% stated that they updated the information one year ago, 9% updated 2 to 3 years ago and 28% more than 3 years ago. Within rural municipalities, in 2009 roughly 16% stated that they update constantly; 52% within a year; 9% in the last two to three years and 23% more than 3 years. Clearly, there have been improvements in this area in the recent years. However, given the importance of property tax for municipalities, there is still room for improvement.

In addition to their own revenues, local finances are composed of intergovernmental transfers. The system combines different types of transfers. Unconditional funds give a high degree of discretion to local governments over expenditure and allocation; and conditional funds give less discretion to local governments because they are designated to specific expenditures. They can take two forms, in general.

In this study unconditional, mandatory conditional and extraordinary conditional funds will be referred to, in order to denote the degree of discretion.

**Unconditional funds** or revenue sharing, as is commonly used in the literature, (*participations*) were designed to compensate for the centralisation of taxing power. They are the most important source of revenue for local governments. They are formed of different funds but the largest fund is called the General Fund of Participations (*Fondo General de Participaciones*) which accounts for

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12 Own calculations elaborated based on the National Survey for public safety and justice in municipalities 2009. Rural municipalities are classified here as 30,000 inhabitants and with a predominance of primary sector activities.
90% of sharing revenue. The allocation of resources from federal to state governments is through an established formula. 20% of the federal assignable tax collection is designated to the General Fund of Participation for states and the state should share at least 20% with the municipalities. The sharing formulas from state to municipalities are established by the state parliaments. Because the formulas are based on percentages from the federal assignable tax collection and then, subject to state regulations, the funds assigned to municipalities fluctuate every year. There is not a clear redistribution which may either lead to rent-seeking and corruption or different forms of incentives.

**Mandatory conditional funds** or earmarked transfers (*aportaciones*) are mandatory funds to local governments. The relevant funds include:

The Municipal Social Development Fund (FAISM) and Fund for Municipal Strengthening (FORTAMUN). FAISM is an earmarked fund only for investment on basic infrastructure projects in marginalised communities. The projects include water, sewage, rural electrification, and municipal urbanization, basic infrastructure in education and health, and rural productivity. This fund is distributed as follows: From the total federal assignable tax collection, the federal government distributes 2.197% to FAISM. They are allocated according to two formulas stipulated in the Law of Fiscal Coordination in Article 34 and 35. Article 34 builds the formula based on a global poverty index and Article 35 is based on a municipal poverty index. Article 35 should be applied only in the case there is no information to apply the formula in Article 34. Because the formulas are based on percentages from the federal assignable tax collection and then, based on a poverty index, the funds assigned to municipalities fluctuate every year.

The fund for public debt and safety (FORTAMUN) was created in order to close the gap between expenditure responsibilities and revenues. The projects

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13 The other funds include: founds for focalization (1.25%); municipal development (1%); funds of compensation (18%); funds of extraction of hydrocarbons (0.46%). In all of them the state government should share at least 20% with the municipalities.
include programmes and actions that foster development in the municipality or financial investments. From the total federal assignable tax collection, federal government distributes 2.35% to FORTAMUN. These funds are distributed based on the number of inhabitants per municipality (redistributive criteria). Because the formulas are based on percentages from the federal assignable tax collection, the funds assigned to municipalities fluctuate slightly every year.

The conditions are that local governments should spend these specific funds in the general spending category of basic public services and public debt and safety respectively. Other conditions include: A) local governments should make public the amounts of money they receive in each fund; the specific projects where they plan to spend the funds and the cost of each project; B) they should promote the participation of citizens in the planning, execution, control, follow up and evaluation of projects; C) they should inform citizens about the projects’ results; D) they should report their spending to the government department in charge of social development (SEDESOL), through their state agencies. The report should follow the rules and guidance stated by SEDESOL; E) they should ensure the projects protect and preserve the environment and promotes sustainable development (INAFED, 2012, 120).

A third set of funds are the **extraordinary funds** or matching transfers (**convenios**). Their aim is to promote the areas which are a priority for federal government. They are highly regulated and audited but also they lack transparency in their redistribution among states and municipalities. Extraordinary funds enjoy less discretion than mandatory conditional funds but in some cases, some decision-making is delegated to local governments.

An important distinction between the different types of intergovernmental transfer is that unconditional and mandatory conditional funds are included in the local government accounts while the later- extraordinary funds- are not. Hence, the extraordinary funds have not been included in the quantitative empirical analysis. But they do appear as relevant in the qualitative empirical
part. Therefore, they will be reviewed in the second stage of this research (the qualitative Section).

Some of the mandatory conditional grants were introduced in 1997. Therefore, they are a good point of reference to compare changes in performance and political behaviour at the local level. The 1997 reform will be discussed more in Section 4.3.

It is important to note that the introduction of mandatory conditional funds significantly increased the amount of resources managed at the local level and reduced state and federal government discretion over allocation of resources among states and municipalities. This ensures all local governments receive specific funds for local development. Therefore, the reform is mainly an expenditure decentralisation.

The reform per se led to higher dependency on central government funds and did not delegate full discretion over expenditure categories. Instead, it increased expenditure power of municipalities but left some degree of discretion in allocation. It activated the role of local governments as a redistributor of basic public services within the municipalities or the allocative efficiency role in the decentralisation theory.

In addition, it empowered local governments with the tools to work towards productive efficiency given that they have discretion over the allocation and operation of the projects in the municipality.

So far, only the results of the decentralisation reform of 1997 have been explained- the creation of the mandatory conditional funds. The next Section intends to clarify why this reform can be used as a point of reference to compare local government performance.
4.3 The 1997 reform- a watershed for local government incentives

As discussed earlier, an important decentralisation reform for Mexican local governments was the creation of mandatory conditional funds in 1997 (it began in 1998). These grants significantly increased the municipalities’ budgets and reduced state and federal government discretion over allocation of resources among states and municipalities. The conditional funds represent an important step to enable local government planning and to foster equal development.

Mandatory conditional grants are important elements in local governments’ incentives but are not necessarily positive. These grants represent an important source of finance that increases municipalities’ expenditure power but also they lead to financial dependency on central government transfers.

Dependency raises a couple of performance problems by negatively affecting tax effort. Cabrero (2005)’s descriptive analysis of local government finance concludes that urban municipalities tend to expand their administrative structure as their budget increase and rural municipalities are prone to become “passive receptors” as intergovernmental transfers augment. Similar results were found by Raich (2003) who investigated the impact of a single type of conditional grant, FAISM (Municipal Social Development Fund). His findings suggest that FAISM is negatively related to tax effort. He concludes that the rise of transfer discourages tax effort due to ‘fiscal laziness’.

Sour (2004) also conducted research on how conditional and unconditional grants affected the fiscal effort of 155 Mexican municipalities between 1993 to 2000. Her econometric analysis suggests that both types of grants have discouraged the fiscal effort of all municipalities, but the extent was higher in large municipalities compared to smaller ones. Another important finding is that medium size municipalities present, on average, better results. However, there

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14 His approach was descriptive statistics before-after the reform of 217 municipalities of the state of Puebla. He also employed qualitative methods as a secondary embedded approach.
are still significant differences across municipalities. This is important for this research because it means that it is still interesting to investigate small rural municipalities. Sour (2004) opens up the question for further research on whether these findings are applicable to local rural governments and predicts that they are not. In another article Sour (2008) expands this study to 2,412 municipalities from 1993-2004 and corroborates the findings.

Moreno-Jaimes (2003) found similar results when analysing the impact of conditional funds in 2,013 Mexican municipalities of at least 50000 inhabitants. His explanation was that local authorities do not want to bear neither the political cost nor the organisational cost of enforcing tax collection.

Looking from a different perspective, Moreno-Jaimes (2005a, 2007) evaluates local governments’ budgetary choices using a panel data from 1990 to 2001 of almost all municipalities in Mexico. He investigates how democracy promotes investment in basic infrastructure rather than current spending. His findings suggest that a democratic environment plays an important role in the provision of public services under a decentralised setting and that basic infrastructure increases when local elections are held and when there is state-level opposition. But, more importantly, he contends that a democratic setting is not a “sufficient condition” to promote local public service provision. Autonomy in decision-making, he claims, is highly relevant.

The literature clearly presents a pessimistic view of certain types of intergovernmental transfers in local government finance but only in relation to fiscal effort. To my knowledge, there are few studies in the Mexican literature that investigate to what extent decentralisation enables entrepreneurial activities which may include higher tax collection and whether it encourages local authorities to be financially accountable.

The studies also confirmed that there is a pattern of high dependency on central government transfers. Nevertheless, performance in some areas is distinct by
group of municipalities. This calls for exploring the fiscal decentralisation hypothesis in specific settings—such as rurally. At the same time, the previous discussion shows that the nature of the most recent decentralisation process (the 1997 reform) is expenditure decentralisation. Hence, municipalities in Mexico remain revenue-dependent on central government, but nowadays they have gained some degree of expenditure-independency. They are entitled to higher sums of money to be spent locally. The conditionality of this expenditure (a general spending category) gives local authorities still some degree of discretion over allocation decisions. Therefore, this reform is an excellent reference for before-after comparison. From here, it can be evaluated how changes and different degrees of discretion in expenditures impact the behaviour of local authorities.

Hitherto the decentralisation reforms and how they impacted the local government finances have been described. The next logical question is why the decentralisation process occurs in this way and what are the underlying motivations of the decentralisation process—identity, democracy or economic growth. The next Section intends to explain this.

4.4 Antecedents and motivations of Mexican decentralisation

As in most Latin American countries, Mexico has a long history of centralised political power inherited from its Spanish conquerors, as well as a strong regional identity that emerged in the post-colonial state. Initiating with this general context of a centralised state power, the decentralisation story began. In order to have an overview, the next Section presents the decentralisation reforms pursued by each federal administration.

Rodriguez (1993) tracked the interest in decentralisation in Mexico since President Luis Echeverria (1970-1976). Until the start of the 1970’s, Mexico experienced an “economic miracle” with a sustained annual growth rate of GDP
6% and low levels of inflation. The main economic policy was import substitution-industrialization. This economic approach triggered regional disparities because industries were concentrated in the centre of the country and in some northern states (Cabrero, 1998) (cited in Mizrahi, 2004, 142).

This miracle started to fade at the beginning of the 1970s and regional disparities were notorious. As a consequence, it is thought that Echeverria promoted decentralisation policies intended to strengthen regional development as well as urban integration (Mizrahi; 2004, 142). Among different reforms, Planning Committees were created in order to integrate states and local governments in the planning and expenditure decisions but maintaining centralised financial power and control.

Lopez Portillo (1977-1981) was fortunate to have abundant state revenues at his disposal during his administrations thanks to high oil prices. However, his agenda did not contemplate decentralisation as a priority. Actually, his reforms reflect, to some extent, the opposite. In 1980, the National System of Fiscal Coordination was created in order to improve revenue collection as well as better redistribute revenues across all the territory. In addition, the National System of Fiscal Coordination aimed at avoiding double and even triple taxation with the state level (Moreno-Jaimes, 2003). A problem at the time was that the same asset or transaction was in some cases taxed by both the state and the municipality.

In 1980 the National System of Fiscal Coordination granted the right to the central government to levy and collect the most important taxes in the country such as income tax, the newly created value added tax and special taxes on production. State governments had to cede their rights to levy some indirect taxes. Hence, instead of decentralising fiscal powers, central government centralised tax control. But, state and local governments were granted revenue-sharing from the taxes collected by the central government - the ones discussed in Section 6.1d- based on pre-established formulas (Mizrahi, 2004, 145).
Unfortunately the next Mexican president, Miguel de la Madrid (1982-1988) was not as fortunate as his predecessor in economic terms. A fall in petroleum prices and debts deepened Mexico’s incipient economic crisis. The interest in decentralisation was reborn. In this regard, Selee (2004, 7) argues that the 1983 reform was triggered by citizens’ discontent over the 1982 devaluation of the Mexican currency (peso).

Miguel de la Madrid pursued economic development policies and “apparently” strengthened local governments with a constitutional mandate. He implemented several administrative reforms such as the National Plan for Development under which administrative competencies were redistributed among different government levels. In 1983, a reform of the Mexican Constitution notably Article 115 delegated more resources and responsibilities to local governments. This article states the composition of local governments, their functions and financial autonomy. Municipalities$^{15}$ were responsible for the provision of local public services mentioned earlier. Moreover, they were endowed with the faculty to collect property tax and other minor taxes. Prior to the 1983 reform these taxes were collected at state level and, then shared with the local governments. The entitlement to local taxes, and local revenue collection aimed to close the gap between expenditures and revenues. Local governments were granted the right to collect property tax. However, state parliaments were, and still are, in charge of setting the property tax rate.

Cabrero (1998) (cited by Muñoz et al, 2006, 33) refers to this stage as decentralisation by decree. It was a top-down policy and local actors did not play an important role. This reform lacked incentives beyond the administrative arrangement it implemented.

The next Mexican president was Carlos Salinas (1988-1994). His election was stereotyped as fraudulent. Yet during his administration, decentralisation

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$^{15}$ In Mexico there are two forms of territorial division at the lowest government level: municipalities and delegations. States are divided into local governments or municipalities and Mexico City is divided into delegations.
policies became part of the main policy agenda but with a different twist. During his administration a programme called PRONASOL was created to allocate grants and other schemes directly to communities. These funds were allocated to community projects such as drinking water and paving roads. In many cases communities contributed financially or in labour, depending on the type of project. The main principle was that communities should get involved in decision-making and implement projects together with the government institutions. However, the decentralisation was toward parallel organisations (solidarity boards) and the projects were carried out under central government advice. Hence, this stage should also be characterised as decentralisation by decree as Cabrero defined.

It is worth mentioning that some academic studies suggest that PRONASOL was politically motivated. They argue that PRONASOL was directed to recover the PRI’s legitimacy lost during the last presidential election. Nevertheless, some scholars claim that it neither helped to alleviate poverty (Dion, 2000) nor had a significant effect on the next presidential election to favour PRI (Bruhn, 1996; Dion, 2000).

Rodriguez (1993, 142) advances the argument that Madrid and Salinas’s motivation to strengthen local governments was based on the intention to preserve the system as it was. In his view, the political elites of the time realised that extreme centralisation would inevitably result in the system’s downfall. Hence, municipalities and the party -PRI- needed to be strengthened at the bottom. Up to this point, Rodriguez (1993, 142) argued that intergovernmental relations had changed because central government was “genuinely obliged” to delegate municipal autonomy due to “fear” of losing political control.

Similarly, Selee (2004, 9) argues that the delegation of functions to subnational level and the increase of resources were performed in response to constant crises of “political legitimacy” as well as fear to the gradually increasing opposition.
The next important change took place in 1997, under Ernesto Zedillo’s administration (1994-2000). The federal government created a budget for conditional funds to municipalities. These are the conditional mandatory funds discussed earlier in Section 4.2 d. They are resources assigned to specific spending categories (for instance, different type of basic local service infrastructure). Before 1997, conditional mandatory funds did exist but were highly discretionary. Several federal dependencies working in favour of regional development were in charge of this share of the budget. “Ramo 33”- as these conditional funds are sometimes called- grouped these shares and decentralised expenditures to local governments. This time the conditional funds were mandatory for all local governments and they increased local government revenues significantly.

In addition, during Ernesto Zedillo’s mandate after mid-term elections, when PRI lost the majority in the Congress, the main opposition party Partido Acción Nacional, PAN (for short) put pressure- and succeeded- in increasing the sharing of revenues.

Zedillo got off on the wrong foot. First, he was president after he replaced Luis Donaldo Colosio, the PRI candidate who was assassinated; days after Zedillo took power, the guerrilla war in Chiapas exploded; a brutal economic crisis started and on top of that opposition party was becoming stronger. Hence, Zedillo had the difficult task of legitimizing his power and maintaining his party’s hegemony. He recognized that the core problem in political and economic terms was “excessive political and economic centralism”. Then, decentralisation via conditional mandatory funds apparently looked like they could be part of the solution. Perhaps, he expected this reform to legitimise his party. However, in this specific matter Zedillo did not succeed since he was the first PRIista (this is a member of the central-left party, PRI) to lose a national election.

Among criticisms of Zedillo’s reform are that states and municipalities became more dependent on the federal government; it did not increase the local
governments’ autonomy because they were mainly conditional mandatory funds; it did not change the centralisation of resources because the majority of total expenditure continued in federal hands and ambiguity in allocation of resources among different levels of government persisted (Mizrahi; 2004, 155).

However, the mandatory conditional funds were distributed independently of party affiliations. This may have curbed to some extent the paternalistic behaviour of the ruling party and may have increased the performance of opposition parties and their electoral opportunities.

It needs to be taken into account that Zedillo did not belong to the ruling PRI political class of the time. Proof of this is that during his mandate, he appointed a PANista (this is a member of the right wing party, PAN) Antonio Lozano as his Attorney General and prosecuted Raul Salinas, the former president’s brother, on charges of murder and corruption. During his mandate there were also important political reforms that to a large extent contributed to the empowerment of opposition parties. These reforms include strengthening the independence of the electoral institution and establishment of new methods of party financing and transparency. Then his motivations for the reforms seem to be a genuine attempt to improve the economic performance of the country.

An alternative explanation of the rise of these reforms is that there was a large influence of multilateral organisms and an “atypical” consensus in the congress at the time the ruling party, PRI, did not have absolute majority (Muñoz et al, 2006).

From 2000 to 2006, the right wing PAN government fostered a programme called “Authentic Federalism” and created the National Institution of Federalism and Municipal Development (INAFED). Local governments were strengthened by promoting a direct relationship between federal and local governments. Taking into account the political context from 2000-2012, these changes were highly convenient for local governments from the same federal ruling party
Mizrahi (2004, 157) considers that the decentralisation reforms (1983 and 1997) were designed for PRI to maintain political power rather than a means to change the balance of power among different levels of government and make them more efficient or increase accountability to local citizens. She argues that the reason decentralisation in general and fiscal decentralisation in particular did not produce the results expected is because a) it was not the fundamental objective - if the federal government delegated responsibilities to subnational levels because they could not carry them out efficiently, then the reforms were not designed as instruments to change the balance of power but as administrative reform to maintain political power, and b) because of the poor democratic institutions in place.

This is similar to Rodriguez and Andrew’s arguments that competition for political control played an important (hidden) role in the decentralisation reform. This implies that in Rodriguez-Pose’s rhetoric, decentralisation in Mexico was advocated from an economic discourse but under political incentives due to pressure from below- PRI losing political control at the bottom.

The discussion seems to suggest that in Mexico, the attempts of decentralisation- even if “malicious” in motivation- result in more political competition, not the other way around. This could be the reason for the latest important democratic changes (which were discussed in Section 4.1).

Thus, decentralisation might have led to changes in the behaviour of local authorities that are reflected in the political landscape. This reaffirms the necessity to look at changes in the political landscape together with the decentralisation reforms. But once they are both in place, political competition and decentralisation, the results or outcomes of decentralisation may be reinforced by the political situation.
Since the political motivations of the decentralisation process in Mexico are being focused on, it makes sense to explore the development and the state of democracy in the country. But, before turning the page, the state of the “municipal autonomy” will be briefly discussed.

It will be argued that indeed, local governments are more autonomous nowadays; after the 1997 reform, than before. Expenditure decisions are part of what municipal autonomy is. However, this is only a part of it. Municipalities in Mexico are far from being autonomous as lawfully defined. This is not only a consequence of the revenue structure of the country with centralised revenue collection, but also because municipal autonomy is closely interconnected with the political landscape of the country. The next Section will clarify these arguments.

4.5 Summary

In short, the fiscal decentralisation reforms in Mexico after 1997 reflect the decentralisation characteristics of most Latin American countries and beyond. Therefore, some of the findings of this research can be extended to other similar countries. Municipalities in Mexico lack taxing power but are enjoying greater expenditure shares.

There is some evidence that fiscal arrangements may influence -negatively- the behaviour of local officials in regard to fiscal effort. However, so far not enough attention has been paid to understanding whether and in what ways fiscal arrangements do influence each type of behaviour. In addition, in order to understand behavioural incentives, this review reaffirms the necessity to include a political dimension in the theoretical framework given the important political changes taking place at all levels of governments, in particular in rural municipalities.
Chapter 5 – Research methodology

The following chapter introduces the empirical approach adopted to evaluate the theoretical framework developed in the previous section. The themes covered are: first, a discussion of the research paradigm and research approaches aiming at justifying the selection of a mixed methods research paradigm; second, a description of the research design explaining the paradigm emphasis, chronology of decision making, integration, and research strategies; and finally, it presents the decision drawn from a pilot study.

It is important to notice that in this chapter a detailed discussion of research methods has not been included. Given that this study uses two different research methods (panel data analysis and interviews) in two phases, the level of detail can be overwhelming. The researcher believes it is easier for the reader to assimilate the detailed methodological information just before the empirical discussion. Therefore, details of the methods are presented at the beginning of chapter 6 for the quantitative method and chapter 10 for the qualitative method.

5.1 Research paradigm and approach

The choice of paradigm is regarded as the first step to achieve the ultimate aim in the research process, the generation of knowledge. The validity of the knowledge claimed to be obtained through the research process depends on the philosophical stance it follows. According to Morgan, (2007, 50) paradigms are “shared belief systems that influence the kinds of knowledge researchers seek and how they interpret the evidence they collect”.

This research uses mixed research methodology. In recent years, mixed research methods have achieved growth in acceptance and importance with a number of dedicated textbooks, journal and conferences now available (Creswell and Plano, 2007; Mertens, 2009; Teddlie and Tashakkori, 2009).
There is no consensus on the paradigm choice for mixed research. There are still issues being discussed by methodologists, including whether mixed research should be considered a paradigm that could be classified under pragmatism (Tashakkori and Teddlie, 2003). Others believe it should be considered as a transformative view (Mertens, 2009) or as a link between paradigms and methods (Creswell, 2009; Creswell and Plano, 2007).

This research uses a standard mixed methods research approach. By this it is meant that mixed methods research is considered as both research design and method. As a research design, it comprises philosophical assumptions that lead to methods for collection of data and analysis using both quantitative and qualitative approaches. And as a method, it advances the collecting, analysing, and mixing of both quantitative and qualitative data in a single study. The premise is that combining both approaches, the researchers can gain a better understanding of the phenomenon under study than either approach alone (Creswell and Plano; 2007, 5)

This standard approach seems flexible in regard to the relative weight given to different paradigms which have been combined. It also calls for a value-neutral stance for the researcher during data collection.

There are two main reasons why the “standard” mixed methods research approach has been selected for this particular study. First, the research questions call for different paradigms and second, the nature of the research benefits from different paradigms.

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16 A very interesting and robust account of recent issues can be found in Creswell (2009).
Research methodology

a) Research questions

This research intends to answer five questions that are based on two more general questions; what and how. What are the drivers of accountability and public entrepreneurship and therefore, government performance, and how are these effects achieved?

All five research questions clearly pursue a different research aim and therefore, each calls for different paradigms and research approaches.

Q (1) seeks to find an association between fiscal decentralisation and two different behavioural patterns accountability and public entrepreneurship. This question intends to test the hypothesis that fiscal decentralisation leads to changes in behaviour patterns associated with accountability and public entrepreneurship behaviour.

Q (2) seeks to test the strength and significance of political competition, which is another variable likely to influence accountability and public entrepreneurship, as voting is used to remove politicians who fail to provide the policies preferred by local citizens. Again, it seeks to find an association between political competition and both, accountability and public entrepreneurship.

Q (3) asks whether fiscal decentralisation is actually associated with better government performance, which theoretically is assumed to be a consequence of changes in accountability and public entrepreneurship.

These questions are designed to answer hypotheses and therefore, require deductive reasoning. They will enable the researcher to make inferences about what might lead to good government performance, and the quantitative data and analysis are appropriate.
By exploring “what” are the identifiable changes affecting accountability and public entrepreneurship in rural local government, (Q4) aims at checking whether the decentralisation reform can be identified as an important factor affecting behavioural patterns on the ground. It will give a contextual explanation to the findings and to any unexpected results of the analysis relating to Q (1), Q (2) and Q (3): whether fiscal decentralisation and/or political competition are associated with changes in patterns of accountability and public entrepreneurship and, in turn, whether these mediating mechanisms are associated with government performance.

In addition, and finally, by studying “how” fiscal decentralisation may encourage accountability and public entrepreneurship (Q5) intends to explain the mechanisms or processes behind this phenomenon.

Questions (4) and (5) require inductive rather than deductive reasoning. Using inductive reasoning permits us to look for patterns across the case studies and to make sense of the empirical observations and important elements overlooked in the deductive approach. The aim is to understand and uncover complex relationships such as the contending elements of accountability and public entrepreneurship. Therefore, a qualitative approach is suitable.

b) Nature of the Research

Fiscal decentralisation is an international trend and has become part of the international, national and local focus of political actors. While much research has been done related to policy outcomes at the macro level, more research is needed on what drives changes on the ground in terms of behavioural patterns and whether these patterns are influenced by the fiscal arrangements the country has adopted or whether change is a consequence of the level of political development in the municipalities.
The impact of fiscal decentralisation has been studied primarily using quantitative methods but there are a few studies based on a qualitative approach. The empirical literature on the subject presents contrasting results likely to be related to the methodology choice. In this regard, case study methods seem to be more pessimistic and statistical methods more optimistic with regard to the impact of fiscal decentralisation, particularly in government performance. Therefore, mixed research that examines the impact of fiscal decentralisation and behavioural patterns from both quantitative and qualitative approaches may lead to a deeper understanding of how fiscal arrangements influence behavioural patterns and therefore, government performance.

In addition, this area of research involves complex elements of analysis which are not easily measurable (accountability and public entrepreneurship) and it is difficult to isolate policy arrangements from personal attributes.

Moreover, there is a large set of factors that are intertwined in local governments practices such as local politics, state politics, culture, development, economy and so on. All of the above considerations support the choice of the “standard” mixed method approach. As discussed above, Q (1), (2) and (3) are suited to deductive reasoning (testing of theories and hypotheses); Q (4) and Q (5) are suited to inductive reasoning (or discovery of patterns) and the interpretation stage will be based on abductive reasoning (uncovering and relying on the best of a set of explanations for understanding one's results) (Johnson and Onwuegbuzie, 2004, p. 17). This will enhance the validity and reliability of the findings.

5.2 Research Design and Strategies

The research design is the plan that guides the researcher through all the research process - gathering, processing and interpreting (Singleton and Straits, 1999). It sets the logic to make informed interpretations.
Some of the key decisions in mixed research are whether the researcher undertakes both methods at the same time (concurrent) or whether they are carried out at a different point in time where one stage will be completed, followed by another (sequential); and the relative weight of the different paradigms that are used. Figure 5.1 summarises the choices and decisions available to the mixed methods researcher.

![Mixed method design matrix](image)

*Figure 5.1 Mixed method design matrix with mixed method research design shown in the four cells (Source: Johnson and Onwuegbuzie, 2004, 22).*

Data assembly and collection occurred in two phases. In this sense, this study falls in the sequential category in Figure 5.1 above. It uses secondary databases for the first phase—the quantitative approach and a qualitative approach in phase 2. According to Creswell and Plano (2007, 66), in the sequential design the researcher may select to start by either collecting and analysing quantitative first or by collecting and analysing qualitative first. The reason to carry out the quantitative research first in this research is that the literature already presents some well-established theories, therefore it makes sense to start testing the hypothesis (Q1, 2 and 3) and then, look for further explanations (Q4, 5). In other sense, this research also uses concurrent design because case study selection criteria for case development of the
Research methodology

Interviews were carried out independently of the quantitative results and alongside the quantitative analysis to decide on the additional.

The second phase involves the collection of qualitative information (see Figure 5.2). In this case, a range of case-studies with “moderately” extreme scores are used to evaluate the same phenomenon; the impact of fiscal decentralisation in the behavioural patterns of local authorities in rural local governments in Mexico. Quantitative results were only used as a part of the selection along other important characteristics such as different funding approaches, demography and different patterns of behaviour.

In regard to the weight of paradigms, this study gives equal emphasis to both paradigms to answer different but related research questions. In this way, the researcher can compensate to some extent for the limitations of each method.\(^\text{17}\)

The first phase is used to inform the selection of cases in phase two. However, this study is not considered embedded because an embedded design requires a type of data (qualitative or quantitative) to be of secondary role (Creswell and Plano’s classification (2007, 71-72).

One other important part of the design is the integration of information. This should respond to the overall strategy of employing mixed research methods. The use of the mixed research per se does not generate valuable results. The researcher should have a clear strategy to merge and combine both methods. According to Creswell and Plano’s classification (2007, 66-68), this study integrates information during data collection, during data analysis and during interpretation.

The first integration occurs at the end of the first phase. The actual scores of the indices constructed for operationalizing the variables Accountability and Public Entrepreneurship were used as a part of selection of case studies for testing the subsequent questions (mixing during data collection). In addition to actual

\(^{17}\) A useful explanation of general typologies can be found in Cameron (2009).
scores of the indices, the selection considered states with different funding approaches, different demography, and also different patterns of behaviour (see Section 5.2.2). Thus, the case studies were not selected purely based on econometric results.

The researcher is aware that there are different approaches to integrating quantitative and qualitative approaches and data to select cases. This research used actual scores on the variable of interests as one of the criteria for selecting cases study municipalities. It did not select cases based on predicted scores from the regression models. The reason is that the qualitative part of the research was not designed to test a model. Its purpose was to operationalise and further investigate Accountability and Public Entrepreneurship through a different approach and additional research questions, prior to further integration.

The second integration is during the second research phase when the qualitative paradigm is used to interpret the initial findings from the quantitative approach (mixing during data analysis).

The final integration is during the interpretation stage of the overall research (see Figure 5.2). In this case, abductive reasoning has been used to reach a final interpretation. Using both sets of findings aims at giving greater validity to the research.

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18 Lieberman (2005) discuss different strategies to select cases in a nested research approach. He suggests that the assessing of the findings of quantitative approach should be based on whether the assessment of the regression model is satisfactory or not. If it is satisfactory, the qualitative analysis should be aimed at Model-testing. If it is not, the analysis should focus on model-building. One of the approaches that Lieberman (2005) suggests is to select cases based on predicted and actual scores on the independent or dependent variable derived from the regression model.
5.2.1 Phase 1- Panel data analysis

The first phase consists of using fixed-effects in a panel data analysis with rural municipalities as units of analysis between the years 1990 to 2008.

Using data from a sample of rural local governments in the country, different hypotheses using different models and outcome variables are tested, depending on the research question being analysed. The hypothesis being examined is that changes in a) accountability, b) public entrepreneurship can be explained by increases in conditional, unconditional funds and/or political competition. In addition, whether these behavioural patterns and/or political competition are associated with government performance is also tested.
Different types of data are used. Information is used of coverage of basic public services from census and population counts collected by the Mexican National Institute of Statistics and Geography (INEGI); local governments’ financial information from INEGI and political information such as party affiliation and political competition from an independent, not-for-profit think tank organization in Mexico, the Centre for Research in Development (CIDAC). 19

Two indices were constructed, accountability and entrepreneurship, based on local government surveys from Mexico. These indices represent an effort to operationalize accountability and public entrepreneurship using secondary data bases. These indices were also, in conjunction with other descriptive variables, when identifying cases for further investigation in the second phase of the study.

More details of the statistical technique and operationalization of variables can be found in Chapter 8.

5.2.2 Phase 2- Sub-Case Studies

This research is interested in the impact of fiscal decentralisation in rural local governments in Mexico. The country-case study was not selected, but guided by the researcher’s interest and familiarity with the country. However, sub-cases (municipalities) were carefully selected as part of the research strategy.

According to Gerring (2004, 342), a case study is:

“an intensive study of a single unit for the purpose of understanding a larger class of (similar) units”.

19 In Spanish- Centro de Investigación para el Desarrollo, A.C.
Flyvbjerg (2006, 219) states that some researchers argue that case studies are too limited to be generalised. They are considered as a part of a pilot study, not as a method to create knowledge or as a reliable and valid scientific method.

Gerring (2004, 341) argues that case study and non-case study approaches involve trade-offs in weakness and strengths rather than “antagonistic” approaches to empirical research.

For this research, the benefits are particularly important. Case studies can bring detailed enrichment for a better understanding of the reality in a context-dependent phenomenon (Flyvbjerg, 2006).

In addition, case studies are well-suited for analysing and explaining how and why things happen as they do (Stake 1994, Pettigrew 1990). This is consistent with the researcher’s interest in uncovering the process by which fiscal decentralisation may lead to changes in accountability and public entrepreneurship. In this research Q5 in particular responds to this type of questions- in what ways has fiscal decentralisation encouraged accountability and public entrepreneurship?

According to Teddlie and Yu (2007), multiple case studies can be used in order to achieve comparability. The selection of cases can be carried out in a purposeful manner using typical cases, extreme or deviant cases, intensity sampling or maximum sampling. Eisenhardt and Graebner (2007) suggest that extreme cases ease the observation of contrasting patterns of constructs and relationships.

The research questions proposed here can be addressed effectively by observing a range of case studies with different levels of accountability and public entrepreneurship because the fiscal decentralisation reform was undertaken by all rural local governments, but still their performance differ.
Gerring (2004) advances that case study should be understood as an approach to defining cases rather than as a method of analysing cases. Therefore, it is important to identify why the defined case studies are useful. For the purpose of this research and following Gerring’s (2004) propositions, case studies are useful because in the second phase of this research a) there is more interest in the depth of the proposition rather than breadth and boundedness; b) case comparability is more important than representativeness; c) the aim is to understand causal mechanisms rather than effects; and d) there is useful variance in the variables of interest.

A critical decision in case study design is the selection of cases. Bryman (2006) suggests that in mixed research, the quantitative approach can be used to inform the sampling of cases.

This research employs purposive sampling techniques with a range of case studies that are “moderately extreme”. It uses the actual scores of the variables of interest of the indices built in the first phase of the research, but also other variables, and specifically the approach taken to implementing fiscal decentralisation. Purposive sampling technique yields a greater depth of information from a small number of cases because cases provide interesting contrasts with other cases. In addition, a range of different cases can also benefit the operationalization of concepts not evident in the statistical analysis (Lieberman, 2005, 441).

Another aspect of the case selection in mixed research that needs to be considered is whether the selection of cases should be based on scores from the independent or dependent variable. Some scholars have criticized the use of the dependent variable scores (Lieberman, 2005, 444) and instead, they recommend using scores on the explanatory variable(s) and with the condition of not having knowledge of the dependent variable score or for using it for Model-testing after the preliminary quantitative analysis on nested approach (Lieberman, 2005, 444). However, as noted above, the case studies in this
research are not being used to test the model. The selection of cases is based on a number of variables of interest. The index scores are, in different parts of the quantitative analysis, both dependent and independent variables, and actual, not predicated, values are used. The score of the dependent variable of ultimate interest, Government Performance, is not considered. Decentralisation arrangements at state level are used as a central part of the case-study selection process, but were not part of the model.

The main objective for the selection of cases was to obtain the following:

CASE 1- A good performer town on both dimensions, Accountability and Public Entrepreneurship.
CASE 2- A good performer town on Accountability
CASE 3- A good performer town on Public Entrepreneurship
CASE 4- A poor performer town on both dimensions
CASE 5- An average performer town

and also to ensure that all major state level approaches to decentralisation were represented.

Case 4, Poor performer town, presents poor performance in both dimensions of interest Accountability and Public Entrepreneurship. The researcher did not investigate individual poor performers in each dimension separately because Case 2 and Case 3 make cases for poorer performance on Accountability and poorer performance on Public Entrepreneurship. In addition, from the methodological point of view, fewer case studies provide with more depth than breadth and avoid the burden of ending with thinner insights about more cases (Lieberman, 2005, 441).

In order to achieve comparability and identify similarities or differences, Rousseau and Fried (2001) suggest addressing the same phenomena in all cases and to give a detailed description of the cases. Following these
recommendations, the same phenomena were analysed in all cases and in Chapter 11 a rich case study description is presented. The description presents similar information about all cases in order to reveal systematic differences.

The main source of information for the case studies was interviews. This was because of the lack of archival documentation in this group of municipalities. More details are given in Section 10.5.

The selection of participants in each case study and the data collection methods used (semi structure interviews) in the second phase is described under the methods section in Chapter 10.

5.3 Pilot study

A pilot study was carried out before starting the first phase of the research. The pilot study was aimed at facilitating the researcher in becoming acquainted with the settings and assisting the decision for the statistical analysis as well as the selection of participants and questions in the qualitative strand.

The interviews were carried out in a rural municipality of the state of Tamaulipas, Mexico. The State of Tamaulipas was selected due to accessibility and familiarity with the setting for the researcher. Further cases for the empirical investigation were selected based on a systematic procedure for ensuring coverage of all major state approaches to decentralisation.

The five interviews correspond to two mayors, two councillors and one local government manager. The two mayors and councillors belong to different political parties (PAN and PRI) and they were in office in consecutive periods but mayors and councillors were in opposition. The manager belonged to PAN.

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20 PAN stands for Partido Accion Nacional. It is the right-wing party in power at the national level at the time of the study. PRI stands for Partido Revolucionario Institucional. This is the central/left-wing party which has previously been in power for 30 years.
The municipality was selected due to its accessibility and the participants’ selection based on the position they held and their party affiliation. Some decisions drawn from the pilot study’s results are:

1) Street level bureaucrats would be excluded because this particular group of municipalities have highly centralised managerial styles. Thus, this research assumes that mayors are the leaders in entrepreneurial actions and have the larger accountability expectation in the local government.

2) The pilot study helped to decide the more relevant participants in the study (mayors and councillors). In addition, it revealed the importance of including a local actor with experience in the local administration before and after the reform of 1997.

3) The pilot study helped to assess the quality of some interview questions. As a result, some amendments were made after the pilot study. The final interview questions were also amended based on the initial findings in Phase 1.

4) The pilot study was important for operationalizing the construct “public entrepreneurship”. Drawing from the literature and the pilot study, the most appropriate variables available in secondary databases were selected which were likely to reflect the different dimensions of the behavioural concepts. More details in Chapter 8.

### 5.4 Summary

This chapter locates the study within the appropriate research paradigm and justifies and describes the selection of methodology and research design for this study.

After reviewing different research paradigms, the study is located within the “standard” mixed methods research approach. This is considered the best approach to obtain a comprehensive understanding of whether and how fiscal
decentralisation drives accountability and public entrepreneurship leading to good government performance.

The nature of the research questions, the association of fiscal decentralisation to behavioural patterns and government performance and the creation of more knowledge around the process leading to such results, justifies a “standard mixed method research approach”. Through the mixing of methods, the study will obtain situational facts from rural local governments as well as rich qualitative data around the local actors’ perceptions.

The unit of analysis is the rural local government in Mexico. The standard mixed method research approach seeks to make most of the strengths of both paradigms and logics of enquiry. The study is carried out in two phases. In the first phase a quantitative approach uses data collection from rural municipalities during the years 1990 to 2008 with a modest number of cases, and the actual scores of the variables of interests operationalized for this analysis are used to assist in the selection of a range of different case-studies for the subsequent phase.

In the second phase, a range of different case-studies were selected. From each case study, qualitative semi-structured interviews were carried out among local actors. The integration of information is carried out at different stages: during data collection, during data analysis and during interpretation.

More details about the selection and processes of research methods are discussed before the empirical analysis of each research phase. Next, the discussion and findings for the first research phase are presented. The discussion and analysis of Phase 1 is divided into four chapters. Chapter 6 presents detailed information of how the variables were operationalized and descriptive statistics. Chapter 7 tests the association of fiscal decentralisation and the two behaviours of interest, accountability and public entrepreneurship; Chapter 8 evaluates the association of the behaviours and government
Research methodology

performance and Chapter 9 presents an analysis of changes in government performance before and after a decentralisation reform.
PHASE 1- A QUANTITATIVE ANALYSIS OF FISCAL DECENTRALISATION
Chapter 6 – Research Method, Operationalizing the Variables and Descriptive statistics

This chapter investigates whether fiscal decentralisation is related to improvements in local government performance. The aim is not only to investigate the relationship between fiscal decentralisation and outcomes such as the provision of public services, but also to uncover whether fiscal decentralisation has changed the behaviour of local authorities which are argued to be theoretically drivers of local government performance.

To summarise the arguments presented in the literature review: if fiscal decentralisation is an effective mechanism in motivating local authorities to be more accountable and entrepreneurial, it might be found that changes in behavioural patterns due to fiscal autonomy result in better provision of local public services. Such changes may also be affected by factors other than fiscal decentralisation.

In particular, in the Mexican case, at the same time as the fiscal reform of 1997, an increase in the level of political competition has enabled politicians from different parties to lead local governments which for many years were in the hands of one political party, PRI. These have changed the political panorama in rural Mexico. There are more opposition parties ruling local governments and there are more local governments with state level opposition.

Theoretically, political competition leads to better government performance, in particular because it also involves changes in accountability and, to a lesser extent, public entrepreneurship. Therefore, the observed behavioural patterns of local politicians might be the result of the political competition’s incentives rather than, or as well as, fiscal decentralisation. Equally, the process of fiscal decentralisation may itself be reinforced by changes in political competition.

It has been pointed out that under fiscal decentralisation, the political mechanisms can result in either improvement in accountability and public
entrepreneurship or in principle deterioration of the same. Elections as a mechanism of reward or punishment lead to accountability behaviour and give an opportunity to local authorities to differentiate themselves from other politicians by stimulating public entrepreneurship. On the other hand, more resources in the hands of local government may lead to a higher level of corruption and public entrepreneurs tend to be risk-takers, which can damage accountability.

In addition, the types of fiscal arrangement might influence accountability and public entrepreneurship in completely different directions. In the Mexican context, high levels of red tape generally attributed to conditional funds are, among other reasons, set in order to control corruption. However, a high level of red tape is likely to discourage creativity and pro-activeness of public entrepreneurs. Hence, the types of fiscal arrangements may affect accountability and public entrepreneurship differently and therefore, government performance.

Before presenting the statistical analysis, the next section explains the research methods and strategies employed to operationalize and measure each variable. It also provides some descriptive analysis of the relevant variables.

### 6.1 Research methods

The first phase of analysis is a quantitative approach. The aim is to get the “big picture” and then, expand the findings in the subsequent phase to answer the appropriate research questions. This quantitative analysis is not intended to obtain generalizable data. The analysis of quantitative data was primarily descriptive of situational facts, but included regression analysis to assess whether statistically significant differences were found in this group of municipalities.

There are numerous techniques that have been developed and are used in social science. The selection of these techniques depends on the type and
availability of the data. The next Section describes and justifies the technique used in this research.

6.1.1 Statistical models

Fixed-effects estimation is used in a pooled time-series cross section with municipalities as units of analysis. The software used is SPSS and the technique Mixed Linear Model. Some models present fixed effects on both time and municipalities and others only on municipality-specific depending on the best model fit. This permits the elimination of bias created for (fixed) unmeasured municipalities’ characteristics that may have additional effects such as culture and geography and if suitable, controlling for country-wide time shocks that affect all municipalities equally.

This research follows the advice by Snijders and Bosker (1999, 46) for choosing between fixed and random models. The reasons are:

a) This group is regarded as a “unique category” (rural municipalities) rather than a sampled population (all municipalities in the country)
b) It is aimed to draw conclusions about each of these municipalities, not from the population
c) The sample size is adequate to run fixed effect model (+ 100). Therefore, the fixed effect parameters are likely to be estimated very accurately and random effects do not add much to this precision
d) The research has an interest in within-group differences rather than between-group differences. Therefore, the aim is to control for between-group differences without modelling as it adds complexity to the analysis

It is important to clarify that validation and model predictions are not the focus of these analyses. Instead, they aim to use underlying trends to see the “big picture” as well as corroborating and integrating the findings in subsequent analyses.
This brings us to the next issue of validity and reliability for this method and technique.

### 6.1.2 Reliability and Validity

Reliability indicates the extent to which measurements are repeatable and stable (Nunnally, 1978; Bollen, 1989) and validity refers to whether researchers are measuring what they intend to measure (Cook and Campbell, 1979).

In this regard, the reader is reminded that the choice of research strategy (mixed) was precisely because of these issues. In social science and non-experimental designs reliability and validity are inherent problems and reliance on survey data raises even more difficult questions in regard to validity.

