# Institutional quality as determinant for the success or failure in poverty reduction The case of Mexican States

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Abstract

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Poverty is not an accident. Like slavery and apartheid it is man-made and can be removed by

actions of human beings.

Nelson Mandela

After the economic recession suffered during the eighties decade, the population under

poverty conditions has increased dramatically. With the purpose of amend the situation;

President Carlos Salinas has established the biggest anti-poverty program in Mexican history,

the Programa Nacional de Solidaridad (PRONASOL). The following three administrations

continued the implementation of these policies. In addition, they also increased the budget

designated to anti-poverty strategies and the zones covered by the programs. However, despite

the efforts, after twenty years poverty levels have remained nearly the same. The main

hypothesis of this paper is that rather than only considering the expansion in social expenditure,

it is necessary to consider the quality of the institutional frameworks as a determinant element

for the success or failure of poverty reduction. This is an empirical analysis of Mexican states.

**Key words:** Poverty, Mexico, Institutional Quality, and Institutions

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### **Abbreviations**

CONEVAL: National Council for the Evaluation of Social Development Policy

ENCUP: National Survey on Political Culture and Citizenship Practices

FEPADE: Special Prosecutor's Office for Electoral Offenses

IFAI: Federal Institute for Access to Public Information IFE

IFE: Federal Electoral Institute

IMCO: Mexican Competitiveness Institute

INEGI: National Statistics and Geography Institute

MIT: Massachusetts Institute of Technology

OPORTUNIDADES: Oportunidades Human Development Program

PDPZ Program for the Development of Priority Zones

PROGRESA: The Education, Health, and Nutrition Program of Mexico

PRONASOL National Solidarity Program

SEDESOL: Secretariat of Social Development

SEGOB: Secretariat of Interior

OECD: Organization for Economic Co-operation and Development

COFIPE: Federal Code of Electoral Procedures and Institutions

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# Making the case

According to data provided by the Organization for Economic Co-operation and Development (OECD), Mexico represents the fourteenth biggest economy in the world and the seventh position in social expenditure among Latin American countries (OECD, 2010). In addition, during the last twenty years its GDP per capita increased around 30% and the amount spent in social programs incremented in more than 90%, which in money represents around \$900 US dollars per citizen.

At a first sight, this numbers can represent an image of a country that has been evolving itself during the last two decades. However, when it comes to poverty levels it results that, despite the economic growth and the increase of resources allocated to social expenditure, the percentage of population below the poverty line has remained nearly the same. Consequently, it is natural that several questions appear; why after economic growth (slow, but it is still positive) and million of dollars spent in the implementation of public programs the population below the poverty line has not decreased? Spending huge amounts of money in social programs is the best solution for eradicating poverty? Or are other mechanisms for solving this issue? Besides of increasing the resources, what does Mexico need to do in order to evolve to a proper welfare state without poverty among its citizens?

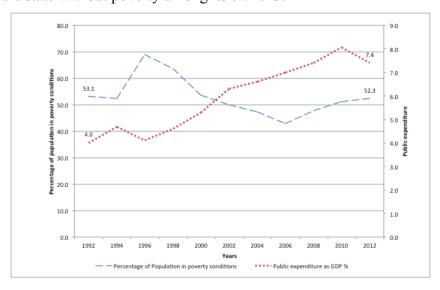


Figure 1. Percentage of population in poverty conditions and Public expenditure as GDP%

The figure 1 presents how the percentage of Mexican population in poverty conditions has been fluctuating during the last twenty years. It has reached its peak in 1996 when the percentage of population in poverty condition was around the 70%. Conversely, the lowest point during these years was in 2006. However, in despite of the oscillation, current percentage is nearly the same than in 1992.

In the same figure it is possible to observe the public expenditure as percentage of the GDP. During the period conceivable between 1992 and 2012 the amount of resources allocated to public expenditure has been following a positive trend. The percentage increased from 4.0 to 7.4

Up to this point, the Mexican case can show two things; first of all, economic growth (no matter the size or pace, just growth) does not represents an automatic impact in the reduction of poverty levels. Secondly, the fact of increasing the budget for anti-poverty programs is important and can provide the opportunity of implementing more programs or expand the existing ones; however, this neither is a synonym of automatic success in the eradication of poverty. This paper is an attempt to understand why is still poverty in Mexico after all the political efforts, money spent and social programs implemented during the last 20 years.