The choice of models as discussed above was based on the approach that validity is not the main concern of this quantitative analysis; instead it is an exploratory study for these particular samples and it does not attempt to generalize findings. However, for the validity of the entire study, this research is also interested in knowing whether what is measured is what it is intended.

Most of the variables included in these analyses have been justified theoretically and have been used in other studies (such as the political variables). Although this is not a valid argument of reliability and validity, it is still a conventional and valid approach in social science research.

As argued in the literature review, it is difficult to operationalize these heavy theoretical ideas and there is very little empirical evidence operationalizing these concepts, in particular public entrepreneurship. These statistical analyses attempt to do that. An empirical measure is constructed from theoretical idea. Therefore, it is an important contribution to social knowledge.

Nevertheless, it is important to clarify that strong model fitting and effects are not expected. The measures used here attempt to uncover changes at the
margin. It does not seek to unpack the whole municipal organization by its roots. Therefore, it is expected to see changes that might make a difference at the margin.

Particularly with the public entrepreneurship index, the researcher is very conscious of having imperfect measures. This is precisely one of the reasons it was particularly important to look at case studies on the ground. Then, the effects on the empirical estimates in the quantitative analysis are not expected to be remarkable huge. Nevertheless it is believed the index is good enough to find some effect in case they exist.

6.1.2.1 Mitigation of threats to reliability and validity in the multiple regressions

The internal validity of studies based on regression analysis relies on two key elements: (i) the unbiasedness and consistency of the estimated regression coefficients; and (ii) the significance level of the estimated results (which depends critically on the standard errors of the estimates).

Following Stock and Watson’s (2011) framework, the most important potential threats to internal validity for this study is omitted variable bias. This threat has been addressed by controlling for other potential determinants of the dependent variable under analysis, beyond the key explanatory variables of interest. Of primary importance are the political variables that were added to the model in stepwise manner, political competition, state-level opposition and political parties, since they are likely to be correlated with both dependent and independent variables of interest in the model. In addition, the researcher explores other potential factors such as population size, population density and size of municipality as measured by its area in squared kilometres. The variables population size, population density and size of municipality were not statistically significant and the estimated coefficients of interests did not change significantly after their inclusion. Therefore, these controlling variables are not present here as they do not add strength to the model. The approach was to select the simplest model for presentation to make it more reader-friendly.
Nevertheless, still some potential threats to internal validity persist. It is important to acknowledge the danger of further omitted variables bias, perhaps arising because the control variables do not capture characteristics of the rural municipalities such as, but not limited to, the proximity to more developed municipalities or cultural characteristics. In this regard, to address issues of potential omitted variables arising from variables that are often hard to quantify, this research compiles and analyses data from different points in time for the same municipality (Stock and Watson, 2011, 359) and the models were run controlling for municipality and time differences and the best model fits presented for discussion and the second best fit added in the annexes. This mitigation of omitted variables can also minimize what is called by Stock and Watson (2011, 359) as “serial correlation” which can arise in panel data.

This research was also checked for non-linearities in the regression function for the relevant variable Coverage of Basic Public Services. Quadratic and cubic specifications were attempted as well, which did not result in a significant improvement of fit, thus it was opted for the simplest model.

Stock and Watson (2011, 363) indicate that error in the measurement of independent variables even in large samples can lead to a biased estimated coefficient. This research relies on secondary databases as to the best of the researcher’s knowledge the data does not suffer from measurement errors. However, as it is described in the next subsection, the research did follow a structured approach in order to identify and to deal with outliers.

Although there is enough theoretical background for direction of association between variables, the problem of simultaneous causality cannot be disregard. However, similar to the measurement error problem, simultaneous causality can lead to inconsistency of the estimated coefficient which is not the ultimate aim in this study.

Another issue in the data base use for analysis in this research was missing data. Based on checks of missing values patterns in SPSS, there are no
observable patterns associated with independent or dependent variables in the missing data. Therefore, the best approach was to reduce the sample size but not introduce bias (Stock and Watson, 2011, 364).

Conventional checks have also been followed to test violations of the model’s assumption. For instance, the normal distributions of variables have been checked and it did not appear to be an issue. Heteroskedasticity-consistent standard error regression has also been checked using standard SPSS test. Heteroskedasticity did not appear to be an issue. In addition, the models are robust to alternative control variables and proxies for the key explanatory variables of interest.

The estimated effects arising from alternative specifications were not only systematically significant but also quite similar almost identical in magnitude. Some of the results are in line with studies that have investigated the effects on government performance of decentralisation mainly the negative association of fiscal arrangements to performance (Moreno-Jaime, 2003, 2007; Sour, 2004).

### 6.2 Sampling and Data Treatment

The analysis takes as a reference point the reform of 1997. This reform, as discussed earlier (Section 4.2) increased the municipal budgets significantly. The research uses longitudinal municipal data from the period 1990-2009.

The information on the coverage of basic public services comes from the census (1990, 2000, and 2010) and population counts (1995, 2005) collected by the Mexican National Institute of Statistics and Geography (INEGI).21 The financial information (SIMBAD, System of State and Municipalities Dabatase) was also collected by INEGI.

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21 Census and population counts aim at enumerating the country population. Both are carried out every 10 years but the census is carried out the years ending in zero (last being in 2010) and the population counts in the years ending in five (last being in 2005).
Political information used to compute measures of party affiliation and political competition comes from the independent, not-for-profit think tank, Centre for Research in Development\(^{22}\) (CIDAC) (from 1990 to 2010). Finally, the accountability and entrepreneurship indices (which will be described in Section 8.4.2) were computed using information from the SIMBAD (for the financial information) as well as surveys carried out in 1995, 2000, 2002, 2004 and 2009 by different research institutions.\(^{23}\)

The study is interested in **rural** local governments. For the purpose of this study, rural municipalities are those municipalities that fit the following criteria: a population of less than 30,000 inhabitants and predominance of primary sector activities (percentage of employed inhabitants per municipality working in the primary sector with respect to secondary and tertiary sector by 2000). This sample has further filtration in the following respects:

- **a.** Since 1997, 71 municipalities have been created. These municipalities were excluded because they do not have information to compare before reform
- **b.** In addition, the state of Oaxaca has 418 municipalities that are not ruled by democratic election but by customs and traditions, and the Federal District has a different constitutional status with respect to its territorial division (16 delegations rather than municipalities). These are also excluded.

Inasmuch as possible, the sample was checked for random and systematic errors. A random error is defined as any factor that may randomly influence the measurement of a particular variable across sample and a systematic error is a

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\(^{22}\) In Spanish- Centro de Investigación para el Desarrollo, A.C.

\(^{23}\) INEGI is an autonomous agent of the Mexican government in charge of gathering statistical information such as census, counts and economic information; the 1995 survey was elaborated by INEGI along with INAFED, a decentralised agency in charge of promoting federalism. Subsequent surveys were carried out by the ministry of social development in conjunction with INEGI. The surveys collect information about local government administrative and financial development. CIDAC is a non-profit independent think tank devoted to study and promoting policy changes.
type of error that affects the measurement of a variable and the sample thoroughly (Lewis-Beck et al, 2003, 1109).

Table 6.1 Missing data and outliers

<table>
<thead>
<tr>
<th>Variable</th>
<th>Missing data</th>
<th>Outlier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey indicators</td>
<td>354</td>
<td></td>
</tr>
<tr>
<td>Political variables</td>
<td>121</td>
<td></td>
</tr>
<tr>
<td>Financial variables</td>
<td>53 (+ year 2001)</td>
<td></td>
</tr>
<tr>
<td>Water and Sewerage indicator</td>
<td>20</td>
<td>43</td>
</tr>
<tr>
<td>Population Growth</td>
<td>0</td>
<td>42</td>
</tr>
</tbody>
</table>

Table 6.1 presents the number of missing observations data and outliers\(^{24}\) excluded for the analysis per type of variable.

Numerous data points are missing for some financial variables. This was particularly in year 2001 for entire states and there is no evidence of being related to the variable of interest. These years are excluded from the analysis.

Another concern for systematic error was that coverage of basic public services could have a ceiling effect for municipalities with high levels of coverage (meaning municipalities with high levels of coverage at the start of the analysis present invariably lower changes overtime). Patterns were checked for within this group of municipalities but no relevant issue was observed.

The database also contained some potential random errors. For instance, some variables have observations with high deviation from the mean—outliers (values above 1.5 Interquartile). Some of these outliers were municipalities with nearly 100% coverage of basic public services. This raises the concern that the variable basic public services could have kurtosis, with a heavily (fat) tailed

\(^{24}\) The data was depurated eliminating extreme values. The outliers are defined as values above 1.5 Interquartile.
distribution. As mentioned in Section 6.1.2.1, a test for the curve fit of the variable of interest was performed and the simplest model (linear) was chose and some extreme values were excluded.

Some municipalities presented large changes in the indicator of population growth\textsuperscript{25} from one census to the next. These changes are particular to these municipalities (and no relevant pattern was found) and may yield misleading values for the mean parameter of the indicator \textit{coverage of basic public services} which is calculated considering population.

Hence, the researcher was faced with the decision to either manipulate the missing data and outliers to include a bigger sample or to use listwise analysis, which includes only complete cases. Given that no obvious patterns were found regarding missing observations or outliers (i.e. no association with particular type of municipalities), the approach taken to treat missing data and outliers was to exclude them from the analysis altogether.

This approach downsized the sample significantly. However, this decision was based on the overall research strategy. The study aims at selecting cases for further investigation. Hence, manipulating the database by adding missing values and transforming variables can seriously damage the selection of cases and, therefore, any further interpretation. In addition, the aim of the analysis is exploratory, not inferential. Therefore, the sample size should not represent a concern.

The sample was finally reduced from 1074 municipalities which fit the criteria for a rural municipality by 2010 to 505 cases which provided viable data for this analysis for the years in between 1990 and 2009. Different years were used depending on the analysis.

\textsuperscript{25} This is calculated by determining the change in percentage from two consecutive censuses.
6.3 Overview of variables within the theoretical framework

The analysis of government performance is based on a set of local public services which Mexican local governments have been lawfully obliged to provide since 1983. These services are granted a priority by local authorities.

Local governments in Mexico have different ways to finance these public services; among them tax collection and intergovernmental transfers in the form of unconditional and conditional mandatory funds. Following Litvack’s definition, all these sources of finances will be analysed because all of them increased the expenditure decision of local governments.

Their major source of revenues is from unconditional funds and mandatory conditional funds. As observed in Figure 6.1, unconditional funds represent the largest proportion of revenues in local finance from 1990 to up 1997 when the mandatory conditional funds were created. Since then, mandatory conditional funds increased (but the highest change in this sample is observed in 2001) and unconditional funds continue to be an important source of finance but now along with mandatory conditional funds. Unconditional and mandatory conditional funds are both intergovernmental transfers. Therefore, there is a clear pattern of dependency on central government transfer before and after the 1997 reform.

Another source of revenue is own revenue, which consist of taxes (mainly property tax), user charges and other types of revenue (such as ‘Aprovechamientos’ which includes all other revenues not classified into taxes and user charges, these are mainly fines and surcharges). The proportion of tax revenue to total revenue represents the fiscal effort of local governments to collect their own revenues. The fiscal effort has steadily decreased in proportion to the total local revenue. Finally, in Figure 6.1 the remaining sources of local government revenues are categorized under the label “other revenues”. These include borrowing and other revenue categories. These sources of revenues have been excluded from the analysis.
Figure 6.1 Percentage of Local Revenues according to Origin
This graph presents the total local revenues divided into own revenue (tax subjects, user charges and other types of revenues); intergovernmental transfers (conditional and unconditional grants); and other revenue. The graph depicts the source as a percentage of total revenue from 1989 to 2009 in the working sample. Source: Own calculation using SIMBAD database (Municipal System Database) by INEGI.

Unconditional funds, conditional mandatory funds and own revenue are different types of decentralised mechanisms. However, unconditional funds and mandatory conditional funds represent the largest source of revenue in rural municipalities and therefore, the main means for financing public services.

Thus, in this research both intergovernmental transfers, unconditional and mandatory conditional funds will be used as indicators to measure fiscal decentralisation.

One other source of investment in local governments is the extraordinary conditional funds. These funds are earmarked to specific expenditures. They have different policy arrangements and in some cases they are delegated to local governments with some decision-making (such as work execution). However, they are managed by federal and state government agencies and they are usually aimed at patterns of investment different to basic public services. These funds are allocated in a more discretionary way. This data is not used in this quantitative analysis because it is not available in the local government accounts. However, to have an idea of the amount of resources it
represents for a rural municipality, the researcher requested information about extraordinary funds to a rural municipality (the municipality that will be presented in the qualitative analysis as an average government performer). This rural municipality received 31% more of its total budget within three years of administration or 60% more of its budget between 2010 and 2014.

As mentioned above, the other source of revenue is own revenue. Own-revenue has declined steadily as a percentage of total revenues (Figure 6.2). However, as shown in Figure 6.2, it has increased slightly in per capita terms.

![Figure 6.2 Revenues by Category in a Sample of Rural Municipalities from 1990 to 2008](image)

The vertical axis represents revenues in pesos per capita adjusted to 2010 (Source: Own calculation using the SIMBAD database- Municipal System Database by INEGI. Sample size: 505).

In general, it is clear that own revenue or the fiscal effort of rural municipalities is important, but not a sufficient revenue source. Although own revenue is also a fiscal decentralisation mechanism, the interest is more in the fiscal effort of local authorities and in this research it is used to represent an entrepreneurial action along with other indicators (more details in Section 6.4.2.2).

A contribution of this study to the decentralisation research is the operationalisation and application of the concepts, accountability, and, especially, public entrepreneurship. Having these two behaviours as measurable variables is quite a step forward. Even though the indices are
imperfect, they are nonetheless measurement tools which can be used to look at patterns across a country. Thus, using data from a sample of rural local governments in the country, different hypotheses are tested using different models and three outcome variables depending on the model.

The hypothesis examined is that changes in a) accountability and b) public entrepreneurship can be explained by increases in mandatory conditional and unconditional funds which are measures of decentralisation (see Figure 6.3 below). It is important to separate accountability and public entrepreneurship values because they present conflicting elements, and this may have a negative effect on performance.

To answer research question 1, which inquires whether fiscal decentralisation is associated with changes in patterns of accountability and public entrepreneurship, accountability and public entrepreneurship indices (which will be described in greater detail in subsection 6.4.2) are used as dependent variables. As discussed in detail below, different dimensions of both accountability and entrepreneurship are examined: scores were derived for each, and summed across dimensions to provide overall, composite index scores for each municipality in the sample.

To answer research question 2, which asked if the differences in the level of political competition had a major effect on whether and in what ways patterns of accountability and public entrepreneurship change following fiscal decentralisation, this research adds political competition variables to the model and explores differences in the presence or absence of state-level opposition and party affiliation. Hence, this research tests to what extent changes in accountability and public entrepreneurship can be explained by an increase in fiscal decentralisation and/or political competition.

The first two sets of analyses described above examine behavioural patterns as outcomes and explore whether particular fiscal arrangements affect local government behaviour in important and relevant ways.
To answer research question 3, a direct, though partial, measure of local government performance is examined – the coverage of basic public services. In particular, the relationship between this direct measure of performance and changes in accountability and entrepreneurship measures will be explored. Coverage of Basic Public Services is used as a dependent variable to answer question 3- the extent fiscal decentralisation is associated with measurable changes in local government performance. The researcher will also examine how far any apparent relationship between the two is explained by changes in political competition, as the overarching model suggests.

In addition, the hypothesis that will be explored is that the introduction of the 1997 decentralisation reform led to an improvement in local government performance. This is done by comparing the association of local government performance with the political variables before and after the reform. The analysis is replicated in two databases (one database from 1990 to 1997 and the other from 1998 to 2009) rather than using the periods as a dummy variable.

In Figure 6.3, the reader can visualize the research questions and the theoretical framework this study is based on.

![Figure 6.3 Theoretical Framework and Research Questions](image)

In the remainder of this Chapter (6), the research method will be described and how each variable is measured and treated for analysis will be explained. In addition, descriptive statistics for each variable included in the proposed models will be presented.
6.4 Operationalization of Measurement instrument

Following the theoretical model, the set of variables to be studied are: conditional mandatory funds and unconditional funds, which represent the fiscal decentralisation arrangements in place; accountability and public entrepreneurship, which are argued to affect the extent of success of policy outcomes; political competition including specifically the presence or absence of state-level opposition.

In this section, the way in which each of these variables is operationalized and derived for the analysis is explained and justified. This is followed by a discussion of the descriptive statistics of the sample.

6.4.1 Fiscal decentralisation indicator

Decentralisation is defined and measured in terms of the fiscal arrangements in place. Thus, a concrete measure of decentralisation is the amount of resources local authorities get yearly in conditional mandatory and unconditional funds. More specifically, for analysis purposes, the following are:

Conditional funds: The total annual amount received for conditional funds converted to 2010 real prices and divided by population.  

Unconditional funds: The total annual amount received for unconditional funds converted to 2010 real prices and divided by population.

The annual revenues for conditional and unconditional funds by municipality were collected by INEGI in the database called SIMBAD. The annual revenues were converted to 2010 real prices and divided by population. The decentralisation indicator was calculated for the years 1995, 2000, 2002, 2004 and 2009 which are the years local government surveys were carried out.

The population use for the years between census and counts are determined by progressive growth.
The assumption is that local authorities enjoy higher discretion in allocation and expenditure when they use unconditional funds and lower discretion in expenditure with resources from conditional funds. The degree of discretion over decentralised funds might have an impact on the behaviour of local authorities.

Unconditional funds have increased steadily from an average of 968 pesos per capita in 1990 to an average of 1031 pesos per capita in 2009 at real values 2010 in the working sample (505 municipalities). The level of funds via unconditional funds are usually higher than the level of conditional funds. However, since 2002, the gap between them started to close.

The introduction of conditional funds in 1997 eventually resulted in a high increase of total local budget in the sample. In 1995 the average conditional mandatory funds per capita was 45 pesos and by 2009, it had increased to an average of 1037 pesos per capita. Both conditional mandatory funds and unconditional funds fluctuate significantly as shown in Table 6.2 (the reader can also refer back to Figure 6.1).

Table 6.2 Descriptive Statistics of Local Revenues (in pesos per capita based on real values 2010) by Category in a sample of Rural Municipalities from 1990 to 2008

<table>
<thead>
<tr>
<th>Year</th>
<th>Unconditional funds</th>
<th></th>
<th>Conditional funds</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Mean</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>1995</td>
<td>968</td>
<td>972</td>
<td>45</td>
<td>228</td>
</tr>
<tr>
<td>2000</td>
<td>1275</td>
<td>1283</td>
<td>464</td>
<td>689</td>
</tr>
<tr>
<td>2002</td>
<td>1248</td>
<td>1245</td>
<td>1007</td>
<td>564</td>
</tr>
<tr>
<td>2004</td>
<td>1523</td>
<td>1532</td>
<td>988</td>
<td>557</td>
</tr>
<tr>
<td>2009</td>
<td>1031</td>
<td>1140</td>
<td>1011</td>
<td>1037</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>505</td>
<td></td>
<td>505</td>
<td></td>
</tr>
</tbody>
</table>

Thus, the 1997 reform resulted in important changes in the local government budget. These changes, theoretically, might lead local governments to perform better, be more accountable and more entrepreneurial because they have more
funds, they are closer to their citizens and they have information advantages compared to central government. The next section presents how accountability and public entrepreneurship were operationalized and their respective descriptive statistics.

### 6.4.2 Behavioural Patterns

Two indices were constructed in order to explore changes in accountability and public entrepreneurship following the respective definition and dimensions mentioned earlier. The data for both indices come from five local government surveys carried out in 1995, 2000, 2002, 2004 and 2009 and from yearly financial data from SIMBAD database.

Due to missing data, the entrepreneurship index only includes three observations over time for the years 2000, 2002 and 2009, whereas the accountability index includes five observations over time for the years 1995, 2000, 2002, 2004 and 2009.

The indices are composed from a set of indicator variables found in the government surveys and financial data. Some of these indicators are closed-ended questions with two possible scores (for instance, yes/no). In these cases, the indicator is classified into good or poor performance where good performance takes a value of 2 and poor performance takes the value of 1.

In contrast, some indicators, from both financial data and the survey data, are continuous. Therefore, they can take an intermediate score. The scores are classified into good (given a value of 2), moderate (a value of 1) or poor performance (a value of 0). All indicators from the financial data are continuous and are again allocated to one of three levels. Thus, the indicators included in the indices are scored to give a maximum value of 2 and a minimum of 0.

The limits for the variables with three levels are set based on mean values of all time observations. For instance, the indicator *Investment outside Municipal Seat*
(from surveys) is continuous- the percentage of households covered by local public services in the municipal seat. The mean value for the year 1995 is 51%, for 2000, 58%; for 2002, 58%; for 2004, 57% and for 2009, 43%. In this case, 58% in the year 2002 is the highest mean value over these five years. Then, 58% is set as the upper bound limit for moderate performance.

The lower bound for moderate performance is the average of all means. Following with the same example, the average of all means (per year) is calculated and divided into five (51%+58%+58+57%+42%/5= 53%). This is set as the lower bound for moderate performance. In this case, the lower bound limit is 53%. Then, the value of 0, 1 or 2 is assigned for each one of the years for each municipality. Municipalities that have coverage of Other Basic Public Services between 53 to 58% are categorized as moderate performers (1), more than 58% represents good performers (2) and less than 53% poor performers (0).

It is important to highlight that this approach was chosen so that the scores that each municipality achieves measure relative performance for this particular (rural) group of municipalities. This gives a more realistic picture of what can be achieved and how well or badly rural local governments are performing in each index. The selection of some variables and the way in which the variables were computed is derived from the work of Carrera et al. (2010) of Red de Investigadores en Gobiernos Locales Mexicanos (IGLOM) (Network of researchers in Mexican Local Governments). 27

The different measures are summed across categories to provide an overall, single composite index score, treated as a continuous variable, for each municipality in the sample. It was decided to analyse a composite index rather than to assess individual variables for two reasons. First- a composite measure was used because in this way it is possible to summarize and capture multidimensional and complex concepts in a simple manner. In contrast, the analysis of single variables would yield insufficient information to get the big picture. The

27 Carrera et al. (2010) were working on an index for institutional development and municipal sustainability. Their approach is used to measure some indicators. The indices also share some indicators.
use of composite scores will allow the analysis of the situation in a particular municipality as it stands in comparison to others as well as observed progress over time and highlight the cases where a case study could be valuable. This follows the strategy of my research design. Second- secondary databases are used. Therefore, there are limitations in regard to the number and types of indicators available. For instance, in the survey databases some relevant indicators are measured at categorical and interval levels. Thus, it makes more sense to convert continuous variables into interval variables. Then, unweighted composite scores are calculated in order to convert the scale scores to a continuous measurement scale. This allows running parametric statistics and the big picture to be analysed.

6.4.2.1 Accountability

This research defines accountability as the virtues of local authorities to behave according to citizens’ expectations improving efficiency. As discussed in Section 3.1.1- Accountability concept and evolution- the concept of accountability is ever expanding and multi-dimensional. Therefore, it is necessary to define and delimit the concept. Following the discussion in Section 3.1.1, this research adopts Koppell’s (2005) accountability dimensions, transparency, responsiveness and responsibility.

Different indicators were used as proxies for each dimension. The study does not intend to measure each dimension. Instead, it seeks to include relevant measures that describe each dimension. The scores were derived for each indicator, and then, summed across all categories to provide an overall, single accountability index score for each municipality in the sample. After the total score was derived, the total score was averaged out.

1. Transparency. This dimension responds to the question: did the organization reveal the facts of its performance? (cited in Koppell, 2005, 96). Adapting this question to this research and data availability, transparency is
measured by the level of openness to citizens’ involvement in public affairs and clear regulatory methods. Two indicators are used:

a) Promotion of citizens’ participation


The new public administration doctrines call for citizens’ involvement in decision-making (Osborn and Gaeber, 1992; Huther and Shah, 1998). This is considered critical to developing relevant local public policies. In addition, the decentralisation theory contemplates citizens’ participation as a means to collect accurate information about needs and preferences. Citizens’ participation is the influence of collective organisation in allocation decisions for the collectivity. Citizens’ participation in local public affairs should be a permanent commitment by local authorities. Therefore, local governments should have in place a system where citizens from different groups and ideologies may express their voice. This indicator denotes a permanent attempt rather than a single measure of participation during political campaigns by casting votes (electoral turnout), which might be another indicator used to denote participation. Hence, local authorities should implement mechanisms to open up to citizens’ voices and involvement. This indicator denotes the action to actively engage political stakeholders in decision-making.

The indicator is a binary variable and comes from the local government surveys. It responds to the question whether the municipality has a mechanism that promotes citizens’ participation (Yes/No). Values are assigned for this indicator. An affirmative answer is considered as a good performance (2) and a negative answer as a poor performance (0).

b) Regulation

Local governments in Mexico have the constitutional right to issue regulations related to their activities. A regulation issued in the local governments not only enables higher government levels to inspect and verify local activities, it also establishes procedures and processes that limit political preferences and embezzlement. Hence, although this indicator is a rough measure, local authorities that advance in issuing local regulations are to some extent implementing a system of transparency because they are formalising procedures and processes. This will reduce bureaucratic discretion.

In the survey, the question for this indicator asks local authorities to tick (from a list) the regulations that the municipality has in place. With this information a ratio was constructed between the number of regulations the municipality has in place and the total number of regulations listed in the survey. Each survey lists a different number of regulations. Therefore, the variable is survey specific.

In addition, the indicators of each time period were converted into interval variable with three performance levels—good, moderate and poor performance.

For this particular variable, the interval levels limits were selected in an intuitive way. The reason being that the indicator for this variable, as mentioned above, contains a different number of regulations in each survey (for instance, in 1995 the list consisted of 15 regulations and in the survey 2009 of 31 regulations). In addition, once the regulations are legislated they are likely to be in place for a couple of administrations, or even permanent.

As shown in Table 6.3, the mean for the number of regulations in 1995 was around 30%; therefore, the average was expected to increase overtime. A value of 0 was assigned to those municipalities with less than 30% of regulations; a value of 1 was assigned to those municipalities with an average regulation between 31% and 69% and a value of 2 to those municipalities with an average equal or higher than 70%. They were not divided equally because the number of regulations in survey 2009 includes some regulations that are not immediately relevant, in particular for this group of municipalities. Table 6.4
presents detailed information of the interval levels used as well as the survey questions used to elaborate the indicator.

2. **Responsiveness**: This dimension responds to the question: Did the organization fulfil the substantive expectation demand/need? (cited in Koppell, 2005, 96). Adapting this question to this research and data availability, the dimension of responsiveness indicates how local authorities act according to citizens’ demands and needs in regard to fairer allocation of resources. The indicators used to denote the level of responsiveness are:

a) **Fair distribution of resources** (two indicators: Investment inside municipal seat and Investment outside municipal seat)


In Mexico, municipalities are entitled to the conditional Municipal Social Development Fund (FAISM). This conditional mandatory fund is earmarked for basic public services as a general expenditure. However, this does not mean that public services investment is entirely limited to this fund. In this conditional mandatory fund, there are no detailed rules for the distribution of resources within the municipality. It is earmarked for general expenditure in public services. Therefore, discretion in allocation gives the authorities the opportunity to redistribute the resources more efficiently.

The evidence suggests that at present the allocation of resources tends to be higher in the municipal seat or town\(^{28}\) due to electoral incentives (see Hernandez and Jarillo, 2007). The municipal seats have the highest number of votes in local election and mayors may invest proportionally more there in order to keep the citizens’ sympathy for their parties, compared to the more scattered and less populated areas. Other possible explanation could be that a municipal seat expands at a high rate therefore, higher investment is needed.

\(^{28}\) The municipal seat is the area where the local government bodies are located.
Research Method, Operationalizing the Variables and Descriptive Statistics

Hence, looking at investment patterns, and distribution of resources for a variety of purposes, is a way of examining whether allocation of resources between the municipal seat and outside the municipal seat follows the accountability expectation of fairness. Considering that basic public services are a priority in these municipalities and that most funds in rural municipalities are still directed to investment in basic public services, it makes sense to look at patterns of investment in different key public services.

In the survey, the question for this indicator requires local authorities to indicate the percentage of coverage of each public service listed for both the municipal seat and for all villages outside the municipal seat. These indicators are not completely accurate because local authorities are asked to give an estimate percentage. However, there is no reason to suggest that the levels of accuracy are systematically different across surveys.

For this analysis, all basic public services, with the exception of water and sewage, were used. The average coverage of key public services was calculated for each, both for (a) municipal seat (Investment inside the municipal seat) and (b) outside the municipal seat (Investment outside the municipal seat). These averages were then combined to create an ‘investment’ indicator. Water and sewage are excluded from this part of the analysis in order to hold back some data for use as dependent ‘government performance’ variable in later statistical models. In some of these, one of the dependent variables includes water and sewage measures.

Thus, the indicators Investment inside Municipal Seat (IIMS) and Investment outside Municipal Seat (IOMS) are based on the combined averages of the following services: street lighting, public safety, traffic, street cleaning, and garbage collection inside the municipal seat. The indicators of each time period for both variables were transformed to interval variables with three levels of performance: good, moderate and poor performance. The complete rural government dataset was used for these calculations. It should be emphasised that the aim of these indicators is to explore both changes in public service
investment, and also fair distribution of resources: i.e. whether the changes occur inside and outside the municipal seat.

The highest mean score in the five years under study for Investment inside the municipal seat was 58% and the average of all five means was 53% (see Table 6.3). Therefore, the value of 2 was assigned to municipalities with average of basic public services equal to or higher than 59%. The value of 1 was assigned to municipalities with average of basic public services between 53% and 58% and a value of 0 to municipalities with average of basic public services equal to or less than 52%.

The highest mean score in the (five) time periods for Investment outside the municipal seat was 43% and the average of all five means was 33% (see Table 6.3). Therefore, the value of 2 was assigned to municipalities with average of other basic public services equal to or higher than 44%. The value of 1 was assigned to municipalities with average of other basic public services between 33% and 43% and a value of 0 to municipalities with average of basic public services equal to or less than 32%. The Average increase in other basic public services reflects the increase in investment in these public services. As stated above, the aim of these indicators is not only to take into account the change in services, but also the fair distribution of resources in and outside the municipal seat. This is the reason two separate indicators have been calculated.

Thus, a municipality acting in a fair manner is expected to increase the investment in basic public services and to do so in both the municipal seat and outside the municipal seat. A fair and responsive municipality can get a maximum score of 4 in the variable Fair Distribution of Resources and therefore, in the Responsiveness Dimension (maximum score of 2 for IIMS plus a score of 2 for IOMS). A less fair municipality can get a maximum score of 3 (2 for IIMS and 1 for IOMS, or vice versa) and a municipality with unfair redistributive actions might typically get a total of 2 (2 for IIMS and 0 for IOMS outside the municipal seat, or vice versa).
3. **Responsibility:** This dimension responds to the question: Did the organization follow the rules? (cited in Koppell, 2005, 96). Since this research is more concerned with financial rules and regulations and on the basis of data availability, the dimension of responsibility indicates how local authorities allocate administrative spending (current spending) and public work investment.

   a) *Administrative spending level*

   The information for this variable is from SIMBAD database from 1990 to 2009.

   This indicator is aimed at evaluating the effort of local authorities to avoid overspending in administrative costs, mainly in accounts related to administrative expenses, travel allowance and similar financial records. This indicates local mayors’ commitment toward efficiency in financial management and it represents better financial compliance. Better financial compliance might result in better allocative efficiency and productive efficiency.

   The financial data are grouped into revenues and expenditures and the expenditures classified into different categories.\(^{29}\) In the database, all monetary values are expressed in nominal pesos.

   From this information, the administrative spending was calculated using only the category ‘personal service’, which is a critical spending category. This includes spending in remunerations. The percentage the administrative spending represented was calculated from the total expenditures for each year and then, the average score for each time period was computed using the years between surveys. As follows:

   Indicator for year 2002- Average of the years 2001 and 2002

---

\(^{29}\) Expenditures is classified into personal services; materials and supplies; transfers, assignments, grants and other allowances; movable, immovable and intangible property; public investment; financial Investment and other provisions; other expenses; public debt.
Indicator for year 2004- Average of the years 2003 and 2004

Thus, the indicator is measured as the ratio between the average in administrative spending accounts and total expenditures between surveys’ time periods.

Once the indicator was calculated, the indicators of each time period were converted to interval variables with three levels of performance: good, moderate and poor performance but in particular for this indicator, the data was reversed. Thus a high score for this indicator represents a poor performance.

The highest mean score in the (five) time periods for administrative spending was 25%. Therefore, the value of 0 was assigned to municipalities with an average administrative spending of 25% or more; the average of all (five) means was 21% (see table 8.2). The value of 1 was assigned to municipalities with an average administrative spending between 24% and 21% and the value of 2 was assigned to those municipalities with an average administrative spending of 20% or less. Table 6.4 presents more detailed information.

b) Public works investment

The information for this variable is from SIMBAD database from 1990 to 2009.

Similar to the previous indicator, public works investment illustrates the local authorities’ commitment to financial compliance. Even though decentralization is aimed at enhancing the quality of public services, this is not always the case. Some studies have even warned about reduced provision of services either by reducing efficiency or due to the loss of accountability (Davoodi and Zou, 1998; 30)

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30 This variable was computed using average between surveys’ time periods for instance an average between years 1991 to 1995 is the value of the indicator for year 1995 and the average from year 1996 to 2000 is the value for the indicator 2000. In 1995 and 2000, surveys of local governments were carried out and these surveys were used to build the indices. Therefore, in order to smooth out the value of the indicators considering that the number of years between surveys is not equal, it was decided to average the indicators.
Woller and Phillips, 1998; Zhang and Zou, 1998; Sow and Razafimahefa, 2015). Public service investment is considered vital for economic growth and human development. Therefore, local government should devote a high proportion of its resource to this account—even beyond the earmarked funds for this line item.

As in the indicator for administrative spending, the financial data for public work investment is expressed in nominal pesos in the database.

From the financial data, the expenditure category called public work investment was selected. This spending is aimed at building up infrastructure through public works that contribute to the formation of capital.

The percentage of total spending represented by public works investment was calculated, with the average score for each time period computed from the individual years between the surveys. The same logic is used for calculation as for administrative spending.

Thus, this indicator is measured as the ratio between the average public works investment and total expenditure between surveys’ time periods. The higher the percentage invested in this account, the better the performance of the municipality. This indicator has three performance levels: good, moderate and poor performance.

The highest mean score in the (five) time periods for public work investment was 43%. Therefore, the value of 2 was assigned to municipalities with an average public work investment equal to or higher than 44%; the average of all (five) means was 33%. Then, the value of 1 was assigned to municipalities with an average public work investment between 33% and 43% and the value of 0 was assigned to those municipalities with an average public work investment equal to or lower than 32%.

All indicators are added and divided by the number of variables. 12 is the higher score and divided by 6 variables equals 2, which is the highest score.
(see Table 6.3 below). The indicator takes a value between 0 to $2^{31}$ and it is treated as a continuous variable. The index is based from 0 to 2 because it is easier to interpret by following the same logic of poor/moderate/good performance used during the index elaboration.

$^{31}$ The values that the indicator can take are the following: .0167, .333, .500, .667, .833, 1, 1.17, 1.33, 1.50, 1.67, 1.83, 2.
### Table 6.3 Descriptive Statistics of Financial Variables used as indicators in the Accountability Index

<table>
<thead>
<tr>
<th>Period</th>
<th>REGULATIONS</th>
<th>FAIR DISTRIBUTION OF RESOURCES IN OTHER PUBLIC SERVICE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Min.</td>
</tr>
<tr>
<td>1990-1995</td>
<td>720</td>
<td>0.0</td>
</tr>
<tr>
<td>1996-2000</td>
<td>722</td>
<td>0.0</td>
</tr>
<tr>
<td>2001-2002</td>
<td>722</td>
<td>0.0</td>
</tr>
<tr>
<td>2003-2004</td>
<td>723</td>
<td>0.0</td>
</tr>
<tr>
<td>2005-2009</td>
<td>724</td>
<td>0.0</td>
</tr>
<tr>
<td>Average of all means</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

Note: The mean value denotes the average percentage of the financial indicator over total expenditures. The grey highlighted cells are the figures used to assign the interval level “moderate performance”.

Table 8.2 continues on the following page....
## Period

<table>
<thead>
<tr>
<th>Period</th>
<th>ADMINISTRATIVE SPENDING LEVEL</th>
<th>PUBLIC WORK INVESTMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Min.</td>
</tr>
<tr>
<td>1990-1995</td>
<td>723</td>
<td>.00</td>
</tr>
<tr>
<td>1996-2000</td>
<td>724</td>
<td>.00</td>
</tr>
<tr>
<td>2001-2002</td>
<td>724</td>
<td>.00</td>
</tr>
<tr>
<td>2003-2004</td>
<td>724</td>
<td>.00</td>
</tr>
<tr>
<td>2005-2009</td>
<td>724</td>
<td>.00</td>
</tr>
<tr>
<td>Average of all means</td>
<td>724</td>
<td>.00</td>
</tr>
</tbody>
</table>

**Note:** The mean value denotes the average percentage of the financial indicator over total expenditures. The grey highlighted cells are the figures used to assign the interval level "moderate performance".
### Table 6.4 Accountability Indicator

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Variable</th>
<th>Indicator Question/calculation</th>
<th>SURVEY YEAR</th>
<th>Values and Ranges:</th>
<th>Column 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1995</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transparency</td>
<td>Promotion of citizens’ participation</td>
<td>Is there an area that promotes citizens’ participation? Yes or No</td>
<td>6 (3)</td>
<td>19 (c)</td>
<td>53 (10)</td>
</tr>
<tr>
<td>Transparency</td>
<td>Regulation</td>
<td>Number of regulations available in the local government</td>
<td>36</td>
<td>63</td>
<td>8</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>Fair distribution of resources</td>
<td>Two indicators: Investment inside/outside Municipal seat Percentage of households covered by a number of different local public services (street lighting, public safety, traffic, street cleaning, garbage collection) inside and outside the municipal seat</td>
<td>IISM 21</td>
<td>IISM 53</td>
<td>IISM 39</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>Administrative Spending Level</td>
<td>Percentage of administrative spending over total expenditures</td>
<td>IOMS 24</td>
<td>IOMS 56</td>
<td>IOMS 39</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>Public work investment</td>
<td>Percentage of public work investment over total expenditures</td>
<td>YEARLY INFORMATION TAKEN FROM FINANCIAL DATABASE (SIMBAD DATABASE)</td>
<td>2= ≤ 22% (Minimum mean from 1990 to 2009) (G) 1= 25 – 21% (Mean from 1990 to 2009) (M) 0= ≥ 26 % (P)</td>
<td>2= ≥ 33% (Maximum mean from 1990 to 2009) (G) 1= 28 – 32% (Mean from 1990 to 2009) (M) 0= ≤ 27% (P)</td>
</tr>
</tbody>
</table>

Column 1 shows the dimensions of the index; Column 2 lists the variables used to measure each dimension; Column 3 describes how the variables are measured. In the case of survey question, the question as it is presented in the survey and how the question is answered are both shown. In the case of financial data, it indicates how the indicator was calculated; Column 4 presents the years that the surveys were carried out and the question number (the subsections are in brackets) from where the question derived; and column 5 shows the values and interval levels for each indicator.
Next, descriptive statistics for the variable accountability are presented.

The *accountability index* is, as explained earlier, composed of five indicators which include: level of regulation, fair distribution of resources (investment inside the municipal seat and investment outside the municipal seat), administrative spending level and public work investment. There are five time periods for every municipality: 1995, 2000, 2002, 2004 and 2009. Unfortunately, there is no information in between these years for some variables. Therefore, this study is limited to these five time periods and the analysis based on five indices. As shown in Table 6.5, the average value of the accountability index for this group of municipalities has increased from 1995 to 2009. In 1995, the average index was .616 and by 2009, it turned to 1.07 out of the maximum value of 2. The changes are expected to be small. Although desirable, good performance in public institutions is not attainable by single policy instruments. So, if it had been very large, it would not have been credible. However, it gives room for examining in detail whether the data are consistent with the hypotheses regarding how fiscal decentralisation or, otherwise, political competition will affect such patterns.

Table 6.5 Descriptive Statistics and Statistical Significance Change Accountability Index

<table>
<thead>
<tr>
<th>Index</th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Significance</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>.107***</td>
<td>.015</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accountability index 1990</td>
<td>505</td>
<td>0</td>
<td>1.83</td>
<td>0.616</td>
<td>0.364</td>
<td>-.453***</td>
<td>0.022</td>
</tr>
<tr>
<td>Accountability index 2000</td>
<td>505</td>
<td>0</td>
<td>1.83</td>
<td>0.733</td>
<td>0.416</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accountability index 2002</td>
<td>505</td>
<td>0</td>
<td>2.00</td>
<td>0.922</td>
<td>0.378</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accountability index 2004</td>
<td>505</td>
<td>0</td>
<td>1.83</td>
<td>0.868</td>
<td>0.400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accountability index 2009</td>
<td>505</td>
<td>0.08</td>
<td>1</td>
<td>1.07</td>
<td>0.320</td>
<td></td>
<td>Case base</td>
</tr>
</tbody>
</table>

Note: Standard errors are in brackets. ***p<.001 **p<.01 *p<.05
The change on accountability index from 1995 to 2009 is statistically significant in the predicted direction, \( r (505) = -.453, SE = .022, p < .001 \) (see Table 6.5).

Turning to individual indicators within the accountability index (see Table 6.6), the level of regulation has improved moderately over time. In 1995, only .3\% of municipalities were categorized as good performers because of the number of regulations in place. The number of municipalities with good performance increased to 12\% by 2009. There are a considerably higher number of municipalities with moderate performance in this indicator. It needs to be noticed that the number of regulations listed in the surveys has increased considerably since the first survey. Therefore, the changes in good performance are substantial.

The level of promotion of citizens’ participation has not progressed in this group of municipalities but rather slightly decreased. In 1995, 37\% of rural local governments had a formal mechanism and by 2009 only 22\%. An explanation could be that this group of municipalities already have high levels of participation regardless of the formal mechanisms implemented for citizens’ participation. In this sense, formal mechanisms are not considered necessary. An alternative explanation is that the formal mechanisms of citizens’ participation introduced with conditional funds- which are highly regulated by higher government levels (called citizens’ committees) may have replaced other formal local mechanisms such as a department for promotion of citizens’ participation. However, it could also be the case that the lack of formal mechanism is part of a tactic to avoid inclusion of citizens that did not support the mayor/winning party during election and this may have become more common with the rise of political competition.

The variable *Fair Distribution of Resources (FDR, for short)* measures how investment in specified basic public services has been distributed in urban areas and the distribution of investment in basic public services in the villages. Results of the individual components show the changes in coverage for the services involved (street lighting, public safety, traffic, and street cleaning and garbage collection) and both indicators together indicate whether the
municipality has distributed the resources fairly in and outside the municipal seat. The number of municipal seats with good performance in investment has increased from an average of 37% in 1995 to 77% in 2009. Only in 2004 did the average step back from its incremental change. The number of localities outside the municipal seat with good performance in investment increased steadily from 11% to 55.4%. In most cases, there is a progressively higher number of municipalities with moderate performance rather than poor performance, particularly investment outside the municipal seat. Once both indicators are added together in the index of accountability, then the variable FDR presents a considerable change in the pattern of investment. As shown in Table 6.7, the number of municipalities with the highest performance score (4) has increased progressively and highly from 8.2% in 1995 to 50% in 2009. However, it is important to notice that this information is not completely accurate because local authorities provide only estimated percentages.

The number of municipalities with good performance in administrative spending changed from 36% in 1995 to 41% in 2000. The average increased to 51% by 2002 but then decreased to 40% in 2004. From 2004 onwards the numbers of municipalities with good performance in administrative spending increased again from 40% to 54%. The number of municipalities with moderate performance is low and stable. This suggests that there is a strong change from one period to another.

The number of municipalities with a good performance level in public work investment increased substantially from 25% in 1995 to 43% in 2009. It progressively increased with the exception of 2000. This is rather surprising as this is immediately after the reform, which by definition increased public work investment. However, given that this is not a large difference, it is plausible that this reflects the fact that the largest increase in conditional mandatory funds occurred after 2000 (refer back to Figure 6.1).

Even though overall, the accountability index has increased, individual indicators present important insights in regard to specific aspects of the accountability dimension. It suggests that fiscal decentralisation might improve
some aspects and deteriorate others. The transparency dimension has improved but only in regard to formal mechanisms that seek to legitimize local authorities' work such as regulations. However, it seems to be less effective in the inclusion of citizens for decision-making. The dimension of responsiveness has improved the most. This is highly related to the fiscal decentralisation reform because it represents the benefits of responding to citizens’ wellbeing.
Table 6.6 Descriptive Statistics of Accountability Indicators

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
<th>Regulations</th>
<th>Promotion of citizens' participation</th>
<th>Other Basic Public Services in the municipal seat</th>
<th>Public the</th>
<th>Other Basic Public Services outside the municipal seat</th>
<th>Administrative Spending level</th>
<th>Public</th>
<th>Work</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>1995</td>
<td>0</td>
<td>490</td>
<td>68</td>
<td>454</td>
<td>63</td>
<td>376</td>
<td>52</td>
<td>545</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>228</td>
<td>312</td>
<td>78</td>
<td>11</td>
<td>92</td>
<td>13</td>
<td>35</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2</td>
<td>0.3</td>
<td>266</td>
<td>37</td>
<td>266</td>
<td>37</td>
<td>83</td>
<td>11</td>
</tr>
<tr>
<td>Valid number</td>
<td>720</td>
<td>100</td>
<td>719</td>
<td>100</td>
<td>720</td>
<td>100</td>
<td>720</td>
<td>100</td>
<td>720</td>
</tr>
<tr>
<td>2000</td>
<td>0</td>
<td>400</td>
<td>56</td>
<td>486</td>
<td>67</td>
<td>261</td>
<td>36</td>
<td>381</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>277</td>
<td>38</td>
<td>68</td>
<td>9</td>
<td>126</td>
<td>17</td>
<td>60</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>43</td>
<td>43</td>
<td>234</td>
<td>33</td>
<td>391</td>
<td>54</td>
<td>213</td>
<td>30</td>
</tr>
<tr>
<td>Valid number</td>
<td>720</td>
<td>137</td>
<td>720</td>
<td>100</td>
<td>720</td>
<td>99</td>
<td>720</td>
<td>100</td>
<td>720</td>
</tr>
<tr>
<td>2002</td>
<td>0</td>
<td>306</td>
<td>43</td>
<td>486</td>
<td>68</td>
<td>264</td>
<td>37</td>
<td>377</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>333</td>
<td>46</td>
<td>73</td>
<td>10</td>
<td>124</td>
<td>17</td>
<td>45</td>
<td>6</td>
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<td></td>
<td>2</td>
<td>81</td>
<td>11</td>
<td>234</td>
<td>32</td>
<td>383</td>
<td>53</td>
<td>219</td>
<td>31</td>
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<tr>
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<td>720</td>
<td>100</td>
<td>720</td>
<td>100</td>
<td>720</td>
<td>100</td>
<td>720</td>
<td>100</td>
<td>720</td>
</tr>
<tr>
<td>2004</td>
<td>0</td>
<td>362</td>
<td>50</td>
<td>572</td>
<td>79</td>
<td>241</td>
<td>33</td>
<td>301</td>
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<td></td>
<td>2</td>
<td>53</td>
<td>8</td>
<td>148</td>
<td>21</td>
<td>388</td>
<td>54</td>
<td>277</td>
<td>38</td>
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<td>Valid number</td>
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<td>100</td>
<td>720</td>
<td>100</td>
<td>720</td>
<td>100</td>
<td>720</td>
<td>100</td>
<td>720</td>
</tr>
<tr>
<td>2009</td>
<td>0</td>
<td>472</td>
<td>66</td>
<td>563</td>
<td>78</td>
<td>121</td>
<td>17</td>
<td>3</td>
<td>0.4</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>158</td>
<td>22</td>
<td>44</td>
<td>6</td>
<td>318</td>
<td>44.2</td>
<td>39</td>
<td>5</td>
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<td></td>
<td>2</td>
<td>90</td>
<td>12</td>
<td>155</td>
<td>22</td>
<td>555</td>
<td>77</td>
<td>399</td>
<td>55.4</td>
</tr>
<tr>
<td>Valid number</td>
<td>720</td>
<td>100</td>
<td>718</td>
<td>100</td>
<td>720</td>
<td>100</td>
<td>720</td>
<td>100</td>
<td>720</td>
</tr>
</tbody>
</table>

(Y= Survey year; P= Performance; 0= Poor; 1= Moderate; 2=Good; F=Frequency)
This table shows the number of municipalities in each performance bound (poor/moderate/good) per year and the equivalent percentage it represents from the total sample.
Table 6.7 Descriptive Statistics of Fair Distribution of Resources

<table>
<thead>
<tr>
<th>Survey year</th>
<th>Combined scores of Investment Inside of Municipal Seat and Investment Outside Municipal Seat indicators</th>
<th>Frequency Number of Municipalities</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>0 = Poorest performance</td>
<td>331</td>
<td>46.0</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>91</td>
<td>12.6</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>176</td>
<td>24.4</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>63</td>
<td>8.8</td>
</tr>
<tr>
<td></td>
<td>4= Highest Performance</td>
<td>59</td>
<td>8.2</td>
</tr>
<tr>
<td>Number valid</td>
<td></td>
<td>720</td>
<td>100.0</td>
</tr>
<tr>
<td>2000</td>
<td>0 = Poorest performance</td>
<td>212</td>
<td>29.4</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>66</td>
<td>9.2</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>169</td>
<td>23.5</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>94</td>
<td>13.1</td>
</tr>
<tr>
<td></td>
<td>4= Highest Performance</td>
<td>179</td>
<td>24.9</td>
</tr>
<tr>
<td>Number valid</td>
<td></td>
<td>720</td>
<td>100.0</td>
</tr>
<tr>
<td>2002</td>
<td>0 = Poorest performance</td>
<td>215</td>
<td>29.9</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>78</td>
<td>10.8</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>148</td>
<td>20.6</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>89</td>
<td>12.4</td>
</tr>
<tr>
<td></td>
<td>4= Highest Performance</td>
<td>190</td>
<td>26.4</td>
</tr>
<tr>
<td>Number valid</td>
<td></td>
<td>720</td>
<td>100.0</td>
</tr>
<tr>
<td>2004</td>
<td>0 = Poorest performance</td>
<td>165</td>
<td>22.9</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>83</td>
<td>11.5</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>154</td>
<td>21.4</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>100</td>
<td>13.9</td>
</tr>
<tr>
<td></td>
<td>4= Highest Performance</td>
<td>218</td>
<td>30.3</td>
</tr>
<tr>
<td>Number valid</td>
<td></td>
<td>720</td>
<td>100.0</td>
</tr>
<tr>
<td>2009</td>
<td>0 = Poorest performance</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>95</td>
<td>13.2</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>57</td>
<td>7.9</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>207</td>
<td>28.8</td>
</tr>
<tr>
<td></td>
<td>4= Highest Performance</td>
<td>360</td>
<td>50.0</td>
</tr>
</tbody>
</table>

This table shows the total performance in the indicator *Fair Distribution of Resources* per year and the equivalent percentage it represents from the total sample.

6.4.2.2 Public entrepreneurship

This research defines public entrepreneurship as the behaviour of a public entrepreneur to act in a way that improves efficiency. The concept is defined based on three dimensions: risk taking, innovativeness and pro-activeness. However, it is not the intention of this research to evaluate each single dimension.
It is a challenge to measure abstract concepts such as public entrepreneurship. Its accuracy is debatable, but it is the only available means of understanding the general changes in a summarised way. Moreover, it is useful in order to explore general trends as well as identifying specific cases.

As discussed in the literature review, if public entrepreneurship is not easily defined in the academic debate, it is also difficult in the field work. In addition, secondary data analysis presents its limitations. In this case, the database available only provides information about administrative and financial actions.

Keeping in mind these issues, during the pilot study participants were asked to identify and explain an entrepreneurial action (for details about the pilot study see Section 5.3). Based on their accounts, three types of entrepreneurial actions were identified which were of potential importance to improving local government performance, and which were also potentially measurable:

1. **Co-operation**: The use of co-operation to minimise costs for local projects.

2. **Grant-application facilitation**: Local government can assist and participate actively with local groups who are eligible for funds granted by the state or federal government directly for a specific sector. This activity requires resources (money).

3. **Win-win Negotiation**: Local government can negotiate with groups and communities for sharing costs for focused projects. Again this requires resources.

These entrepreneurial actions helped to operationalize the concept of entrepreneurship. However, it is important to point out that the dimensions, risk taking, innovativeness and pro-activeness are not mutually exclusive and that the actions identified as entrepreneurial do not stand in a one-to-one relationship with the three dimensions either. On the contrary, the three types of
entrepreneurial action identified in the pilot can involve either all or only some of the dimensions. The types of entrepreneurial actions are not one-dimensional, but multi-dimensional. Given data limitations, it is thus not possible to separate and analyse each dimension independently. General trends can, however, be identified.

Hence, the operationalization of the concept of public entrepreneurship in rural local governments was based on the definitions selected earlier - the behaviour of a public entrepreneur to co-operate with private, public and social bodies in a way that improves efficiency. Based on this operationalized concept and the three entrepreneurial actions identified in the pilot study, three indicators from local government surveys were selected. These indicators map onto a specific entrepreneurial action identified above.

a) Co-operation with public organisations and public service associations (two indicators)

The information for these two variables is from local government surveys 2000, 2002, 2009.

These indicators denote whether local governments have undertaken actions that involve co-operation under the assumption that these actions aim at minimizing cost. These indicators correspond to the first type of entrepreneurial action, co-operation.

Moret (2008) explains that the decentralisation process has sometimes encouraged association of municipalities as a way to foster regional development because the delegation of public service provision to local governments transferred functions of economic and social development to municipalities. In addition, they contribute to governance because local actors collaborate in order to solve a common problem. They go beyond public service provision to promotion of local development through co-operation with different
actors. In Bolivia, many rural municipalities have been associated in order to improve roads, health centres and education (Moret, 2008, 9).

Engaging in co-operation as to provide public services or other sorts of projects with other municipalities requires political willingness. This is not a statutory requirement. Therefore, local authorities' commitment to do so envisages an entrepreneurial action.

These indicators are constructed using the following questions from surveys carried out in local governments:

*Has the local government been associated with other local governments with a specific end?*

*Is the local government associated with other institutions to provide local public services?*

Each question has only a Yes or No answer. A value of 2 was assigned to local governments that responded “Yes” to the question and those that responded “No” were assigned a value of 0. Hence, the maximum score is 2. See Table 6.8 below for more details.

**b) Financial autonomy (two indicators)**

These indicators represent the effort of local governments to obtain “own revenues”, which can potentially be used for obtaining more federal and state grants as well as undertaking focused projects, often in collaboration with other groups, that otherwise cannot be financed through conditional grants. Levels of fiscal effort are important in determining whether or not a municipality can undertake these and serve as indicators of whether it is entrepreneurial.

As discussed earlier, fiscal decentralisation entitles local governments to more money and spending discretion; but leaves them highly dependent on central government. Hence, there is room for local authorities to rely on both conditional mandatory funds and unconditional funds and discourage fiscal
effort. However, if they want to be entrepreneurial with respect to the second and third type of entrepreneurial actions, *grant application facilitation and win-win negotiation*, they will need to raise and call on ‘own revenues’.

- **Property tax update**


Updates in property tax take effort and money. The effort is not often comparable with the money raised through property tax. As a consequence, rural local governments do not update property tax registers regularly. Updating the property tax can increase the level of own revenue collection. Therefore, it is an opportunity to collect higher revenues.

Each survey presents the answers for these questions in a slightly different format. The question is:

Has the land value on which the property tax is based been updated in the last – two/three years? Or when was the land value updated?

If the land value has been updated in the last three years, which is the period for a local government, a value of 2 was assigned. Otherwise, it takes the value of 0.

- **Fiscal effort**

The information for this variable is from SIMBAD database from 1995 to 2009.
The financial data is grouped into revenues and expenditures and the revenues are classified into different categories. All monetary values in the database are expressed in nominal pesos.

From the revenue information, the variable fiscal effort was calculated by adding up taxes, user charges (contribuciones de mejora), duties (derechos), product (producto), and exploitation (aprovechamientos). This includes the revenues collected and administered by local governments. Then, how much percentage their own revenues represented from the total expenditures for each year was calculated and then, the average score for each time period was computed using the years between surveys. As follows:

Indicator for year 2002- Average of the years 2001 and 2002

Thus, the indicator is measured as the ratio between the average in own revenues and total expenditures between time periods of the surveys. A high percentage indicates high levels of fiscal effort. Once the indicator was calculated, the indicators of each time period were converted to interval variables with three levels of performance: good, moderate and poor.

The highest mean score in the (three) time periods for fiscal effort was 15%. Therefore, the value of 2 was assigned to municipalities with an average fiscal effort of 16% or more; the average of all (three) means was 9%. The value of 1 was assigned to municipalities with an average fiscal effort between 9% and 15% and the value of 0 was assigned to those municipalities with an average fiscal effort of 8% or less. Tables 6.8 and 6.9 present more detailed information.

32 Taxes, fees, user charges (contribuciones de mejora), duties (derechos), product (producto), exploitation (aprovechamientos), unconditional funds, conditional funds, other income, financing.
33 The literal translation of “derechos” is “rights” but in the fiscal context, derechos are related to payment of duties due to use of public land.
34 As for the index of accountability, this variable was computed using an average between surveys’ time periods in order to smooth out the averages considering that the number of years between surveys is not equal.
All indicators are added and divided by the number of variables (3). The indicator takes a value ranging from 0 to 2\(^{35}\) and it is treated as a continuous variable.

Table 6.8 Descriptive Statistics of the financial variable used as an indicator in the Public Entrepreneurship Index

<table>
<thead>
<tr>
<th>Period</th>
<th>FISCAL EFFORT</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Min.</td>
<td>Max.</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>1990-1995</td>
<td>721</td>
<td>.00</td>
<td>.53</td>
<td>.146 (15%)</td>
<td>.109</td>
</tr>
<tr>
<td>1996-2000</td>
<td>722</td>
<td>.00</td>
<td>.39</td>
<td>.081</td>
<td>.067</td>
</tr>
<tr>
<td>2001-2002</td>
<td>706</td>
<td>.00</td>
<td>.48</td>
<td>.071</td>
<td>.074</td>
</tr>
<tr>
<td>2003-2004</td>
<td>712</td>
<td>.00</td>
<td>.61</td>
<td>.060</td>
<td>.063</td>
</tr>
<tr>
<td>2005-2009</td>
<td>715</td>
<td>.00</td>
<td>.45</td>
<td>.064</td>
<td>.069</td>
</tr>
<tr>
<td>Average of all means</td>
<td></td>
<td></td>
<td></td>
<td>.085 (9%)</td>
<td></td>
</tr>
</tbody>
</table>

Note: The mean value denotes the average percentage of the financial indicator over total expenditures. The grey highlighted cells are the figures used to assign the interval level “moderate performance” and the number in brackets is the specific percentage used.

\(^{35}\)The values that the indicator can take are the following: .25, .50, .75, 1, 1.25, 1.50, 1.75, 2. According to Rhemtulla et al. (2012) five to seven categories can be treated as continuous variables and yield acceptable performance.
Table 6.9 Public Entrepreneurship Indicators

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Indicator</th>
<th>Question/calculation</th>
<th>2000</th>
<th>2002</th>
<th>2009</th>
<th>Values and Ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cooperation with public organisations</td>
<td>Has the local government been associated with other local governments with a specific end? Yes or No</td>
<td>60</td>
<td>43</td>
<td>75</td>
<td>Yes=2 (G) No=0 (P)</td>
</tr>
<tr>
<td>Public Services Association</td>
<td>Is the local government associated with other institutions to provide local public services? Yes or No</td>
<td>62</td>
<td>41</td>
<td>76</td>
<td>It is associated=2 (G) It is not associated=0 (P)</td>
<td></td>
</tr>
<tr>
<td>Property Tax Update</td>
<td>Has the land value on which the council tax is based on been updated in the last two years? Or similar questions.</td>
<td>98</td>
<td>25</td>
<td>92</td>
<td>2&gt; Yes, it has been updated (G) 0= No, it has not been updated (P)</td>
<td></td>
</tr>
<tr>
<td>Fiscal Effort</td>
<td>Percentage of own revenues collected over total revenues</td>
<td>YEARLY INFORMATION TAKEN FROM FINANCIAL DATABASE (SIMBAD DATABASE) DIVIDED INTO THREE PERIODS 1995-2000/2001-2002/2003-2009</td>
<td>2&gt; 16% (Maximum mean from 1990 to 2009) (G) 1= 15 - 9% (mean from 1990 to 2009) (M) ≤ 8% (P)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This table presents detailed information of the indicators used. Column 1 shows the dimensions which in this case are not separated; Column 2 lists the indicators used to measure each dimension; Column 3 presents how the variables are measured. In the case of the survey questions, the questions are shown as presented in the survey and how the questions are answered. In the case of financial data, it indicates how the indicator was calculated; Column 4 presents the years that the surveys were carried out and the question number (the subsections are in brackets) from where the question derived; and column 5 shows the values and ranges for each indicator.
Next, descriptive statistics for the variable public entrepreneurship are presented.

The public entrepreneurship index has four component indicators. There are only three observations (2000, 2002 and 2009). Data from the surveys in 1995 and 2004 were not included because of a large amount of missing data for these specific variables. As described above, the index consists of four indicators: property tax update, fiscal effort, public service association and cooperation with public organisations. The public entrepreneurship index also shows a steady increase but to a lesser extent than the accountability index. As shown in Table 6.10, the mean increased slightly from .709 in 2000 to .912 out of 2 in 2009. This is consistent with the reasoning that accountability and public entrepreneurship have distinct behaviour.

<p>| Table 6.10 Descriptive Statistics and Statistical Significance Change in Public Entrepreneurship Index |</p>
<table>
<thead>
<tr>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Significance</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>.912 ***</td>
<td>.912 ***</td>
<td>-0.017</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneurship 2000</td>
<td>50</td>
<td>.25</td>
<td>1.50</td>
<td>.709</td>
<td>.270</td>
<td>-.203 ***</td>
</tr>
<tr>
<td>Entrepreneurship 2002</td>
<td>50</td>
<td>.25</td>
<td>1.75</td>
<td>.823</td>
<td>.321</td>
<td></td>
</tr>
<tr>
<td>Entrepreneurship 2009</td>
<td>50</td>
<td>.25</td>
<td>1.75</td>
<td>.912</td>
<td>.451</td>
<td></td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td>Case base</td>
<td></td>
</tr>
</tbody>
</table>

Note: Standard errors are in brackets. ***p<.001 **p<.01 *p<.05

The changes on entrepreneurship index from 2000 to 2009 is statistically significant, r (505) = -.203, SE= .023, p<.001.

Entrepreneurship indicators denote, as discussed earlier, pro-activeness, risk-taking and innovativeness of rural local governments. The dimensions are not separated because they might overlap with each other. These indicators are
difficult to achieve by most municipalities which indicates the entrepreneurial aspects of them. Over the period (see Table 6.11):

- Fiscal effort shows a fall in collection of revenues in the working sample in respect to the total municipal revenues. The number of municipalities categorized as good performers increased from 12% in 2000 to only 15% in 2009 and the municipalities with poor performance increased gradually from 58 to 64%. Therefore, the moderate performance has decreased and most municipalities have fallen into the poor performance category.

- More municipalities are updating their Tax Property Valuation within a three year period; the numbers are up from 270 (37%) in 2000 to 407 municipalities (72%) in 2009.

- The percentages of municipalities that have been associated with other institutions for the provision of public services fell from 70% in 2000 to 46% in 2009.

- The percentage of municipalities that have been associated with other local governments or organisations for the common good has increased from 75 (10%) municipalities in 2000 to 306 (46%) municipalities in 2009.

- More municipalities are updating their property tax at least once in their government period. The number of municipalities with good performance has progressively increased from 37% to 72%.

This shows that co-operation has become important for rural municipalities but particularly in areas distinct from basic public services. This could be interpreted as a sign of entrepreneurship.
It is important to notice that a lot of data were missing in these variables. This accounts for the further reduction in the working sample size.

Table 6.11 Descriptive Statistics of Public Entrepreneurship Indicators

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
<th>Fiscal effort</th>
<th>Property Update</th>
<th>Tax Update</th>
<th>Public Service Association</th>
<th>Co-operation with Public Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>2000</td>
<td>0</td>
<td>421</td>
<td>58</td>
<td>452</td>
<td>63</td>
<td>215</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>212</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>89</td>
<td>12</td>
<td>270</td>
<td>37</td>
<td>507</td>
</tr>
<tr>
<td></td>
<td>Valid number</td>
<td>722</td>
<td></td>
<td>722</td>
<td></td>
<td>722</td>
</tr>
<tr>
<td>2002</td>
<td>0</td>
<td>442</td>
<td>61</td>
<td>396</td>
<td>55</td>
<td>109</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>87</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>193</td>
<td>27</td>
<td>326</td>
<td>45</td>
<td>613</td>
</tr>
<tr>
<td></td>
<td>Valid number</td>
<td>722</td>
<td></td>
<td>722</td>
<td></td>
<td>722</td>
</tr>
<tr>
<td>2009</td>
<td>0</td>
<td>469</td>
<td>64</td>
<td>160</td>
<td>28</td>
<td>360</td>
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<tr>
<td></td>
<td>1</td>
<td>152</td>
<td>21</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>106</td>
<td>15</td>
<td>407</td>
<td>72</td>
<td>306</td>
</tr>
<tr>
<td></td>
<td>Valid number</td>
<td>727</td>
<td></td>
<td>567</td>
<td></td>
<td>666</td>
</tr>
</tbody>
</table>

This table shows the number of municipalities in each performance bound (poor/moderate/good) per year and the equivalent percentage it represents from the total sample. (0= Poor; 1= Moderate; 2=Good; F=Frequency).

6.4.3 Political competition and other political variables

Political competition

The information for this variable is from the CIDAC database from 1990 to 2010.

For the purpose of this investigation, the margin of victory between the two principal contesters is used to measure political competition. This measure has been used in Mexican literature because it emphasises the risk faced by politicians and political parties to lose political power which is the underpinning argument linking political competition with improvements in performance (Moreno, 2005, 68).
Political competition is the main political variable analyzed in this research because political competition might either impact or reinforce accountability and public entrepreneurship in a decentralised setting. The indicator of competition in local elections (electoral competition) is measured as follows:

Political competition: 1 minus the difference in the share of votes obtained by the two strongest parties.

Therefore, a high index means high levels of competition (because the parties’ levels of support were close to each other) and a low index the opposite. For instance, a rural municipality in the state of Tamaulipas had local election in 2001. For first time in the history of the town the opposition party won the election. The total votes were 11,405, and the share of votes by party was PAN (opposition party) 5,657, PRI 5,447 and the rest accounted for other parties and cancelled votes. The difference between the two strongest parties was 210 votes. This represents 0.02 or a 2% difference in percentage. Hence, the index results in .98 (1-0.02) or 98%. This was indeed a highly competitive election - and the first one in the history of the town.

It is important to notice that local elections in Mexico do not occur simultaneously across the country, and so they occur at different points in relation to fiscal decentralisation changes. This varies not only among states, but sometimes even within states. The latter occurs in special cases, for instance when an election is repeated or postponed in specific circumstances. The date mayors begin their governing period also varies. However, most municipalities start their governing period in the last half of the year or at the beginning of the next year after the election is held.

The database from CIDAC presents the results of the elections. Therefore, it indicates only the year the election was held. Thus, for the use of this study, the elections’ results were added to the following three years after the election was held based on a mandatory office period of three years. For instance if the
The political-electoral variables portray important democratic changes in recent decades. Figure 6.4 below shows, from the working sample of rural municipalities, how elections in rural municipalities are becoming highly competitive. The vertical axis in Figure 6.4 measures the *mean* level of political competition (as defined before) for rural municipalities in the working sample.

From 1990 to 2000, political competition increased remarkably. After 2003, the rate of change slowed down. This might be a result of a ceiling effect of high levels of competition. This is an important change in the political landscape of Mexico. To some extent, it captures the weakening of the hegemonic party, PRI (descriptive statistics are found in Table 6.13 at the end of the section).

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36 Halaby, C (2004) presents an important discussion about the time-invariant exploratory variables in a fixed effect model. He argues that evidence suggests a fixed model does not sacrifice all information about time-invariant variables if they have enough time-variance to identify a base line effect. Based on this premise and the number of observations in this analysis, the time-invariance exploratory political variables should not be a concern.
If we compare the changes in political competition before and after the 1997 reform, it can be observed that the highest changes occurred before. The average mean of political competition before the reform was 0.488 or 49% and 0.829 or 83% after the reform. Thus, on a scale of 0 to 1 (or from 0 to 100%), where 1 or 100% means highly competitive, a change from 49% to 83% is substantial and statistically significant at p< .000 (see Table 6.12 below).

As stated above, the main political variable studied here is political competition. However, the categorical political variable state-level opposition can also present important differences for performance.

Table 6.12 Descriptive Statistics and Statistical Significance of Political Competition Before and After 1997 Reform

<table>
<thead>
<tr>
<th>Period</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Intercept</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before the reform from 1990-1997</td>
<td>461</td>
<td>.481</td>
<td>.237</td>
<td>-0.347***</td>
<td>(.012)</td>
</tr>
<tr>
<td>After the reform from 1997 to 2008</td>
<td>505</td>
<td>.829</td>
<td>.125</td>
<td>Case base</td>
<td></td>
</tr>
</tbody>
</table>
Table 6.13 Descriptive Statistics of Political Competition

<table>
<thead>
<tr>
<th>YEARS</th>
<th>N</th>
<th>POLITICAL COMPETITION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
</tr>
<tr>
<td>1990</td>
<td>466</td>
<td>29%</td>
</tr>
<tr>
<td>1991</td>
<td>473</td>
<td>31%</td>
</tr>
<tr>
<td>1992</td>
<td>474</td>
<td>33%</td>
</tr>
<tr>
<td>1993</td>
<td>500</td>
<td>45%</td>
</tr>
<tr>
<td>1994</td>
<td>501</td>
<td>48%</td>
</tr>
<tr>
<td>1995</td>
<td>501</td>
<td>54%</td>
</tr>
<tr>
<td>1996</td>
<td>501</td>
<td>70%</td>
</tr>
<tr>
<td>1997</td>
<td>500</td>
<td>72%</td>
</tr>
<tr>
<td>1998</td>
<td>505</td>
<td>75%</td>
</tr>
<tr>
<td>1999</td>
<td>505</td>
<td>76%</td>
</tr>
<tr>
<td>2000</td>
<td>505</td>
<td>78%</td>
</tr>
<tr>
<td>2002</td>
<td>505</td>
<td>79%</td>
</tr>
<tr>
<td>2003</td>
<td>505</td>
<td>86%</td>
</tr>
<tr>
<td>2004</td>
<td>505</td>
<td>85%</td>
</tr>
<tr>
<td>2005</td>
<td>505</td>
<td>86%</td>
</tr>
<tr>
<td>2006</td>
<td>505</td>
<td>87%</td>
</tr>
<tr>
<td>2007</td>
<td>505</td>
<td>88%</td>
</tr>
<tr>
<td>2008</td>
<td>505</td>
<td>88%</td>
</tr>
</tbody>
</table>

NOTE: The indicator for political competition is interpreted as: the higher the indicator, the more competitive the election.
Political parties

The information for this variable is found in the CIDAC database from 1990 to 2010.

The CIDAC database only presents the party winner by election. Following the same strategy as for political competition variable, a database was built per year by government period. The party winner was added to the following three years after the election which was held based on a mandatory office period of three years.

Parties are added as a dummy variable. The parties are identified as *Partido Revolucionario Institucional* (central-left-wing) and coalitions (PRI+C); *Partido Acción Nacional* (right wing) and coalitions (PAN+C); Others + Coalitions (OTHERS+C). Notice, the two strongest political parties also include coalitions. For instance, if PRI has arranged a coalition with PANAL (*Partido Nueva Alianza*) and they win the election, the party is identified as PRI+C. In this case, it is assumed that PRI and PAN are the dominant parties in coalitions and that in rural municipalities “small” parties are used by the main party for political strategies. There are three reasons to sort out the political parties in this way.

First, in the post-reform period, there has been a considerable increase in the number of coalitions in local elections, which are mainly led by the two strongest parties, PRI and PAN. The political control remains in these two political parties. This is mainly the case of PRI which has used this as a strategy after it started losing political power.

Second, PRI was in power for 71 years at the federal level and in the majority of state and local governments. This political power at all levels of governments may still benefit PRI by lobbying for investment of basic public services compared to other political parties. This was the concern of opposition parties in the pre-reform period and one reason to decentralise in the first place. Therefore, it is important to observe any changes in relation to CBPS before
and after the reform. The differences in political parties permit inferences to be made in regard to the extent fiscal decentralisation has diminished party paternalistic behaviour and to what extent it has encouraged or enabled accountability and public entrepreneurship.

Third, the high political control PRI maintained over many years and still maintains in some municipalities, mainly rural, may affect its performance negatively compared to other parties. High political control can bias the selection process of candidates or lead the party to ignore investment in basic needs over other political strategies. On the other hand, it may influence positively the performance of other political parties because they see the local administration as an opportunity to differentiate themselves (leading to higher investment in CBPS). This may occur regardless of the level of political competition. In this case, it is hypothesised that there is a party-specific effect.

As a result of higher levels of political competition, rural local governments in Mexico have gradually experienced the alternation of parties. From the working sample of rural municipalities, it can be observed that the conservative party (PAN+ coalitions) and other small parties and coalitions have gained ground. As shown in Figure 6.5 this trend seems substantial after the 1997 decentralisation reform. In 1997, PAN + Coalitions governed 40 municipalities in the working sample and Other Parties + Coalitions, 49 municipalities. By 2008, PAN + Coalitions governed 137 municipalities and Other Parties + Coalitions, 108. On the other hand, PRI + Coalitions went from 499 municipalities in 1997 to 260 in 2008. This is a substantial change for rural municipalities if we consider that before the reform from 1990 to 1994, the number of municipalities governed by PRI + Coalitions hardly changed.
Figure 6.5 Number of Municipalities Governed by Party on the working sample of Rural Municipalities from 1990 to 2008
State-level opposition

The information for this variable is derived from the CIDAC database but the indicators are the researcher’s own calculations from 1990 to 2009.

The variable state-level opposition was introduced in Mexican literature by Moreno-Jaimes (2007) who called it Juxtaposition. The variable identifies the municipalities where the mayor and the state governor belong to different political parties. Moreno-Jaimes hypothesized that municipalities with state-level opposition have more limited access to state government grants, and as a consequence, lower coverage of service. In his analyses, he did not find any differences in service coverage in municipalities with state-level opposition. This finding is somewhat surprising, given the literature on political competition, and this study therefore includes the variable and revisits Moreno-James’ results for rural municipalities only.

For the purpose of this study, state-level opposition is defined similarly to Moreno-Jaimes. A municipality whose mayor in a given period belongs to a party different from the state governor is given a value 1 for that period, 0 otherwise.

The CIDAC database only presents the party winner by state election. Thus, similar to the strategy used for political competition, a database was built per year by government period for the state-level, grouping the political parties into party coalitions (minority parties are included as part of the two strongest political parties). Then, the information was combined to obtain the state-level opposition variable.

Turning to descriptive statistics, the rise of political competition is observed in all government levels. Therefore, there are also more local governments with state-level opposition. In Figure 6.6 a solid increase of municipalities with state-level opposition can be observed from the working sample of rural
municipalities. This is a consequence of substantial loss of political power of the hegemonic party (PRI) in both states and municipalities.

The previous description shows how the political landscape has changed in the last two decades. These political changes are aligned to the pro-theoretical arguments that link better the political environment to local government performance. However, political competition in this group of municipalities has not changed drastically after the 1997 reform while other political indicators have. Therefore, it is important to explore all of them.
Figure 6.6 State-level opposition on a sample of rural municipalities in Mexico from 1990 to 2008
6.4.4 Local government performance indicator

**Source:** The information for these variables is listed on the Census of Population and Housing 1990, 2000 and 2010 and Count of Population and Housing 1995 and 2005.

Local government performance is the key focus of the overall research study because it is the ultimate policy aim. It is, however, difficult to define, let alone measure it. This concept has evolved alongside public administration doctrines and is not captured by a single indicator (see Section 2.4, number 3).

A measure of performance that has been used in Mexican literature is the coverage of basic public services in local governments. The range of public services the municipality is lawfully obliged to provide is extensive. However, accurate data for all public services is not available for longitudinal studies. The only well-documented public services are coverage of sewerage and water. These indicators are highly significant for rural municipalities because these public local services are still underprovided and therefore, still a priority.

Official data is released every five years. Therefore, an average was calculated between those years. Firstly the yearly progressive increment/decrement of coverage of sewage and water for each municipality between censuses and counts was calculated (i.e. an average incremental change from 1990 to 1995). A yearly progressive increment/decrement of population count was calculated between the same censuses and counts. Then, these two indicators were used to calculate the percentage of households covered by each service. Hence, this is an estimated average.

---

37 The indicators for Investment inside and outside the municipal seat are only estimates and were collected via surveys.
38 As a reminder, water and sewage services are not induced in the indicator for Other Basic Public Services because the various analyses carried out in this research include these variables as dependent (Coverage of Basic Public Services) and independent (Other Basic Public Services as part of the Accountability index). This may lead to argue that the variables contain similar indicators and might account for the significance correlation. However, these analyses ensure that the same data are not used in any given analysis for both the dependent and the independent variable.
The reason to calculate a yearly measure is because the researcher works with different databases and the measures are from different years including years in between the census and counts.

The indicators are measured as follows:

SEWERAGE: Absolute coverage of sewage per year. It is interpreted as the relation between the number of houses with sewage services and the total number of houses in the municipality in the same census or population count.

WATER: Absolute coverage of water per year. It is interpreted as the relation between the number of houses with water service and the total number of houses in the municipality in the same census or population count.

The periods are divided into the pre-reform period from 1990 to 1997 and the post-reform period from 1998 to 2008. 39

These two indicators are added up and averaged to obtain the indicator named Coverage of Basic Public Services.

Coverage of Basic Public Services, or CBPS for short, is the average coverage of Basic Public Services measured as the absolute change of water and sewage in the municipality.

The decentralisation reform has left the expansion and restoration of basic public services in the hands of local governments. Basic public services constitute an important element for development. The World Bank considers basic public service infrastructure a key element in reducing poverty (Briseño, et al, 2004) and the quantity and quality of basic infrastructure is argued to bring development in the area (Fourie, 2006).

39 The pre-reform and post-period were not included as dummy variables. The database was divided into two different files.
The coverage of water specifically in rural localities has improved over time in the world, in Latin American countries and in Mexico (the world from 62% in 1990 to 80.72% in 2011; Latin American countries from 63% in 1990 to 82% in 2011; and Mexico from 59% in 1990 to 89% in 2011) \(^{(40)}\). Nonetheless, there are still persistent problems in basic public service provision and in particular in rural municipalities.

In the working sample of municipalities, there is a steady growth in public services. The coverage indicates the percentage of housing in the local government having water and sewage services. The coverage of basic public services, which is the average of both services, has increased progressively from 41.31% in 1990 to 72.9% coverage in 2009 (see Table 6.14 at the end of the section). The descriptive statistics present other important insights. For instance, even though municipalities created after the reform are excluded from the analysis, the lowest level of coverage at the beginning of the study in 1990 is .5% and the highest 91% in the same year. This highlights a wide level of inequalities. In addition, if the sample is divided into 8 economic regions, the northwest and central-west rural municipalities present a better level of development in the composed indicator CBPS. \(^{(41)}\) The rest of the states show lower coverage with an important gap between them.

In addition, the level of investment varies depending on the public services. In the working sample, investment in water has been larger than the investment in sewage. This is observed in Figure 6.7. The level of coverage in water service has been historically higher than sewage service but lately- since 2000- the sampled rural municipalities had a significant increase in coverage of sewage service, presumably due to higher investments and higher levels of coverage in water service.

\(^{(40)}\) World Development Indicators (http://www.wssinfo.org/)
\(^{(41)}\) Zone 1 North-west  Baja California Norte, Sur, Sonora, Sinaloa, Nayarit; Zone 2 North Chihuahua, Coahuila, Durango, Zacatecas Y San Luis Potosí; Zone 3 North-east  Nuevo León y Tamaulipas; Zone 4 Central-west  Jalisco, Aguascalientes, Colima, Michoacán y Guanajuato; Zone 5 Central-east  Querétaro, México, D.F., Morelos, Hidalgo, Tlaxcala y Puebla; Zone 6 South Guerrero, Oaxaca y Chiapa; Zone 7 East Veracruz y Tabasco; Zone 8 Península of Yucatán Campeche, Yucatán y Quintana Roo.
Figure 6.7 Coverage of water and sewage from 1990 to 2008 in the working sample
Research Method, Operationalizing the Variables and Descriptive Statistics

Table 6.14 Descriptive Statistics of Coverage of Basic Local Public Services

<table>
<thead>
<tr>
<th>Year</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
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<td>499</td>
<td>.005</td>
<td>.914</td>
<td>.413</td>
<td>.205</td>
</tr>
<tr>
<td>1991</td>
<td>498</td>
<td>.013</td>
<td>.925</td>
<td>.440</td>
<td>.205</td>
</tr>
<tr>
<td>1992</td>
<td>498</td>
<td>.023</td>
<td>.936</td>
<td>.450</td>
<td>.205</td>
</tr>
<tr>
<td>1993</td>
<td>498</td>
<td>.033</td>
<td>.946</td>
<td>.461</td>
<td>.205</td>
</tr>
<tr>
<td>1994</td>
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<tr>
<td>1995</td>
<td>504</td>
<td>.000</td>
<td>.971</td>
<td>.553</td>
<td>.219</td>
</tr>
<tr>
<td>1996</td>
<td>504</td>
<td>.042</td>
<td>.967</td>
<td>.558</td>
<td>.212</td>
</tr>
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<td>.556</td>
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<td>1998</td>
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<td>.038</td>
<td>.963</td>
<td>.554</td>
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<tr>
<td>1999</td>
<td>504</td>
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<td>.961</td>
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<td>505</td>
<td>.124</td>
<td>.985</td>
<td>.721</td>
<td>.179</td>
</tr>
<tr>
<td>2007</td>
<td>505</td>
<td>.128</td>
<td>.989</td>
<td>.725</td>
<td>.179</td>
</tr>
<tr>
<td>2008</td>
<td>505</td>
<td>.132</td>
<td>.993</td>
<td>.729</td>
<td>.179</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>498</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6.5 Summary

In this chapter a justification and explanation of how the different empirical variables are measured has been given. In this research it has been argued that if there is an impact on performance derived from the fiscal decentralisation, thus the implication is that fiscal decentralisation drives first accountability and public entrepreneurship behaviour. To test this hypothesis, the variables that I will be used for an empirical analysis have been presented in this chapter. Two measures of decentralisation have been introduced based on the type of funds municipalities are entitled to- conditional mandatory funds and unconditional funds. These funds have different arrangements (and degrees of discretion) which may drive different behaviour. It has also been shown how the behaviours- accountability and public entrepreneurship- will be measured and
the indicators that compose them justified. In addition, the other explanatory variables likely to influence the behavioural patterns and government performance have been introduced namely, political competition, state-level competition and party affiliation. Finally, how government performance is measured has been explained.

In addition, individual indicators have been explored and it has been shown that in general both behaviours and governance performance have improved over time as have all explanatory variables. However, an important finding to be noted is that fiscal effort has indeed declined as a percentage and own revenues has showed only a slight increase in absolute real terms. This is consistent with the theoretical literature which suggests that expenditure decentralisation might create incentives for local government to become financially dependent from higher government levels. This is in spite of how important local taxes are in the general theories of decentralisation such as Tiebout (1956).

The next step is to empirically explore whether these positive changes over time can be attributed only or partially to fiscal decentralisation and how decentralisation drives such changes.
Chapter 7 - Fiscal decentralisation and Behavioural Patterns: An empirical analysis correlates

In this chapter different statistical analyses are run to explore the relationship among the theoretical variables. Each analysis intends to answer a specific research question. However, as stated before, validation and model predictions are not the scope of this analysis. Instead, it aims at exploring possible association among variables.

As seen in the previous chapter (Section 6.4.2), there have been changes, over time, in the mean values of the key variables under discussion, namely accountability and public entrepreneurship behaviour. However, we need to examine how far there is evidence to support the relationships inherent in the formal hypotheses.

In this chapter the relationship between fiscal decentralisation and changes in behavioural patterns (accountability and public entrepreneurship) of Mexican rural governments are examined in detail. Different models are constructed to test whether fiscal decentralisation has contributed to behavioural changes and the same is done for political competition.

Based on the previous review there is evidence in favour of changes in actions related to accountability and public entrepreneurship, therefore, it makes sense to investigate whether these changes were related to the decentralisation reform. This section corresponds to research question 1.

In addition, fiscal decentralisation is not the only theory that suggests promoting accountability and public entrepreneurship. The political-electoral theory also relates political factors- such as political competition- with improvement of accountability and to a lesser extent to changes in public entrepreneurship. In addition, some fiscal decentralisation arguments are based on political factors to make decentralisation work. Hence, political competition may also play a role
in the behavioural pattern of local authorities. It can either better explain the changes in behavioural patterns or reinforce the impact of fiscal decentralisation.

Therefore, it is indeed possible that the changes are not the results of fiscal decentralisation at all but of other policies or circumstances associated with it such as political changes. This is a common problem in social science, and in this case, as explained in Chapter 4, Mexico has gone hand in hand with major political changes. Then, it is necessary to explore whether the changes in accountability and public entrepreneurship, which might lead also to better performance, are the result of political competition and in what ways fiscal decentralisation arrangements and political competition may interact and/or strengthen each other. This section corresponds to research question 2.

Figure 7.1 presents (in black) the part of the theoretical model to be evaluated.

Figure 7.1 Research question 1 and 2 in the theoretical framework

This research argues that specific fiscal arrangements under fiscal decentralisation may affect the behaviour of local authorities differently. It may encourage better accountability but suppress public entrepreneurship or vice versa. In addition, accountability may be reinforced by the presence of political competition in the municipality once fiscal decentralisation is in place or political
competition may be the main force affecting accountability and/or public entrepreneurship.

7.1 Fiscal decentralisation and changes in accountability

This Section seeks to answer part of research question 1 about whether fiscal decentralisation can, in fact, be related to changes in patterns of accountability. It presents a statistical analysis of the influence of conditional mandatory funds and unconditional funds on accountability.

For that purpose the baseline model is estimated:

\[ y_{it} = \alpha_i + \theta_t + \beta UF_{it} + \delta CF_{it} + P_{it} + \epsilon_{it} \]

where \( y_{it} \) is the outcome variable of interest: the accountability index in municipality \( i \) at time \( t \). The index is a continuous variable between 0 and 2.

\( UF_{it} \) and \( CF_{it} \) measure the absolute level of per capita unconditional and conditional mandatory funds in municipality \( i \) in year \( t \), respectively.

\( P_{it} \) is a vector of political variables and include:

Political competition measured as a continuous variable of 1 minus the difference in the share of votes obtained by the two strongest parties in municipality \( i \) at time \( t \).

Political party is a categorical variable that denotes the party governing in municipality \( i \) at time \( t \). The parties are identified as:

\( PRI+C \) (Partido Revolucionario Institucional and Coalitions). This is the omitted category.
Fiscal Decentralisation and Behavioural Patterns: An empirical analysis correlates

\textit{PAN+C} (Partido Acción Nacional and Coalitions)

\textit{OTHERS+C} (Others + Coalitions)

\textit{State-level opposition} is a dummy variable taking a value of 0 if the mayor of municipality \( i \) at time \( t \) belongs to a different political party than the state governor or 1 otherwise.