First of all is important to start assuming that if the poverty levels have not decreased, not necessarily means that the antipoverty programs are totally inefficient. There can be a possibility that exogenous factors have intervened in the result of these policies. In addition, if the numbers are situated in the global context maybe it is possible to understand that economic crisis in 2009 affected the entire world, and maybe, because of the programs worked as a shield avoiding a raise in the poverty levels.

According to Table 1. (Located in the appendix) it is possible to note that even when the national percentage of population below the poverty lines have remained mostly constant after twenty years, when it comes to local level it is possible to find different results. For example, from 1990 to 2010 states like Hidalgo, Querétaro and Yucatán have decreased in more than 10% their percentage of population in extreme poverty conditions. On the contrary, states like Chiapas, which is one of the states with more anti-poverty programs, Chihuahua and Quintana Roo have more population in extreme poverty conditions than twenty years ago (See Table 1 and Map 1 in the appendix).

After this first approach to the problem, many questions can emerge, why after economic

growth and after incrementing the resources for social expenditure, the federal percentages of population in poverty conditions remained nearly the same? Why some states have better results than others? Are the anti-poverty programs working? With the intention of understanding the situation and in order find answers to those questions, this paper will be focusing on the role of institutions.

The main hypothesis of this paper is that rather than the amount of money spent in poverty reduction policies; the institutional framework can contribute in the success or failure in the poverty reduction. This paper is based on the assumption that high quality institutions should lead to prosperity and bonanza instead of poverty.

A high quality institutional framework is characterized by elements such as democratic level in the communities, patron–client relationships between governors and citizens, legitimacy of the public actors and economic incentives that promote the entrepreneurship, investment and consequently, economical growth. The quality of the institutions, can affect indirectly the operation of the anti poverty programs and, therefore it can, affect the result of the programs. In other words, context of weak institutions cannot produce effective programs and it is condemned to remain stuck in poverty.

With the purpose of testing this hypothesis I will develop a tool that can help me in order to measure the quality of the institutions at the local level. I will try to find a relationship between institutional quality and poverty levels. This means that the Mexican states with the higher quality in their institutions, should trend to have more efficient ant-poverty programs and, as a result, less percentage of population in poverty. Strong and legitimized institutions (market, state and community) rather than expenditure amount in anti-poverty programs, contribute to succeed in the goal of diminish poverty.

The structure of the document will be the following; in the first part I will present some theoretical considerations for getting more familiarized with the problem of poverty. In this first section I will mention the main characteristics of poverty and how it has been conceived and defined. Following, a space will be dedicated to a brief summary of the biggest anti-poverty programs implemented in the last twenty years, and finally, in the last part of the section I will make a review about the principal elements that compose the quality of institutions. In the second part of the document I try to explain how does institutions can matter in the success of poverty reduction. For this purpose I will use different variables in order to

construct the Mexican Institutional Quality Index (MIQ). In the third section I will use the created index through some statistical tests in order to answer the main questions of this paper. And in the final section, I will sum it up and present conclusions.

### Theoretical considerations

The main purpose of this section is to provide relevant information that can facilitate the comprehension of the problem of poverty in Mexican states. Before determining why poverty has not decreased, it is necessary to homologate definitions and explanations of the emergence of the problem. Hence, the first part of this section will be designated to make a brief definition of the concept of poverty, the different ways it has been measured and some theories about how to face it.

In second place, I will mention the public expenditure allocated to the principal antipoverty programs that have been implemented in Mexico during the last twenty years. And finally, in the last part I will make reference to the role of institutions in the welfare provision. I will enumerate the main characteristics of formal institutions and how elements as legitimacy or clientelism can determine the strength or quality of the institutions. Finally, I will make a brief review of the different academic attempts in order to measure the institutional quality.

### **Poverty**

The National Council for the Evaluation of Social Development Policy (CONEVAL) is a public organization in charge of the poverty measurement in Mexico. For this organization poverty can be understood as the living conditions that attempt to the human dignity, limit their civil rights, freedom and impede the satisfaction of the basic needs that are required for achieving a social integration of the individual (CONEVAL, 2010).

From 1990 to 2010, the poverty in Mexico was measured through citizens' income. According to the capacity for acquiring basic commodities, the poverty was categorized in three deprivation levels. The first one was food-poverty, which made reference to the inability for acquiring all the goods of a basic basket, even if the consumer spent all his/her income in this kind of goods. This kind of poverty was also known as extreme poverty.

The second level was the capabilities-poverty, which was defined as the insufficiency for acquiring the goods of a basic basket and, affording the basic payments of health and education. And finally, the Patrimony-poverty, that is when a person does not have enough money for affording food, health, education, livelihood, and transport, which also includes the inability for affording, livelihood and transport.

Besides the Mexican definitions, other authors have tried to define and conceptualize poverty. For Amartya Sen (1999) the poverty is not just the lack of income, furthermore, it is a deprivation of basic capabilities. The poverty should be understood as the deprivation of basic needs, and it should not be reduced to strictly economic issue. However, at the same time, Sen (1999) recognizes that a low income can have negative repercussions in the satisfaction of the most elemental human needs.

Following this line, CONEVAL created the Social Gap Index Incorporating indicators pertaining to education, access to health services, basic household, quality and spaces of dwelling. In its origins, it was not considerate as a poverty measurement because it does not consider the income variable, however, it can provide important information about social coverage (CONEVAL, 2007).

Up to this point, it has been defined what poverty is and one-way for measuring it, but if it is intended to solve the poverty issue, it is not enough with defining it. We also need to know what causes it and how to prevent or solve it.

### Why does poverty exists?

For Jeffrey Sachs (2005) the emergence of poverty has it explanation in the different technological advances and the constant growth during a long period of time. Hence, according to his statements it is possible to eradicate the poverty because technology can reach everybody.

In order to increase familiar wages, Sachs (2005) proposes four basic points: save, trade, technology and expansion of resources. At the same time, Sachs identifies eight traps that brake development. The traps are: extreme poverty, geography, taxation, bad governments, cultural issues, geopolitics, lack of innovation and demographic trap. In Central America, Sachs identifies the geographical conditions and the ethnical differences like two important reasons for explaining inequality.

Following this line, Acemoglu and Robinson (2012) are in a similar path, they express the idea that effectively, the innovation and emergence of new technologies can boost the economical growth; and as a consequence, poverty can be reduced. However, for implementing or generating technological advances, Acemoglu and Robinson mentioned that is necessary to count with solid political institutions that determine inclusive economical institutions. An inclusive economy will provide citizens enough incentives for educate them and develop technologies, while an extractive economy will inhibit the incentives for the development of creativity or continuous education.

Sachs (2005) explains that poor societies are condemned to remain poor because they do not have enough resources for investing and being productive. Under this statement, neither democracy nor open market will succeed until an external aid provides a "big push" and incentivize a virtuous circle. On the contrary, Easterly (2006) replies that far from helping, Sachs' proposal will keep the current structures. As a result, the solution is to generate free markets with proper incentives.

According to the statements mentioned above, Mexico tried to have its own "big push" with the implementation of different programs, but it why does poverty remain? Sachs states unequal distribution of wealth, mistakes from the governmental authorities, poor people distant from being part of the market dynamism and malnutrition, and the scarcity of preparation and health.

## **Public expenditure and anti poverty programs**

The public expenditure can be defined as the outlays done by the three levels of government (Federal Union, States and Municipalities) the parastatal sector and the Legislative and Judicial branches. One of the main objectives is to contribute to the improvement of social welfare. This objective should be achieved through three main activities: the increase of economic efficiency, to generate equal conditions among the sectors and finally, to maintain macroeconomic stability (Barnes, 2000).