\( \alpha_i \) is a municipality fixed effect to account for municipality-specific and time invariant factors such as culture, geography or any other persistent characteristics, that might affect the outcome of interest.

\( \theta_t \) is a time fixed effect controlling for country-wide shocks that affect all municipalities equally.

The variables will be added in a stepwise manner to the model.

This model is estimated for the sample of 505 municipalities using data for the following years 1995, 2000, 2002, 2004, 2009.
### Table 7.1 Statistical Analysis Models of Accountability

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Estimates ACCOUNTABILITY</th>
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<tr>
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<td>MODEL 1</td>
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<td>Intercept</td>
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<tr>
<td>Unconditional funds</td>
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<tr>
<td></td>
<td>(.018)</td>
</tr>
<tr>
<td>Conditional Funds</td>
<td>.072***</td>
</tr>
<tr>
<td></td>
<td>(.021)</td>
</tr>
<tr>
<td>Political Competition</td>
<td>-.004</td>
</tr>
<tr>
<td></td>
<td>(.021)</td>
</tr>
<tr>
<td>Non-State-level opposition (0)</td>
<td>-.016</td>
</tr>
<tr>
<td>(=1 if there is state-level opposition;=0 otherwise)</td>
<td>(.039)</td>
</tr>
<tr>
<td>PAN+C</td>
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</tr>
<tr>
<td>Omitted category=PRI+C</td>
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<tr>
<td>OTHERS PARTIES AND COALITIONS</td>
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<td>Omitted category =PRI+COALITIONS</td>
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</tr>
<tr>
<td>Non-State-level opposition (0)* Political Competition</td>
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</tr>
<tr>
<td>Pseudo R²</td>
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</tr>
<tr>
<td>No. Municipalities</td>
<td>505</td>
</tr>
<tr>
<td>Years</td>
<td>5</td>
</tr>
<tr>
<td>Observations</td>
<td>2525</td>
</tr>
</tbody>
</table>

Note: Dependent variable ACCOUNTABILITY. Standard errors are in brackets. The results are presented in standardised values. ***p<.001 **<.01 *p<.05. McFadden's Pseudo R² with best fitted model (−2 Restricted Log Likelihood) is used. All models include municipality and time fixed effects.

In model 1 and 2, the hypothesis is that improvements in accountability can be explained by increases in conditional mandatory funds and unconditional funds.

In this case, a positive association is expected to be found between unconditional funds and accountability levels based on the theoretical argument.
that increases in these grants might motivate local authorities to be more accountable because they are close to their constituency and are judged by citizens in local elections. The assumption is that additional grants might give them the opportunity to respond to citizens’ preferences.

Therefore, under fiscal decentralisation, local authorities can make good use of resources because they are aware of what citizens’ prefer. In addition, citizens can relate to where and how the grants have been spent. This clarifies responsibility and, to some extent, imposes more control over local authorities.

Drawing from the literature review, increases in conditional mandatory funds are also expected to be associated with accountability based on the assumption that conditional mandatory funds have tougher financial controls which control corruption but the association is expected to be weaker as conditional mandatory funds delegate less discretion than unconditional funds.

**Unconditional funds as a single effect**

Unconditional funds delegate financial resources to local authorities giving them the opportunity to allocate the funds according to local necessities. In other words, they have freedom of allocation. As seen in Section 6.4.1, Table 6.2, these rose from an average of 45 pesos per capita to 1011 pesos per capita from 1995 to 2009.

Theoretically, it is possible to argue that this type of funds should encourage local authorities to behave in a more accountable fashion. The reasons being, that unconditional *funds* give local authorities the opportunity to act according to citizens’ preferences and therefore, increase the chances for their political party to succeed in the following elections.

Since Tiebout (1956) advanced that citizens “vote with their feet”; this theory implies that local authorities would prefer to act in a more accountable manner in order to keep their citizens happy. If this does not work as a “pricing
mechanism” for citizens, it is still the level of government with comparative advantages in the provision of public services and for the satisfaction of diversified needs, according to Oates’ (1972) theorem. This gives scope to allocative efficiency and, to some extent, productive efficiency.

However, there are serious concerns that particularly fit with the group of municipalities studied here. Local governments rely on federal transfers rather than own revenue collection. Theoretically this may lead to misuse. Local authorities can just become “fiscally-lazy” and be discouraged from increasing their local revenues or they may increase total expenditure without increasing tax collection, the so called “flypaper effect” (Melo, 2002).

In addition, in this group of municipalities, there are strong contiguity factors, as Tanzi (1996) called it. People have known each other since childhood and this may lead to coalitions and preferential treatment among citizens. Besides, local bureaucrats are likely to be poorly qualified and professionally unmotivated because there are no progression schemes or good salaries (Prud’homme, 1995; Tanzi, 1995).

Hence, Model 1 tests whether the pro-theoretical assumptions hold for this type of funds in rural municipalities. The empirical results, shown in Table 7.1, show that as a single effect positive changes in the quantity of unconditional funds are negatively statistically correlated to accountability index r (505) = -.094, SE= .018, p<.001.

This suggests that an increase in the level of financial resources in unconditional grants is associated with one or more of: administrative overspending, decreased public work investment, and to some extent, a decline in transparency and citizens’ inclusion in local decision-making (these being the component parts of the accountability index).
Conditional mandatory funds as single effect

Conditional mandatory funds are resources delegated to local governments earmarked to specific types of investments. This type of funds increases the local governments’ budget but also imposes more restriction in the allocation of resources. Recalling the criticism on fiscal decentralisation, Prud'homme (1995) claims that priority public services are the drivers of public service allocation, not citizens’ preferences. In this case, the conditional mandatory funds are mainly earmarked to basic public services. So, local authorities allocate resources based on the priorities indicated in this type of funds. However, it is a reasonable assumption that citizens’ preferences are aligned to these priorities because rural municipalities still lack basic public services.

Another important difference between this type of funds and unconditional funds is that there is more technical and financial supervision by higher government levels. This by no means implies that unconditional funds are not supervised. However, there are more rules involved in conditional funds. Therefore, the alleged effects of contiguity factors and poor qualification should have less impact.

As shown in Table 7.1 (Model 2), in contrast to unconditional funds, the amount of conditional mandatory funds appears to be positively correlated to accountability index $r (505) = .072, SE= .021$ and is highly statistically significant at $p < .001$.

This result suggests that an increase in the level of financial resources through conditional mandatory grants is associated with one or more of: less administrative spending, an increase in public work investment and to some extent, encouragement of transparency and citizens’ inclusion in local decision-making.
Hence, the fiscal arrangement based on conditional mandatory funds supports the theoretical argument that fiscal decentralisation might be positively associated with changes in accountability behaviour.

*A model of Accountability and fiscal arrangements*

The previous analyses show how important the fiscal arrangement can be in encouraging or discouraging accountability. As the decentralisation theory implies, delegation of financial resources may lead to changes in behaviours. However, the findings suggest these changes might be counter-productive and the effect seems to depend on the type of fiscal arrangement.

Based on these findings, it can be argued that there is partial evidence of positive association between the fiscal decentralisation arrangements and accountability, particularly in relation to unconditional funds. Therefore, it makes sense to test the effect of both of them in accountability index.

As shown in Table 7.1 (Model 3), conditional mandatory funds and unconditional funds are highly significantly correlated to accountability. Unconditional funds are negatively correlated with $r (505) = -0.160$, SE = 0.021, $p<0.001$ and conditional mandatory funds are positively correlated with $r (505) = 0.157$, SE = 0.023, $p<0.01$. In this model, *unconditional funds explained the accountability index relation slightly more*. In other words, the negative impact on a municipality’s score of increases in unconditional funds is slightly larger than the positive impact of conditional mandatory ones.

These findings suggest that, as the theoretical literature would lead one to expect, the type of fiscal decentralisation arrangement contributes to how local authorities behave. However, contrarily to the pro-theoretical assumption, fiscal decentralisation may damage accountability in rural municipalities through the use of unconditional funds but this can also be slightly offset with the use of conditional mandatory funds. Therefore, its benefit in regard to accountability is
An intriguing question is how these positive and negative relations actually happen. This will be examined in the second empirical phase.

**Models of Accountability, decentralisation and political variables**

The following models investigate the relationship between accountability, decentralization and a range of municipal political variables.

The hypothesis is that political competition and state-level government may interact and strengthen each other. In addition, accountability may be reinforced by the presence of political competition in the municipality once fiscal decentralisation is in place.

The first analysis showed that conditional mandatory funds and unconditional funds are important indicators of accountability. Unconditional funds are negatively associated and conditional mandatory funds are positively associated; unconditional funds being the variable with a slightly higher impact.

The addition of political variables in Table 9.7 does not add power to the model of accountability and, from the political variables, only the political party variable reaches statistical significance at 5%. However, the introduction of political variables increases more the (negative) parameter of unconditional funds than the (positive) parameters of conditional mandatory funds.

In all models, the fiscal decentralisation variables- conditional mandatory and unconditional funds- present the same direction of association and continue being highly statistically significant.

In Model 4, the addition of the main political variable- political competition- is not as relevant as theoretically claimed for this group of municipalities. It does not reach statistical significance in the models and the direction of association is opposite to what would be expected theoretically up to Model 7 where it becomes positively associated with the introduction of the interaction variable state-level opposition by political competition. However, the parameter is very
In an alternative model (Annex 1), if only municipal-specific factors are controlled, the parameters of political competition appear positively and highly statistically significant until the interaction state-level opposition*political competition is included in the model. However, the parameters are still considerably smaller than the parameters of fiscal decentralisation variables.

Thus, an effect (either positive or negative) of political competition cannot be discharged, though the analyses tend to show a negative effect. More importantly, it seems that the decentralisation variables have a higher impact and are more robust predictors.

In Model 5, the state-level opposition variable appears statistically insignificant. The sign suggests that after controlling for the fiscal decentralisation variables and political competition, municipalities where the governor is from the same political party have a lower score in accountability than those with state-level opposition. This may suggest that the presence of political opposition per se drives accountability actions. This interpretation holds for Models 6 and 7.

In Model 6, the political parties reach a conventional statistical level at 5% and the parameters suggest that PAN + Coalitions and Others Parties + Coalitions have on average a lower score in accountability index than PRI + Coalitions.

In Model 7, the interaction state-level opposition and political competition are added. The reasoning for adding this interaction is that if political competition does not explain many changes in accountability, it can be the case that it is reinforced when the state and local governments are in opposition or vice versa. So, the higher the political competition, the more accountability actions may be pursued by municipalities with or without state-level opposition. In other words, higher levels of political competition condition the effects of state-level opposition.

This variable should be interpreted in context. As discussed above, municipalities where the governor is from the same political party appear to
have lower scores in accountability than those that are in state-level opposition. Thus, the interaction variable inquires whether this still holds in the presence of high political competition.

The interaction variable does not reach conventional significance level. However, the parameters suggest that the higher the political competition, the less accountability changes take place in municipalities that belong to the same political party as the governor. Hence, if both variables are read together, state-level opposition and the interaction variable, municipalities that are from the same political party as the governor appear to undertake fewer accountability actions regardless of the political competition level.

Reading this differently, opposition parties may become involved in more accountability actions than non-opposition as a way to differentiate themselves from others. This may be the case because a) opposition may interpret high competition as a probability of losing the next election or b) they might be more concerned about financial soundness due to fear of party reprisal as the state-level monitors and allocates part of the intergovernmental transfers.

This may suggest that being in opposition per se drives accountability actions. However, this claim is not empirically supported here as the statistical analysis does not reach a conventional level of statistical significance. However, it draws a general picture that can be investigated further.

This analysis shows how important the fiscal arrangements are for accountability. However, opposite to the hypotheses tested here, the models suggest that there are slightly more negative effects on accountability with increases of unconditional funds, than the positive effects on accountability due to increases in conditional mandatory funds. These contrasting results seem to hide complex relations that cannot be visualized here.

In addition, the findings suggest that political competition is not as relevant with regard to accountability (or at least as robust) as the financial arrangements in
place and the political variables seem to indirectly reinforce the financial variables, mainly the negative effect of unconditional funds (since the parameters get higher when political variables are included).

Another interesting finding, though not empirically supported in these models, is that “being in opposition” appears to be a driver of accountability. The reasons are not entirely clear in this analysis and should be pursued in the following empirical phase.

Hence, in answering part of question 2 - whether differences in the level of political competition had a major effect on whether and in what ways patterns of accountability change following fiscal decentralisation - the results appear to indicate that political competition does not have a major effect on patterns of accountability after these two decentralisation arrangements were introduced and the findings seem to indicate that the political variables may reinforce (the negative effect of) fiscal decentralisation through unconditional funds.

In the next section, the researcher will investigate whether these results are also applicable to entrepreneurship behaviour.

7.2 Fiscal decentralisation and changes in Public Entrepreneurship

Another theoretical implication of fiscal decentralisation is that it encourages public entrepreneurship by enabling local authorities to use their local knowledge and adapt policies. Its benefits go beyond information advantage and it involves “experimentation”, as Tanzi (1996) suggests. This gives scope to productive efficiency, and to some extent, allocative efficiency. Therefore, increases in unconditional funds are expected to be positively associated with public entrepreneurship because these types of grants provide local authorities with discretion in allocation of resources and expenditures and may encourage entrepreneurial actions.
Fiscal Decentralisation and Behavioural Patterns: An empirical analysis correlates

The reference regression model is the following:

$$y_{it} = \alpha_i + \theta_t + \beta UF_{it} + \delta CF_{it} + \sigma P_{it} + \varepsilon_{it}$$

where $y_{it}$ is the outcome variable of interest: the public entrepreneurship index in municipality $i$ at time $t$.

$UF_{it}$, $CF_{it}$ denotes the unconditional and conditional mandatory variables measured as before and $P_{it}$ is the vector of political variables, and includes political competition, state-level opposition, political party affiliation as before.

$\alpha_i$ is a municipality fixed effect to account for municipality-specific and time invariant factors such as culture, geography or any other persistent characteristics that might affect the outcome of interest.

$\theta_t$ is a time fixed effect controlling for country-wide shocks that affect all municipalities equally.

All variables will be added in a stepwise manner to the model.

This model is estimated for the sample of 505 municipalities using data for the following years 2000, 2002, and 2009.

The hypothesis is that improvements in public entrepreneurship can be explained by increases in conditional mandatory funds and unconditional funds.
### Table 7.2 Statistical analysis models of Public Entrepreneurship

<table>
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<tr>
<th></th>
<th>MODEL 8</th>
<th>MODEL 9</th>
<th>MODEL 10</th>
<th>MODEL 11</th>
<th>MODEL 12</th>
<th>MODEL 13</th>
<th>MODEL 14</th>
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<td>.331***</td>
<td>.336***</td>
<td>.339***</td>
<td>.341***</td>
<td>.358***</td>
<td>.357***</td>
</tr>
<tr>
<td></td>
<td>(0.043)</td>
<td>(0.043)</td>
<td>(0.043)</td>
<td>(0.051)</td>
<td>(0.065)</td>
<td>(0.067)</td>
<td></td>
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<tr>
<td>Unconditional funds</td>
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<td>.072***</td>
<td>.070***</td>
<td>.070***</td>
<td>.067***</td>
<td>.066</td>
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<tr>
<td></td>
<td>(0.025)</td>
<td>(0.027)</td>
<td>(0.027)</td>
<td>(0.027)</td>
<td>(0.027)</td>
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<td>.059*</td>
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<td>.060*</td>
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<td>-0.056</td>
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<td>(0.041)</td>
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<td>(0.052)</td>
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<tr>
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<td>.028</td>
<td>.028</td>
<td>.028</td>
<td>.027</td>
<td>.026</td>
<td>.026</td>
</tr>
</tbody>
</table>

|                  | 505     | 505     | 505      | 505      | 505      | 505      |
| No. municipalities|         |         |          |          |          |          |
| Years            | 3       | 3       | 3        | 3        | 3        | 3        |
| Total observations| 1515    | 1515    | 1515     | 1515     | 1515     | 1515     |

Note: Dependent variable ENTREPRENEURSHIP. Standard errors are in brackets. The results are presented in standardised values. ***p<.001 **p<.01 *p<.05. McFadden's Pseudo R² with best fitted model (-2 Restricted Log Likelihood) is used. All models include municipality and time fixed effects.
Fiscal Decentralisation and Behavioural Patterns:
An empirical analysis correlates

Unconditional funds as single effect

Unconditional funds give financial resources and discretion to local authorities which might encourage them to try new and innovative ways to improve productive efficiency of local public services. Based on this theory, the researcher tested whether increases in unconditional funds are related to changes in public entrepreneurship.

As shown in Table 7.2 (model 8), the results indicate that unconditional funds are positively and highly statistically related to public entrepreneurship with \( r (505) = .096, SE = .025 \) at \( p < .001 \).

Conditional mandatory funds as a single effect

A weak association between conditional mandatory funds and public entrepreneurship is expected, based on the assumption that conditional mandatory funds have tougher financial controls, which control corruption, but may constrain entrepreneurship as the contending discussion between democratic accountability and public entrepreneurship suggests. At the same time, conditional mandatory funds significantly increase the amount of local budget, which may be more relevant as an entrepreneurial driver than discretion.

In this case, the results in Table 7.2 (model 9) show that as a single effect, increases in conditional mandatory funds are positively and highly correlated to public entrepreneurship with \( r (505) = .092, SE = .026, p < .001 \).

A model of public entrepreneurship and fiscal arrangements

Contrary to the hypothesis set here, models 8 and 9 found that both funds seem to encourage public entrepreneurship. Conditional mandatory funds seem to be an important predictor of public entrepreneurship- not weak predictors. And there is evidence to suggest that unconditional funds are associated with public
entrepreneurship. This follows the idea that higher resources and discretion give more room for entrepreneurial actions. Therefore, the results support the argument that not only discretion but in general higher financial resources per se might encourage public entrepreneurship.

Adding both variables in a model (10), unconditional mandatory funds still maintain their highly positive correlation with \( r (505) = .072, \ SE = .027, \ p < .001 \) and conditional mandatory funds present a slightly lower parameter \( r (505) = .060, \ SE = .028 \) and reach statistical significance only at 5%.

Thus, the evidence suggests that both types of funds explain improvements in public entrepreneurship. In other words, they appear to be associated with potential entrepreneurial actions including co-operation management, grant-application facilitation and win-win negotiations (Section 6.4.2.2). These actions might reflect a more proactive, risk taking and perhaps, even innovative behaviour. The conditional mandatory funds might encourage public entrepreneurship because the entrepreneurs are motivated by the entitlement of higher resources they can allocate among citizens, driving co-operation. In addition, the restrictions and conditions imposed by other government levels may motivate them to maximize efficiency. Unconditional funds might give room for entrepreneurial actions because of high levels of discretion.

These results, however, are not highly consistent. If the model does not control for time fixed effects, the significance level of conditional mandatory funds still persist and the parameters become larger than for unconditional funds, for which statistical significance disappears (see Annex 1). However, this overview gives signs that positive changes in entrepreneurial behaviour are encouraged differently (both funds) and sometimes contending with accountability (only conditional).
Models of Public Entrepreneurship, decentralisation and political variables

Up to this point, the results show that fiscal arrangements impact local authorities’ behaviour differently. The two fiscal decentralisation indicators seem to explain positive changes in public entrepreneurship. The next models investigate, whether and to what extent public entrepreneurship is affected or reinforced by the presence of the political variables will be tested.

It needs to be highlighted that theoretically, the relationship between political variables and public entrepreneurship is weaker than for accountability. The association is that, in particular, higher political competition encourages local authorities to act in a more entrepreneurial fashion in order to win the next election. In this case the assumption is that higher political competition indicates a higher probability of losing the next election. Yardstick competition takes place where citizens compare the performance of their politicians. Therefore, local politicians are encouraged to act more entrepreneurially as a way to differentiate themselves from others and ensure that their party remains in power.

In contrast to the Accountability models, both fiscal decentralisation variables appear to be positively correlated and statistically significant for Public Entrepreneurship in all models. However, unconditional funds lose their significance power once the interaction variable is included in the model. This indicates that the importance of unconditional funds may be conditional to the political circumstances in the municipality or in other words, the incentives of unconditional funds are linked to the political conditions in the municipality.

As shown in Table 7.2, in this case political competition reaches statistically significance at the 5% level. However, it has a negative direction of association and this negative effect is reinforced by the interaction variable state-level opposition * political competition. Thus, in contrast to the theoretical assumption, this indicates a small direct but negative effect of political competition on public entrepreneurship.
Thus, as opposed to the analysis of accountability and the hypothesis for public entrepreneurship, the political variables appear to be more relevant for entrepreneurial behaviour. However, the fiscal decentralisation variables are likewise relevant.

In Model 11, the political competition variable was added. As in the model for accountability, the political competition variable follows a negative relationship. This is different to what is theoretically expected. This negative effect is reinforced with the introduction of the interaction variable in Model 14.

In Model 12, state-level opposition was included and the parameters also present similar results as those for accountability - local governments from the same political parties as the governor have on average a lower score in public entrepreneurship. The rest of the models present similar results. However, it also does not reach statistical significance and the parameter is very small.

In Model 13, the political party affiliation presents different results than for the Accountability model. In this case, the centre-right party (PAN) and coalitions have on average higher scores in public entrepreneurship index than the centre-left party (PRI) and other parties and coalitions have on average a lower score. However, the results are not statistically significant.

In Model 14, the interaction variable reinforces the parameters of the political competition variable and decreases the significance level of unconditional funds, but it does not reach conventional statistical level. Contrarily to the accountability models, the parameters suggest that the higher the political competition in the municipalities, the more entrepreneurial actions take place in municipalities that belong to the same political party as the governor.

Thus, high political competition seems to change the behavioural patterns of local authorities that belong to the same political party as the governor. The findings suggest that they might undertake fewer actions related to the
accountability score and *more* actions related to the public entrepreneurship score. The results for entrepreneurship reach statistically significance if time fixed effects are not controlled (see Annex 1).

As a reminder, after controlling for fiscal decentralisation and political competition, the state-level opposition variable indicated that local authorities from the same political party as the governor were likely to undertake *fewer* actions related to the accountability score and *fewer* actions related to public entrepreneurship score. Thus, the presence of higher political competition seems to condition the entrepreneurial behaviour of municipalities without state-level opposition.

Thus, political competition seems to have a direct effect on public entrepreneurship similar to the fiscal decentralisation indicators. However, contrarily to the fiscal decentralisation variables, the results suggest that political decentralisation seem to discourage public entrepreneurship.

The model controlling only for municipal effects presents a similar direction of association but the significance level among them differs (see Annex 1). For instance, in the alternative model, the variable ‘unconditional fund’ appears positively associated. However, it does not reach conventional significance level in the models with conditional mandatory funds.

### 7.3 Empirical findings

The empirical findings illustrate how important financial arrangements are in motivating local authorities to be more efficient. Each type of grant seems to foster different types of actions. Changes in the level of unconditional grants appear to be negatively associated with accountability actions and this association explains most of the changes in the accountability index. On the other hand, changes in unconditional and conditional mandatory funds seem to make a significant contribution to explaining changes in public entrepreneurship (parameters are not too different but still unconditional funds appear to influence slightly more). However, only increases in conditional funds appear positively
associated with accountability and unconditional funds are highly negatively associated. Therefore, the positive effects of unconditional funds seem to trade off efficiency.

This pattern may be explained by the financial dependency of rural municipalities. Fisman and Gatti (2002b) suggest that corruption will depend on the appropriate level of revenues decentralised, with high dependency likely to follow corruption. As explained before, this group of municipalities are highly dependent on state and federal funds. Thus, the concern in the fiscal decentralisation literature that high discretion in revenues may increase corruption might be reflected indirectly in limited public work and increased current spending.

In contrast, the arrangements of conditional mandatory funds allow less discretion to local authorities but it increased local budget. In this case, the findings are consistent with the argument that tougher financial control imposed in conditional funds keeps local authorities accountable.

The interesting point here is to find conflicting results- conditional mandatory funds improving accountability and unconditional funds discouraging accountability and encouraging public entrepreneurship. This brings us back to the discussion of the opposite virtues between public entrepreneurship and accountability values. The results may lead to the interpretation that entrepreneurs are likely to behave accountably to the extent they legitimize their entrepreneurial actions rather than as an accountability virtue. This may lead to poor use of unconditional funds in order to achieve their entrepreneurial aim. This is a complex relation beyond what these empirical indicators can explain. Therefore, it will be addressed in the second empirical phase.

Previous empirical works in Mexican literature (Cabrero, 2005; Sour, 2004) have found that both fiscal arrangements under decentralisation result in problems of high dependency and as a result damage fiscal effort. In this research fiscal effort is a major component of the entrepreneurship index, so
Fiscal Decentralisation and Behavioural Patterns: An empirical analysis correlates this implies discouragement of entrepreneurial actions/a negative relationship with entrepreneurship scores. Indeed, in the sampled municipalities studied here, the descriptive analysis (Figure 6.2) shows little improvement in this aspect with a very slight increase in real values over almost 20 years. This is highly relevant for fiscal effort if we compare this trend to the sharp and consistent increases in grants. The fiscal effort- own revenues over total revenues- was on average 14.5% from 1990-1995 and decreased to an average 6.4% from 2005-2009 (see Table 6.8). The number of municipalities with good performance increased in the working sample slightly in contrast to the number of municipalities with poor performance which increased more and progressively. Thus overall, fiscal effort has declined in the time period studied here- 2000, 2002 and 2009.

It needs to be considered that achieving higher levels of own revenue collection is especially challenging for this group of municipalities because there are not only political costs, but also financial costs involved. Nevertheless, the empirical findings suggest that for every increase in conditional mandatory funds, rural local governments are not only likely to be more accountable, but also likely to act more entrepreneurially by engaging in more co-operation with different organisations and sectors. However, given the results, it seems that conditional mandatory funds are not the only and unique factor encouraging entrepreneurial behaviour. Unconditional funds may play a role and there are other unobserved factors.

Thus, the results showing that conditional mandatory funds might promote positive changes in both accountability and public entrepreneurship challenge one of the theoretical assumptions of fiscal decentralisation - the claim that autonomy and discretion are key aspects to encourage better performance. Unconditional funds - which denote higher levels of discretion and allocation decision than conditional funds- are negatively correlated to accountability but positively related to entrepreneurship. The benefits from unconditional funds seem to be cancelled out or likely to be more detrimental for accountability as it seems the effect is higher in accountability than public entrepreneurship. In
contrast, conditional mandatory funds are found to encourage both accountability (partially as we cannot explain how it interacts with the negative impact of unconditional funds) and entrepreneurship. This implies that for rural municipalities, discretion might not be the only determinant for entrepreneurial behaviour and that dependency might not always demotivate local authorities as long as it is accompanied by higher levels of funding.

In answering Question 1, the hypotheses drawn from the literature in which fiscal decentralisation encourages both accountability and public entrepreneurship is not entirely confirmed. The analysis suggests that the direction of association might depend on the type of fiscal arrangement. In rural municipalities, accountability and public entrepreneurship benefit from increases in conditional mandatory funds. The increases in entrepreneurship due to unconditional funds might be cancelled out by its negative effects on accountability. How and in what ways this happens will be investigated in stage two.

The contending findings of conditional mandatory funds and unconditional funds supports the argument that fiscal decentralisation may lead to different behavioural patterns.

In regard to the political landscape, the findings suggest that political competition and the rest of the political variables seem to reinforce the negative effects on accountability and it also suggests that political competition might have a more direct and larger (negative) impact on public entrepreneurship in a decentralised setting compared to accountability.

A consistent interpretation is that, “being in opposition” seems to be an incentive for both accountability and public entrepreneurship. The evidence is that in both models (accountability and public entrepreneurship) political parties that belong to the same political party than the government have lower changes in accountability and public entrepreneurship than the ones that are opposition.
In answering part of question 2- whether differences in the level of political competition had a major effect on whether and in what ways patterns of accountability and public entrepreneurship change following fiscal decentralisation, the results appear to indicate that:

a) Political competition does not have a major effect on patterns of accountability but the political variables may reinforce (the negative effect of) fiscal decentralisation through unconditional funds

b) The political variables might play a more direct (negative) role on public entrepreneurship but the financial variables are likely to have similar, but positive, effects.

7.3 Summary

In this chapter the association of fiscal decentralisation and political competition is empirically explored in relation to both forms of behaviour, accountability and public entrepreneurship. In both cases, the financial arrangements explain more of the changes in behavioural patterns but in distinct directions. This seems to support the arguments that accountability and public entrepreneurship lead to different behavioural patterns and that they have contending values.

The decentralisation variables appear more relevant in explaining both accountability and public entrepreneurship than political competition and the findings for fiscal decentralisation are more robust.

Up to now behaviours have been explored separately, based on the assumption that these patterns are related to the outcomes (government performance) and that they might impact the outcomes differently. In the next chapter, these assumptions will be explored empirically using the same constructs for accountability and public entrepreneurship.
Chapter 8 - Behavioural patterns and government performance: An empirical analysis correlates

This Chapter intends to answer research question 3 that asks about the extent to which fiscal decentralisation in rural local governments is associated with measurable changes in local government performance. However, in order to answer this question, it is first necessary to explore whether the behaviours measured here are associated with government performance. Drawing from the literature, these behaviours should have a positive impact on performance, independently of the fiscal arrangements effects.

In this research, government performance is measured as Coverage of Basic Public Services. It is acknowledged that Coverage of Basic Public Services is only a small part of government performance but nevertheless it is a significant indicator for rural municipalities and the best indicator available over time.

8.1 Behavioural actions and changes in Government performance

In the previous analysis, there was some evidence to suggest that the type of fiscal arrangements explain more the motivation of local authorities to behave either with more accountability or more entrepreneurially than political competition does. In this Chapter, to some extent, it is intended to corroborate these findings. Whether accountability and public entrepreneurship actions, respectively, are associated with changes in government performance is first tested, and then the importance of political indicators is analysed.

Local government performance is a key focus of the overall research study because it is the ultimate policy aim. For the purpose of this research, government performance is measured as the absolute change in the coverage of potable water and sewerage in the municipality or Coverage of Basic Public
Services, for short (CBPS). Figure 8.1 illustrates the part of the theoretical framework it intends to assess.

As in the previous section, accountability and public entrepreneurship are explored separately because time observations are different. First, the main independent continuous variables will be presented in a simple model. In this case the continuous variables are accountability and public entrepreneurship. Then the political variables will be added to these models.

### 8.1.1 Accountability, political variables and changes in Government performance

In this section, the association between accountability and political variables with government performance is explored. The dependent variable is CBPS, as a measure of government performance.

The reference regression model is the following:

\[ y_{it} = \alpha_t + \beta A_{it} + \sigma P_{it} + \varepsilon_{it} \]

where \( y_{it} \) is the outcome variable of interest: Coverage of Basic Public Services in municipality \( i \) at time \( t \). *The index is a continuous variable between 0 and 100%.*
$A_{it}$ is a measure of accountability in municipality $i$ at time $t$ as measured before.

$P_{it}$ is the vector of political variables, and includes: political competition, state-level opposition and political party affiliation, as before.

$\alpha_i$ is a municipality fixed effect to account for municipality-specific and time invariant factors such as culture, geography or any other persistent characteristics, that might affect the outcome of interest.

All variables will be added in a stepwise manner to the model.

This model is estimated for the sample of 505 municipalities using data for the following years 1995, 2000, 2002, 2004, 2009. In this model the analysis controlling only for municipality-specific is presented because the model fit is better. In Annex 1 the reader can find the model with time-fixed effects.
Table 8.1 Statistical analysis models of Government Performance and Accountability

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Note: Dependent variable CBPS. Standard errors are in brackets. The results are presented in standardised values. ***p<.001 **p<.01 *p<.05. McFadden's Pseudo $R^2$ with best fitted model (-2 Restricted Log Likelihood) is used. These models include municipality-specific fixed effects.

**Accountability as single effect**

The hypothesis is that improvements in CBPS can be explained by changes in accountability.

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42 Mixed linear model does not provide with a model of fit. The most common Pseudo $R^2$ used in this type of analysis is the McFadden's Pseudo $R^2$ in the form of:

$$R^2 = 1 - \frac{\ln(L_{full})}{\ln(L_{intercept})}$$
Drawing from the literature, a positive (but not very strong) association between accountability levels and government performance is expected to be found based on the theoretical argument that changes in these actions are reflected in the government’s outcomes. In other words, better accountability actions impact the level of efficiency in local governments.

Accountability might lead to government performance because the accountability actions studied here may lead to deliver the mix of goods and services in the way local citizens prefer. This can potentially lead to greater allocative efficiency, but also, to some extent, gains in productive efficiency resulting in good government performance.

If the theoretical framework is correct, and the arguments valid, the accountability index should be positively associated with government performance but its impact on government performance should be smaller and weaker than the entrepreneurship index (this will be compared in Section 8.1.3).

As shown in Table 8.1 (Model 15), the statistical analysis shows that accountability index is positively correlated to CBPS ($r (505) = .067, SE= .007$). This means that changes in accountability lead to better government performance as predicted. The parameter is small but highly statistically significant.

Models of Accountability and political variables

Table 8.1 shows the different models discussed next. In all models, the accountability index holds the direction of the theoretical framework. It is highly positively associated with government performance.

In Models 16 to 18, political competition appears to be also highly statistically significant at $p<.001$ and with the expected direction. In model 19 the significance level drops at $p<.01$. 
In model 17, the state-level opposition variable appears statistically insignificant but the parameters suggest that municipalities that belong to the same political party as the state governor have on average smaller changes in CBPS. This appears to be a constant finding. In the previous analysis, the association between state-level opposition, accountability and public entrepreneurship indicated analogous results.

In Models 18 and 19, the variable political party affiliations for PAN + Coalitions reaches conventional significance level at 5% and others parties + Coalitions do not reach a conventional statistical level but the parameters suggest that both political parties have a slightly higher score than PRI + Coalitions.

In Model 19, the interaction variable does not reach a conventional statistical level but it affects (decreases) the parameter and significance level of political competition variables. The parameters of the interaction variable suggest that the higher the political competition in the municipalities, the higher the average of CBPS in municipalities that belong to the same political party.

Similar to the previous analyses, the political variables are not as robust as, in this case, behavioural patterns (see Annex 1).

Hence, in these models accountability and political competition are important indicators for government performance but accountability has a slightly higher effect.

After reading these findings, the first question to consider is why political competition appears positive and relevant for government performance, but the direction of association appears negative for the behavioural patterns. This question will be reviewed during the empirical discussion of this Section. Again, these are very interesting findings but we need to test whether they hold once the public entrepreneurship variable is in the picture.
8.1.2 Public Entrepreneurship, political variables and changes in Government performance

Public entrepreneurship might lead to improved government performance because the public entrepreneurship actions studied here intend to portray the involvement of local authorities in more projects (pro-activeness) that may involve higher levels of risk and innovation. This can potentially lead to greater productive efficiency, but to a lesser extent, it might also lead to gains in allocative efficiency resulting in good government performance. Thus, the association between public entrepreneurship and government performance is analysed as well as the association of political variables.

In this section, whether public entrepreneurship is associated with local government performance will be explored and to what extent it is influenced or reinforced by the presence of the political variables.

The reference regression model is the following:

$$y_{it} = \alpha_i + \beta E_{it} + \sigma P_{it} + \epsilon_{it}$$

where $y_{it}$ is the outcome variable of interest: Coverage of Basic Public Services in municipality $i$ at time $t$ as above.

$E_{it}$ is a measure of Public Entrepreneurship in municipality $i$ at time $t$ as measured before.

$P_{it}$ is a vector of political variables and includes political competition, state-level opposition and political party affiliation.
\( \alpha_i \) is a municipality fixed effect to account for municipality-specific and time invariant factors such as culture, geography or any other persistent characteristics that might affect the outcome of interest.

All variables will be added in a stepwise manner to the model as before.

The observations in this analysis are the years 2000, 2002, and 2009. There are less time periods because of the large set of missing data for the public entrepreneurship index in the other surveys. This analysis includes only municipality fixed effect. In Annex 1 the models are presented with municipality and time-fixed effects. A positive association between public entrepreneurship and government performance is expected to be found.

In Annex 1, the models controlling for both time and municipality fixed effects are also added.
Table 8.2 Statistical analysis models of Government Performance and public entrepreneurship

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Note: Dependent variable CBPS. Standard errors are in brackets. The results are presented in standardised values. ***p<.001 **p<.01 *p<.05. McFadden's Pseudo $R^2$ with best fitted model (-2 Restricted Log Likelihood) is used. These models include municipality-specific fixed effects.

Public entrepreneurship as a single effect

If the theoretical framework is correct, the public entrepreneurship index should be positively associated with government performance and it should have a higher impact than the accountability index.

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43 Mixed linear model does not provide with a model of fit. The most common Pseudo $R^2$ used in this type of analysis is the McFadden’s Pseudo $R^2$ in the form of:

$$R^2 = 1 - \frac{\ln \hat{L}(M \ full)}{\ln \hat{L}(M \ intercept)}$$
As shown in Table 8.2 (Model 20), the statistical analysis suggests that the public entrepreneurship index is highly positively associated with CBPS \((r (505) = .080, \ SE= .012, \ p<.001)\). This means that changes in public entrepreneurship lead to better government performance. The parameter is slightly larger than for the accountability index as predicted.

Models of Public entrepreneurship and Political variables

Another theoretical implication is that CBPS is encouraged by political competition because it works as a reward or punishment mechanism where citizens judge local authorities. Therefore, local authorities try to satisfy voters by undertaking actions that improve efficiency of any sort.

In all models, public entrepreneurship index follows the direction of the theoretical framework. It is positively associated with government performance and statistically significant at \(p<.001\).

In Model 21, political competition reaches a conventional statistically significance level at 1% but the parameters are lower than the public entrepreneurship variable. The significance level decreased with the addition of other political variables.

In Model 22, the state-level opposition variable reaches a conventional statistical significance level at 1%. The parameters seem to indicate that municipalities belonging to the same political party as the governor have on average smaller changes in CBPS, after controlling for public entrepreneurship and political competition. This result has been constant through all the models studied so far.

In Models 23 and 24, similar to the accountability and governance model above, the parameters suggest that, PAN + Coalitions and Others parties + Coalitions
have on average a higher score in CBPS than PRI + Coalitions. In this case, the variable PAN + Coalitions is statistically significant.

In Model 24, as in the accountability and government performance model, the interaction variable does not reach a conventional statistical level and the parameters suggest that the higher the level of political competition in the municipalities, the lower the average of CBPS in municipalities that belong to the same political party. It affects the parameters of the political competition variable and the significance level of PAN + Coalitions.

Similar to the previous analyses, the political variables are not as robust as, in this case, the entrepreneurship variable (see Annex 1).

Thus, the public entrepreneurship index follows the theoretical framework direction. It is highly positively associated with government performance and it is the most important and robust indicator explaining changes in government performance in the model.

8.1.3 Empirical findings

The findings seem to corroborate that the measures of accountability and public entrepreneurship used in this research are related to government performance in the indicated indirection.

This adds more reliability to the results. Answering research question 3- to what extent fiscal decentralisation in rural local governments is associated with measurable changes in local government performance, the main finding is that public entrepreneurship explains more of the changes in CBPS than both accountability and the political variables. In addition, accountability explains slightly more than the political variables in CBPS.

Therefore, as conditional mandatory funds are highly related to public entrepreneurship, then fiscal decentralisation via conditional mandatory funds is
likely associated with positive changes in local government performance due to changes in public entrepreneurship. However, the opposite is true for unconditional funds as they seem to cancel out the benefits of public entrepreneurship with the deterioration of accountability. The negative impact of unconditional funds seems to be larger than the positive impact of conditional funds on accountability and still larger than the positive effects on public entrepreneurship.

Returning to the question of why political variables are more relevant in the model of government performance compared to the model of accountability and public entrepreneurship and why they have a different direction of association, the interpretation of the researcher is that the parameters are capturing the political favouritism in the municipalities. The indicator of governance is measured in absolute changes of two basic public services. This indicator can be influenced easily by favouritism in the municipality as other government levels might favour specific municipalities for grants that facilitate investment in this account. In contrast, the behavioural index measures actions that are not easily related to favouritism and therefore, it might indicate a negative influence of political competition. In other words, in the theory of fiscal decentralisation the means and ends are different.

To some extent, these findings support the argument that the extent of government performance may vary depending on the type of behaviour that predominates. Therefore, it is evidently important to understand what drives each type of behaviour.

Thus, in this chapter the relationship between the behavioural patterns of accountability, public entrepreneurship and government performance have been explored. The results suggest that there is evidence of positive association between these variables as theoretically expected but to a different extent.

This supports the hypotheses that each fiscal arrangement might promote specific behavioural patterns; and that each type of behaviour impacts
Behavioural Patterns and Government Performance: An empirical analysis correlates performance differently, with public entrepreneurship being the one with the greater effect.

Up to this point, information has been analysed after the introduction of conditional funds. Given the relevance of conditional funds to behavioural patterns and as argued here, government performance, it makes sense to explore whether and in what ways government performance changed with the introduction of these funds. As there is not enough information to measure the indicators of accountability and public entrepreneurship evaluated here before and after the 1997 reform, the changes in the political landscape have been explored.
Chapter 9 - Fiscal decentralisation and Government performance before and after the 1997 reform: An empirical analysis correlates

In this section, two similar models are built to observe changes in government performance before and after the introduction of conditional funds. A model is run that explores the political landscape in rural local governments before the conditional mandatory funds were created and then, exactly the same model is run for the period after the introduction of the reform.

As in the previous analysis, political competition is expected to encourage investment in public services because local authorities a) feel a stronger social commitment with their electorates and 2) their performance might impact their party’s further re-election knowing that opposition is also strong.

In contrast to the previous statistical analysis, the aim of these models is to observe changes in the political variables as these may show some relevant changes that could be used for interpretation.

Figure 9.1 illustrates the part of the theoretical framework that this chapter intends to assess. In one of the analyses, conditional mandatory funds did not exist. In the second analysis, the conditional mandatory funds were already in place.
9.1 Government performance and political competition before and after the 1997 fiscal reform.

It is important to notice that conditional mandatory funds after the reform are not added to this model because the CBPS variable is closely related to conditional mandatory funds. Some conditional mandatory funds are earmarked to basic public services including the ones studied here. Therefore, it is not surprising that the level of investment in basic public services increased in these specific services after the conditional mandatory funds were introduced and therefore, it is not surprising that an increase in conditional mandatory funds should be highly related to improvements in CBPS. Therefore the statistical relationship between conditional mandatory funds and government performance is not observed. Instead the focus is on what has changed in the association of political variables and government performance before and after the creation of the conditional mandatory funds.
Fiscal decentralisation and Government performance before and after the 1997 reform: An empirical analysis correlates

For that purpose the baseline model is estimated:

\[ y_{it} = \alpha_i + \delta_t + \beta PC_{it} + \sigma P_{it} + \varepsilon_{it} \]

where \( y_{it} \) is the outcome variable of interest: Coverage of Basic Public Services in municipality \( i \) at time \( t \) measured as before.

\( PC_{it} \) is a measure of political competition in municipality \( i \) at time \( t \) as before.

\( P_{it} \) is the vector of other political variables, and include: state-level opposition and political party affiliation as before.

\( \alpha_i \) is a municipality fixed effect to account for municipality-specific and time invariant factors such as culture, geography or any other persistent characteristics that might affect the outcome of interest.

\( \delta_t \) is a time fixed effect controlling for country-wide shocks that affect all municipalities equally.

All variables will be added in a stepwise manner to the models as before.

These models are estimated for the (same) sample of 505 rural municipalities as before. The model is recreated twice, once for the pre-reform period from 1990 to 1997 and once for the post-reform period 1998 to 2009. Periods are not included as dummy variables. The analysis was run with different databases. Table 11.2 presents the pre-reform and post-reform models.