It is believed that the correct path for increasing the efficiency is through the optimal allocation of resources. Consequently, by the promotion of redistributive policies, social expenditure has become one key element in order to maintain equity and solidarity (Barnes,

2000).

Mexico has 2,440 municipalities, but in 190 of those it is concentrated half of the population in poverty conditions. As a consequence, a big amount of social expenditure has been allocated through targeted programs. For example, in 2011 the *Programa de Desarrollo Humano Oportunidades*, which is the biggest anti-poverty program in Mexico, received more than 58,700 million pesos (CONEVAL, 2012). The money allocated in social policies have the objectives of increasing the wellbeing of the citizens, to propitiate equal access to services and conditions that can guarantee the satisfaction of basic needs, and to diminish poverty levels and social exclusion.

In other words, the social expenditure will promote the implementation of social programs that will generate the adequate conditions for the development of the individuals. In the long term, these programs should improve the life quality through the reduction of inequality, facilitating the access to education, sanitation, alimentation and housing (Barnes, 2000)

### **Anti poverty programs**

During the last twenty years, several anti-poverty programs have been implemented with the intention of making a difference in the familiar income, improving the nutritional habits, the health services and in the creation of social infrastructure. The fundamental goal is to generate welfare conditions that can enrich the productive life of the population. In other words, the improvement of these conditions will facilitate the inclusion of poor population in the dynamics of the economic market.

With the purpose of reducing extreme poverty levels, the amount spent in social programs has focused in three main areas. The first one is concerned about the promotion of families development, in order to reach this goal, the beneficiaries receive direct investments, cash transfers and basic services like nutritional counseling, education, and health. Regarding to the second target of the programs is the local economic market. The fundamental aim is to incentivize the local economy, create several opportunities in the labor market and finally, the third sector of action is pertaining to social infrastructure.

The implementation of anti-poverty programs has been intimately related with the political context. In 1988 Mexico had a controversial election and Carlos Salinas de Gortari started his presidential term with a lot of pressure from different groups. Characterized for being the first anti-poverty program in Mexico, the National Solidarity Program (PRONASOL) had the aim of reducing the amount of population below the poverty line, but at the same time, it worked as an important element for legitimate the Gortari's presidency.

PRONASOL provided urban services such as sanitation, electricity installation and street paving in the big cities perimeters. However, the distinctive element in this program was the promotion of social cohesion, through the citizen's participation in the welfare delivery. The people living in rural zones were invited to contribute in the process of constructing infrastructure. The people received materials provided by the state and they were responsible for the self-construction of roads and housing Furthermore, this program attacked another big problem in rural communities, the school dropouts. Through the emission of cash transfers, scholarships, and micro credits, there were incentives for continue formal education.

However, for Brachet- Márquez (2007) this program lacked a solid base. The main argument is based on the fact that in 1994 the privatization of public enterprises diminished the financial budged of the program. The second critic lies on the fact that even when it was supposed to contribute in poverty reduction, it was not attending the poorest sectors of the population. In other words, even when the program attended rural zones, the indigenous population did not receive the benefits.

Carlos Salinas's term in the presidency ended in 1994, and again, the political and economical context shaped the implementation of anti-poverty programs. After PRONASOL, the next governmental program attending poverty was created until 1997 launched by Zedillo's government. This second program was called Education, Health and Food Program (PROGRESA) and in contrast with its ancestor, it attended only population in extreme poverty and it removed any kind of support to urban beneficiaries.

Again, in the year 2000 the political context influenced the programs' implementation. For the first time in its independent history, Mexico experienced a pacific alternation of political party in the presidency. President Fox's mandate (2000-2006) intensified the efforts for reducing poverty levels, especially in rural and urban zones. The PROGRESA was renamed as Oportunidades and it received a big support expressed with a budget 85% bigger. The

principal aim of Oportunidades was to act as a preventive measure rather than a solution for the problem. This meant that instead of just trying to reduce the poverty, it also intended to avoid a new poor generation. This program was characterized by the provision of food, health care and scholarships with the purpose of breaking the poverty cycle. It was believed that with better nutrition and more education, it is possible to experiment social mobilization.

In this order of ideas, one of the Oportunidades' goals was to make compulsory a 12-years education, and even when the goal was not accomplished, during Fox's administration secondary school attendance increased in 1.2%. In addition, the differences between states remained during this period, but not only in economic numbers, also in school attendance. While in Mexico City school—years average was 10.2 years, in Chiapas was 6.1

Regarding to target programs the *Program for the Development of Priority Zones (PDPZ)* was designed with the intention of reduce the poverty levels and inequalities among the 125 poorest municipalities (Mexico has 2457 municipalities in total) In the strict sense, the program can attend municipalities located in any of the 32 states of the country. However, as a result of being a target program, and to focus in the poorest municipalities it is almost centered in the southern region. Around 35% of the resources of this program are spent in Chiapas, Oaxaca and Guerrero (SEDESOL, 2013).

To construct social infrastructure, to promote the social cohesion and to improve housing conditions in this zones are the three aims of PDPZ. The infrastructure strategy subsidizes basic services delivery, for example: the construction of hospitals, the installation of sanitation, drinkable water delivery, electrification and education. Simultaneously, the housing improvement strategy puts its efforts in strengthen the houses through the replacements of floor, roof and construct material. (SEDESOL, 2013)

During the period between 1990 and 2010, there have ben several efforts in order to reduce poverty levels. However, one constant mistake in the design of social programs is the lack of context evaluation before the implementation. CONEVAL has stated that in 2007 more tan the 30% of social programs were lacked a diagnosis and a well-defined problem. As a result, it is extremely possible to use resources in a non-productive way.

The poverty levels have practically unchanged after twenty years, even before the PRONASOL program was implemented. Hence, it is possible to state that the programs for reducing the poverty have not reached their principal objective, but further than a making an

evaluation of the social programs, the main purpose of this paper is to show that there are exogenous conditions beyond the programs that shape the success or failure of diminishing poverty levels.

#### Why programs are failing?

There can be several answers for that questions, however it is possible to identify three main reasons. The first one can be because several anti-poverty programs are targeted and not universal. For Silver (2005: 43-66) social programs fail in the intention of alleviating poverty because they are not compensatory but not for all citizens.

The second explanation, that is the main concern of this paper is because of the role of deficient institutions. For the neoclassical perspective, a market with deficient regulations that permit monopolistic practices can derive in inequality and poverty. (Macpherson, 1991: 11-33). And the third possible reason states that a weak institutional framework cannot be able to produce effective programs.

#### **Institutions**

Up to this point, it has been mentioned the relevance of strong and solid institutions in order to reduce poverty levels. As a consequence, for the aim of this paper it results extremely important to define what are the institutions. The institutions can be considered as the basic rules for connivance among humans. In the strictest sense, institutions have two main objectives: first of all, to economize, redistribute and promote the maximization of wealth. Secondly to guarantee property rights. However, in the real life the institutions are the rules that maintain the society functioning (Olsson, 1999)

It is possible to identify three main institutional dimensions: economic, political and social. The first ones are related with the economic freedom, they are in charge of guaranteeing the property rights and incentive innovation and investment. The political institutions are measured in terms of political freedom, civil liberties, political rights and political stability. And finally, social institutions are the rules that can shape social values and ethical principles. Regarding to these institutions, Putnam (1993) has coined the "social capital" term, referring to the rules and standards that shape the quality and quantity of the interaction of the members of the society. Following this argument, Putnam's idea argues that a society with high degree of

cohesion will derive in more investment. The main reason for this statement is that cohesive society will require less protection for the individuals, which represents less costs and, finally, can be understood as an incentive for investment.

Several studies (North, 1990, Aron, 2000, et. al.) have shown the positive effects of having strong and high quality institutions and its repercussion in the economic development. Defenders of geographical conditions, like Olsson (2005) argue that geographical location and natural resources have a direct repercussion during the growth process. Under this line of thinking, geographic conditions have favor the agriculture, and consequently settlements. Nevertheless, even when the institutional view recognizes the importance of those two elements for economic development, institutionalism adduces that is only through the institutions that this elements can have any impact.