The model is recreated twice: for the pre-reform period (from 1990 to 1997) and the post-reform period (1998-2009). Periods are not included as dummy variables. The analysis was run with different databases. These models are estimated for the sample of 505 rural municipalities.
Fiscal decentralisation and Government performance before and after the 1997 reform: An empirical analysis correlates

The assumption is that before the 1997 reform, from 1990-1997, federal government had highly centralised decision making in terms of basic public service provision and, from 1998-2009, local governments were granted conditional mandatory funds, specifically those for basic public infrastructure and they enjoyed more decision making and freedom in allocation. This may have changed the association of political variables before and after the reform.

By now, an idea of what should be expected in the post-reform period is already emerging. To recall, the models of government performance and behavioural patterns discussed earlier also explore the relationship between the outcome variables and political variables. There are two differences between these models:

a) The post-reform model to be studied here does not include the variables for accountability and public entrepreneurship as do the models of government performances and behavioural patterns. Therefore, the focus of the post-reform model is on the political landscape of the municipality

b) The post-reform model includes more time periods in the data from 1997 to 2009. The models of government performance and behavioural patterns only include the years 1995, 2000, 2002, 2004 and 2009 in the analysis

Based on these findings the hypotheses that can be drawn are that the introduction of conditional funds did make a difference in government performance if:

a) Political competition was a stronger indicator before the reform.

b) Municipalities with state-level opposition before the reform had limited access to resources allocated to basic public services by the state. This might lead to lower mean scores in CBPS in the pre-reform for municipalities with state-level opposition.
Fiscal decentralisation and Government performance before and after the 1997 reform: An empirical analysis correlates

The reason for lower mean score before the reform is political rivalry. Governors might have denied grants to the municipalities governed by opposition parties. The higher score after the reform may imply that the reform of 1997, which gave municipalities autonomy to allocate public services and eliminated state discretion by establishing mandatory conditional funds encourage/enable performance even in the presence of state-level opposition.

The majority of Governors were from the political party PRI. Therefore, it can be the case that opposition parties were discriminated against the distribution of grants as they were opposition. This might lead to (statistically significant) lower mean scores of CBPS for PAN+ Coalitions and Other Parties and Coalition in the pre-reform.
Fiscal decentralisation and Government performance before and after the 1997 reform: An empirical analysis correlates

Table 9.1 Models of Government Performance Pre and Post-reform

<table>
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<tr>
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<th></th>
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<td>MODEL 27</td>
<td>MODEL 28</td>
<td>MODEL 29</td>
</tr>
<tr>
<td>Intercept</td>
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<td>.637*** (.052)</td>
<td>.636*** (.053)</td>
<td>.638*** (.053)</td>
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<tr>
<td>Political Competition</td>
<td>.065*** (.017)</td>
<td>.043* (.017)</td>
<td>.051** (.017)</td>
<td>.037 (.035)</td>
</tr>
<tr>
<td>Non-State-level opposition (0) (=1 if there is state-level opposition;=0 otherwise)</td>
<td>-.501*** (.037)</td>
<td>-.500*** (.037)</td>
<td>-.501*** (.037)</td>
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<tr>
<td>PAN=C</td>
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<td>.084 (.087)</td>
<td>.086 (.087)</td>
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</tr>
<tr>
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<td>.058 (.066)</td>
<td>-.055 (.067)</td>
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</tr>
<tr>
<td>OTHERS PARTIES AND COALITIONS</td>
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<td>-.135 (.029)</td>
<td>-.139 (.029)</td>
</tr>
<tr>
<td>Omitted category =PRI+C</td>
<td></td>
<td>.152*** (.038)</td>
<td>.149 (.039)</td>
<td></td>
</tr>
<tr>
<td>Non-State-level opposition (0) * Political Competition</td>
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<td>-.034 (.038)</td>
<td>-.036 (.038)</td>
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<td>PAN+C</td>
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<td>Omitted category =PRI+C</td>
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<td>Non-State-level opposition (0) * Political Competition</td>
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<td>4,040</td>
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</table>

Note: Dependent variable CBPS. Standard errors are in brackets. The results are presented in standardised values. ***p<.001 **<.01 *p<.05. McFadden's Pseudo R² with best fitted model (-2 Restricted Log Likelihood) is used. These models include municipality and time fixed effects.

Mixed linear model do not provide with a model of fit. The most common Pseudo R² used in this type of analysis is the McFadden's Pseudo R² in the form of:

\[ R^2 = 1 - \frac{\ln(L_{full})}{\ln(L_{intercept})} \]
Fiscal decentralisation and Government performance before and after the 1997 reform: An empirical analysis correlates

As shown in Table 9.1, political competition is statistically significant as a single effect before and after the introduction of conditional funds. This suggests that the level of political competition appears to be associated with higher investment in CBPS. In both periods, the political competition variable is highly significant at p<.001 but the impact is slightly higher in the post-reform period. This is opposite to the hypothesis stated above that political competition was a stronger indicator before the reform.

Political competition appears to be a significant factor for government performance before and after the reform. The state-level opposition variable appears more significant in the pre-reform models (27-29). It presents higher coefficients and it reaches a significance level at p<.001. The parameters suggest that in both cases, municipalities that belong to the same political party as the governor have on average a lower score in CBPS. Therefore, the hypothesis that municipalities with state-level opposition before the reform had limited access to resources allocated to basic public services by the state is not supported. This confirms Moreno-Jaimes’s (2007) findings that there is no difference in service coverage in municipalities with state-level opposition but this study finds evidence particularly in rural municipalities. In fact, this may indicate and reinforce the researcher’s interpretation that being in opposition to the state governor may lead to better performance per se.

An interesting result here is that the differences in parameters between municipalities with state and without state-level opposition appear considerably different between periods. Therefore, the incentive of being in opposition is not as strong as before.

In Models 28-29, the political party variable shows that before and after the reform, PAN + Coalitions have higher score of CBPS than PRI + Coalitions and Other parties and Coalitions have lower score. Only PAN + C reach a statistical level at 1% after the reform where the parameters are larger. This might be a consequence of the decentralisation reform.
Fiscal decentralisation and Government performance before and after the 1997 reform: An empirical analysis correlates

Reading both state-level opposition variable and political party affiliation together, there is no evidence to support the hypothesis that opposition parties were discriminated against before the reform.

In Models 29 and 32, the significance level and the parameters of political competition are captured by the introduction of the interaction variable, but the interaction does not reach conventional significance level before or after the reform. In both periods, the parameters indicate that in high politically competitive municipalities where the local government and the governor come from the same political party, the CBPS tends to be higher. The same might not true if there is lack of political competition in the municipality. In this case, the CBPS tends to be lower.

Even though the results are not statistically significant, a general picture can be drawn depicting how the political situation might influence some cases and that state intervention may occur only when local authorities belong to the same political party as the governor and there is a “warning sign” that the next election could be lost. Perhaps this is particular to this group of municipalities as they do not represent an important electoral weight.

Hence, the importance of the political circumstances and intervention in this group of municipalities cannot be discarded, but also high changes in political dynamics cannot be attributed to the fiscal decentralisation reform at least in this group of municipalities and based on these explanatory variables. Although the results are not robust, the evidence reflects a complex relationship that is not easily captured in this analysis and it should be pursued in the next research stage.
9.2 Empirical findings

There is no evidence to suggest that favouritism for this group of municipalities before or after the introduction of the reform is only due to opposition status. However, intervention may occur under conditions of high political competition. Hence, municipalities with mayors from the same political party as the governor may be supported by state party/state government. Contrarily, the same municipality can win the local election without high levels of competition and the state party might not prioritise support to these municipalities. This is plausible given that this group of municipalities are not politically important with regard to votes. This, however, needs further evidence.

In addition, the evidence suggests and reaffirms the previous findings that “opposition status” encourages good performance. Municipalities with state-level opposition have slightly higher changes in performance regardless of the fiscal arrangements in place. However, the introduction of conditional funds may have made it easy for opposition parties to differentiate themselves from others.

It is important to clarify that large changes in parameters or closely fitted models were not expected because government performance is multidimensional and difficult to define and measure.

9.3 Bridging methodology approaches

In order to understand the relationship between the quantitative and qualitative analyses, it will be helpful to revisit the diagram in which the basic argument under investigation is illustrated.
In the previous chapters, using secondary data from a number of sources, the researcher examined the extent to which a growth in rural municipalities’ fiscal resources and spending power was associated with changes in entrepreneurship and accountability, as measured by indices constructed from a range of governmental and other data sources. Whether these changes were partly or even wholly associated with changes in levels of political competition was also investigated, which is itself highly likely to affect municipalities’ behaviour.

As has been seen, significant changes were indeed apparent. These changes were, however, very strongly affected by whether or not the increases in fiscal resources were themselves associated with stringent controls (‘conditional funds’) or involved funds where municipalities had a great deal more discretion in how they used them.

To summarise the findings:

- Fiscal decentralisation involving changes in unconditional (high discretion) funds is negatively associated with accountability measures
- Fiscal decentralisation involving changes in unconditional (high discretion) funds is highly associated with changes in entrepreneurship as measured on the constructed index. These positive changes seem to be smaller than the negative effects in accountability and its significance power might depend on the political circumstances (political competition and state-level opposition)
Fiscal decentralisation and Government performance before and after the 1997 reform: An empirical analysis correlates

- Fiscal decentralisation involving changes in conditional mandatory (low discretion) funds is highly positively associated with increases in accountability
- Fiscal decentralisation involving changes in conditional mandatory (low discretion) funds is positively associated with increases in public entrepreneurship
- Changes in accountability are positively related to government performance and the impact of accountability is lower than the impacts of public entrepreneurship
- Public entrepreneurship seems to contribute directly to changes in government performance. The impact is larger than the drivers related to the political circumstances in the municipality

An important remark is that the financial variables and the public entrepreneurship variable are robust in all the analyses performed. They hold the direction of association and they also reached a conventional statistical level. The results for the accountability index were also consistent. This was not the case with the political variables.

The way political competition influences behavioural patterns and government performance seems to be more complex than is theoretically suggested. The main findings are:

- There is not enough evidence to suggest that favouritism was present before the decentralisation reform of 1997 in regard to funds allocation
- Political competition seems to reinforce the negative effects on accountability and it seems to have a negative impact on public entrepreneurship
- Political competition seems to be relevant for government performance but its impact is lesser than the impact of the decentralisation arrangements
Political competition becomes more relevant when it reinforces other political variables particularly if interpreted as a “warning sign” of losing the next elections.

- Being in opposition seems to drive accountability, public entrepreneurship and therefore, government performance.

Thus, the quantitative data suggest overall that the latest reform of fiscal decentralisation seems to have contributed to improved government performance. The reason is, to some extent, because of the fiscal arrangement it took via mandatory conditional funds.

Mandatory conditional funds, which present lower levels of discretion, are important for positive changes in public entrepreneurship and accountability. In contrast, unconditional funds, which enjoy a larger degree of discretion, are likely to trade off efficiency. Politics seem also to be a relevant factor but not as theoretically expected. There is a complex dynamic beyond what can be interpreted from these analyses.

But how and why might this occur? Are these findings consistent with the way decision-making and politics actually occur ‘on the ground’? When we look in detail at how rural municipalities operate, and how they have changed since the fiscal reforms, do our results seem to be consistent with these national patterns? Do they indicate how the latter might be emerging, and validate them by providing a convincing narrative of events since 1997? Or do they suggest that the quantitative data – which are inherently constrained by government agencies’ own data collection responsibilities and capabilities – are actually missing important processes?

In looking at ‘ground level reality’, a case study approach was adopted, involving selected municipalities chosen in terms of the variables which were central to the quantitative data. The case studies themselves looked at the component variables of the index, in order to get a concrete sense of what
Fiscal decentralisation and Government performance before and after the 1997 reform: An empirical analysis correlates changes (or lack of change) these might actually involve. In addition, the case studies provided an opportunity to look at some aspects of both accountability and entrepreneurship which were not covered by available databases and therefore could not be included in the quantitative part of the study.

For accountability

a) Closeness to the people- The theory of decentralisation is founded on the argument of responsiveness to preferences and local authorities are thought to be closer to their constituencies. However, being close to the people does not mean per se that citizens’ preferences are materialized.

b) Citizens’ participation- In his famous work, “Making Democracy Work”, Putnam (1993) claims that “civic community” as a reference to civic engagement, political equity, solidarity, trust and tolerance is the most important performance indicator for successful decentralisation policies.

c) Corruption- There is a concern that delegation of financial autonomy with discretion is accompanied by higher levels of corruption in lower government levels. This is based on two assumptions. First, local authorities do not enjoy as many career incentives as public servants do in other government levels (Prud’homme, 1995 and Tanzi, 1996) and second, because of the contingency factor (Tanzi, 1996), or a close relationship between local employees which may lead to favouritism.

For public entrepreneurship

a) Risk taking- Decentralisation is argued to enable local authorities to become more adaptable to economic changes (MacLeod and Goodwin, 1999 cited in Rodriguez-Pose and Sandall, 2008, 58) and it implies that local authorities will be more willing to take risks in local projects for the progress of their constituencies.
b) Experimentation- Under decentralised settings, Tanzi (1996) claims that successful policies can be learnt and transferred among municipalities. This suggests greater innovation, which is a public entrepreneurship dimension.

c) Pro-activeness- Decentralisation assumes that undeveloped areas will pursue either public funds or private investment by using bargaining power and first-hand information.

Chapters 13 to 14 will report the results of this part of the study. They address research questions 4 and 5:

What are the identifiable changes affecting accountability and public entrepreneurship in rural local government?

In what ways has fiscal decentralisation encouraged accountability and public entrepreneurship?

These research questions examine the extent to which, in selected municipalities, evidence of direct links between the fiscal changes and behaviour can be identified; the degree to which these are consistent with the national-level data analysis and how these changes are undergoing.
PHASE 2- A QUALITATIVE ANALYSIS OF FISCAL DECENTRALISATION
Chapter 10 - Research Methods

This element of the research adopts a case study approach in order to explore in detail the impact of the decentralisation theory on the ground. This chapter explains why semi-structured interviews were used as a research technique to collect the data for analysis and how this research selected, handled and interpreted the qualitative data to ensure validity and reliability of the findings.

10.1 Semi-structured Interviews

The qualitative method used to collect information is semi-structured interviews. The reason this method was used is the flexibility to open a wider range of topics and to go further in the discussion of certain issues when it is necessary and relevant. Semi-structured interviews are also more appropriate in regard to the research question because they allowed incentives to be found that are less obvious to the researcher.

The researcher also attempted to collect information from documentation and records in the municipalities but this particular group of municipalities lacked archival documentation (more details are given in Section 10.5).

10.2 Sampling

The interviews were carried out in five rural municipalities in Mexico. These varied in terms of their (actual) scores on the indices and to provide different approaches to fiscal decentralisation: and more specifically the distribution arrangement of unconditional funds from state to municipalities.45 The first pilot municipality was personally familiar to the researcher, and the other four were

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45 Nowadays, the transfers from federal to state governments are more standardized mainly after a reform in 2007 which simplified and enhanced the redistribution formulas to promote financial incentives. However, the reform of 2007 was not expanded to the redistribution between state and municipalities, which is legislated by state parliaments.
Research Methods

not. Ten interviews (nine in one of the cases) were collected in each of main group of four municipalities, each one in a different state. This was in addition to the five interviews carried out in the pilot study. A total of forty-four interviews were performed. The interviews lasted forty minutes on average.

As a federal system, the state governments in Mexico are entitled to distribute resources using their own criteria. Therefore, there are differences in the intergovernmental system used to allocate resources from state to municipalities, mainly in regard to unconditional funds. According to Peña and Wence (2011), the main arrangements can be classified as distributivo (distributive), resarcitorio (fiscal effort) and inercial (historical) or a combination of these, depending on the variables used in the formulas to calculate the redistribution of resources. The distributive type includes population count, territorial extension or the number of localities within the municipality; historical type is based on historical percentages, or the guarantee of providing at least the same level of resources as in previous years; and the fiscal effort type takes into account fiscal effort and local economic growth.

The arrangement can change between administrations because it is legislated by state parliaments. This research selected one state government that fell into each formula-type, valid in 2011, based on Peña and Wence’s study (2011). As this research investigates and collects information ranging from a wide time span, if these arrangements are relevant, they should be captured in the fieldwork.

As shown in Figure 10.1, Puebla, Guanajuato, Hidalgo and Tamaulipas are the states where the field work was carried out. Puebla was considered to use the distributive and historical types; Guanajuato a fiscal effort type; Hidago a distributive type; and Tamaulipas a distributive type. In Tamaulipas one municipality was the pilot study and one was selected based on performance.

46 The original idea was to carry out interviews in another state, San Luis Potosi instead of two municipalities in Tamaulipas. However, one day before travelling to the selected municipality, the local police chief and other members of the local government were kidnapped and the local police chief was found dead. This event created tension in the city. Therefore, I decided not to go ahead and instead, I selected a municipality in Tamaulipas.
Once the states were selected, municipalities with high levels of performance in accountability, in entrepreneurship, in the accumulated index, as well as poor accumulated performance in these four states, were selected. The selection considers growth overtime in performance, as well as absolute values.

Based on the findings of the pilot study, the participants selected were mainly elected members of municipalities (mayors and councillors). During fieldwork, the intention was to collect information from local authorities from different administrative periods, as well as different political parties. At least one mayor from the period before the reform in 1997 was interviewed. In addition, a journalist and a former trustee were interviewed because the participants proposed them as key informants. The local council includes both the ruling group and the minority groups, or opposition. Opposition should be highly important in decisions taken by the local government because they can obstruct bills.
Table 10.1 summarises the number of interviews according to the participants’ characteristics.

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<tr>
<td>POSITION</td>
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10.3 Validity and Reliability

Qualitative methods, as quantitative methods, also call for methodological rigour in order to enhance the quality of the research. Because validity and reliability are concepts developed in the quantitative approach, a theoretical discussion is whether these concepts should be transferred and applied to the qualitative paradigm to judge research quality.

Broadly speaking, reliability means that results are both consistent over time, and that they represent the total population and therefore, can be replicated and generalized; and validity refers to whether the instruments truly measure the phenomenon intended.

Some scholars have argued that the broad concepts of validity and reliability are suitable for all research paradigms because the main aim is to provide credible outcomes as in any research (Hammersley, 1992; Kuzel and Engel,
2001; Yin, 1994) (in Morse et al, 2002, 3). On the other hand, some qualitative methodologists have argued that reliability and validity were not pertinent to the qualitative paradigm and inquiry (Morse et al, 2002, 2).

Other scholars have suggested a number of terms that either substitute or add new characteristics to validity and reliability criteria (Seale 1999, 465) under the assumption that a study should be judged by the terms of its own paradigm (Healy and Perry, 2000). For instance, Guba and Lincoln (1985, 1981) substituted validity and reliability for the term “trustworthiness” containing aspects such as credibility, transferability, dependability, and confirmability (Morse et al, 2002, 2).

Regardless of labels, there are different strategies to maintain validity and reliability in qualitative research, and a crucial step is to select these strategies. Creswell and Miller (2000) suggest selecting the strategies based on the lens chosen to validate the research (his own, participants and external reviewers) and the researcher’s paradigm assumption. On the other hand, Morse et al. (2002) state that recently, the strategies used for validity and reliability- mainly derived from the strategies for trustworthiness proposed by Guba and Lincoln (1981)- are inclined to be used as post hoc reflexion of the completed work (audit trail, members check and reflexive research) rather than, rigourous verification during the process of research (methodological coherence, sampling sufficiency, collecting and analysing data concurrently, thinking theoretically and theory development). Verification, they argue, improves responsiveness to data and reminds the researcher to be proactive and rigorous in the research. Therefore, verification during the process of research using sampling sufficiency, analysing data concurrently and so on, is an incremental mechanism to ensure reliability and validity.

Morse et al. (2009, 9) state that “while strategies of trustworthiness may be useful in attempting to evaluate rigour, they do not in themselves ensure rigour. While standards are useful for evaluating relevance and utility, they do not in themselves ensure that the research will be relevant and useful”.

250
The reliability and validity of this research emphasise verification techniques rather than paradigm choice because, as discussed in Section 5.1, there is no consensus on the paradigm choice of mixed research and this research adopts a standard mixed methods research approach which means that mixed methods research is considered as both research design and method.

In addition, this research supports the argument of Morse et al. (2009) that verification should lead to reliability and validity. However, it also includes a post hoc reflexion (13.5.1). Some of the verification techniques in this research are:

*Methodological coherence:* The use of mixed methods answers this issue. The research questions are answered using different approaches based on the type of questions to be answered.

*Sampling sufficiency:* The pilot study informed which participants would provide the best representation of knowledge about the topic. In addition, a negative case is included (poor accumulated performance).

*Thinking theoretically:* The ideas emerging from the quantitative analysis were confirmed by the data collected in the qualitative analysis. This permitted the analysis to move back and forward from macro to micro perspective.

Similar to the claims of Morse et al. (2009), Mays and Pope (1995, 110) argue that the quality of the study can be “protected throughout the research process”. They suggest some strategies for achieving validity, reliability and generalizability. The following strategies are relevant for this study.

*Ensuring reliability of an analysis:* This is attained by disclosing data analysis in Section 10.4 which will provide an account of how the data were systematically analysed.

*Safeguarding validity with Triangulation:* Triangulation is the collection of data from different sources and by different means. As a general design, this
research presents both types of research approach. The first phase informs the qualitative approach and confirms the quantitative approach. To some extent, this means a triangulation of information. In addition, although this research does not use different methods (or means) in a single paradigm, it does collect information from different sources (mayors and councillors) in order to confront views and identify patterns which may be misleading, taking into account only one source of information for analysis.

Beyond basic strategies, Mays and Pope (1995, 110) state that the qualitative researcher should seek two goals: firstly, to specify the methods and data in such a way that other trained researchers could analyse them and reach the same basic conclusion. In this regard, as stated above, methods and data used for analysis will be presented in Section 10.4.; and Chapter 11 provides an in-depth description of the case studies.

In addition, the analysis benefitted from peer review through conferences and seminars related to the topic. 47

10.4 Data analysis

The fieldwork was carried out in November 2012. The time spent in each municipality varied from three to four days, based on the availability of the participants. The interviews were recorded with the participants’ authorization and lasted forty minutes on average. The interview recordings were transcribed and safeguarded at the end of the field-work.

47 - Local Governance, Decentralization and Participation: Meta-Governance Perspectives. The Department of Public Administration at Tallinn University of Technology and the journal Halduskultuur – Administrative Culture, April 2012, 27-28, Tallinn, Estonia
7th Annual South East European Doctoral Student. South East European Research Centre, September 2012, 24- 25, Thessaloniki, Greece
Inaugural Public Management and Administration Postgraduate Conference. Society for the Advancement of Management Studies, University Council and Aston University, May, 2013, 8-9, Birmingham, UK
Seminar presentation at King’s College London for the Public Service Management Research Group, May 16th, 2013; London, UK.
In three out of the four municipalities, initial contact was made with current local authorities. Only in one case did the mayor deny me access to information and the contact was through the opposition political party. During the first meetings, an initial list of participants (former mayors and former councillors) was compiled. From there, the snow-ball technique was applied. The participants were asked to name entrepreneurial mayors and local authorities as well as key political actors in the municipality. Then, those additional people, whose names were offered through the interviews, were contacted. In some cases, the initial list was used because the proposed participants were not available.

In addition, the researcher kept an account of important observations and rejections of interviews. These notes were analysed and used to understand contextual issues. For instance, the majority of the people contacted for interviews but who were reluctant to discuss the topic were women.

NVivo, the qualitative software was used to manage data collected from interviews. Data were transcribed into Spanish and analysed in Spanish also. Only findings were translated into English. The data were organized and analysed as follows:

1. Data was recorded against interview questions
2. A classification sheet was elaborated, categorizing participants by position (mayors, councillor, others); the period they participated in local government; whether the governor was in opposition or not; whether they had working experience in public sector organisations; whether they had experience in politics; and, in the case of mayors, whether they had been re-elected; gender; level of education and the political party to which they belong.
3. Conceptual levels were identified in each question and grouped
4. Key arguments/issues were identified and the text clustered into major categories
5. The major categories were subsequently divided into subcategories
The codes and text were analytically reviewed and cross-referenced by categories. Patterns and themes were related to the theoretical framework and research questions. The data analysis consists of discussions, explanations, and examples.

10.5 Limitations, Challenges and Other Issues

The pilot case study, which is identified as an “Average Performer Town”, was carried out in a place familiar to the researcher. Therefore, access was not a challenge. Following the research strategy of this investigation, the remaining case studies were carried out in unknown and unfamiliar places that were selected based on performance. In this case, this was more challenging. However, on balance, most local authorities contacted were co-operative and, indeed, supportive of this study.

The first point of contact was the current local governments. The initial intention was to undertake interviews with current mayors or other current officials, and from there acquire contact information of former local authorities, using the snowball sampling technique. Most current authorities at the time of the investigation were part of this study and were of great support.

During the first contact with the participants, the research was outlined, their (non-financial) support was indicated and requests for interview were made. Caution was taken at the time about clarifying the purpose of this study and making it clear that drug-related issues were not part of the study as, at the time of my research, drug-related issues were in the headlines in Mexico and many rural municipalities were highly affected. Often, participants related the financial issues of this research to the involvement of cartels in the local economy. Participants were reassured that this was not the intention of the study and that their comments would remain anonymous. On reflection, once the interviews began, most participants were comfortable and open in their statements.
The main source of information for this research was interviews. More limited success was had in accessing archival documentation of municipal development plans and annual reports (only current and very recent local government administrations were obtained). This was largely due to unavailability of this information in local archives. This can be attributed to a combination of factors: many documents were destroyed or lost between local administrations; this group of municipalities often lack the resources required to gather enough copies of such information in the past and even currently; and nervousness of revealing too much information.

This information was also requested in state parliaments but only the most recent administrations were acquired. As not enough information from all case studies was available, it was decided to focus entirely on interviews.

As stated above, in most cases, not many great challenges were faced contacting current and former local authorities with the exception of one municipality. This municipality was less forthcoming. They were less cooperative sharing information, contact details or allowing current local authorities to be interviewed. At the beginning, a meeting was granted with the current local mayor and, at the moment the interview was about to start (with the consent form already signed), a phone call made the mayor change her mind about participating in the study and she neglected any other information or contact details. The reasons were unclear. However, after the interviews it was clear that this municipality has a strong group of political elites which may have felt compromised somehow.

In this case, the strategy was changed and the offices of political parties were sought. Surprisingly, the opposition party was the only political party with a functional office. The opposition was highly co-operative and helpful, providing contact not only with members of their own political party, but also with former members of the current political party in office. However, they were not part of the same political group (with the exception of one participant). Therefore, it
was acknowledged that the views from the current (at the time of the investigation) political group in office were not able to be incorporated.

10.5.1 Reflexivity

In social science research, it is widely accepted that, in particular, qualitative researchers should be flexible in their approach to research because objectivity or neutral detachment from the phenomenon being studied is not entirely possible. Therefore, it is important that the researchers acknowledge their biases, values and assumptions. (Blaikie; 2000, 54-56). Under this acknowledgement, a reflection of the researcher’s experience, beliefs and assumptions are presented in this investigation.

The researcher has some prior knowledge/involvement in local and state politics but not local finance (beyond a background in accountancy). This research was undertaken in rural municipalities because of the gap in the literature and the need for delimited research, but also because of the researcher’s familiarity with the rural environment.

Prior to pursuing a PhD, the researcher participated for many years within the Institutional Revolutionary Party of Mexico as a young representative and campaign planner at local and state levels. PRI is best described as a central left party, at least ideologically. However, since graduating, the researcher has not been involved in any political parties and her ideological perspective is no longer defined to one political party. However, prior political knowledge has also meant the researcher tends to puzzle over how problems might be solved using the tools and tricks of the political trade.

In regard to decentralisation processes, the researcher tends to support the pro-arguments of decentralisation from the allocative efficiency point of view but before this investigation was embarked upon, the researcher was sceptical about productive efficiency arguments. However, during the investigation the
researcher was acutely aware of these beliefs and tried to be as objective as possible.

10.5.2 Ethics Considerations

Ethical consideration is an important part of social research. Ethical approval was obtained from King’s College London on 15th February 2011 after submitting a research outline, protocol and potential interview questions. The application was considered after minor changes. Soon after the final ethical approval was received, interviews were conducted for the pilot study. Copies of research participants’ consent forms and information sheets for participants in English and Spanish (the latter being the language in which the interviews were carried out) are attached in Annex 2.

Among the ethical concerns is that informed consent has been given by the participants and that confidentiality and anonymity are safeguarded. Interview participants provided signed consent forms in Spanish, their own language and they kept a copy of the research information sheet with details enclosing their right to withdraw at any time until the writing up of the thesis and assurance that their information would be treated in an anonymous and confidential manner. In respect to assuring the safety and anonymity of the data, as a precaution password protection was used in the database files and recorded interview material was deleted after transcription of interviews.
Chapter 11 - Case studies description

In this section, the case studies used to investigate further the findings from the previous analysis will be described. The case studies were selected from the sample of rural municipalities analysed earlier. The quantitative findings suggested that the reforms led to general changes, but to varying degrees. Therefore, this research selected a range of case studies mostly “moderately deviant cases” in the sense that they are municipalities where the changes were relatively strong or relatively weak.

To remind the reader, rural municipalities are defined in this study as those with a population of less than 30,000 inhabitants and where the economic activity that predominates is the primary sector.

In Mexico, the decentralised resources are transferred via the states. Therefore, the states play an important role in the final allocation of these decentralised resources, mainly the unconditional funds. In order to take this into consideration, the case studies were selected based not only on the Accountability and Public Entrepreneurship Index, but also based on types of financial arrangements used by the states, as explained in Section 10.2. The states selected were Puebla, Hidalgo, Guanajuato and Tamaulipas- one case study each from Puebla, Hidalgo and Guanajuato and two from Tamaulipas (where the pilot study was carried out).

One municipality presented a high performance in both accountability and public entrepreneurship index and it is referred as a “Good Performer Town” or GPT. Another municipality has a high index in entrepreneurship (and above average accountability index) and its pseudonym is “Entrepreneurial performer town” or EPT. The next municipality presents a high accountability index and average entrepreneurship index. It is referred to here as “Accountable performer town” or APT. The municipality with poor performance in both accountability and entrepreneurship index is denoted as “Poor Performer Town” or PPT and finally, the pilot study is included as an “Average Performer Town”
or AvPT. However, it is important to note that the AvPT is above the average, but it was not selected based on performance as the previous cases were.

Once the states were selected, the top score cases of the accumulated index, accountability and public entrepreneurship in each state were selected (see Table 11.1). Then, cases with higher progressive growth in the indices were chosen for analysis. In the case of the poor entrepreneurial town, one of the lowest five scores in the state of Tamaulipas was selected.

It needs to be clarified that there is not a large difference between municipalities’ scores. These are not the highest scores in the states or the country but they are representatives of performance in each index.

Table 11.1 Performance Indices of selected case studies

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Average Accountability Index (5 observations)</th>
<th>Average Public Entrepreneurship (3 observations)</th>
<th>Accumulated Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good performer town</td>
<td>1.20</td>
<td>1.00</td>
<td>2.20</td>
</tr>
<tr>
<td>Poor performer town</td>
<td>1.07</td>
<td>.08</td>
<td>1.15</td>
</tr>
<tr>
<td>Accountable Performer town</td>
<td>1.27</td>
<td>.75</td>
<td>2.10</td>
</tr>
<tr>
<td>Entrepreneurial performer town</td>
<td>1.13</td>
<td>.83</td>
<td>1.96</td>
</tr>
<tr>
<td>Average performer town</td>
<td>1.33</td>
<td>.58</td>
<td>1.91</td>
</tr>
</tbody>
</table>

The pseudonyms given in this study are followed by a letter that denotes whether the interviewee is a mayor, councillor or key political actor in the municipality. The key political actors are interviewees with experience in the pre-reformed period.
Table 11.2 Pseudonyms for municipalities and participants

<table>
<thead>
<tr>
<th>Function</th>
<th>Good performer town</th>
<th>Poor performer town</th>
<th>Accountable Performer town</th>
<th>Entrepreneurial performer town</th>
<th>Average performer town</th>
</tr>
</thead>
<tbody>
<tr>
<td>M= Mayor</td>
<td>GPT-M</td>
<td>PPT-M</td>
<td>APT-M</td>
<td>EPT-M</td>
<td>AvPT-M</td>
</tr>
<tr>
<td>C= Councillor</td>
<td>GPT-C</td>
<td>PPT-C</td>
<td>APT-C</td>
<td>EPT-C</td>
<td>AvPT-C</td>
</tr>
<tr>
<td>PRE= Key Political Actor with pre-reform experience</td>
<td>GPT-PRE</td>
<td>PPT-PRE</td>
<td>APT-PRE</td>
<td>EPT-PRE</td>
<td>AvPT-PRE</td>
</tr>
</tbody>
</table>

Table 11.2 illustrates the way that interviewees will be referred to in the empirical Section. The first group of letters used for abbreviation represents the performance of the municipality in the Government Performance Index. The second abbreviation separated by a hyphen indicates the function of the interviewees in the local government. Mayors and councillors are from different government periods and different political parties. The key political actors have participated in local politics for a long time- in an elected position, as leaders of specific groups or as journalists. They participated in pre-reform administrations and present an account of how the system was before the decentralisation reform.

The following Sections describe each case study. However, in order to safeguard the identity of the participants, some information is undefined but designed to illustrate the decentralisation and socio-political situation of each case study.

**11.1 A Good performer town (GPT)**

This small town in the state of Guanajuato has just over 11,000 inhabitants. It has just over 50 localities. The city is well connected to three big cities without including the capital city. The economic activity is based on cultivating green
alfalfa, oat fodder, green chilli, black beans, maize and sorghum. In livestock, the farmers rear pigs and cattle.

It is a clean and pleasant town. The town hall entrance is fully paved and the gardens and local market feature narrow stoned streets. Some localities are also well-connected to the town and to large cities.

The following Figure 11.1 shows how much of the total revenues come from conditional funds and its relative difference to unconditional funds and fiscal effort.

A general feature of rural municipalities is their dependency on conditional and unconditional funds. This high performer town follows the same pattern (see Figure 11.1). However, it is interesting to observe here how, for some years, the percentage of conditional mandatory funds relative to total revenues increased substantially.

![Figure 11.1 Revenue Structure as a % of Total Revenues GPT](image)

Figures 14.1 shows that own revenues or fiscal effort, as defined in this study, is less than 10% of the total budget.

Looking at the annual own revenues (analysed in current pesos), in Figure 11.2 it can be observed that own revenues have increased over time. In 2008, the
annual own revenues were approximately 3.5 million pesos per year (in current pesos 2010) which is equal to around £152,000 per year.

The largest increase in own revenues was from 2000 to 2001. After this year, the own revenues increased progressively up to 2007 where they slowed down. The high increase in own revenues from 2000 to 2001 is largely due to increases in the account “Contribuciones de Mejora” or contributions for improvements. Contributions for improvements are charges to individuals or businesses derived from a benefit obtained directly due to a public work, which increased the value of the taxpayer’s assets.

The political history of this small town is indeed interesting. This is one of the earliest rural towns to experience alternation of political parties from the centre-left party (PRI) to the right party (PAN). However, this occurred when a member of the right party was an interim governor of Guanajuato, Carlos Medina Placencia. Medina was elected interim because the elected governor candidate from PRI renounced the state government position (before even taking charge), after several criticisms over the election results where Vicente Fox Quesada was his contestant. After Medina’s period, Vicente Fox Quesada became governor of Guanajuato, and later the first ever PAN President of Mexico.

Figure 11.2 Own revenues in current pesos (2010) GPT per year
Since 1991, Guanajuato has been governed by the right wing party and from 2000 to 2012, Guanajuato belongs to the same political party as the president of Mexico.

This GPT has been governed by different parties (PRI, PAN, PNA) but each party has been in power for prolonged periods of time and the political control is in the hands of two families; small opposition parties such as PNA are controlled by one of these families.

As explained earlier, during all the field work, the first point of contact was the current local administration with the exception of this municipality. In this municipality (GPT), the mayor originally agreed to be interviewed and was willing to collaborate and contact previous mayors and councillors. This willingness changed after a call from another member of the local government. Surprisingly, the political party PRI does not have an established office in the municipality while the PAN does. Therefore, in order to acquire information, the opposition political party, PAN was contacted.

In this municipality, there is a particular family power dispute and it can be observed in the competitive index. The competition in this municipality, which was already high, has increased progressively in the last 5 elections (see Figure 11.3).

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PNA- It stands for Partido Nueva Alianza. It is also identified as the teachers’ party.
11.2 An entrepreneurial performer town (EPT)

This entrepreneurial performer town in the state of Hidalgo has just over 12,000 inhabitants and around 40 localities. The town’s economy is based on green alfalfa, oat fodder, black beans and maize. In livestock, the farmers rear pigs, sheep, goats and different poultry stock. However, the soil and climate are not considered optimal for agriculture. They also have some communities dedicated to pottery.

The city is not too far from the capital city, Hidalgo. However, it is midway between two other small cities. Therefore, locals say that the town is a “passing by” town. One of the features of this small town are some recreational projects that stand out. These recreational projects (in addition to other projects) have been financed through collaboration with other municipalities and government agencies.

In regard to revenue structure, similar to the previous case, conditional and unconditional funds are the main source of revenues, but in this case, fiscal effort represents less than 2% of the total revenues (see Figure 11.4).
By 2008, this town collected own revenues of around $620,000 pesos per year (in current pesos, 2010). This is equal to around £27,000 per year. This is considerably different to the Good Performer Town. In terms of inhabitants, there is no large difference between the GPT and the EPT. However, they are highly different from an economic perspective. GPT has fertile land and it is very close to an important city. This has an impact on tax revenues. On the other hand, EPT has poor agricultural soil and it does not adjoin a major city; it is only a “passing by” town between two other small cities.

Own revenues in current pesos (2010) in 1998 presented a large increase (see Figure 11.5). This dropped to an average level in 1999. The increase in revenues in 1998 was due to revenues collected via “productos”. Since 1999, own revenues slightly increased with an upward trend in 2002 again due to increases in “productos”. Productos are revenues obtained when the local government provides a service as a private actor, and due to the use, rights or sale of private assets.
The main political parties are PRI, PAN, PRD and lately another opposition party was formed and won the election in 2009. However, locals claim that this political party is part of PRI and it was created only as a consequence of internal division within the PRI’s local structure. There are some political figures that control the local politics in the municipality and some of them are also important figures within the state party politics. This municipality has not been in opposition to the state government. Hidalgo has been governed historically by the centre-left party, PRI. The competitive index shows that lately this EPT has highly competitive elections (see figure 11.6).
11.3 An accountable performer rural town (APT)

This small town in the state of Puebla has around 3,500 inhabitants and 16 localities. It is important to notice that Puebla has the second highest number of municipalities in Mexico with 217 municipalities, behind Oaxaca (570). They are dedicated to cultivating beans and maize but these are seasonal rain-fed crops. They do not have irrigation systems and they have only one harvest per year. Soil is dry and there is little rain throughout the year. Due to the weather conditions, livestock is not highly successful.

This APT is close to a medium-sized city, with a relatively new road connecting them and it depends on remittances sent by co-nationals living in the United States.

In Figure 11.7, it can be observed how conditional and unconditional funds are also the main source of revenues. The fiscal effort has decreased over time reaching less than 1% in 2008.
Own revenues in real values in 2008 were equivalent to around $630,000 pesos per year (current pesos 2010). This is around £27,300 per year. As shown in Figure 11.8 in 2003, there was a large increase of own revenues. The same trend was observed in 1998. These increases were mainly due to larger revenues via productos. After 2003, own revenues dropped below the previous year’s standard and increased slightly up to 2006 where it starts falling.

The main political parties are PRI and PAN. They have faced political party alternation. In the last elections, PRI and PAN formed coalitions with other small political parties and the last three elections have been highly competitive (see
Figure 11.9). This municipality has been in opposition to the state level on one occasion. The state of Puebla has been governed by PAN since 2011.

![Graph showing competitive election index APT](image)

**Figure 11.9 Competitive Election index APT**

### 11.4 A poor performer town (PPT)

This PPT belongs to Tamaulipas state. It has over 3,000 inhabitants. More than 60% of the land is used for livestock and around 20% for agricultural activities. Farming is mainly dedicated to cattle and 90% of agricultural production is sugar cane. This city is relatively far from the state capital and it is on the border with a different state. Therefore, its economic activity relies on this neighbouring state. It is integrated by around 40 localities.

![Graph showing revenue structure as a % of total revenues PPT](image)

**Figure 11.10 Revenue Structure as a % of Total Revenues PPT**
According to historical information available, conditional funds were not granted until 2000. The revenues (%) missing in this graph in 1998 and 1999 were categorized as “other revenues” in the available database, being around 65% of the total own revenues in 1998 and 25% in 1999. The fiscal effort in this municipality has decreased over time and it represents less than 2% by 2008 (see figure 11.10 above).

Figure 11.11 Own revenues in current pesos (2010) PPT

In Figure 11.11, it can be appreciated how the level of own revenue has been changing constantly. From 2002 to 2004, the “productos” category increased (but “derechos” or rights category decreased). From 2005 to 2008, “derechos” have increased but “productos” have decreased. In 2008, own revenue in current pesos (2010) was around $350,000 per year or £15,200 per year.

This municipality is very particular in the State of Tamaulipas. Tamaulipas has been historically a PRIista State and this municipality was one of the first rural municipalities to face political party alternation. Some elections have been highly competitive but not all. In Figure 11.12, it can be observed how the fourth election was less competitive and there was no alternation of political parties in this particular election.

There was no information for 2001.
11.5 An average performer town (AvPT)

This town was the pilot case study and, like the PPT it is located in Tamaulipas. The AvPT has around 30,000 inhabitants dispersed within over 190 localities. The economic activity is dedicated to producing sugar cane (53%) and agave (11%). Almost 70% of the agriculture uses irrigation and the rest is seasonal. In livestock, farmers rear mainly cattle and different types of poultry stock. This city is well-connected to the capital city.

Again, similar to the PPT, the historical information available about own revenues shows that conditional funds were granted in 2000. In 1998 and in 1999, 38% of the total revenues were categorized as “other revenues” (see figure 11.13). But it is clear that fiscal effort has decreased over time.
Figure 11.13 Revenue Structure as a % of Total Revenues AvPT

Figure 11.14 shows how own revenue collection has decreased over time, with the exception of 1999 and 2004, where there was a significant increase. In 1999, the rise was due to increases in taxes and “productos” and in 2004 due to increases in the “approvechamiento” category. The recovery in 2008 is observed after a dramatic fall in the previous year. In 2008, own revenues were $2.3 million current pesos (2010) per year which is equal to around £95,000 per year.

Figure 11.14 Own revenues in current pesos (2010) AvPT

This is a very politically competitive town (see Figure 11.15). It experienced alternation after 2000 and PAN has been governing the town since then, with
the exception of one term where PRI made a comeback. Similar to the GPT, the political control in this municipality is in the hands of two families and, like the EPT, the political elites are important political actors at the state level in their political parties. As Tamaulipas is eminently PRIista, this municipality has been in opposition to the state during three time periods.

![Graph showing political competition index AvPT over time](image)

**Figure 11.15 Competitive Election index AvPT**

There are some similarities in these municipalities that are important to highlight. In the GPT, EPT and AvPT, local politics are dominated by a family or groups not only playing in the local arena, but also in the state political arena.

In contrast, in the APT and PPT, the influence of a political group was not evident. In addition, in these municipalities, participants claim that at the local elections the “culture” of the people was to support the person, not the political party or a group.

In regard to local finance, this research puts emphasis on own revenue performance or *fiscal effort*. As a reminder, own revenues are not studied as a decentralised mechanism, but as an entrepreneurial action. The reason is that it is evident own revenues do not represent a main source of revenue for these municipalities. This is a consequence of not only political cost, but also inherent developmental and geographical issues.
The picture of “revenues” for the selected cases above is highly uneven between municipalities, both in terms of the overall level of revenues and their change over time. This highlights that places differ and there is not a simple uniform relationship. Therefore, as Putnam (1993) states, on the ground, the social phenomena are quite complicated and they cannot be captured in their entirety by large-scale survey data.