North (1990) tried to explain the impact of the institutions in the economic growth. He identified that when a country has weak institutions all the productive elements will be less productive. In other words, a market that is unable to guarantee the respect of property rights or when financial operations are surround by a context of corruption will derive in the inhabitancy of technological innovation and capital investment, slowing down the economic growth. Complementing this idea, Kirzner (1973) states that an economic freedom environment will reduces the production costs, and as a consequence, will incentive the production.

Several studies have showed the positive effects of strong and high quality institutions in the advance of economic growth. For Olsson (1999), the main hypothesis is that success or failure of current economies is related with the original bio-geographical conditions. In other words, the original context advantaged the transition to the first settlements and later, in the development of agricultural techniques.

Effective economic institutions allow the citizens to select their profession, which give the opportunity to develop their talents in the best way possible. Consequently, the individuals will be more creative, innovative and will be productive for the market Economic institutions should provide the incentives for studying, investing or saving. However, the economic institutions are determined by the political institutions behavior. Inclusive economies will encourage economical activities. On the contrary, extractive economies will only obtain wealth without reinvesting. (Acemoglu, 2012)

Authors like Acemoglu, Robinson and Levine emphasize the role of institutions as a

critical agent for determining the success or failure of the countries. According to their arguments, wellbeing conditions of the citizens are determined by the interaction of state, market and community. A positive interplay among institutions should trend to reflect lower inequality levels, a more inclusive society and a market with more incentives for the production, innovation and academic preparation of its members. Therefore, this should lead towards a more balanced power distribution.

Conversely, when the market present several failures and the state lacks legitimacy, it is more probable to find difficulties in the institutions' main tasks, such as the provision of welfare. In other words, as weak as an institutional matrix gets, the less satisfaction of the population needs, in extreme cases, this could lead to high poverty levels (Wood & Gough, 2006).

For Acemoglu and Robinson (2012), the different levels of wealth between nations can be explained through the different incentives the citizens, politicians and companies have received from the institutions. The main role of economic institutions is to create conditions that make attractive to invest time and resources in receive academic education or to start a business in a new market. The economical institutions can be classified in two big groups: inclusive and exclusive.

The first kind identifies the private property as the basic element for incentive people to produce. When an entrepreneur is afraid of being sacked or robbed, he will not invest his resources in a new business, and as a consequence, the market could get stagnant. Furthermore, the inclusive institutions not only incentive the investments, also promotes the creativity and innovation, which means that in the long term it could turn in new technologies and more development. On the contrary, the extractive institutions will seek for satisfy the needs of an elite group. With extractive institutions it is easy to generate path dependence on history. Sometimes it is so difficult to break the path because ruling elites are against sacrificing their privileges for the common good.

But Acemoglu and Robinson (2012) go beyond, and they state that if it is true that economical institutions determine the wealth of the nation, it is also true that the political institutions shape the economical ones. Political institutions are efficient if they can assure the participation of the individuals in the electoral process, providing them the faculty of renewing

or removing its leaders. Political institutions can also be considered inclusive and exclusive. The first ones are based on a pluralist system and centralized power. On the other hand, a powerful elite that can extract resources from society characterizes the extractive economies.

According to Acemoglu (2012) there is a strong relationship between pluralism and inclusive economies. But, this economies does not only are pluralist; they also have a centralized backrest. For this economist, countries can fail when they have extractive economies supported by extractive political institutions.

When the market present several failures and the state lacks legitimacy, it is more probable to find difficulties in the institutions' main tasks, such as the provision of welfare. In other words, as weak as an institutional matrix gets, the less satisfaction of the population needs, in extreme cases, this could lead to high poverty levels (Wood & Gough, 2006). On the contrary innovation is possible because economic institutions are strong enough for guarantee property rights, the accomplishment of the contracts, equal and fair conditions for generating new companies.

North (1990: 110) "Third World countries are poor because the institutional constraints define a set of payoffs to political/economic activities that do not encourage productive activity". Reaffirming this idea, there is no way of understanding the problem of poverty without considering an institutional perspective. Acemoglu and Robinson (2012) state that the role of economic institutions in generating incentives is the cornerstone for determining the prosperity level of a country.

Regarding to the social dimension, Almond and Sidney (1964) have coined the term "civic culture" where they state that individuals does not only have political and cognitive links towards its political system, they also have affective relations. When the cognitive, the evaluative and the emotional elements are combined, it is generated a loyalty to the system, which in the long term will derive in legitimacy and stability. On the contrary, when some of the mentioned elements have a negative connotation, it is possible to inhibit participation. A non-participative society is a society that rejects the political institutions and structures.

Putnam (1993) states that local governments have generated an independent political sphere, distanced from the federal one. In order to explain this argument he point two variables: socioeconomic level of the region and political culture. In his thesis, Putnam provide two political socialization processes, the first one is characterized by a strong interest in public

issues, and social trust. At the same time, the second process is the reduction of social participation to a family level.

Trust in institutions is a key element to legitimize the role of the state, its origins and its actions (Guijarro, 2004). In the same line, Fukuyama (1995) states that if the institutions want to be successful it is essential to have the possibility of rely in the citizens

There are several opinions about the trust in institutions. According to Miller (1974) it can be an indicator of how the population is supporting the regime. Conversely, Citrin (1974) argues that it is not about supporting the system; it is a measure of the acceptance of the current government. Since a different view, Listhaugh (1984) consider that the degree of trust in the institutions can be a parameter of how well are living the citizens. He believed that the personal degree of satisfaction could shape the trust level.

### **Institutional quality**

Several academic efforts have tried to measure the relation between institutions and development. Martin Krause (2009) has created an Institutions Quality Index, with the purpose of measure the quality of economic and political institutions. The first ones are assessed trough the evaluation of the market operations. The variables used are focused in elements that motivate the active participation of the individuals, conditions that rewards the competitiveness; promote the economic freedom, currency stability and tax regulations. Regarding to the political institutions, Krause consider relative terms for measuring intangible concepts like justice, democracy, transparency accountability and property rights.

In a similar way, Aljaz Kuncic (2012) developed the institutional quality dataset, establishing institutions as the core stone of economic and social activities. He has created a World Institutional Ranking using indicators of formal institutions. Thanks to this ranking, it is possible to string along the changes of a certain country through the years.

In a like way, Eicher and Röhn (2007) have published the Institutions Climate Index (ICI); with the intention of explore the institutional clash in the economic growth. Contrasting with the first two proposals, the ICI propose a more extensive view. Constructed by several variables aggregated in seven categories, the ICI is not only focused on market a formal political variables, it also measures social conditions. Probably, the biggest contribution of this index is the two categories measuring potential events. The first one can be related with social

stability because it considers the potential conflict, either between nations, inside the same country or between two different religious groups. In addition, it makes an approach to the potential conflict if the military force has participation in the political arena. The second category of potential events is concerning about the innovation potential, the pattern register and the number of the published journals are two variables that feed the index.

In contrast with this perspective, Aron (2000) propose that the institutions can be measured through quantitative assessments, like the growth domestic product, the property rights or the civil liberties.

Following this literature review about institutional quality, it is precise to cite the Quality of Government Institute (QoG) and the several papers it has published about the quality in governmental institutions and, the requirements for keep high quality in the government. In addition, the QoG Institute provides access to a comparative database.

The QoG has organized the dataset in three big groups that can provide different approaches and ways of getting involved with the quality of institutions. The first category is what they call WII variables; these indicators are related with the essence of governments. It is possible to find assessments of bureaucratic elements and democratic characteristics. The second variable group is focused on bearings related to the development or maintaining the quality of institutions. In other words, the variables respond to legal frameworks and elements that participate during the policy process. And finally, the last group provides information about the consequence of the quality in government; this can result in human or economic development (QoG, 2014).

One of the contributions of the QoG is the European Quality of Government Index (EQI) that collects information of 236 political units among the 28 European Union members. This index considers as a corruption as a crucial element for defining in a government has high or low quality With this idea in mind, the surveys used for constructing this index make emphasis in the citizens perception about government effectiveness, rule of law and voice accountability and corruption. (Charron: 2013).