However, as the empirical literature tends to suggest, fiscal effort has decreased as a percentage of total revenues in the selected municipalities. But, there is actually no consistent downward pattern in absolute value, in fact quite the opposite. This is particularly clear in the PPT (see Figure 11.11) where own revenues or fiscal effort declined as a % of total revenues but the absolute value increased after 1998 (with its ups and downs).

This is relevant for this study as an increase in absolute value is also a valid indicator of effort for rural local governments. The reasons will be explained in the following chapter.
Chapter 12 - Rural municipalities: the context for change

In order to understand what has changed as a consequence of the 1997 reform on decentralisation, there is a need to identify what has not changed since the reform, or what are the “constants” in this group of municipalities. In addition, there is a need to identify the changes that may have occurred that seem unrelated to fiscal decentralisation, and that might be particularly related to the recent political changes in political competition.

This chapter is divided into two sections. In the first Section, two constants in rural municipalities are presented, regardless of how they perform; first, closeness to the people and second, financial dependency. The extent to which this group of municipalities enjoy a close relationship with their citizens is explained, together with how this may lead to the loss of authority and recent changes in the way citizens participate. These characteristics also support and help validate decisions made in selecting key variables for the entrepreneurship index.

In the second Section, the strong political party loyalty in these municipalities and deficiencies in the local council system are highlighted. Again, these are common to this group of municipalities, regardless of performance. How political loyalty seems to lead, in some cases, to poor political practices is explained and it is argued that political competition seems to be gradually improving the work of the council system.

During the interviews, participants often explained attitudes and behaviour by referring to popular sayings. Popular sayings can teach us about culture and society. They have compressed knowledge passed on from generation to generation. Thus, in order to visualize the participants’ thoughts more clearly, the subsequent Sections use popular sayings that were (in most of the cases) used by the interviewees when making their points.
12.1 As the saying goes… Small town, big hell

Participants refer to the saying “small town, big hell” to portray the level of social scrutiny citizens in this group of municipalities have on local authorities. Communication in small towns is easily passed on with “gossip” which is a “big hell” or a big problem for those involved in the gossip. Somehow this gossiping warns the local authority that everything they do would become public knowledge.

In this Section, it is intended to put across three important features of rural municipalities related to closeness to the people and financial dependency:

a) In this group of municipalities, social scrutiny seems to be a strong mechanism for accountability.

b) Citizens seem to participate less directly with local authorities but more through political parties.

c) Closeness to citizens facilitates collection of quality and relevant information but it also seems to weaken authority. This “loss of authority” is a threat to accountability.

The reason social scrutiny is highly important is because closeness to the people is highly remarkable.

APT-M “I did not differentiate among people. I gave access to the people that supported opposition, I gave attention and respect to all of them, I did not differentiate between blue (conservatives), red (central-left) or yellow (left). …..People are never happy, but when the majority is satisfied we can be calm … as they say small town, big hell. People here know everything, they talk to each other and nothing can be hidden from them”.

PPT-M “Because it is a very small town, people are checking on you. If you go to one community, they are there and they know...they tell
you...the other mayor used to get this amount of money, you got this money and you are not doing anything.... ”

Their performance in the local government is important for local reputation.

PPT- M- “We have three years in which we can serve our city. Three years where citizens will judge you and will reward or punish you for the work you do. That is why you need to do your best. WHAT SORT OF PUNISHMENT?. My punishment would be that if I behaved wrong, the day I finished my mandate I could not look people in the eye or they would show me disrespect. This would be a punishment. In this way they are telling me I did badly because I am among them every day.”

The importance of constant social scrutiny and the closeness with their citizens benefit the flow of information between local authorities and citizens, as well as the quality of information they obtain.

In these municipalities, local authorities are well-informed of both their municipality and their citizens. The information for decision-making is obtained before they are even elected and after they take office. Before they are elected, both mayors and local councillors express that being part of the community allows them not only to know what the important services and projects are for their municipality, but also to distinguish among individuals in terms of whether or not they need any social support.

EPT-M “…because we live in a very small community, we know each other very well. I cannot go unnoticed and neither can the people that express their needs. I know if they need help or not”

The other means of collecting information is through political campaigns. In these municipalities, candidates visit all communities from door to door, and
sometimes even twice during the political campaign. Asking for support in person is vital for a successful campaign.

PPT-M “… You learn while in the political campaign. You visit communities, neighbourhoods and you see what the problems are and the people tell you what they need and how to do it”

AvPT-M “Since the political campaign, we learn what people need, what public work they want. Once in the local government, you continue listening to what the people need”

Once they take office, the mechanisms to collect information are meetings with communities and groups, directly in the office and letters. As anticipated, mayors tend to highlight more meetings and councillors a direct encounter.

PPT-M “… at the beginning you have to present the municipal development plan, which is, in fact, the list of necessities of the municipality. We went to all the communities …we invited all the people and asked them what they wanted, which are the needs that are a priority. Based on this, we planned for its execution gradually during the three years of the administration….”

Even though meetings are by far the most efficient way to dedicate time to all citizens, for a mayor this is not enough. He must dedicate office time for ANY person that wants to present his/her situation directly to him. On the other hand, most councillors rely on people coming forward to talk to them.

AvPT-M “…In the morning when I wake up in my home, I usually have 10 or even 30 people waiting for me. They want to talk to me... People here are not used to making appointments. If you ask them they will get offended. If you tell them, talk to the treasurer, they will say, no, I want to talk to the mayor…”
Oates’ (1972) argument of the importance of closeness to the people is well-grounded in this group of municipalities, particularly in regard to information advantage. They have different means to collect quality information and with high levels of validity.

Thus, it can be argued that there is a close relationship between local authorities and citizens in this group of municipalities. There is a high level of social scrutiny and this allows for collection of relevant information.

This is an expected result. However, a closer look at how citizens participate in the local government presents important insights.

When local authorities were asked whether participation has changed over time, they present a very interesting point, again regardless of their current performance. They consider that people were no longer willing to participate in what they called “faenas” or work as co-operation. The constant issue put forward by the interviewees was that citizens only participate in exchange for individual benefits and political status. Some of them link this particularly to the decentralisation reform; others blame the political division in the municipality.

PPT-M “People used to participate a lot. We did not have problems. Today, we need to make a party, a celebration if we want the people to get together. Before it was not like that, they participated more. Now there is more political division”

EPT-C “…people are used to asking for individual benefits... Nobody wants to invite people for work because they think people would be angry and people do not want to participate…WHEN DID IT CHANGE? Around 12 years ago. People saw that the local government was getting more
money and they think that they do not need to help anymore. They also believe local authorities take the money for themselves. I have been outside and, to be honest, I had the same idea and I constantly hear this comment from the people”.

APT-M “The way people participate has changed. Now they want the mayor to do everything. They only work if they are paid. It has changed a lot”.

Thus, co-operation of citizens seems to be changing. Regardless of the reasons (decentralisation or politics), another interesting assertion is that while direct participation or co-operation in local issues has decreased, participation in regard to political party affiliation has improved.

The rise of political party affiliation does not necessarily mean more participation by citizens in the local government, neither does turnout during elections.

GPT-C “I have seen more participation directly with the political parties. In regard to participation directly to the local government, it is very little. In fact, we have invited citizens to meetings to take decisions- about public work… I believe they do not do it (they do not participate) because they (local authorities) take reprisals against citizens (because of political reasons)”.

PPT-PRA “Before people used to participate more...now there is a lot of division because of politics (people are divided supporting political parties). We should have only one party...”.

Then, rural municipalities benefit from high social scrutiny but direct participation of citizens in collective affairs seems to be changing. This seems to be partially due to increases in local government budget, but also due to political issues. This reinforces the choice to consider co-operation as an
entrepreneurial activity.

One other “constant” in these municipalities is financial dependency. Since before the 1997 reform, this group of municipalities were highly dependent on intergovernmental transfers. After the reform, the financial dependency increased even more, but expenditure decisions also increased. The financial dependency in this group of municipalities derives from the tax system being in place.

Own revenues in local government consist of taxes, aprovechamientos, derechos and contribuciones de mejora. The most important tax for local governments is the property tax and its surcharges. During field work, local authorities were asked to describe the tax system in place. Unsurprisingly, all participants mentioned and referred directly to property tax. There were minimal comments regarding other types of taxes such as Real Estate Transfer Tax.

In all case studies, participants claim that property tax is insufficient for undertaking their duties as providers of public services.

APT-M “Own revenues collected through taxes… are very scarce. Here, we can say that the only tax that exists is the property tax… But, it is very scarce because some people have not legalized their lands. It is in fact, very limited. For instance, if a mayor is running out of money for the month and calls the people to pay the property tax, two, three, or four people show up…it is around 50 pesos (2.5 pounds) for a piece of land. What you can collect is insufficient, and to make things worse, it is paid annually”.

The previous statement shows the perception of a low level of revenues collected through property tax. However, the level of revenue depends largely on the municipality’s characteristics and rural municipalities represent a difficult
test to the tax system. But, they also represent the best scenario for tax principles, namely identification of authority-investment by the tax payers.

The previous quote points out the issue of unstable revenues. Another participant talks about this matter clearly.

PPT-M “We do not have a collection base. In the three years we were in the local government, we collected 130 thousands pesos the first year; 160 in the second year and less in the third year. It varies a lot. We gave tax payers the opportunity to pay from January to March. They received discounts for late payments and, sometimes, we extended until June. Whatever we collected in that period, was what we got. After June, it was very rare that people would come forward to pay. From there you can plan in what to spend”.

There is no doubt that administrative capabilities are more challenging for rural municipalities. Interestingly, the administrative problems mentioned by participants are insufficient budget level, extra funds bargain, and in particular, tax legislation problems but no tax administration issues. This does not suggest that the problem does not exist but it shows the level of concern by local authorities.

The reasons for low tax revenue collection, according to the participants are local economy and culture.

Defaulting is a “culture”, participants claim, and it needs to be overcome in order to increase revenue collection.

APT-M “- (A participant explaining different programmes run by the local authority to collect more revenues from taxes) - It did not work. Sometimes we visited the communities. We sent the treasurer to different

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50 Local authorities are entitled to cancel some fees and surcharges. Cancelling surcharges is used by local authorities to motivate households to pay property tax.
communities. We expected people would pay. We thought they did not have time to go to the local government to pay or they did not want to spend money in transportation. It did not make any difference. We collected very little. Citizens really do not want to pay”.

PPT-M “There is a lot of defaulting...At the beginning of our administration 2008-2010, we reviewed how much we lacked due to defaulting. We had almost 1 million pesos. We invited the citizens to pay this off in different ways. We even offered them to not pay a surcharge, but it did not make any difference…”

Interestingly, the municipality where local authorities consider that defaulting is not a problem is the municipality measured and selected as a poor performer. Consistent with this observation is the fact that PPT has one of the most stable patterns of own revenues (see Figure 11.11).

PPT-C “We have a very good tax collection system. Most of the people pay. I do not know if it is fair because of the economic level of the municipality. I think it is OK. The problem here is how to gain money in another way...when we find a way to generate wealth it would be different”.

PPT-C “People here pay taxes. All business owners are up-to-date with their payments”.

A common annual property tax programme used by local governments to increase tax collection rapidly is to exempt citizens from paying tax surcharges applicable to overdue property tax payments. Most municipalities, regardless of political parties, talked about this annual programme and participants expressed how taxpayers take advantage of it.
APT-C “People here are very passionate about politics. If they do not like the mayor or the mayor is from another colour (political party), they do not pay taxes. They wait until the next administration. If the candidate they support does not win, they will go on and on (without paying).”

This is a red light in terms of efficiency and it immediately rings the bell as a political cost consequence. Indeed, there are political costs involved when enforcing local taxation. Taxes are not popular among people and, therefore, it can be seen as a threat to political support. However, it seems that there is more than political cost reaction in this group of municipalities.

APT-M “Sometimes I feel very bad because we get people that have a piece of land, but they do not even have a fence and they already owe 4000 pesos (200 pounds). Once I told them to pay half or 1000. I asked the accountant if there is problem with that (discount) or if I had to pay for it myself. But if we agree as a council, we can do it (discount). It is good because there are some people that are really poor and we can exempt them…at least we help them in a way…”

Closeness to citizens can be two sided. On the one hand, the local authority can collect improved information about citizens’ preferences or needs and, therefore, improve their welfare; and citizens can relate their tax contribution to the benefits they receive, facilitating their political choice. On the other hand, very close relationships can put a toll on the exertion of authority.

Regarding the latter, the majority of local authorities recognize that application of authority is difficult. Citizens tend to ask to be exempted from taxes as a favour. This behaviour is facilitated in this environment of close relationships. Tax payers can take advantage of knowing the tax authority and the social relationships they have. In addition, as observed in the previous quote, local authorities also face dilemmas of being all too aware of peoples’ conditions. Although it is not a justification for misbehaviour, it shows an important element
that needs to be considered when evaluating local authorities’ incentives to increase the collection of taxes.

Following the same discussion, local authorities were asked whether the collection of taxes by other public authorities would be more efficient. There are opposing views in this regard. There is fear that local governments might lose discretion over these resources, and this is not acceptable because, although low, it is used for petty cash accounts that are important for welfare support. Moreover, participants mistrust state government to pass down the tax revenues and they believe that vulnerable people might not be differentiated by the state.

Nevertheless, in terms of collection efficiency, most participants agreed that state governments would be more efficient in collection (no difference in responses from mayors and councillors or political affiliations). The reason they put forward is that state governments are more respected by citizens, and politics and friendship are not mixed.

EPT-M “Sometimes political and social situations mix and it is not easy to apply authority. You do not want to generate conflicts or inconformity. In these municipalities, due to political reasons, it is very difficult to apply regulations as they should...”

A major concern about own revenue collection is discretion on expenditure. Most participants pointed out that own revenues are used for public service maintenance and social support.

Empirical research presents a rational explanation of low fiscal effort. It states that increments in transfer will decrease tax efforts due to ‘fiscal laziness’ (Raich, 2003: 2). In practice, rather than a lazy attitude towards tax collection, local authorities in rural municipalities face the challenge of identification and proximity. The application of authority represents a challenge in this
environment. This is not far from the business saying- “do not mix business and personal relations or do not do business with friends and relatives”.

Hence, perception of low tax revenue compared to the level of expenditures required, high political cost and the challenge of authority are not encouraging attributes for a tax system. Rather, raising taxes represents an entrepreneurial action. This reaffirms the use of fiscal effort as one the indicators used to construct the entrepreneurial index.

12.2 As the saying goes… You cannot deny the cross of your parish

In this Section, the political dynamic in rural municipalities will be explained.

This popular saying… You cannot deny the cross of your parish… means in this case that you cannot deny the “political party” you belong to. This is remarkably evident in this group of municipalities.

In this group of municipalities the council system is not fully developed. For many years, it was integrated by one political party. However, the increasing level of political competition seems to have changed local politics in a number of ways. There are two general points to be noted in regard to local politics:

a) Political competition seems to have strengthened the council system but there are still important deficiencies

b) Due to party loyalty, there are political revenge practices used by some municipalities that are a threat to accountability

In this group of municipalities, immediate re-election is not permitted. Therefore, political incentives work through keeping the political party in power; the mayor’s re-election after an intermediate period; and pursuing a public service career.
Party continuity

PPT-M “I believe that during my mandate I was fair —with the people. I helped the people that really needed it. The proof is that the next mayor was also from my party...”

Re-election

APT-M “I feel I did something —well. This is why people supported me and I won- the (re-) election. It is not easy to run for election after having being mayor previously. We (him and his team) did something with the little money we received...“

A former mayor from the same municipality also commented about the mayor quoted above.

APT-C “Right now the mayor is somewhere working. He has been elected twice. He was re-elected because the first time he did a lot and the people saw he worked very well. That is the reason we helped him- to become mayor again”.

These statements present an interesting account. In this quote the participant suggests that citizens not only judge honesty and fairness but also compare entrepreneurial behaviour. This highlights the presence of yardstick competition in local politics and the ability of citizens to make inferences in regard to accountability and public entrepreneurship behaviour through the ballots.

Another political incentive mentioned by participants is to build a career in the public sector.

Public service career

EPT-M “I can give you an example —of personal and political attributes of a responsible local authority. I consider myself a responsible person. I had the opportunity to be mayor, maybe I was not the best but I was accountable to my people. Now, I have the opportunity to be Secretary of
the town council (county clerk). The same people gave me the opportunity to be here or at least, they are allowing me to remain here. If I were not a responsible person, the people would have asked - the mayor- to remove me from the post. They would be here showing their discomfort.

In this group of municipalities, there are important deficiencies in the political system. The local council system is highly relevant in order to avoid absolute power. However, it seems that some councillors still have a rather poor understanding of their role and during the field work this was often the case for women councillors and young women councillors. The following quotes from women councillors reflect this point.

APT-C “I did not know how to work, what my job was”. [18-25 years old councillor]

APT-C “The difficulty was that I did not know what to do in the job”.

PPT-C “I am not a politician and, therefore, it was difficult for me. I did not know anything. You get familiar with the job gradually”. [18-25 years old councillor]

Some councillors expressed that they did not have difficulties in their work because the mayor solved the problems or because opposition did not intervene.

APT-C “We did not have difficulties. We always agreed in the council meetings…ARE YOU FROM THE SAME POLITICAL PARTY AS THE MAYOR? Yes. HOW DID YOU WORK WITH THE OPPOSITION? She never had problems with us. She never said anything”.
PPT-C “I was very disappointed because it -being a councillor- was not what I expected. I thought I would intervene more in the decision-making but the decisions were unilateral. The mayor was the one who took all the decisions. Sometimes we did not even learn about things that were happening there, about the funds that we got. Other people (not members of the council) were more aware than us. That was a constant during the three years”. Others participants claim that the councillors’ role is underestimated and used only for obtaining a regular wage.

EPT-C “… the mayor has a lot of power. … I think that the council should have more obligations also. They need to do their job because there are councillors that only come when we have meeting and not all the time. At that time there were only two or three of us that were here every day checking….”

GPT-C “…in small cities like this there are councillors from different parties who unfortunately because of human nature and also because we are Mexicans, act according to their own convenience. They are paid and nothing else matters…”

The councillor’s seat is often negotiated due to political reasons within the political parties. In this practice, women and young people are often used to fill positions in order to complete gender and young representation. Women and young councillors work under the political control of others and this might generate the problem of lack of knowledge in their role in the local council as presented above. From the 9 women councillors interviewed, three were young women between 18-25 years old. The women councillors’ quotes mentioned above present the women councillors’ age in order to highlight this point.

Moreover, three out of nine women councillors interviewed have family ties to local politicians.
EPT-C “… Our municipality has always been governed by PRI but when I was elected as council from my party PRI because my husband was competing within the party to be the candidate… (He lost the candidacy)… he proposed me as a councillor”.

It is important to clarify that woman councillors were less willing to participate in the interviews.

Although there are still high levels of deficiency in the council system, there is some evidence that it has improved due to political competition.

A councillor that has been elected twice, before 1997 and recently, expressed the following:

EPT-C”… (First time as councillor)… Well, at that time we did not do our job in the council as we should. The mayor decided everything; he was the one that gave orders. We were- all- from the same party (the opposition did not get enough votes for a seat in the council). So, we did not have any problems. Whatever the mayor said, we approved it and signed it”.

EPT-C “… (Second time as councillor)…well, it was different... This time I was on the other side, I was in opposition. I had some obstacles. It was illogical that because I was in opposition I did not have access to information… I had to sign the income law but I did it only if I got something for my people (negotiation)”.

During the interviews, the councillors were asked for examples of situations where they expressed their disagreement, or a veto was used by the local council. In all municipalities, they claim they have been opposed to some of the mayor’s proposals. In three of them, which are the ones categorized as high performers, GPT, EPT and APT, at least 50% of the participants gave examples
of veto by the council and there was no distinction between councillors that were from the same party as the mayor and opposition councillors. Interestingly, the lowest performer in the group, PPT, presented the lowest incidence of reported disagreement with the mayor.

EPT-C “at the beginning we did not agree with a plan to take a loan from a bank for 2 million pesos for equipment and transportation. We did not have anything here (previous local government did not leave transportation or equipment). But the mayor did not explain very well and we asked him to bring us a person from the bank to explain to us how much interest they would charge. In the end we did not approve it.”

GPT-C “We did not pass a plan for a greenhouse. WHY? The plan was to build six greenhouses. The people that applied for the project would contribute with some money and SEDESOL (federal agency) the other part. We did not agree that the people interested in the project were part of the local government”.

In the quote above, the participant expressed that he disagreed on a project because people working on the current-at the time-local government wanted to benefit from it. This is a problem in this type of programme, which, in many cases, benefit political elites or political groups. In spite of that, this quote presents a good example of the importance of council systems in rural municipalities and how the democratic mechanisms promote, to some extent, accountability.

On the other hand, mayors also claim that decisions are taken due to political reasons:

GPT-M “We know that many times politics is mixed (with the local government’s work). In the last year I was mayor, we needed a qualified majority to approve the annual budget. I remember it was March and they (the opposition) had not approved the budget yet. …I had a meeting
with the opposition and in this way we could approve the budget. They did not approve it in January and February because it was an electoral year”.

The number of opposition seats in the local council is determined according to the number of votes. Political competition has increased and, as a consequence, the local council system is gradually maturing.

Theoretically, political competition is an ultimate aim in a democracy but surprisingly, in one of the municipalities a concern regarding political competition arises.

GPT-C “I do not know if the political competition has been beneficial or detrimental. Honestly, we are living under a government where for two long periods, I do not remember exactly the years, two families have governed our city. The conservative party has been in power for 12 to 15 years... The current mayor and his wife....They have governed for a long period. In the previous elections, they also competed in the campaign (they lost)… But the situation did get better because now the central-left party took power with another family. He has been mayor twice, and now his sister is the mayor. We know that he helped her during the campaign even though she is coming from another party.”

The high level of political competition in this municipality has created a kind of “modern caciquismo”. The reason is, in part, because of the multi-party system which has segregated minority parties and the political reform to form coalitions.

EPT-PRA “…..60% of us are from the central-left party, 40% is divided among the other parties. Here we only have three parties, central-left, left and conservative. Let’s say 20% left and 30% right and now, we have the green party, which we know is the central-left party’s younger brother.
A relevant issue that has direct financial and performance implications in local governments is the use of political revenge practices between political parties. These political revenge practices have occurred in three out of five municipalities studied here. When a different party wins the election, the mayor will deliberately donate assets and clean out the local government office.

APT-M “The first problem is that when the administration changes colour (party), there is egoism. When we started here (in the office) it was empty, we did not have chairs, computers, cars, equipment such as backhoe, dump truck, nothing, why? We were opposition...For us, it was difficult to start because they also left debts, debts with suppliers...”

EPT-C “We also left them (the opposition party) without cars (they had also been left without equipment at the beginning of their mandate). I signed for two trucks to be given to a common land... In this common land, cattle had been stolen and nobody wanted to offer his truck to go to the peak because it was far. We gave them the trucks that the mayor had got”.

Similar political practices were commented on by participants but in relation to state-municipal intergovernmental transfers.

Participants who were mayors before the decentralisation reform explain that funds were allocated arbitrarily due to political reasons but even municipalities governed by the same political party as the state did not have financial security.

EPT-PRA “Before I did not have problems with the money, but other parties did. The state government retained the money and did not give them enough. They (local mayors from the opposition parties) were my friends and they struggled a lot”.

PPT-PRA “…I had to lobby a lot to get money for public work. I got some money, for instance, to put lamps in the street. Imagine! It cost 13,000
pesos...very cheap. At that time, I think the state government did not give money to any municipality because they kept the money for themselves. This was in the first few years. By the end, the governor did some public work...possibly because it was election time but I cannot be sure of that.

In the quantitative analysis (Section 9.1) one of the hypotheses tested was whether there was evidence to suggest favouritism in municipalities that belong to the same political party as the state government before the reform, by comparing their performance after the introduction of the conditional mandatory funds. The hypothesis was not proved and the findings (though not strong and statistically insignificant) suggested that municipalities that were in opposition had, on average, a higher and stronger performance in the coverage of basic public services (before and after the reform). Hence, being opposition was suggested as an incentive for good performance.

In the previous quotes, participants gave a plausible explanation as to why the statistical analysis did not find favouritism before the reform. They explained that rural municipalities were disadvantaged, regardless of whether they were in state-level opposition or not. This is probably because, in most cases, rural municipalities represent low electoral political weight and, before the reform, the hegemonic party used to dominate local politics and minority parties were almost non-existent.

However, due to higher political competition, intervention in this group of municipalities has now emerged.

PPT-M “I have always been from PRI (central-left party). Before we did not have too much support from the party, they did not mind (the municipality) because we did not have any competition. Recently because of the political competition, PRI (the party) is intervening more”.

Recalling some of the results from the quantitative analysis, even though they did not reach a conventional significance level, the interaction of political
competition and state-level opposition (Section 9.1, p.239) suggested that under high levels of political competition, municipalities without state-level opposition are more likely to present a higher Coverage of Basic Public Services before and after the reform. In contrast, if the level of political competition is not considered, these municipalities are likely to have on average a lower score in Coverage of Basic Public Services. Thus, political competition was considered as a “warning sign” that could drive performance or a case of intervention.

Interestingly, the quantitative analysis also suggested that being of the same political party did lead to fewer accountability actions (Section 7.1, p. 204) and fewer entrepreneurial actions (Section 7.2, p. 212). In addition, the interaction of political competition and state-level opposition in the models of behavioural patterns suggest that under levels of high political competition, being of the same political party did lead to fewer accountability actions (Section 7.1, p. 205) but higher entrepreneurial actions (Section 7.1, p. 212) compared to parties that are in opposition. Thus, again, actions and aims differ.

The previous statement gives a plausible explanation to these findings and reinforces the interpretation of higher political competition being a “warning sign”. This warning sign to political parties leads to a higher interest in local politics. This may influence the selection of candidates, or state government intervention may take place to support local governments directly. In this group of municipalities, this seems to occur only when there is a warning sign of political failure, not otherwise. The reason might be that rural municipalities do not represent important political weight and more importantly, they are highly loyal to political parties.

Thus, in this case, the qualitative data helps to explain why the statistical analysis did not find a clear and simple relationship that the theory of fiscal decentralisation might have led us to expect.

Another good example of how politics, and in particular state-level opposition, influence the behaviour of local authorities is the case of a mayor from the APT
who has been re-elected twice. This mayor was mentioned by other interviewees, regardless of political party affiliations, as a good mayor in his first administration, and participants pointed out that the mayor’s former good performance is the reason he was elected again. The difference between now and then is that, during the first administration, he was aligned to the governor’s political party and now he is not. This mayor claims that the governor has shut down the doors for the opposition and that cuts in unconditional funds and extraordinary funds from the state programmes have been applied. He also claims that the governor is using the National Institution of Geography and Informatics, which is the main source of statistics in Mexico, to justify the cuts.

Highly emotional, he explains that people perceive that he is not working as before, and this worries him to the point where it has affected his health. These claims are corroborated by another councillor also participating in the same administration. The focus of her conversation was about how resources have been cut in this administration and the mayor’s impotency to achieve citizens’ expectations.

This municipality (APT), as well as another case study (EPT), presented the same problem of lower revenues because of changes in marginalization status. But, in this case, the political context overshadows the problem at the point that the mayor has closed any relation with the state government and dependencies. In the same municipality in 2005, the council requested an inspection to INEGI because their revenues dropped by 20% due to changes in marginalization status. After a fieldwork inspection by INEGI they were reset as a marginalized municipality and their revenues increased.

As observed above, there are complex political issues at ground level. It is important to notice that there are no straight answers, no clear information even for those facing the problems. The aim of presenting this case is to illustrate how, on the ground, politics and financial issues affect local authorities’ behaviour.
12.3 Summary

To sum up, this chapter describes the social and political dynamics common to all rural municipalities. We can now visualize a rural local government as a place where citizens’ voice and scrutiny is important, where local authorities enjoy high quality information but also struggle with the loss of authority due to their close social proximity to citizens. In addition, we are aware of the important role of political loyalty and the political deficiencies in the council system. These characteristics were present before the 1997 decentralisation reform and they are still true after the reform excepting the level of development in the council system which seems to have improved as a result of higher political competition. At this point it is necessary to find out what has changed with the introduction of the decentralisation reform. The next chapter intends to address this point.
Chapter 13 - Fiscal decentralisation in practice: impact on accountability

In this study, accountability is defined as the virtues of local authorities to behave according to public expectations, demonstrating such attributes as transparency, responsiveness, and responsibility, which further improve efficiency.

As discussed in Section 3.1.2, the delegation of financial resources via fiscal decentralisation might lead to positive changes in accountability because local authorities can respond to citizens’ preferences as they are close to their people, have quality information and citizens can judge their performance. This implies a high level of participation and involvement by citizens.

However, the results in the quantitative analysis suggest that changes in accountability might depend on specific fiscal arrangements. The findings present contrasting results between unconditional funds and mandatory conditional funds. Mandatory conditional funds were likely to increase accountability and unconditional funds likely to be detrimental. To remind the reader, mandatory conditional funds were introduced in 1997.

In this chapter the aim is to observe whether accountability on the ground is indeed discouraged by unconditional funds and encouraged by conditional funds and if so, in what ways. One of the issues encountered in phase two is that one important source of funds could not be included in the indices, namely extraordinary conditional funds. These funds are earmarked for specific expenditures and they have different policy arrangements. In some cases these funds are allocated with some decision-making in work execution and sometimes they are fully managed and executed by federal and state agencies. They are highly specific and are allocated in a more discretionary manner. These types of funds are not included because extraordinary funds are not part of the local budget. Therefore, the national database for local government finance does not integrate this information.
In the previous Section, it is evident that local authorities seem well informed of citizen's preferences and are socially scrutinized by citizens. However, participation seems to be changing and there is less direct participation with local authorities.

In this Section extraordinary conditional funds are examined. Evidence related to these extraordinary conditional funds will be corroborated as well as evidence related to the other funds. This will enable us to suggest whether or not there is evidence on the ground that tends to strengthen and increase confidence in the findings from the quantitative analysis.

13.1 As the saying goes, don't bite the hand that feeds you

This saying reflects the idea that local authorities should be accountable to the people over whom they have stewardship. In the public sector, the issue is that there are multi-principals. In this sense, the principals could be the citizens that elected the local authorities for the position or the political allies that lobby for resources for them.

This seems to be an important reason for contrasting differences in accountability between the different types of fiscal arrangements. However, each type of fund has in its own specific benefits drawn from the developmental characteristics of rural municipalities. In the next Section, the accountability benefits and issues in each type of funds will be outlined, which seem to be specific to this group of municipalities.

a) Unconditional funds

From the local authorities' point of view, unconditional grants in principle enable efficiency of allocation. It gives them the freedom to distribute resources according to citizens’ needs and preferences as well as undertake projects that cannot otherwise be included in the conditional mandatory funds. However, with this type of funds, citizens’ involvement is not as evident because citizens are
not directly involved in decision-making for expenditure allocation (see Section 4.2, incise d, p.98-100 for more details).

EPT-M “This type of revenue allows doing what the citizens’ prefer… how they require the public work. If they want the sewage pipe this width, if they want a larger sport field. With the conditional ones you have to spend it on certain norms and procedures”.

EPT-M “There is nothing like these funds. Because you can redirect a little more to generate employment… you get more freedom and I think it makes the system more efficient- but always supervised”.

Participants agree that unconditional funds are more prone to be used for current spending. However, there are contrasting views between mayors and councillors. On the one hand, mayors consider that a high level of expenditure on salaries is a way to increase employment and welfare and on the other hand, councillors point out that unconditional funds are subject to misuse on unnecessary expenses.

AvPT-M “Sometimes you have to sacrifice efficiency in the public administration to favour the citizens, for instance, employment. I have a case of two individuals that got into a fight because they wanted the post as street sweeper… Sometimes you can invest in equipment that can make the provision of services more efficient but the same investment can generate employment for various years or months to many people. It is sad but people in this municipality are grateful to have a job with minimum salary because there is no other option”.

PPT-M “the only source of employment is the local government. This is the reason we do not want public service careers… in this way, every three years you give the opportunity to other people to work here. They can work on something other than farming and being a housewife”
Fiscal decentralisation in practice: Impact on accountability

Mayors consider that this type of revenue does not discourage accountability and present examples of expenses that are not part of public investment and are against efficiency grounds but important.

PPT-M: “Current spending is mainly used for paying the ambulance. We have only a health unit but it is not specialized. The ambulance service is free and every month part of the budget goes there. The closest hospital is 55 km away. You have to pay return fuel but often they go to the capital and other big cities. Part of the budget goes there…another example of current expenditure is the caterpillar machine. State government helps with the rent but the local government pays for the fuel. We try to keep the rural roads as good as possible. In addition to this, there are people that come forward to talk about their needs, health issues, and medicines. Money goes there”.

EPT-M “… Even money that is not earmarked, you have to be accountable for. The fact that it is not earmarked for specific work does not mean it is not transparent. Maybe it can be the case that the local authorities buy something that is not really necessary in the municipality. But, logically, part of the council would not agree. For instance, here a former mayor bought a car that was not appropriate for the local government. The councillors obliged him to sell it back and invest the money back in the municipality…There is still corruption but in minimal proportion. We have progress in this matter. Although the resources are not earmarked, you cannot spend it on something that is not beneficial for the people”.

There is no doubt that honest management is a very personal matter. Efficient audits and vigilance by upper government levels are highly important to keep local authorities accountable, but as the previous quote explains, the maturity of the political system, particularly the council system, is also highly relevant.
b) Mandatory conditional funds

During field work, the aim was to investigate whether there was evidence that local governments were indeed delivering good services, particularly with reference to the mandatory conditional funds earmarked to basic public services. Participants were asked about the general level of public services and whether it has changed over time. The majority of the participants agreed that the level of public services has changed significantly in recent years. But, more importantly, some of them directly referred particularly to these mandatory conditional funds. Others only remember that in the mid-1990s (around the time the conditional funds were created), the local government acquired a lot more money and invested in local services.

APT-M “The municipality has changed its physiognomy. I never thought it would change but since we received the money from mandatory conditional funds - It changed. It is very good. It benefits communities. Everything has changed. We were very behind, marginalized…. Now, everything has changed”.

Another participant that has worked on three occasions for the local government as a treasurer states that:

GPT-PRA “…. (He) believes mandatory funds have helped a lot... from one year to another the local budget increased a lot… Before, we did not have enough to pay the payroll and to maintain public services….it is easier now because the state government gives us 12 million, 1 million each month, we had a set date for the deposit. Then, we can plan for public work investment…”

Participants also pointed out local communities have largely benefited from the reform. They remarked on the importance of the reform in regard to changes in local services not only in the municipal seat, but also in the communities. A participant expressed that the reform improved the redistribution within the
municipalities because the allocation of resources is decided at the local level with citizens participating directly; while before the reform, the state government invested in public works that were not necessary and were often not used by the communities, which they call “white elephants”. The mandatory conditional funds are not only earmarked for general expenditures, but also require direct participation by citizens.

EPT-M “Before, the state government decided what to do…sometimes the communities did not even ask for that (specific work), did not even want it. They were “white elephants” because they did not want that and just left it abandoned and it was money wrongly spent. With all the changes that have happened in the government now there is money to do public work and to do what is needed”.

These “white elephants” are not captured by the accountability index. The part that is captured by the index is the redistribution of CBPS in the municipal seat and in the communities. However, the “white elephants” tend to confirm that decentralised funds such as conditional mandatory funds and unconditional funds are especially likely to be responsive to local preferences and used efficiently, just as theory would suggest.

In addition, the field work presents some evidence that the mandatory conditional funds, which delegated higher financial resources to local governments and increased public investment, appear to benefit the redistribution of basic public services denoting responsiveness to citizens; and seem to involve citizens in decision-making which denotes transparency. This reinforces the quantitative findings that mandatory conditional funds are likely to improve accountability.

Conditional mandatory funds are delegated in order to reduce disparities in development and help federal governments to achieve more standardized outcomes throughout the country.
However, conditionality of funds conflicts with the core argument of decentralisation, namely autonomy, and higher conditional mandatory funds might increase dependency and discourage any further investment in public works using unconditional grants, as well as affecting tax effort.

In all municipalities, both mayors and councillors consider that the advantage of mandatory conditional funds is that they are less prone to be diverted to unnecessary expenses and/or that they are obliged to invest more in infrastructure.

The disadvantage is the impossibility to use these resources in unpredictable circumstances:

PPT-M “Sometimes there are unpredictable details. The first year of my administration we had a big flood in the city and because everything was earmarked I did not know what to do. The second year we had the swine flu problem. In all Mexico we were known because of this pandemic. We were in quarantine and we had many doctors and nurses here…this is a resource you did not plan for. You need to take from other sources but you cannot…”

This goes in line with the findings in the previous chapter that show a positive relationship between mandatory conditional funds and index of accountability. Particularly, it is reflected in the variable public work investment in the accountability index.

All positive comments regarding conditional funds were related to the mandatory conditional funds created after 1997 to close the gap for local infrastructure. An interesting remark is that all participants expressed their agreement for the financial resources to be earmarked. They consider that this facilitates investment in infrastructure. The negative comments are related to funds reassigned by agreement either by the states or federal government: i.e.
the ‘extraordinary’ funds referred to above, and which are excluded from the national data bases. This is discussed next.

c) Extraordinary conditional funds

The majority of participants who were mayors after the reform did not present favouritism concerns with respect to unconditional funds and mandatory conditional funds. However, in some cases they argued that extraordinary conditional funds from state or federal agencies were often denied due to political reasons.

Extraordinary funds require high levels of lobbying. In three of the five municipalities, mayors that were in opposition to the state government were keener to obtain extraordinary funds from federal agencies instead of negotiating state funds.

APT-M “the governor treats us differently because we are another colour (political party)… Sadly, it is the way Mexican politics works. Fortunately, I have the federal government from the same party… because of that and my previous job in a federal agency, I bypass the state government (this means he went directly to the central government). I did not wait for the governor to help me. Honestly, I avoided it because I knew he would tell me- yes -but not when. People here want results. I looked for other ways, knocked on other doors and they heard me. The member of parliament and the president (of Mexico) helped me, they assigned extraordinary resources to us”.

PPT-M “We do not have problems (with the state funds) but when you request something (discretional grants) they tell you- wait, we will see what we can do. …we know politics is mixed with everything. It is logical that the municipalities that are from the same group as the governor have a few more resources. We are fortunate that we met a local parliament member who is today mayor from another rural city (the
average performer town). He helped us a lot with different federal agencies in Mexico City… we obtained projects for our city… We went directly to Mexico City to present the projects, budgets, monitoring…. We got the funds to build 300 council houses in our municipality… nobody had done it before. Thank you to the federal agency and the federal government”.

The political use of extraordinary conditional funds is not surprising but it is highly interesting that this group of municipalities have been able to engage in this political dynamic with federal agencies.

The rationale from the local authorities' point of view is that it does not matter from where the resources are channelled (state or federal government) as long as they benefit the municipality. However, the types of projects promoted by state and federal government have different aims. This might have collateral problems as some of these investments are not a priority in the municipality.

PPT- C “The extraordinary conditional funds are sometimes for investments that are not really necessary. EXAMPLE: A public square. I believe it is more important to invest in a road than in a public square”

Others raise the concern that some extraordinary conditional funds are aimed at individual support rather than collective benefits while these municipalities still require investment in projects that benefit the community as a whole.

PPT-C “Recently we have obtained a lot of federal resources for our municipality. It is good. However, federal projects are more directed to private benefits than collective. We have the council houses here. They benefited individuals directly and it is fine. But, the problem is that we still have a lot of deficiencies in our community; we do not have paved streets, electricity, cultural spaces, and sport facilities. Why do they not provide funds for that? I know that it is difficult to satisfy everybody but we have other problems that take priority”.
Three out of the four municipalities that obtained federal projects express the concern that projects are left unaccomplished because the municipality does not have the level of development to afford it.

GPT-C “We have many houses that were made for lizards. I mean it literally. Many houses are used only by lizards and other animals. They live there because the houses are empty”.

EPT-M “We got council houses… houses are not in use because we could not finish a well for drinking water, electricity and sewage. We were about to install the water and some people did not allow us. The central-left candidate (they had elections at that time) who is now the mayor told some people that we must pay them for the duct that would cross their neighbours’ land. He did it for political reasons. In the end I thought – I am not going to end my mandate fighting with people. Now that he is the mayor he has not yet fixed the problem”.

In these cases, extraordinary conditional funds may damage citizens’ welfare.

In addition to unnecessary investment or types of investment that are not a priority, participants mentioned two accountability issues in regard to the extraordinary conditional funds: the work execution by contractors hired directly by the state or federal agencies and the inflexibility in operational rules.

EPT-M “Sometimes it is not good because contractors from other cities come and, sometimes, they do their work well but not well enough for us. We are the ones that remain here. We face the consequences of what we do. The contractors come and go. They do their job and take the money but nobody takes responsibility for the durability of the work”.

307
EPT-C “The advantage of using unconditional funds is that you do not get into legal trouble. I know some local authorities that got into problems for using extraordinary conditional funds… it is better not to touch them”.

When local authorities were asked for suggestions in regard to intergovernmental transfers, in one municipality, the majority of mayors proposed that transfers should not pass through the hands of state government and should be sent directly from federal government to local governments. Their concern was not related to political revenge practices towards opposition parties, because, in this particular municipality, there were no political party or state level differences. It is again a perception of weak accountability by the state.

EPT-M “…These federal funds should be given directly to municipalities without passing by the state government. In this way we can make the most of the resources. We will use them 100%. Obviously, the expenditure can be categorized. We know there are a lot of necessities in local government and, in particular, in rural local governments”.

Thus, both conditional mandatory funds and unconditional funds give room for better decision-making in allocation of resources based on the needs and desires of local citizens. However, these funds present different concerns. The problems with conditional mandatory funds are related to some constraints of efficiency, such as a restriction to use the resources for unpredictable circumstances. On the other hand, the problems with unconditional funds are related to financial responsibility- the misuse or unnecessary spending and/or to opt for inefficiency over efficiency. The difference between them is citizens’ involvement in decision-making. With conditional mandatory funds, it is obligatory for local authorities to include citizens in decision-making and work oversight (this is part of the earmarked funds regulations), whereas with unconditional funds it is not.
On the other hand, the extraordinary conditional funds are an important source of investments for development. However, they rely on direct relations with government officials. In this case both types of issues are present. On efficiency grounds, inflexible operational rules and work execution by the state (in some cases) restricts efficiency. In regard to financial responsibility, these funds are prone to collateral effect (the white elephants) as investment is not decided at the local level.

The next Section will focus on a key variable that was not captured in the accountability index, corruption.

\subsection*{13.2 As the saying goes, you do not (need to) give (somebody) money, put (him) where the money is}

This saying portrays the general idea that money changes the behaviour of people, leading to corruption. This section explores whether higher resources at the local level appears to encourage corrupt practices by local authorities.

Unfortunately, in the previous quantitative analysis, the accountability index does not include a direct measure of corruption. It only includes a measure of citizens’ involvement, legal transparency and financial responsibility. Measuring corruption at this level and for this group of municipalities is more than a challenge, not only due to technical measuring problems (with secondary databases), but also because it is a highly sensitive issue. However, qualitative analysis gives the opportunity to explore corruption through the participants’ experience.

In order to explore the issue of corruption, participants were told that some people think that rural governments must not receive unconditional funds because they spend the money wrongly and among few people. They were asked to state whether they agreed with the statement and to give an example. The majority of the participants agree that corruption exists. However, considering it is a very delicate matter, it was affirmed by some but not others.
The most common types of corruption mentioned by participants were systematic corruption, embezzlement and, the most cited, favouritism.

**Systematic corruption**

PPT-C “Well, in this municipality...when I was there it was not possible. Now, there are some resources of federal projects (for start-up business)... where ....for example you tell the mayor- help me to get this project and I will give you 50 or 100 thousands pesos. The mayor helps you to get the project, you get the money (to set up a business) give part to the mayor and you do not do the project...”

**Embezzlement**

GPT-C “Some municipality budget goes to DIF (System of integral development of the family)...at the end of the mandate, the mayor also has to prove what the DIF did. But in reality here is where more of the resources are used to their convenience; here is where the unconditional funds are used wrongly because DIF has a programme of economic allowances for medicines and other sort of help. They are prone to be misused. In fact, we have cases where the beneficiary signs the allowance receipt blank. They are granted with 50 pesos in cash but the allowance appears in treasury for 300 or 400 pesos...”

**Favouritism**

PPT-C “Here, most of the mayors benefit their family and closest friends. The best government programmes and projects are for them. We have seen how some mayors finish their mandate with a lot of money as well as their relatives”.

Unfortunately, corruption exists at all levels of governments and local authorities express that because of the increase in resources, there is more corruption.
APT-M …"You always have the best intention to do the best for the municipality. Everyone should do that. We say it, but when we are inside it is different. If you are not doing it (corruption), there is a bunch of people waiting to see what they can take. Money shines to all of us”.

GPT-C “When I was young I did not understand public administration and maybe, the money at that time was little. I remember very well, we only had one party here, PRI, and we did not have any disputes, competition or anything. They only decided who the next mayor was and that was it. Now things have changed, there is a lot of money in between”.

At first glance, unconditional funds seem to facilitate corruption because local authorities have more freedom on expenditure decisions. In other words, they have more discretion and this is a significant concern, because they represent a big proportion of the total revenues budget.

In addition, the quantitative analysis adds strong support to this assumption as the first phase of this research suggests that an increment in unconditional funds is likely related to a negative change in accountability. It means that to a given increase in unconditional funds, local authorities are likely to diminish infrastructure investment, raise current expenditures, invest less in public services in the communities and be less engaged in transparency arrangements in terms of legislation and institutional openness. But, interestingly, most examples from participants for systematic corruption were related to funds where state intervention was necessary- Extraordinary Conditional Funds, not unconditional funds. The reader can observe this in the previous selected examples of corruption.

In addition, an interesting difference between the case studies is that participants from the PPT mentioned examples of both favouritism and systematic corruption and both were related to the extraordinary conditional funds. Contextually, this municipality (PPT) presents a very significant difference with the rest of the municipalities. The state-level has always been
from PRI and this municipality was from PAN in several administrations. Hence, PRI still has a strong political power in the state. These local administrations governed when PAN was in power at the national level and the corruption examples are related to federal government funds. However, most examples were presented by respondents belonging to PRI. This municipality benefited largely from federal funds but these resources are off local budget. Hence, these public works were not captured in either of the indices.

The relation between extraordinary conditional funds and corrupt practices is not limited to the PPT, in all municipalities corrupt practices were also exemplified using extraordinary conditional funds. However, in the PPT case, it was more apparent given the political circumstances.

In contrast, participants, regardless of municipalities, did not provide examples of corrupt practices using mandatory conditional funds at all. This does not prove that mandatory conditional funds cannot be used in corrupt practices or indicate that the corrupt agent is generally the state government. However, this evidence along with the results from the quantitative analysis, give room for inferring that mandatory conditional funds might improve accountability behaviour as they are likely less prone to corrupt practices and more likely to respond to local preferences.

13.3 Summary

This analysis reaffirms and helps to provide additional possible explanations for some findings from the previous empirical national data analysis. Fiscal decentralisation through conditional mandatory funds has benefited rural municipalities because local governments have been delivering better services after the 1997 reform, in regard to redistribution, and there is less concern about corruption practices.

The evidence indicates that the more the funds are a function of direct relation with state officials, the less they promote accountability. This is evident on
special projects based on extraordinary conditional funds but it seems highly plausible that the same is true for unconditional funds but in this case it is because of lack of direct relation with citizens.
Chapter 14 - Fiscal decentralisation in practice: impact on public entrepreneurship

This study argues that fiscal decentralisation implies not only changes in accountability behaviour, but also entrepreneurial behaviour. As explained in the literature review, public entrepreneurship is a difficult concept to define.

In the first phase of this investigation, some interesting and suggestive findings were found from national data. However, these findings suffer from all the drawbacks of quantitative data sets with limited and rigid data-collection constraints and variables. Nevertheless, they were useful in two ways. First, they present the “big picture” and second, they inform us in the selection of cases.

The most important suggestive finding is that fiscal decentralisation might be related to entrepreneurship through both unconditional and conditional mandatory funds but the strong association with unconditional funds seems to disappear in the presence of some municipal political circumstances.

In addition, as with the accountability analysis, there is one important source of funds that was not included directly in the quantitative analysis, i.e. the extraordinary conditional funds because this type of funds is not considered part of the local government budget. However, in the qualitative analysis, these funds appeared relevant. Therefore, this research will seek to understand in which ways the extraordinary conditional funds are also related to public entrepreneurship.

Before doing so, it is important to clarify what local authorities on the ground perceive as an entrepreneurial action. Then this research can aim to ratify whether the entrepreneurship index used in the previous empirical analysis is reliable by exploring in more detail each of the entrepreneurial dimensions; pro-activeness, innovation and risk taking.
This chapter is structured as follows: the first Section explores the definition of public entrepreneurship from the local authorities' point of view and the subsequent Sections discuss each of the entrepreneurial dimensions, pro-activeness, innovation and risk taking, embedding the discussion of unconditional, mandatory conditional and extraordinary conditional funds.

14.1 Defining public entrepreneurship in rural local governments

As discussed in the literature (Section 3.2), there is not yet a consensus on the extent and aspects of public entrepreneurship but the concept has evolved from a definition of economic maximisation toward innovation and creativity.

Before presenting the definitions from the participants’ point of view, this study presents briefly how public entrepreneurship was defined and operationalized in this research.

In the first phase of this study, public entrepreneurship was defined as the behaviour of local authorities to act in ways that improve efficiency. It aimed at including the three usual dimensions of entrepreneurship: pro-activeness, innovation, and risk taking. However, two or more of these three dimensions are likely to be encountered in one entrepreneurial action or it can be the case that only one dimension is present. For instance, we can categorize pro-active behaviour to pursue extraordinary funds as entrepreneurial because of the effort and dedication to obtain it. In this case, the pro-active dimension is present. The same example could involve local authorities needing to find out innovative ways to fulfil the requirements of this particular fund. In this case, both pro-active and innovative dimensions overlap.

The three dimensions are all very difficult to operationalize and measure. In the quantitative work this research used four variables- co-operation with public organisations, public service association, property tax update and fiscal effort (the collection of own revenues as a percentage of total revenues). The aim of these indicators was to capture the entrepreneurial actions likely to embrace
one, two or all three dimensions of public entrepreneurship: pro-activeness, innovation and risk taking. Therefore, the ultimate aim was to get a general picture about whether local authorities were involved in actions that might suggest entrepreneurial behaviour.

In the in-depth case studies, with very different sorts of data, this research takes another look at the concepts by considering actions such as co-operation, grant-application facilitation, win-win negotiation, pro-active pursuit of funds and work efficiency.

These types of actions were selected based on: actions identified during a pilot study at the start of this investigation and were: co-operation, grant-application facilitation and win-win negotiation; and other additional actions were identified during the second phase of this study which were: pro-active pursuit of funds and work efficiency.

As shown in Table 14.1, all five entrepreneurial actions denote some sense of co-operation either with local citizens or other public institutions but the entrepreneurial actions, grant-application facilitation and win-win negotiations also describe the use of own revenues as an entrepreneurial action. This is the reason fiscal effort was incorporated as an indicator in the public entrepreneurship index. Grant-application facilitation and proactive pursuit of funds are similar in the sense they both aim at getting extra funds. However, they are different because in the former, local authorities are intermediaries between public agencies and social groups that are eligible for funds, and in the latter, local authorities are the applicants themselves.
Fiscal decentralisation in practice: impact on public entrepreneurship

Table 14.1 Entrepreneurial actions’ definitions and dimensions

<table>
<thead>
<tr>
<th>Type of entrepreneurial actions</th>
<th>Definitions</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) <strong>Co-operation</strong></td>
<td>The use of co-operation to minimise costs for local projects</td>
<td><strong>Pro-activeness</strong></td>
</tr>
<tr>
<td>2) <strong>Grant-application facilitation</strong></td>
<td>Local government can assist and participate actively with local groups in being eligible for funds granted by the state or federal government directly for a specific sector using own revenues.</td>
<td><strong>Innovation</strong></td>
</tr>
<tr>
<td>3) <strong>Win-win negotiation</strong></td>
<td>Local government can negotiate with groups, communities, public and private sector for sharing costs for focused projects using own revenues.</td>
<td></td>
</tr>
<tr>
<td>4) <strong>Proactive pursuit of funds</strong></td>
<td>Local authorities can increase the local budget by pursuing funds other than basic public services.</td>
<td><strong>Risk taking</strong></td>
</tr>
<tr>
<td>5) <strong>Work efficiency</strong></td>
<td>Local authorities can innovate in order to minimize cost or maximize revenues.</td>
<td></td>
</tr>
</tbody>
</table>

During the field work the researcher asked participants to define public entrepreneurship. This was not an easy task for the participants as they had not thought about this matter before. These definitions present an interesting pattern. The following quotes present a range of responses.

EPT-PRE “...Being an entrepreneur is to look for more resources”.

GPT-C “The entrepreneur does not have only one aim; he/she has three or four or five aims (for getting more resources)”.

PPT-C “…an entrepreneur has vision; he/she knows how to apply the resources and where the municipality is going. …”.

AvPT-M “One can go for the easy way. I get one peso, I spend it within the regulation, I justify it and prove the expenses (Accountability). The other way is I get one peso ... what are we going to do with it? We go out and listen to the people, we observe their interest and based on that, we start working together (Entrepreneurship)…”. 
APT-M “We do not have enough financial resources and we have to do amazing things with it. We need to be creative for instance, co-operate with citizens … they work and we provide the material. It is not easy to do. Everyone is about to fight against necessity. … An entrepreneur looks for more, he looks at the future”.

In these definitions, it can be seen that participants refer to efficiency in different ways, ranging from pro-active pursuit of funds by increasing the budget; innovation in order to minimize cost or maximize revenues; and vision, a point of direction where the municipality is going.

These definitions denote the dimensions of pro-activeness and innovation but not much of risk-taking. In this case, participants are purely defining positive attributes of public entrepreneurship. However, during the conversations some participants also pointed out some negative aspects. These aspects can be considered to be more related to risk taking. This point will be reviewed in Section 14.4.

The first quote was the most mentioned definition by participants. It defines entrepreneurship only as a way to increase investment by a pro-active pursuit of funds. Therefore, this action is related to the pro-activeness dimension. Co-operation with citizens was used to portray innovative ways to minimize cost or maximize revenues. In addition, by investing in projects other than basic public services (through extraordinary conditional funds), there is “vision” for the long term social and economic capital.

There is a difference between the responses of mayors and councillors and key political actors in respect of the entrepreneurship definition. For instance, the first three quotes above belong to councillors and a key political actor (ending in –C and –PRE). In these quotes participants refer mainly to a proactive pursuit of funds, in particular extraordinary conditional funds.
But, in the last two quotes, which belong to mayors (ending in –M), mayors went beyond increments in investment and also considered dimensions such as innovative ways to minimize cost or maximize the financial resources. This includes co-operation with citizens such as sharing costs or “faenas” (citizens using their labour skills in the projects). Moreover, in some entrepreneurial examples, increases in fiscal effort and pro-activeness, which is the pursuit of funds, could also be identified. This difference in defining entrepreneurship behaviour was a general pattern in the responses.

Speaking of entrepreneurial examples, following the same argument that mayors and councillors/key political informants define entrepreneurship in a different way, the same pattern is also evident in the examples provided by councillors/ key informants and mayors. Councillors and key informants mostly presented examples related to extraordinary conditional funds as entrepreneurial action which denote a pro-active action. Mayors, on the other hand, presented, in addition, examples of co-operation with citizens and public organizations which denote more an innovative dimension.

Thus, the findings suggest that public entrepreneurship is perceived differently by different actors. Mayors, who are the entrepreneurs in this study, embrace two dimensions (pro-activeness and innovation), whereas local councillors and key informants seem to interpret public entrepreneurship largely as pro-active behaviour to pursue funds. In addition, the discussion leads to the interpretation that risk-taking is not evidently considered as an entrepreneurial action or at least, it is not considered a positive attribute of public entrepreneurship.

The next Section will explore whether, on the ground, the evidence tends to reinforce confidence in the findings from the statistical analysis and if so, in which ways.
14.2 As the saying goes, to be the rice in all kinds of mole

*Mole* is a traditional and popular Mexican food combining chillies and chocolate usually accompanied by rice as a side dish. There are different types of *mole* dishes. Therefore, being “the rice” in all kind of “mole” means to be someone that is everywhere and gets involved in everything or a pro-active individual.

As mentioned above, pro-active pursuit of funds, particularly via extraordinary conditional funds, was the most cited entrepreneurial dimension by councillors and this was also mentioned by mayors. However, there are other interesting remarks about how other types of funds, in particular the decentralised funds, are used indirectly to obtain extraordinary funds, which denotes a proactive dimension.

Most of the entrepreneurship examples indicate that entrepreneurial actions were about pursuing extraordinary conditional funds from federal and state government through their respective agencies. From now on this type of entrepreneurial actions will be referred to as “proactive pursuit of funds”.

The researcher asked participants to explain the entrepreneurial feature of these proactive pursuits of funds. Most participants refer to the fact that they were not only public services, but related to employment or economic development, such as extraordinary funds for business projects, dams, highways; or they explain that these projects were aimed at long-term social and capital development such as businesses and sports complexes.
### Table 14.2 Entrepreneurial actions by type of fiscal arrangements and operationalized variables

<table>
<thead>
<tr>
<th>Entrepreneurship performer</th>
<th>Project</th>
<th>Unconditional: Own revenues</th>
<th>Mandatory Conditional</th>
<th>Extraordinary Conditional</th>
<th>Private Sector/ Community</th>
<th>Type of Entrepreneurial behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good performer</td>
<td>Industry</td>
<td>√</td>
<td></td>
<td>√</td>
<td></td>
<td>Win-win negotiation</td>
</tr>
<tr>
<td></td>
<td>Refurbishment of public buildings</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td>Win-win negotiation</td>
</tr>
<tr>
<td></td>
<td>Trust</td>
<td>√</td>
<td></td>
<td>√</td>
<td></td>
<td>Work efficiency</td>
</tr>
<tr>
<td></td>
<td>Basic Public Service (electricity)</td>
<td>√</td>
<td>√</td>
<td></td>
<td></td>
<td>Win-win negotiation</td>
</tr>
<tr>
<td></td>
<td>Highway</td>
<td>√</td>
<td></td>
<td>√</td>
<td></td>
<td>Proactive pursuit of funds</td>
</tr>
<tr>
<td></td>
<td>Industry</td>
<td>√</td>
<td></td>
<td>√</td>
<td></td>
<td>Win-win negotiation</td>
</tr>
<tr>
<td></td>
<td>Council houses</td>
<td>√</td>
<td></td>
<td>√</td>
<td></td>
<td>Proactive pursuit of funds</td>
</tr>
<tr>
<td>Average</td>
<td>Trash collection</td>
<td>√</td>
<td></td>
<td>√</td>
<td></td>
<td>Co-operation</td>
</tr>
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<td>Clay and Craft Ovens</td>
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<td>Business projects</td>
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Table 14.2 displays the lists of projects participants referred to as entrepreneurial in each case study. The table also shows the source of finance used to carry out the project. This permits the observation of which type of funds is likely to be used more often for entrepreneurial activities. In addition, the table classifies the projects according to the five types of entrepreneurial actions mentioned in Table 14.1.

As shown in Table 14.2, all case studies mentioned proactive pursuit of funds, regardless of their performance and proactive pursuit of funds is the most mentioned type of action. In addition, some examples combine other sources, such as own revenues, or the use of fiscal effort, and unconditional funds to obtain extraordinary funds. Combining funds means that part of the finance for a project comes from state/federal agencies and part from local governments. The local governments’ financial resources come from unconditional or own revenues. This will be referred to as “combined funds” from now on.

In the grant-application facilitation actions, local governments increase local investment by supporting local social groups to be eligible for special funds using own revenues.

AvPT-M “A trusteeship programme called Quality School in Mexico required schools to give $83,000 (Pesos) for being eligible for a school project valued $300,000. We wanted to support all local schools. In the annual competition for the hometown queen, the local government together with all local schools presented an innovative idea. The local government would double the amount invested in the competition. It promoted the participation of schools and students’ mothers. They collected as much money as they could. After the competition, I organised an open public meeting where I invited the governor (who was from an opposition party) and together with the local teachers, we asked the governor to collaborate in the same way. He accepted and the result was that as an example, if a school collected $100,000 it ended up with
$300,000. They agreed that part of the money collected would go to the Quality school programme which was $83,000. This left them with $217,000 but they received funds from the Quality School programme valued at $300,000, which gave them a total of $517,000. This practice was performed during three consecutive years and school investment in infrastructure, maintenance and equipment amounted overall to $1 million pesos per school”.

EPT-M “…We help a group of citizens to get funds for public housing. These are people that do not have houses, for instance, single mothers. They tried for many years to get this fund but they could not do it because the local government did not support them. There was no guarantee that they would finish it. We got 105 council houses with the support of two public institutions and TELEVISA (a private institution)…. They gave this fund to us because we were working efficiently. We assumed the responsibility to execute the work. We worked with this group of citizens but they did something wrong during the work execution and we had to intervene. We levelled the ground where the houses were about to be built. CAN YOU EXPLAIN WHY THERE WAS NOT SUPPORT FOR THIS GROUP BY OTHER LOCAL AUTHORITIES? Because they thought the leader of this group was deceitful. He promised for many years he would get the funds but he could not. He had the intention but he did not have the necessary support to achieve it. He had a big obstacle he could not overcome. We went to Mexico City and to the state government and we got it”.

Another way pro-activeness is manifested in rural local government is when there is co-operation with different sectors, including the private sector.

EPT-M “…it is not only about getting money from state government; a mayor can also get money from the private sector. CAN YOU GIVE ME AN EXAMPLE? When I was a mayor, Channel 13 gave us toys for children’s day. Sabritas (a crisp company) gave us crisps for the children.
Fiscal decentralisation in practice: impact on public entrepreneurship

PEMEX (Oil Company) gave us some wheel chairs for disabled people. ...I know that there are other public institutions that can help, even in the embassies. It is all about knocking on people’s doors”.

AvPT-M “We also worked with the private sector…but sometimes it did not work. For instance, we had a project for an oxidation pond to avoid pollution of the river. A company in the city was polluting but the company did not co-operate, but they did co-operate in other projects such as rural roads, paving and other projects”.

In addition, in the win-win negotiation, extraordinary funds can be obtained if local governments finance part of the project using money from own revenues, unconditional funds or conditional funds (when the projects are dedicated to basic public services or according to the funds’ specifications) and the other part is financed by private, public or social organisations. For instance, in the following example it can be observed how different sources of finance are used to carry out one specific project.

GPT-M “…People want jobs. In my time as a mayor, the local government supported a textile factory. The textile industry came to ask for support and we agreed (the textile industry was redirected to the local government by the state economic development ministry). Local government participated with installation expenses. WHERE DID THESE RESOURCES COME FROM? We paid this from own revenues. But there is always somebody that wants to lead. A woman, I still see and remember her –with a disappointed face-, became leader (of the workers) and told the people (workers) that the factory was paying very low wages. The factory’s owners opted to move to another city where they did not have such problems…”.

Based on this classification, another important distinction in Table 14.2 is between the types of entrepreneurial actions mentioned above and the performance of municipalities. GPT, EPT and AvPT presented more examples
of extraordinary conditional funds that were combined with other types of funds, “the combined funds”. In contrast, the APT and PPT mentioned less of this type of combined funds and largely use examples of proactive pursuit of funds. In fact, 5 out of the 7 entrepreneurial actions were carried out in the municipalities considered as good performers and these projects were financed with different types of funds.

The index of public entrepreneurship may have captured part of the “combined funds” with the operationalized variable fiscal effort. In this case, the types of entrepreneurial action expected to be described were win-win negotiation and grant application facilitation. However, as observed in Table 14.2, co-operation with public organisation and public service association was, in some cases, also accompanied by combination of funds. One other important trend to consider is that most combined funds considered entrepreneurial were often financed through the use of fiscal effort compared to unconditional funds.

In Table 14.2, the underlined tick in the column conditional/ own revenues refers to funds financed through own revenues. It can be observed that 11 out of 13 examples were financed by own revenues.

In the previous discussion, it was clear that unconditional funds and, to a lesser extent, conditional mandatory funds, can be used as a part of a mechanism of combined investment between municipality, state and central government, similar to fiscal effort.

In regard to conditional mandatory funds, a participant claimed:

GPT-C “Mandatory conditional funds are, in my point of view, very efficient. This type of fund invites mayors to spend resources for the good of their people…It has some “padlocks” for the mayors…. And as a result, mayors can work harder and seek MORE funds”.

325
Thus, unconditional and conditional funds might not be direct factors for a pro-active behaviour on entrepreneurship as they are mandatory for all rural municipalities. But they have contributed indirectly to a more pro-active pursuit of funds.

According to the previous empirical research, unconditional and mandatory conditional funds are positively associated with entrepreneurship. It means that an increase in unconditional and conditional funds is associated with, and seems likely to encourage, co-operation with private, other public sector agencies and society, as well as increases in own revenue collection.

In the field work, it seems clear that one way unconditional and conditional mandatory funds have an effect on entrepreneurship is by indirectly enabling local authorities to pursue extra funds. Thus, they have an important but indirect effect on the pro-active dimension of entrepreneurship and extraordinary conditional funds have a direct effect.

This proactive behaviour, the pursuit of funds through combined funds, seems to be bound up with the decentralisation process as fiscal decentralisation secured local governments fund for basic expenses (unconditional funds) and services (conditional mandatory funds) and this enables them to pursue extraordinary funds. In addition, with these decentralised funds, local authorities are enabled to allocate funds (due to high discretion) through own revenues and unconditional funds (mainly).

14.3 As the saying goes, where there's a will, there's a way

The fiscal decentralisation theory assumes that higher revenues encourage local authorities to seek new ways to attract both businesses and people in order to activate the local economy and extend the tax base.

Attracting businesses and extending the tax base are two actions that were likely captured in the index for entrepreneurship because, to some extent, the
index measures direct increases in own tax collection through fiscal effort which are a consequence of attracting more business to the municipality and extending the tax base.

In regard to the local economy, participants in the case studies presented examples of local authorities’ awareness of the needs of employment and the importance of extending their tax base. Some examples that reflect their commitment to creating employment are the following:

EPT-M “…I managed to get an investor for the city and I got very disappointed because in the end, I realized that the payment for “taxes for the use of land” was collected by the state, not the local government. This happened because we did not have all the proper paper work, namely the urban development plan and legislation. I called the local council out for an urgent meeting and told them “how is it possible that the business we invited would pay $2.7 million pesos in taxes to the state? This factory agreed with the state to pay $200,000 in instalments. I managed to get $400,000 out of the $2.7 million for the local government… The previous administration left us with a tax collection of $400,000 pesos. I took it to $800,000 pesos. All of this because of the business we invited. Now, the tax is paid here to the local government. This increases our own revenues”.

EPT-M “We invited investors to come here. In fact, we suggested to the governor to build the new refinery in this area because here there are many lands that do not produce anything. I told him that we have PEMEX (Mexican Oil Company)’s duct so, why do you need to destroy productive lands somewhere else and you do not take advantage of these lands that are almost dead? People from the CFE (Electricity Company) helped us to take aerial maps and advised us in order to present a good project. A lot of people were very interested because the economy would flourish. Derived from this, I achieved to bring an investor (textile industry). We managed to give jobs to the people. For me, this was very important. At the end, we did not achieve our aim (of bringing the refinery). The
governor already had commitments somewhere else. I told him that he would pay 100 thousands pesos for each hectare there, it was very expensive. I convinced the other investors because the land here is cheaper…”.

GPT-C “We invited a company to set up here….they found a piece of land that belongs to the city. We were supporting them but the problem was that our city does not yet have good road communication. The investors said that it took them too long to reach the city”.

Some of the projects mentioned by participants in regard to employment were unsuccessful. For instance, the second and third quotes are examples of “good intentions” where local authorities initiated change (pro-activeness) finding innovative ways to gain investment. However, the end results were unsuccessful. Regardless, this investigation is not aimed at successful entrepreneurship actions only. The definition of public entrepreneurship does not require success in all actions. It aims at exploring incentives that may or may not result in success.

The important point to reflect on is that, even though local authorities have quality information and willingness to foster investment, most examples related to employment did not last long or were never accomplished due to different circumstances. In this regard, participants pointed out that they are at a disadvantage compared with other municipalities.

GPT-M “…we cannot compete with other neighbour municipalities because they are in the industrial corridor. We cannot because we do not have anything”

EPT-M “…rural municipalities need more resources in order to compete with other neighbouring big municipalities. Developed cities have and continue to have money because they generate their own resources. Our municipality does not generate because the geographical conditions do
not generate… if they do not give the resources directly at least they should help us to build infrastructure that can increase resources here in the municipality”.

The results of such competition seem to support Prud’homme’s (1995) argument of unequal competition and poor regional redistribution. For rural municipalities there are obstacles due to poor infrastructure and inherent geographic characteristics of rural areas.

The other innovative aspect that decentralisation implies to promote is related to cost reduction either by running public services better or by investing in public works. The decentralisation policy seems to have improved this aspect. Interestingly, EPT and GPT were the only municipalities that present examples of how work execution can lead to work efficiency (see Table 14.2).

Work execution is seen as an opportunity to be innovative. Work efficiency minimizes the cost or maximizes the resources local authorities use in public works. Theoretically, there is a fear that higher conditional funds would increase dependency and discourage both further investment in public works using unconditional funds and fiscal effort. However, on the ground some evidence suggests that the opposite could also occur under the premise that local authorities execute the work.

EPT-M “We faced the worst financial crisis of our time, we faced the influenza pandemic, the local budget was cut by more than 4 million and nevertheless, I can tell you honestly we did more than in other administrations. We looked for more investment. We asked PEMEX (Oil Company) for a donation. We built a road from here. The previous administration, they arranged this road from here up to my parents’ house but they stopped there because it was my parents’ home. This happened when I lost the first political campaign. But, we built the road from here and for more than four kilometres with PEMEX support. You can see, it is very good quality. We built it for 1.2 million pesos. We hired
a machine to make our own material; we bought some things and lobbied others. We made the tarmac, so it was cheaper. We looked for ways to make more with less”.

GPT-M “… There are some funds (extraordinary conditional funds) that are completely earmarked and they have a set date to execute the work and if you do not finish you have to return the money. The mandatory conditional funds are not like that. Sometimes we had an excess because of interests or savings from public work. Then, we could propose some other public work and we could do the public work in the next accounting exercise. When I was there, we never returned money”.

Under extraordinary conditional funds, local authorities might or might not execute the public work depending on the specifications of the fund. If they execute the work, it is seen as an opportunity to be more efficient. This allows local authorities to save from their own resources and invest in other public works. Inversely, as observed in the next quote, work execution by the state is perceived as a disincentive for productive efficiency and as a threat to allocative efficiency.

APT-M “When I execute the public works, I am able to decrease the cost. HOW DO YOU DO IT? For instance, for public work worth 1.5 million pesos you can buy cement at 500 pesos but in reality it cost 100 pesos. In this way, I can save. Public work worth 1.5 million I know I can do it for 500-700 thousand (pesos)...it is the engineers’ mafia. They tell you what to do... Another example, the new state programme called PESO A PESO (50%-50% share between state and local governments). Not even people from the same political party as the governor agree with the programme. The state executes the work. A public work worth 1 million pesos, they value it for 2 million pesos. Let’s say that we execute the job and the state government says it costs 2 million pesos. In this case, it does not matter if they inflate the numbers, because we can do something with the savings. But that is not the situation, they execute the
work. The municipality puts one million pesos (50% share) and I know that I can make it for 700 thousand. We are giving away 300 thousand pesos to them and we are still the means to get 1 million more. In the first year of my administration, it happened. I did not know. They took me by surprise. I gave them 5 public works at around 5 million. But sewage that cost 1 million pesos, they value it for around 3 million pesos. I did exactly the same sewage work for 1 million pesos and with the same level of quality. Besides, if they do the work, they do not come back to fix details”.

The execution of work by state government seems to discourage entrepreneurship. The other issue is related to the use of excess when savings are achieved. This is not a problem under the conditional funds and, therefore, this is clear evidence that fiscal decentralisation via conditional funds has, in some cases, been an important enabler for local authorities to become more innovative in the ways they perform their work.

EPT-M “…the problem is that, if the funds are completely earmarked, then they have a period for execution and if you do not execute it, you have to take it back”.

GPT-S “Sometimes we get budgets that are high and we could manage to get an excess. This is good, it means you are investing properly, because most of the time it is the opposite, you do not have enough money. We should be able to use this excess for things that are not earmarked because we have already achieved the objective. Now we can use the money for something else”.

At this point, the reader is aware how difficult it is for this group of municipalities to increase tax effort. All municipalities collect the same taxes and use the same revenue sources. However, some rural local governments try to implement innovative actions in order to increase tax effort. Therefore, fiscal effort reflects success in some fund-seeking areas. Some examples are:
AvPT-M “A co-operative farm with a population of 250 inhabitants had had a property-tax debt with the local government for many years. I had a meeting with the community and suggested that if they paid the debt off, the local government would provide the same amount of money to invest in a local project. They accepted and decided to invest the money in a bridge because this community is located between two rivers and every year, at least three times, the river used to flood, leaving the community isolated from its hometown. A suspension bridge was built.”

AvPT-M “I hired an expert in land valuation but we did not have enough money for sophisticated studies. I decided to invite students from the local high school to collaborate as part of the compulsory social service. Students were trained and divided into groups to visit local properties that were detected as irregular due to low land valuation. In the end, the revenues from property tax increased by 78% that year without raising the tax rate. Then, the initiative of local government minimised costs and increased its own local revenues in adverse circumstances.”

In Table 14.2 it can be seen that municipalities that score high on the entrepreneurship index (GPT and EPT) tend to also be the municipalities that presented examples of work efficiency (and combined funds). This tends to suggest that the entrepreneurship index is indeed providing a measure of public entrepreneurship.

In particular the EPT illustrates a relevant example of entrepreneurship behaviour- the hunting ranch. This project was the most remarkable, expensive running project that I encountered in this group of municipalities, not only because of the extent of investment, but also because it was based on careful consideration of the municipality’s strengths and a novel effort of co-operation between municipalities.

This hunting ranch was proposed by a local citizen and supported by the mayor of the EPT at the time. They invited and organized mayors from three nearby
rural municipalities and applied for funds from the agency in charge of promoting eco-tourism. It consists of sustainable hunting of wild boar, turkey and deer. The municipalities agreed to set aside money from their own revenues and unconditional funds to finance part of the project. The project progressed significantly during the time the entrepreneur mayors were in office. However, after the pioneers finished their administration, the participants claim that not enough effort was been made for the project to grow.

Thus, on the ground, the actions of the EPT seem indeed more entrepreneurial compared to the other municipalities. This supports the idea that the index, though imperfect, did capture entrepreneurial actions and that decentralisation increases entrepreneurship behaviour under certain circumstances, as hypothesised.

The evidence suggests that fiscal decentralisation, particularly the decentralisation reform from 1997, benefited rural municipalities by having regular grants. Local authorities could engage in more decision-making, as well as experiencing less political arbitrariness. This has given room for innovative actions in rural local governments. This seems to be the reason and increases confidence in the findings from the quantitative analysis that fiscal decentralisation, if seen as stable, is likely to increase public entrepreneurship. Innovation in rural municipalities should be understood in terms of work efficiency, co-operation and tax effort. Co-operation and tax effort were likely captured by the entrepreneurial index developed in phase one. However, the index does not capture work efficiency.

14.4 As the saying goes, nothing ventured, nothing gained

This saying means that you should not expect to achieve anything noble if you never take any risk. In this Section the researcher will explore whether public entrepreneurship may lead to risky actions and whether this is a consequence of fiscal decentralisation.
Risk-taking is a key dimension in public entrepreneurship. However, there was no good data to measure it directly. In Section 14.1, the discussion showed that risk-taking behaviour was not included in the definition given by participants. However, theoretically risk-taking is a key dimension.

It was argued that the participants were inclined to describe only positive aspects of public entrepreneurship and this might indicate that risk-taking is not considered a positive attribute. In this regard, when participants tried to compare accountability and public entrepreneurship, some of them ended up raising concerns about the risk-taking behaviour of public entrepreneurship.

PPT-C “I think that being accountable and being entrepreneurial could go hand in hand. I mean that you can be both accountable and entrepreneurial. But, there are mayors that are entrepreneurs but unaccountable and vice versa...we need a mayor that does both, a mayor that is accountable in how he manages the resources and (entrepreneur) that has vision, that knows how to apply the resources and where the municipality is going. ...Entrepreneurship helps a lot but being entrepreneurial could cause some problems with accountability...”.

GPT-C “…being accountable and entrepreneurial go hand in hand because a person who is responsible if he/she is enthusiastic, would be entrepreneurial… if he/she looks for more projects for the benefit of the municipality… But if the mayor is only a little responsible I would say that a mayor could be shameless and be apparently entrepreneurial but not responsible. The thing is a mayor always has commitments with people and very often they do not do things adequately”.

From the field work, it seems that the concern is mainly present in the pro-activeness dimension of public entrepreneurship, and particularly with the extraordinary conditional funds classified as proactive pursuit of funds. The risk-taking behaviour of pursuit of funds presents two issues and the evidence was already discussed in previous Sections.
First, the pursuit of funds might be based on political reasons, not on local necessities. In Section 13.1, it was pointed out that two municipalities governed by mayors that belong to a different political party than the governor obtained deliberately federal projects instead of negotiating state funds. They rejected any relation with the state government due to political rivalry and sought extraordinary conditional funds directly from the federal government which belongs to their political parties. Then, a closer look at local political dynamics showed apparent changes in the political bargain dynamics with other government levels. This is part of the risk-taking behaviour of local authorities.

The use of extraordinary funds for political reasons is not surprising but it is interesting that this group of municipalities, which are politically not as significant as populated cities, are engaging in such dynamics. This seems to be bound up with both the decentralisation process and the political circumstances. On the one hand, unconditional and conditional mandatory funds are compulsory for all municipalities, and local authorities, to some extent, enjoy a more stable revenue for current and basic public services. In contrast, the extraordinary funds are at the expense of political bargains. On the other hand, due to changes in political competition at all levels of government, there is more diversification of political parties in the government.

The rationale from the local authorities' point of view is that it does not matter from where the resources are channelled (state or federal government) as long as they benefit the municipality.

Indeed, the pursuit of funds is a desirable action. However, as claimed before, the types of projects promoted by state and federal government have different aims. The case studies here show that extraordinary conditional funds may be used for investment that is not a priority in this group of municipalities and in some cases, even involving the risk of the projects remaining uncompleted, as in the council houses examples presented in most case studies. This might have collateral problems in rural municipalities such as “white elephants”, as
participants called unnecessary investments. Three out of the five municipalities that obtained federal projects express this concern.

Second, because the risk-taking behaviour seems to be particularly evident with extraordinary conditional funds, there is more concern about corruption practices. It is important to remember that in Section 13.2, the discussion about corruption presents two remarks with regard to extraordinary conditional funds. First, they seem to be more prone to corruption practices because they are highly politicized and second, citizens are not aware of the specifications of these funds. In this case, negotiation and political abilities determine whether or not a local government obtain the funds.

A mayor explains this very clearly:

AvPT-M “It is obvious that how you ask is what you get. You have to be very polite. In my case, I am in state-level opposition with the governor. I have to invest more into politeness (sarcastic); I have to dedicate more attention to the governor. I should not greet someone with somebody else’s hat (it means: to take (unfair) advantage of an achievement that is somebody else’s). I have to show the people that the governor, as well as myself, is working for them. Politicians are like actors. They need applause. Then, we need to tell the people that the governor is supporting us”.

Thus, risk-taking behaviour in rural municipalities is not straight forward. It seems that rural authorities do not embrace it as a positive aspect of public entrepreneurship and the actions where it might be present are sometimes a matter of concern, particularly in relation to the pursuit of extraordinary funds. Nevertheless, as the pursuit of funds seems to be an indirect consequence of the decentralisation process, it seems pertinent to state that risk-taking behaviour has increased.
14.5 Summary

The first aim of this chapter was to ratify the idea that decentralisation increases entrepreneurship behaviours as claimed in the previous findings.

Indeed, there is evidence to support the findings that fiscal decentralisation via unconditional and conditional funds might contribute to increasing entrepreneurship behaviour. This is an important piece of the puzzle for public entrepreneurship. The means by which this sometimes occurs is by giving more financial stability to local governments and room to pursue funds beyond basic public services.

The decentralisation process indirectly encourages public entrepreneurship by promoting a pro-active pursuit of funds (pro-activeness) and directly by enabling work efficiency (innovation).

The pro-active pursuit of funds seems to encourage “combined funds” to acquire extraordinary conditional funds and this reflects some success of fiscal effort and unconditional funds in some fund-seeking. In addition, decision-making, though limited, in conditional funds gives room for work efficiency in local projects using innovative means to make the most of the money.

Although risk-taking behaviour was not considered as a relevant positive aspect of public entrepreneurship by participants, it seems that risk-taking tends to appear in the pro-active pursuit of funds, raising some concerns about efficiency.

The second aim of this chapter was to confirm whether municipalities that scored high on the entrepreneurship index tend to also be more entrepreneurial on the ground. In this chapter it has been demonstrated that indeed the municipalities with a higher score on the index were more entrepreneurial on the ground. This means that the entrepreneurship index, although imperfect, did capture part of the intended effect. Fiscal effort was the variable that might have
Fiscal decentralisation in practice: impact on public entrepreneurship

captured most of the effects but also the indicators to denote co-operation did contribute.
Chapter 15 – Fiscal decentralisation, a trade-off of efficiency: Conclusions

In this final chapter the findings from the quantitative and qualitative analyses are integrated and related to the theoretical framework. It discusses the theoretical implications and the main areas of contribution that this research has provided to new knowledge. Then, it outlines the policy implications for rural local governments and lastly, presents limitations of the study and suggestions for further research.

15.1 Fiscal decentralisation and behavioural factors

A major part of this research involved operationalizing key concepts identified in the theoretical literature. Taking into consideration the availability of municipal-level data sources in Mexico, this research used a range of variables to compose two indices intended to measure Accountability and Public Entrepreneurship.

The Accountability index includes indicators aimed at capturing transparency, responsiveness and responsibility. Among these indicators were promotion of citizens’ participation, average number of local regulations in place, percentage coverage for a number of basic public services in/outside the municipal seat (excluding water and sewage service), and the percentage of administrative and public works spending.

Similarly, an index for Public Entrepreneurship was built. In this case, the indicators were aimed at capturing three dimensions: pro-activeness, innovation and risk-taking. The indicators were based on different actions identified as entrepreneurial. From these entrepreneurial actions two characteristics stood out: co-operation and the use of own revenues to carry out local projects. Therefore, variables that could capture these two characteristics were selected among them: whether municipalities have been involved in co-operation with other municipalities for any specific
project; or with public, private or social groups for the delivery of basic public services; the level of fiscal effort in the municipality; and whether there have been recent updates in the tax system. These indices, although imperfect, were used to build up a general picture that could be used as a base to compare and interpret information on the ground.

This research tested the hypothesis that increases in the level of funds obtained due to decentralisation encourage both Accountability and Public Entrepreneurship as the fiscal decentralisation theory implies. Two sets of funds were tested, unconditional and mandatory conditional funds. The difference in these two types of funds lies in the level of discretion each one designates; this being that unconditional funds delegate higher levels of discretion than conditional funds. However, the conditionality on conditional funds still leaves open some room for allocation decision-making.

In order to test these propositions, national data were analysed and case studies of individual municipalities were also carried out.

One hypothesis tested was that unconditional funds were positively related to changes in both accountability and public entrepreneurship.

![Diagram](image)

Figure 15.1 Theoretical Framework results: Unconditional funds and behavioural patterns
As shown in Figure 15.1, the "big picture" derived from data analysis was that increases in unconditional funds seem to have been detrimental for accountability and significantly positive for public entrepreneurship.

On the ground, it has been confirmed that unconditional funds do seem to discourage some aspects of accountability. It is important to remember that the index of accountability did not directly capture corrupt practices. Nonetheless, in the field, unconditional funds were generally perceived more susceptible to corrupt practices and misuse. In other words, these funds are not conducive to increasing, or encouraging, accountability. Fieldwork also suggested that the negative association that is captured in the national data was mainly due to those indicators which are associated with responsibility (administrative spending level and public work investment).

However, although they seem to work against accountability, unconditional funds seem to benefit responsiveness by enabling local authorities to undertake actions urged by their citizens, and the reason is potentially the freedom in allocation decision. In this aspect, the field work shows that responsiveness was generally perceived as positive in this group of municipalities. During the field work, it could also be observed that the indicators used to measure the responsiveness dimension of the index were viable and appropriate measures.

Figure 15.2 Theoretical framework results: Conditional funds and Behavioural patterns
In contrast, the “big picture” of conditional mandatory funds emerging from the national data shows that increases in conditional mandatory funds seem to encourage positively both accountability and public entrepreneurship, as shown in Figure 15.2.

On the ground, it was found that the means to promote effective accountability through mandatory conditional funds is not only related to the earmarked nature of the fund. Once more, it was found that that delegation of authority to allocate the funds within the municipality, although limited, nonetheless enables local authorities to respond to citizens’ preferences, as the theory of fiscal decentralisation suggests.

Similar to the unconditional funds, mandatory conditional funds give enough authority for local authorities to allocate the resources based on citizens’ desires. However, the earmarked nature of the conditional mandatory funds seems to curb to some extent corruption and misuse, because citizens are informed and become involved in the allocation of these mandatory conditional funds. Again, as the theory of decentralisation suggests, qualitative case studies support the idea that the citizens’ voice is heard because of the close relationship between authorities and citizens.

As shown in Figure 15.2, the “big picture” also suggested that mandatory conditional funds might be related to increases in public entrepreneurship.

In the field work, evidence was found that mandatory conditional funds are indeed used for entrepreneurial actions. In particular, these funds were used to maximize resources for local projects or minimize costs for public works. In the field work, most of these actions fell into the “innovative dimension” of public entrepreneurship and particularly for this group of municipalities, the evidence suggests that in the use of conditional mandatory funds local authorities make use of co-operation in order to maximize resources or minimize costs.
It could be argued that co-operation can also (or partly) be categorized as pro-activeness. Indeed, this could be the case. However, for the use of this study co-operation was classified in the innovative dimension because an important pattern was found in the empirical work. This being that, when using conditional mandatory funds, rural local authorities are more inclined to consider co-operation as a way to “innovate” whereas for obtaining extraordinary conditional funds co-operation is considered as pro-activity.

The importance of co-operation supports Mack’s (2008) findings that connection with the local community is an important factor in public entrepreneurship and also Faguet’s (1997) argument that co-operation is facilitated in rural municipalities because it is easy to “wear the same shoes” and local authorities have a close relationship with their citizens. However, it needs to be considered that co-operation in rural municipalities is not set in stone. Local authorities need to persuade citizens and other private and social groups to engage in co-operation and this is considered an entrepreneurial action in this group of municipalities.

On the ground it was also found that the municipality considered most entrepreneurial presented more types of entrepreneurial actions compared to the rest of the case studies. Therefore, this gives some confidence in the interpretation of the statistical results.

The field work results support the choice of indicators to capture the entrepreneurial behaviour of rural local governments. The inclusion of fiscal effort and the indicators measuring co-operation were particularly useful.

The importance of fiscal effort for public entrepreneurship supports Barlett and Dibben’s (2002) findings that local authorities tend to engage in innovative enterprises due to local fiscal pressure. But, in addition, this
study shows that using own revenues potentially for increasing the local budget through combining funds is a more important driver.

These findings are consistent with the decentralisation theory in some ways but much less so in others. Decentralisation theory suggests that with fiscal decentralisation, accountability and public entrepreneurship could be expected to improve. Moreover, it suggests that this should be particularly true with the unconditional funds as they delegate higher degrees of autonomy, which is the core of the decentralisation argument. In contrast, the findings of this research imply that “some degree of flexibility” in allocation decision, but not full autonomy, can be an important element to motivate local authorities in rural municipalities to behave in both a more accountable and a more entrepreneurial fashion.

This is to some extent similar to the findings presented by Kim (2010). He found that the organizational characteristic “flexibility” promotes public entrepreneurship but, as argued above, in this research only “some degree of flexibility” might be necessary.

Full discretion (through unconditional funds) might lead to poor accountability due to corrupt practices, and poor responsibility in the use of financial resources. However, unconditional funds because they allow greater allocative discretion, also give scope for gains in responsiveness and they can drive pro-activeness when they are used as a mechanism to pursue additional funds.

While the research was designed to use mixed methods throughout, using case studies to explain relationships that appeared in the statistical data, this was impossible in the case of extraordinary conditional funds. The evidence on their use is nonetheless important, and sheds further light on complex fiscal incentives.
In general, local authorities called attention to the political agenda of state and federal governments that characterized the extraordinary conditional mandatory funds. Apparently, this has led to new political games in rural municipalities, where the conditional extraordinary funds play a key role as they are sometimes used to support municipalities controlled by opposition parties. This, however, is not only limited to state level, the field work demonstrates that both state and national level governments are sometimes part of this new political dynamic.

On the ground, it was clear that local authorities consider extraordinary conditional funds as a driver of pro-activeness and those extraordinary conditional funds are at the heart of overlapping incentives where the decentralised funds, unconditional funds, fiscal effort and, to a lesser extent, mandatory conditional funds, are combined in order to obtain extraordinary conditional funds. Thus, the pursuit of funds — which may not be successful— can be categorized as risk-taking behaviour of rural local authorities and, in the field work, this behaviour was found to lead in some cases to poor responsiveness. Thus, there is some evidence supporting the claim that accountability and public entrepreneurship can have some contending elements, particularly due to the risk-taking behaviour of public entrepreneurs.

As fiscal decentralisation includes different types of funds promoting different types of behaviours, it follows that fiscal decentralisation presents evidence of a trade-off in efficiency.

15.2 Fiscal decentralisation and the political environment

Drawing on the premise that local politicians attempt to maximize their political survival by behaving in a more accountable and entrepreneurial fashion, this research tested the hypothesis that political competition may either reinforce the impact of fiscal decentralisation or it may, irrespective
of fiscal decentralisation, be a major independent factor that explains changes in behavioural patterns.

As shown in Figure 15.3, the “big picture” shows that greater political competition – measured using the difference in the share of votes obtained by the two strongest parties - seems to reinforce the negative changes in accountability through unconditional funds and it may also discourage directly public entrepreneurship.

However, the impact of political competition was not statistically significant. Moreover, the statistical analysis found that other political variables did not show a consistent and robust effect. These other variables include: state-level opposition, political party affiliation, and the interaction of political competition and state-level opposition.

Once the evidence on the ground was collected, the influence of local politics on behaviour became obvious, as does the strong influence of state and national politics. More importantly, the influence of state and national politics became relevant once the extraordinary conditional funds were in the picture and extraordinary conditional funds were found to be more prone to corruption and risk-taking behaviour. Therefore, on balance, the evidence tends to support an important but in some cases negative-
influence of political competition and state-level opposition on local authorities’ behaviour.

In summary, the overall evidence suggests that fiscal decentralisation, specifically delegation of allocation decision, may explain some of the changes in both accountability and public entrepreneurship, and political competition may reinforce some of these effects.

15.3 Behavioural patterns, political competition and Government performance

In addition to having looked at behavioural changes in Accountability and Public Entrepreneurship, this research tested the association of behavioural patterns and political competition on government performance. In the final analysis, the contribution of this research is based on the idea that fiscal decentralisation through changes in accountability and public entrepreneurship have tangible effects on government performance. Thus, the hypothesis was that accountability, public entrepreneurship and political competition are positively associated with government performance, measured as coverage of basic public services.

Local government performance was operationalized using a single indicator. This study recognizes this measure is imperfect because government performance is multidimensional. However, the rates of coverage of water and drainage as a performance indicator were selected, partly because a good data series was available, but also, crucially, because these basic public services constitute part of the legal responsibilities of local governments in the country. In addition, citizens expect, as a minimum, to enjoy these basic public services and, in rural municipalities, coverage of these services is still behind the national average.
To remind the reader, the variable *local government performance* includes only water and sewerage services. Water and sewage services were excluded from the variable *Fair Distribution of Resources* of the *Responsiveness dimension* of *Accountability index* in order to hold back these key indicators as an outcome variable.

The analysis of government performance was framed, once more, under the theoretical premise that fiscal decentralisation through changes in behavioural patterns promotes better government performance.

Because of data limitations in the index variables, this study presents two different models of local government performance. In both cases, Coverage of Basic Public Services is used as a dependent variable. In one model, the independent variables are accountability index and the political variables. In the other model the independent variables are public entrepreneurship index and the political variables.

As shown in Figure 15.4, and as this research framework expected, the findings suggest that changes in accountability, public entrepreneurship and political competition seem to be associated with positive changes in CBPS. More importantly, the decentralisation variables appear to explain most of the positive changes in CBPS in the models and increases in the public entrepreneurship index explain more the positive changes compared to increases in accountability indices. These findings support the original argument that accountability and fiscal decentralisation have a
positive but different impact on government performance and that public entrepreneurship might have a larger effect.

This research also incorporated political competition and the other political variables in the model of government performance. Indeed, the statistical analysis presents a positive association between political competition and government performance, but its effect is lower than the behavioural patterns and, in most cases, this did not change if the models included other political variables.

This is opposite to the previous findings of negative association between political competition and behavioural patterns. The reason is the selection of variables. While government performance denotes outcomes, the behavioural indices include actions. Therefore, means and ends seem to differ.

Thus, the findings suggest that fiscal decentralisation arrangements appear indeed relevant and are associated with measurable changes in local government performance.

15.4 Government performance: a fuller model

The previous statistical analyses were based on changes after the 1997 reform in Mexico. There are no data to test behavioural patterns before the reform, but there is sufficient information to test for changes in the political environment. This final analysis explored whether the influence of political competition on government performance has changed since the mayor decentralisation process of 1997, using a dataset from the pre-reform period, from 1990-1997, and the post-reform period, from 1998 to 2008.

Under the premise that political competition encourages better performance, this study analysed again to what extent political competition was likely to increase CBPS before and after the reform, in addition to
incorporate the other political variables in the model. In the model, CBPS is included as a dependent variable and political competition and other political variables as independent variables. This model was run for the pre-reform period and replicated for the post-reform period. Figure 15.5 highlights the main analysis and results. In the pre-reform period, there were no conditional mandatory funds; in the post-reform period, the mandatory conditional funds were already in place.

Figure 15.5 Theoretical framework results: Government performance and Political competition before and after the 1997 fiscal decentralisation reform

As shown in Figure 15.5, in both periods political competition explained increases in CBPS, although modest. However, the effect appeared larger in the post-reform period.

There was not enough evidence to accept the hypothesis that there was state-favouritism in municipalities before the reform. This is consistent with Moreno-Jaimes’ (2007) findings that there is no difference in service coverage in municipalities with state-level opposition, but this research presents evidence for rural municipalities in particular.

The results suggest that there are no relevant changes that could be attributed to the decentralisation reform based on these political variables, but it gives insights that intervention may occur in more complex situations and corroborates a constant statistical finding that being in opposition per se drives better performance. In the field work, it was found that, before the reform, favouritism or patronage from state and federal levels was not a
major issue in these municipalities, but, rather, many rural municipalities were segregated from the state governments, potentially because small rural municipalities have low political weight. However, due to higher political competition, intervention in the case studies towns emerged.

Moreover, in this group of municipalities, there is a general perception that Coverage of Basic Public Services has improved in recent decades and especially the redistribution of basic public services within the municipality. This improvement was in many cases related directly to the decentralisation reform of 1997.

Based on both pieces of evidence, it can be argued that political competition plays (to a lesser extent) an important but complex role in government performance. It seems to be a double edged sword for government performance.

In summary, there are reasons to believe that there are specific fiscal arrangements towards rural municipalities in Mexico that can be promoted further in order to benefit its structure of incentives. These incentives are not confined to controlling corruption and accountability measures in general, but they can also boost entrepreneurial behaviour, and this behaviour, in turn, can lead to a greater impact on government performance.

This implies that the current decentralization strategy in rural Mexico requires important changes for its success, placing special attention on the design of an adequate structure of incentives to make local authorities more likely to comply with their statutory and expected duties, but also to enable them to behave in a more entrepreneurial fashion.

15.5 Theoretical remarks

This study is based on the general theoretical assumption that fiscal
decentralisation promotes both allocative and productive efficiency and, therefore, government performance. Thus, it argues for the importance of evaluating the mediating behavioural factors between fiscal decentralisation and government performance.

The theoretical framework proposed here assumes that allocative and productive efficiency are related to actions of accountability behaviour and public entrepreneurship. Therefore, the findings from accountability and public entrepreneurship are related to the arguments of fiscal decentralisation’s efficiency in general.

In regard to allocative efficiency, Tiebout’s (1956) theory of citizens “voting with their feet” implies that local authorities would behave in a more accountable fashion in order to maintain citizens’ support by providing the public services citizens prefer. In this group of municipalities, there are low levels of own revenues through taxes, they lag behind basic public service provision, and citizens struggle with basic needs, therefore, Tiebout’s (1956) theory is not fully applicable. Instead, as Prud’homme (1995) argues, revealing preferences is not the main concern in this group of municipalities, rather it is satisfying “basic needs”. Therefore, there are not potential large gains from the matching preference theory.

On the other hand, Oates’ (1972) theorem of comparative advantages (in allocative and productive efficiency) of provision of public services between the central and local government appear relevant in this group of municipalities but only to some extent. This research cannot compare central and local government provision of basic public services but it presents a case to understand the extent of the advantage of rural local governments. In this regard, the findings suggest that being close to the people and to first-hand information can help to improve responsiveness, part of accountability, and innovation, part of public entrepreneurship, but the structure of fiscal incentives can lead to issues of responsibility and risk-taking behaviour. This is consistent with Bellone and Goerl (1992) and
Borins’ (2000) arguments that accountability and public entrepreneurship share some contending elements. Thus, if the structure of incentives is not adequate, fiscal decentralisation can lead to a trade-off of efficiency.

Some reasons have already been discussed in the literature, for instance Tanzi (1996) warns about the contiguity factor, which is especially relevant to this group of municipalities. The contiguity factor means that the fact that people have known each other since childhood may lead to alliances and preferential treatments among citizens. Indeed, this study presents evidence of issues related to the contiguity factor. But more importantly, it highlights how some funds are more prone to be used for these aims and it is not only due to flexibility or discretion, as in the case of unconditional mandatory funds, but also due to political bargaining games, as in the case of extraordinary conditional funds. In addition to the contiguity factor, this study found that loss of authority, due to contiguity factors, can lead to inefficiencies.

In regard to productive efficiency, the fiscal decentralisation theory presents arguments suggesting entrepreneurial behaviour. In general, the theory suggests that delegation of higher resources to local government levels promotes competition. Horizontal competition (Tiebout, 1956, Tanzi, 1995) is achieved by local authorities competing for investment and revenues, as well as by allocating expenditures efficiently compared to other jurisdictions. In addition, because central government power is diversified, the leviathan hypothesis proposed by Brennan and Buchanan (1980) states that the central government does not monopolize control over the economy, and Jin and Zou (2002) state that it downsizes central government and spreads power away from the centre (cited in Ezcurra and Pascual 2008, 1188). Thus, competition is increased and territorial imbalance decreased.

This study presents some evidence that horizontal competition in this group of municipalities is not generally positive. The level of development
of these municipalities, geographical disadvantages and the low levels of revenues along with limited taxing power leave them with disadvantage over other more developed municipalities. This is in spite of improvements in public entrepreneurship, which this research argues fiscal decentralisation promotes (more than the expected benefit in accountability). Therefore, the extent of the impact of public entrepreneurship in this group of municipalities is limited.

In regard to tax collection, even though local taxes are an important part of the decentralisation theory as Tiebout (1956) suggests, there are concerns that higher revenues from the centre are likely to induce less fiscal effort. It is argued that this group of municipalities may increase total expenditure without increasing tax collection, the so-called “flypaper effect” or that local authorities can become just “fiscally lazy” and be discouraged from increasing own revenues (Melo, 2002).

Indeed, the evidence suggests that in this group of municipalities, own revenues have declined as a percentage of total revenues and also, there have been insignificant increases over time in absolute real terms. This is consistent with the theoretical literature. However, this research also presents evidence that, for public entrepreneurs, own revenues can represent an effort to increase efficiency, if they are used as a mechanism to increase the local budget via other types of funds.

The findings are also consistent with Tanzi’s (1996) argument that fiscal decentralisation can promote “experimentation” by taking advantage of local knowledge and proximity to citizens. However, this study found evidence that some specific arrangements, in this case in the form of conditional mandatory funds, are more likely to be used to minimize cost and maximize revenue. This is in spite of emphasis on control which Bovens (2010) warns is likely to damage creativity and efficiency.

Finally, the findings are not consistent with some aspects of the political
theories; among them the “retrospective vote theory” which argues that the performance of government influences the vote of citizens. As votes are used as a performance indicator, then good performance might lead to re-election. Thus, the theory is based on the general idea that political competition drives good behaviour and therefore, better performance. In this research, the evidence tends to suggest that, in decentralised settings, political environment derived from more political competition seems to lead to poor behaviour and that this has changed the dynamics of local politics with other government levels. The negative effect of political competition seems to be particular to this group of municipalities because party loyalty is very strong.

15.6 Theoretical contribution

- The development of a framework for the analysis of how fiscal decentralisation impacts government performance

Based on the theoretical assumption of fiscal decentralisation, this study identifies two factors that moderate the key relationship between fiscal decentralisation and local government performance, namely accountability and public entrepreneurship. This research has attempted to disaggregate these behavioural patterns in order to understand the extent of impact on government performance and the potential arrangements to promote the right incentives for rural municipalities.

Therefore, this research contributes to the fiscal decentralisation theory by looking at these mediating factors and demonstrating that the understanding of the impact of fiscal decentralisation is altered. The theoretical implication of this result is that the link between fiscal decentralisation and government performance is based mainly on changes in public entrepreneurship. Accountability accounts for smaller changes in government performance and fiscal decentralisation presents more gains from public entrepreneurship than accountability.
• Expanding the theory of public entrepreneurship and developing and testing public entrepreneurship index

Given data restrictions at local government level in Mexico and particularly in rural municipalities, this study developed two indices that differentiate behavioural patterns. The indices attempt to cover important dimensions of accountability and public entrepreneurship, the latter being previously highly theoretical. One index measures actions that are related to accountability behaviour. The second indices measures public entrepreneurship, which has to do with more proactive, innovative and risk-taking behaviour. In addition to developing the indices, this research differentiates gains coming from accountability and public entrepreneurship and the extent of its impact in a decentralised setting.

Thus, this research contributes to theory by expanding the theory of public entrepreneurship to one specific phenomenon, fiscal decentralisation. The theoretical implication is that only some degree of discretion with allocation decision-making seems to be likely to drive public entrepreneurship based on innovation. Full discretion may contribute to negative changes in accountability.

The intention has been not to make strong inferences regarding the reliability and validity of the indices, since the limitation and constraints of the data are recognised, as well as the complex relation between dimensions. But, after corroborating the use of these indices on the ground, it can be argued that these indices are likely to capture the intended effects. Therefore, this research contributes with measurement tools which can be used to look at patterns across a country.

• Developing a logic to reconcile fiscal decentralisation and political competition

Another theoretical contribution in this study is the development of a logic that reconciles the expectations from the theories of fiscal decentralisation
and political competition. Both theories are argued to contribute to better government performance and the pro-arguments of fiscal decentralisation are often linked to democratic mechanisms. This research presents evidence that fiscal decentralisation plays a more important role in government performance than political competition and presents some evidence that, in a decentralised setting, political competition could be detrimental in rural municipalities.

- Applying the theory of fiscal decentralisation in rural settings to explain complex relationships

In addition, this study contributes to the fiscal decentralisation theory by applying the theory in a particular setting: rural municipalities. It explains how the phenomenon occurs by expanding the understanding of the complex interrelationship between different types of funds. Thus, it shows how fiscal decentralisation works in practice in rural municipalities, as well as its limitations.

15.7 Policy implications

As can be seen from the above summary of findings, this study’s research questions have developed new knowledge in understanding the type of incentives promoted by the fiscal decentralisation process. This knowledge can be used for improving policies aiming at promoting better financial performance.

The findings suggest that specific fiscal arrangements play a fundamental role in how local authorities behave and that there is scope to promote public entrepreneurship, if the correct fiscal arrangements are set in place.

Some of the findings in this research indicate that further fiscal arrangements are required in order to make the decentralisation policy more effective for government performance. From the researcher’s point of view, most of the changes have to deal with the issues of delegating
more decision-making within a conditional frame. In other words, more resources should be decentralised earmarked to general expenditures. But it is important that decision-making is delegated to rural local authorities. This implies not only decision-making in allocation of expenditures, but also in execution of public work. This research suggests that while the first may improve accountability through responsiveness to citizens, the second may promote a more entrepreneurial behaviour by boosting innovation.

These are not necessarily the only changes needed. This thesis has provided several pieces of evidence showing weaknesses in accountability behaviour particularly using unconditional funds. This research has reaffirmed that local governments rely heavily on intergovernmental transfers. However, it also shows that this may not have a negative impact per se, if there are mechanisms enabling and promoting actions leading to expansion of local budgets. Unconditional funds can be subject to such incentives under appropriate intergovernmental arrangements.

One of the most serious concerns is the use of extraordinary conditional funds. Although they are used to standardize the country’s development, more control is needed to end the discretionary allocation and political party influences in obtaining these funds. The problem does not rely solely on unfair distribution of resources but also, in some cases, on inefficient and wasteful investments due to the conditionality of such funds.

Another contribution of this investigation to public policy is that it advances the fact that government performance seems to be more responsive to incentives of policy process rather than democratic mechanisms.

This is not to say that political competition does not matter at all; as revealed in the previous findings, political competition is significantly important in rural local governments as it works as a mechanism of political and social punishment. However, in a decentralised setting the positive
effects of political competition might not be strong enough to be crystallized in improvements in policy outcomes.

Another piece of evidence implying serious failures in the local government system is the underdeveloped council system that, nevertheless, has improved due to the changes in the political landscape. A more developed council system can benefit accountability without needing to impose highly rigid constraints on the funds for the sake of better accountability.

15.8 Limitations of research

This empirical research has relied heavily on the availability of secondary databases at the local level in Mexico. Despite the fact that there have been improvements in data collection across the country, it was a challenge to rely on this information, particularly for rural local governments. There is still a considerable shortage of information that prevented the inclusion of a larger sample in the study, as well as the creation of a more comprehensive assessment of the government processes.

Therefore, the possibility cannot be ruled out that such results could have been affected by potential selection biases in the surveys’ responses and in the observations included in the analysis. Observations with missing values were excluded from the statistical analysis. Therefore, the sample was considerably reduced and the observations might carry some biases. But there is no evidence to believe that these observations have a potential inclination that could jeopardize the overall findings. This decision was made in order to follow the overall research approach for the selection of cases in the second phase.

In addition, some of the limitations of the study are linked with how the concepts of accountability, public entrepreneurship and government performance were operationalized. This research took advantage of the
few measures available. However, only some of the indicators used to measure the dimension of the index on accountability and public entrepreneurship seem to have been valid and some could be improved. For instance, the indicator used to operationalize transparency included the indicators of citizens’ participation, based on the existence of formal institutional mechanisms. After analysing the information in the field, it became clear that, in rural municipalities, citizens rely on informal mechanisms. It is difficult to capture these informal mechanisms. Based on the field work, the researcher believes that a better indicator could be the number of open council meetings in the municipality. Even though it does not capture the informal mechanisms, this is considered as an attempt to be “transparent” in local issues and it can be quantified.

In regard to the entrepreneurial index, the indicators fiscal effort and whether there has been an association with public, private and social groups were potentially valid indicators. However, they capture only associations for basic public services. It would be important to include an indicator that captures associations for business projects and economic development. For this group of municipalities it would be particularly important to incorporate rural development projects. This can be done by incorporating databases from the state agencies in charge of this matter, in Mexico, the Rural Development Ministry.

Although the selection of case studies followed a methodological rigour for case selection process with the aim of avoiding biases in representativeness and subjectivity, there are limitations in the techniques used for collecting information, and the in-depth evaluation of each case study. This research relied on semi-structured interviews and did not collect any other means of information to corroborate the respondents’ information. The researcher attempted to collect municipal plans and annual reports but in rural municipalities, electronic versions are a recent development and they do not keep a record of this information in the municipality; it is sent to state parliament. Other studies can use this
information in order to corroborate and expand further the interpretation of the actions carried out in the municipalities.

In addition, relying on interviews posed a concern in regard to the respondents' biases due to political inclinations. During this research, the first step was to contact people through the current local governments and then, snowball sampling was the approach. This sampling technique was useful for identifying potential entrepreneurs in the municipalities but it carried some problems in terms of representativeness and in some cases related to party affiliation. This was corrected when possible.

15.9 Further research

This thesis has developed a theoretically sound framework to analyse behavioural patterns by providing some instruments for gaining further insights into how fiscal decentralisation may encourage government performance. Further improvements in methodology to corroborate the findings, such as survey instruments would be areas for further research.

In addition, further research can be carried out to examine this theoretical framework in urban municipalities. Given the findings that there is a fragile accountability incentive behind the decentralisation reform, and that urban municipalities have a weaker relationship with citizens, the findings are likely to be different for urban municipalities.

There is also much to do in understanding the public entrepreneurial actions in local government. In this research, the focus was on encouragement to promote entrepreneurial behaviour, but it did not address successful entrepreneurial actions. Further research can address questions aiming at understanding in which ways fiscal arrangements lead to successful entrepreneurial actions.

Disentangling how much these two behavioural patterns have an impact on government performance requires further exploration, as well as more
refined data on the many other forms of incentives driving these behaviours, such as organizational and individual characteristics.
Annex 1- Alternative Statistical Analysis Models

Statistical Analysis Models of Accountability with municipal fixed effects.\(^{51}\)

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<tr>
<td></td>
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<tr>
<td>Conditional Funds</td>
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Note: Dependent variable ACCOUNTABILITY. Standard errors are in brackets. The results are presented in standardised values. ***p<.001 **p<.01 *p<.05. McFadden's Pseudo R² with best fitted model (-2 Restricted Log Likelihood) is used. These models include municipality fixed effects.
Statistical analysis models of Public Entrepreneurship with municipal fixed effects

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Note: Dependent variable PUBLIC ENTREPRENEURSHIP. Standard errors are in brackets. The results are presented in standardised values. ***p<.001 **<.01 *p<.05. McFadden’s Pseudo R² with best fitted model (-2 Restricted Log Likelihood) is used. These models include municipality fixed effects.
Statistical analysis models of Government Performance and Accountability with municipalities and time fixed effects.

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Note: Dependent variable CBPS. Standard errors are in brackets. The results are presented in standardised values. ***p<.001 **<.01 *p<.05. McFadden's Pseudo R² with best fitted model (-2 Restricted Log Likelihood) is used. These models include municipality and time fixed effects.

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32 Mixed linear model do not provide with a model of fit. The most common Pseudo R² used in this type of analysis is the McFadden's Pseudo R² in the form of:

\[
R^2 = 1 - \frac{\ln(L_{full})}{\ln(L_{intercept})}
\]
### Statistical analysis models of Government Performance and public entrepreneurship with municipalities and time fixed effects.

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Note: Dependent variable CBPS. Standard errors are in brackets. The results are presented in standardised values. ***p<.001 **p<.01 *p<.05. McFadden's Pseudo R² with best fitted model (−2 Restricted Log Likelihood) is used. These models include municipality and time fixed effects.

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33 Mixed linear model do not provide with a model of fit. The most common Pseudo R² used in this type of analysis is the McFadden's Pseudo R² in the form of:

\[ R^2 = 1 - \frac{\ln(L_{full})}{\ln(L_{intercept})} \]
Annex 2- Information sheet and consent form

INFORMATION SHEET FOR PARTICIPANTS

REC Reference Number: REP(EM)/10/11-20

YOU WILL BE GIVEN A COPY OF THIS INFORMATION SHEET
Fiscal decentralization in rural local government: a case study of Mexico.

We would like to invite you to participate in this postgraduate research project. You should only participate if you want to; choosing not to take part will not disadvantage you in any way. Before you decide whether you want to take part, it is important for you to understand why the research is being done and what your participation will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information.

This study aims to investigate the incentives generated by the decentralization process undertaken in the country. The delivery of authority to local governments to collect taxes, increments in transfers and right to borrow are assumed to have impacts on the performance of the local governments, especially in combating poverty and in welfare enhancement. Have the decentralization of revenues and decision-making increased accountability and entrepreneurship in local governments, especially in relatively undeveloped municipalities? How and when does it happen? In order to answer these questions, the views of local leaders, elected representatives and managerial staff are of the utmost importance.

If you agree to take part in this research, you will be given this information sheet to keep and be asked to sign a consent form. The interview will be held in your office, at the time most convenient for you. It is important to emphasise that data obtained from you will be incorporated in the study as anonymous pieces of information only. Anonymity and confidentiality of your statements are guaranteed, unless you explicitly agree to be named for particular parts of discussion. You may withdraw your data from the project at any time and without giving a reason up until it is transcribed for use in the final report, i.e. until 15th October 2013. Recording of the interview is for my personal use only and the interviews will be wiped upon transcription. You are allowed to see the transcripts of the interview and modify/add more information. This should be on request. The reasons for recording the interview are: 1) it is impossible to get a complete and accurate account any other way; 2) writing during the interview will distract the researcher and interrupt the flow of the conversation; 3) selecting the important points to write down implies judgements about relative importance but it is difficult to decide on the spot what is really important; 4) tape-recording will allow the researcher to listen to the interview several times and discern them better.

Note that the researcher undertaking this study is a PhD candidate. The reason for doing this research is the importance of the subject and also that it contributes to obtaining the degree. This research is financed by the Mexican National Council of Science and Technology given its status as the student’s sponsor. After completion, you will receive a copy of the final report.

It is up to you to decide whether to take part or not. If you decide to take part you are still free to withdraw at any time and without giving a reason.

For further information please contact:

**PhD student**
Flor Silvestre Moreno Ramírez
E-mail: Flor_silvestre.m@kcl.ac.uk

**Supervisor**
Alison Wolf
Sir Roy Griffiths Professor of Public Sector Management
E-mail: alison.wolf@kcl.ac.uk
HOJA DE INFORMACIÓN PARA PARTICIPANTES

REC Número de Referencia: REP(EM)/10/11-20

A USTED SERÁ ENTREGADA UNA COPIA DE ESTA HOJA DE INFORMACIÓN

Descentralización Fiscal en gobiernos municipales rurales: el caso de México

Nos gustaría invitarlo a participar en este proyecto de investigación de postgrado. Debe participar solo si usted quiere. No tomar parte en el estudio no le afecta de ninguna forma. Antes de que decida participar, es importante que entienda porque se está haciendo esta investigación y lo que envuelve su participación. Por favor, tome un poco de tiempo para leer cuidadosamente la siguiente información y discuta con otros si así lo desea. Pregúntenos si hay algo que no es claro o si le gustaría más información.

Este estudio tiene como objetivo investigar los incentivos generados por el proceso de descentralización llevado a cabo en el país. Se asume que la delegación de autoridad a gobiernos locales para colectar impuestos y el incremento a las transferencias tiene un impacto en el desempeño de los gobiernos locales, especialmente en lo referente al rendimiento de cuentas y al fomento de proyectos emprendedores. ¿Ha la descentralización de recursos y la delegación de toma de decisión mejorado el rendimiento de cuentas y fomentado la implementación de proyectos emprendedores de los gobiernos locales, especialmente en municipios subdesarrollados? ¿Cómo y cuándo se generan esos incentivos? Para responder estas preguntas, el punto de vista de líderes locales y representantes electos es de vital importancia.

Si está de acuerdo en tomar parte en esta investigación, se le dará copia de esta hoja de información y se le invitara a que firme el formato de consentimiento. La entrevista será tomada en su oficina, o en el lugar y la hora más conveniente para usted. Es importante enfatizar que la información obtenida de por parte de usted será incorporada en el estudio como información confidencial. La anonimidad y confidencialidad de sus comentarios están garantizados, a menos que usted indique explícitamente que su nombre puede ser presentado para alguna parte específica de la investigación. Usted puede solicitar que la información no sea incluida en el proyecto en todo tiempo y sin dar explicación alguna siempre que la información no haya sido usada en el reporte final, ejemplo hasta el 15 de Octubre del 2013. La grabación de la entrevista es solamente para mi uso y la entrevista será borrada cuando se transcriba. Usted puede solicitar la transcripción de su entrevista y modificar/agregar más información. Esto debe solicitarlo. Las razones para transcribir la entrevista son: 1) No hay otra forma de obtener la información de forma completa y exacta; 2) escribir durante la entrevista puede distraer al investigador e interrumpir el seguimiento de la conversación; 3) elegir los puntos importantes para escribirlos es una decisión subjetiva por parte del investigador y es difícil decidir en el momento lo que realmente es importante; 4) la grabación permitirá al investigador escuchar la entrevista en repetidas ocasiones y analizarla mejor.

El investigador que realiza este estudio es Candidato a Doctor. La razón de realizar este estudio es la importancia del tema y que le ayudara a obtener el grado académico. La investigación está financiada por el Consejo Nacional de Ciencia y Tecnología quien es el que beca al investigador. Después de concluido el estudio, usted recibirá una copia del reporte final.

Es su decisión tomar parte o no en esta investigación. Si usted decide participar, todavía tiene la libertad de renunciar en cualquier momento y sin dar explicaciones.

Para más información, por favor contactar a las siguientes personas:

**Candidato a Doctor**
Flor Silvestre Moreno Ramírez  
E-mail: Flor_silvestre.m@kcl.ac.uk

**Supervisor**
Alison Wolf  
Sir Roy Griffiths Professor of  
Public Sector Management  
E-mail: alison.wolf@kcl.ac.uk
CONSENT FORM FOR PARTICIPANTS IN RESEARCH STUDIES

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

Title of Study: Fiscal decentralization in rural local governments: a case study of Mexico
King’s College Research Ethics Committee Ref: REP(EM)/10/11-20
Thank you for considering taking part in this research. The person organising the research must explain the project to you before you agree to take part. If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

- I understand that if I decide at any time during the research that I no longer wish to participate in this project, I can notify the researchers involved and withdraw from it immediately without giving any reason. Furthermore, I understand that I will be able to withdraw my data up to the point of publication on 15 October 2013.

- I consent to the processing of my personal information for the purposes explained to me. I understand that such information will be handled in accordance with the terms of the Data Protection Act 1998.

- The information you have submitted will be published as a report and you will be sent a copy. Please note that confidentiality and anonymity will be maintained and it will not be possible to identify you from any publications.

- I consent to my interview being recorded.

Participant’s Statement:
I - ____________________________________________________________________________

agree that the research project named above has been explained to me to my satisfaction and I agree to take part in the study. I have read both the notes written above and the Information Sheet about the project, and understand what the research study involves.

Signed ___________________________ Date ____________
FORMATO DE CONSENTIMIENTO PARA PARTICIPAR EN EL PROYECTO DE INVESTIGACIÓN

Por favor llene este formato después de haber leído la información de la hoja de Información y/o haber escuchado la explicación acerca del estudio.

Título del estudio: Descentralización Fiscal en municipios rurales: el caso de México

Referencia el Comité de Investigación Ética de King’s College: REP(EM)/10/11-20

Gracias por considerar tomar parte en esta investigación. La persona organizando la investigación debe explicarle el proyecto antes de que usted decida participar. Si tiene alguna pregunta sobre la hoja de información o sobre la explicación que se le dio, por favor pregunte al investigador antes de que acepte participar. A usted se le dará una copia de este Formato de Consentimiento para que la conserve y le sirva de referencia en todo momento.

- Entiendo que si en cualquier momento de la investigación decido renunciar a mi participación, puedo notificarle al investigador y mi información será eliminada sin necesidad de dar explicación. También entiendo que esto puedo hacerlo antes que la investigación sea publicada hasta 15 de Octubre de 2013.

- Doy mi consentimiento para que procesen mi información personal para las razones que se me explicaron. Entiendo que esta información será manejada de acuerdo al Acta de Protección de Información de 1998.

- La información que usted provea será publicada como un reporte y usted recibirá una copia. Por favor, comprenda que la confidencialidad y anonimidad serán mantenidas y usted no será identificado en ninguna publicación.

- Doy consentimiento a que la entrevista sea grabada.

Declaración del participante:
Yo -

Estoy de acuerdo que el proyecto de investigación nombrado arriba me lo han explicado de forma satisfactoria y estoy de acuerdo en participar. He leído la información de arriba y la hoja de información acerca del proyecto y entiendo lo que envuelve la investigación.

Firma ___________________________ Fecha ________________
Annex 3- Interviews’ protocol and questions

Topics

Financial Autonomy
Accountability
Public entrepreneurship

Beginning the Interview
  o Express thanks for agreeing to meet and find out about the research
  o Explain the investigation’s aims and hand over the information sheet (in Spanish) to participants and tell them to keep it
  o Explain that participation in the study is voluntary and in case of accepting being part of the study, the interviewee can still withdraw at any time
  o Explain that the interview can be stopped at any time the interviewee wants without any need to justify ending the interview.
  o Explain that the interviewee’s comments would be treated as anonymous in the study
  o Ask if they wish to participate and if so, hand over the consent form to be signed (in Spanish)
  o Consent form to be signed and the information sheet handed out to the interviewee to be read.
  o Ask for permission to tape record the interview. Explain the reasons for recording and that the interviews will be transcribed and the records deleted after transcription.

At the end of the Interview
  o Express thanks for participating in the study
  o Ask if the interviewee is interested in receiving the study’s results and if so, ask for an email or address where the report can be sent.
  o Ask the interviewee to name two entrepreneurial local authorities and a means to contact them.
Preguntas para la entrevista (Spanish)

Estas preguntas sirvieron solo de guía para el investigador

INTRODUCCIÓN
Me podría decir cómo comenzó a participar en los asuntos públicos hasta alcanzar la posición actual.
Me podría explicar brevemente la situación económica y social del municipio.
¿Cuáles son las dificultades que un presidente municipal o un miembro del cabildo enfrentan al principio de la administración?
En su punto de vista, ¿Qué es lo que significa ser responsable y ser emprendedor en un municipio rural?

AUTONOMÍA FINANCIERA
En su punto de vista, ¿Qué implicaciones tiene para las presidencias municipales el ser financieramente dependientes del gobierno central?
¿Cómo describe el sistema de impuesto actualmente implementado?
Los ingresos locales que se obtienen de la colección de impuestos locales, ¿Son importantes cuando se planean los gastos del municipio?
¿En que gastan? ¿Me podía dar ejemplos?
En su punto de vista, ¿Qué dificultades enfrentan las autoridades locales cuando se quiere incrementar la colección de impuestos?
Cuando se pone más empeño en incrementar los ingresos por medio de colección de impuestos locales, ¿cree usted que afecta la forma en que se administran otras áreas financieras?
¿Cómo se puede fomentar y facilitar el incremento en el nivel de colección de impuestos?
¿Considera que las fórmulas de redistribución de fondos a gobiernos locales por parte del Estado son justas?
¿Cuáles son las ventajas y desventajas al usar recursos provenientes de fondos condicionados de aquellos incondicionados?
Si tuviera la oportunidad de sugerir una reforma sistema de transferencia de recursos a los municipios, ¿Qué cambios propondría?

RENDIMIENTO DE CUENTAS
¿Cómo se da cuenta de las demandas y preferencias de la comunidad en lo que respecta a servicios públicos?
¿Cuáles son los mecanismos usados para dar prioridades a las demandas ciudadanas?
¿Qué rol juega el partido al que usted pertenece en la toma de decisiones del municipio?
¿Cómo puedo yo, como ciudadano, saber lo que pasa en la ciudad y como el municipio invierte el dinero?
¿Podría describir como se incluyen los ciudadanos en la toma de decisiones?
¿Cómo usted reconoce que una autoridad local ha rendido cuentas a la ciudadanía?
La gente algunas veces dice que los municipios rurales no deben de obtener recursos incondicionados porque el dinero se hecha a la basura o se gasta entre pocas gentes y buscando el interés personal. ¿Ha usted alguna vez visto que esto pase? ¿Me podría dar ejemplos?

**ACTIVIDADES EMPRENDEDORAS**

¿Me podría dar un ejemplo de un proyecto emprendedor en el municipio? ¿Podría describir el proceso seguido al implementar una actividad emprendedora? ¿Cuánto tiempo dedica a las negociaciones con dependencias Estatales y Federales para obtener recursos?
Interview Topic-questions

These questions were for the researcher’s guidance only.

INTRODUCTION
Could you tell me how you became involved in public affairs until you reach your current position?
Can you explain briefly the economic and social background of this municipality?
What are the challenges a (mayor, council) face at the start of the administration?
In your view, what does it mean to be accountable and to be entrepreneurial?

FINANCIAL AUTONOMY
In your view, what are the implications for local governments to be financially dependent on the central government?
How would you describe the tax system currently implemented?
Are the local revenues collected from local taxes important when planning local spending? Where are these resources spent? Give examples.
In your point of view, what are the difficulties that a local authority faces when they want to increase their own revenue collection?
Does emphasizing one’s own revenue collection affect other areas of financial management?
How can fiscal effort be fostered and enabled?
Are the redistribution formulas fair for rural municipalities?
What are the advantages and disadvantages of using conditional funds compared to unconditional funds?
If you had the opportunity to suggest a reform in the way intergovernmental transfers are set, what changes would you propose? Explain.

ACCOUNTABILITY
How do you find out what the demands of the local community are in public services?
What are the mechanisms used to prioritize public demands?
What role does the party you belong to play in the decision-making process by the local government under your supervision?
How can I, as a citizen, know what is happening in the city and where the local government is investing public resources?
Can you describe how your administration includes citizens in decision-making?
How do you recognize if a local authority is being accountable?
People sometimes say that rural municipalities should not receive unconditional funds because the money will be wasted, or spent on a few people and special interests. Have you ever seen this happen? Give examples.

ENTREPRENEURSHIP
Can you give me an example of an entrepreneurial project carried out in the municipality?
Can you describe the process used to implement an entrepreneurial project (based on the previous example)?
How much time do you spend on negotiating resources with State and Federal dependencies to obtain funds?
Glossary

ACCOUNTABILITY- The virtue of local authorities to behave according to public expectations that further improve efficiency. It is evaluated based on three dimensions: transparency, responsibility and responsiveness.

BEHAVIOURAL PATTERNS- The actions of local authorities associated with accountability and public entrepreneurship.

CBPS: or Coverage of Basic Public Services. The level of coverage in water and sewerage in the municipality which local governments are lawfully responsible to provide.

CIDAC: or Centre for Research in Development. An independent, not-for-profit think tank that undertakes research and proposes policy alternatives for the medium and long-term development in Mexico.

COUNCILLOR: A member of the council.

EFFICIENCY, type:

-ALLOCATIVE: the mix of goods and services that matches the goods and services desired by the local citizens.

-PRODUCTIVE: the production of public goods at the lowest possible cost (i.e. minimising the cost of producing the goods and services that people want).

FAISM: or Municipal Social Development Fund. A conditional mandatory fund earmarked to public services including water, sewage, street lighting, public safety, traffic, street cleaning, and garbage collection.

FD: or Forms of Public Service Delivery. The arrangements to administrate and deliver local public services which could include: Direct provision by local governments; administration and delivery of services by State government, or by the Federal government, or by local social groups or by private individuals; or by more than two municipalities (intergovernmental associations) following an agreement with the local government.

FENAMM: or National Federation of Municipalities in Mexico. A civil association that aims to straighten municipalism in Mexico. Members: mayors, councillors and government officials.

FISCAL DECENTRALISATION- The transfer of authority and responsibility for public functions from the central government to
subordinate or quasi-independent government organizations or the private sector.

**FORTAMUN:** or Fund for Municipal Strengthening. A conditional mandatory fund earmarked to programmes and actions that foster development in the municipality or financial investments.

**FUNDS, Types-**
- **CONDITIONAL.** A revenue sharing fund with tied expenditure assignments created in order to promote national standards by conditioning the funding to federal expenditure priorities.
- **UNCONDITIONAL:** A revenue sharing funds assigned to lower government levels without labelled or controlled expenditures created to deal with regional inequity.
  - **MANDATORY CONDITIONAL FUNDS:** Earmarked funds regularly and lawfully distributed among lower government levels. They delegate some degree of discretion but to a lesser extent than unconditional funds.
  - **EXTRAORDINARY CONDITIONAL FUNDS:** Discretionary funds for specific expenditures, which are not regular or repeated year after year. They are typically heavily regulated and delegate less discretion in allocation of resources than mandatory conditional funds.

**GDP:** or Gross Domestic Product. A monetary measure of the value of all final goods and services in a country produced in a period.

**GOVERNMENT OFFICIALS-** Someone who hold an office in the local government regardless of rank and position.

**GOVERNMENT PERFORMANCE-** For the purpose of this study, absolute coverage of sewage and water service in a municipality.

**GOVERNMENT SEAT:**
- **MUNICIPAL SEAT:** the city or town selected as a capital of the municipality where most of the administration is place.

- **OUTSIDE MUNICIPAL SEAT:** The cities or towns that are not considered municipal seat but are integral part of the municipality.

**INAFED:** National Institution of Federalism and Municipal Development. A decentralised agency in Mexico under the responsibility of the Secretary of Interior that coordinates and implement policies and programmes designed to strengthened intergovernmental relations between the federal government and low states and municipalities.
**INEGI**: or Mexican National Institute of Statistics and Geography. An autonomous agency in Mexico dedicated to coordinate the national system of statistical and geographical information at the municipal and state level.

**LPS**: or Local Public Services. Local services that the municipalities are lawfully responsible to provide. It includes: water, sewage, street lighting, public safety, traffic, street cleaning, and garbage collection.

**MAYOR**: Elected citizen to head the local government.

**MUNICIPALITY** (or LOCAL GOVERNMENT, terms used interchangeably): A second level administrative division of states in Mexico.

**NPM**: or New Public Management. A public management idea of modernizing public sector based on market-oriented management as a mean to achieve greater cost-efficiency for governments.

**PRONASOL**: or Programa Nacional de Solidaridad (National Solidarity Program). A social spending programme in education, health, transportation, and regional development.

**SEDESOL**: or Ministry of Social Development. The government department in charge of social development efforts in Mexico.

**SGTs**: or Second Generation Theories of Fiscal Decentralisation. A set of theories evolved from fiscal federalism that embody the political process and the possibility of asymmetric information across political agents.

**SIMBAD**: Municipal System Database developed by INEGI.

**STATE- LEVEL OPPOSITION**: Municipalities where the mayor and the state governor belong to different political parties.

**POLITICAL COMPETITION**: The margin of victory between the two principal political party contesters.

**POLITICAL PARTY.** An organisation whose members share similar political aims and opinions and seeks to influence public policy through elections.

  - PRI: Partido Revolucionario Institucional (PRIlista). Left centre wing party.
  - PRD: Partido de la Revolucion Democratica. Left wing party.
  - PNA: Partido Nueva Alianza or PANAL. Party originally created by members of the National Education Workers. Often in coalition with PRI.
-COALITION: An alliance or agreement between political parties for cooperation, often for the purpose of contesting in elections.

PUBLIC ENTREPRENEURSHIP- The behaviour of local authorities to act in ways that improves efficiency.

RURAL LOCAL GOVERNMENTS- In the context of this research, a population of less than 30,000 inhabitants and where the economic activity that predominates is the primary sector.
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Institute.