After this brief review, it is possible to state that the quality of institutions has a direct impact in the life of population. The first reason is that free market and democracy seem to be crucial elements for economic development. Both elements contribute indirectly to the individual's satisfaction, because higher income and lower unemployment rate will derive in

better life conditions. In addition, a stable market provides not only economic benefits, but also contributes to the freedom of choice, which can be considered as an important element for the individual and collective wellbeing (Gwarteney, J, Lawson R, and Hall, J, 2013: 230)

In the last years the debate about the role of institutions and the way of measuring their quality and impact has been very intense. There are several opinions of which variables determine the institutional quality and the way they should be measured. Some indexes are focus on the economical institutions, others in the formal ones or independent measures of corruption or quality of democratic regimes. However, there are some variables that are constant in many of these assessments.

It is important to state that the mentioned indexes are created by different institutions, and as a consequence, under different methodologies. In some cases, the institution in charge of the development of the index has consulted experts in the topic, for example the civil rights of Freedom house. But, at the same time, there are some indicators that are product of the combination of experts' opinions and objective measurements. However, other variables such as legitimacy or corruption can be assessed through different surveys or cumulative indexes.

Almost all academic research in the topic converge in the idea that formal conditions as democracy and legitimacy can affect positively in the quality of the institutions. On the other hand, informal elements like clientelism and corruption can awake and inhibit the proper operation of institutions. In the following lines I will precise in this variables.

#### **Democracy**

As it has been mentioned above, the political institutions are a basic element in the constitution of the institutional framework. It is believed that democracy can play an important role in the construction of the mentioned framework. For example, there is an academic wave that supports the idea that weak, or relatively new democracies, which are not consolidated, can have negative effects than authoritarian regimes or consolidated democratic regimes. Charron and Lapuente (2010) tried to answer if democracy stimulates the quality of the government. They found that there is no common rule; however, the common trend is that countries with high level of poverty can have higher quality of government when they are under an authoritarian regime. Meanwhile, the most efficient democratic regimes correspond to

moderate-to-wealthier countries.

It is a common trend that democratic regimes have strong institutions. Even when a simple correlation cannot necessarily means causation, democracy is a variable that should be considered and defined.

For Dahl (1999) a democratic regime is the best form of government, and in order to support his argument he present ten positive consequences of implementing a democracy. The first advantage of these regimes is that it avoids the spread of a tyranny. This means that even when political decisions can affect one sector of the population in order to benefit another one, democracy can avoid abuses. The second point is that democracy guarantee fundamental rights to the citizens. People should have right to vote, participate and decide. The third point highlights the importance of freedom of expression. Without this point, democracy cannot exist.

In another point, Dahl (1999) states that it is only through a democratic system that the individual can guarantee the protection of liberties and promote the self-determination of the individuals. Regarding to the sixth point, democracy states the limits of individual freedom where the neighbor's freedom begins. In other words, if a democratic regime is working properly, it should promote moral behavior. Also, Dahl states that to live in democracy will derive in peaceful societies.

Regarding to democracy in a larger scale, Dahl (1999) argues that public positions should be elected, given the opportunity to participate as candidate or as voter. A democratic regime should be characterized by free, periodically and clean elections. For guarantee freedom of expression, free and public access to information, freedom of association,

In other words, the minimum standards required for consider a regime as democratic are: universal vote for all the citizens, free, competitive and periodical elections, pluralism in the parties and several information sources. In addition, Morlino (2008) highlight freedom and equity as the main components of the ideal type of democracy.

Another important pillar of democratic regimes is the practice of civil and political rights. A context of freedom of expression and participation will constrain the abuse of power from elites and consequently will derive in better policies that redistribute the goods in a more equitable manner. (Wittman, 1989). On the other hand, Alesina, and Rodrik (1993): highlight that not only the lack of democracy will affect economic growth, also the instability

A democratic regime is characterized by the strong participation of it citizens. For Axford and Rosamond (1999) the political participation can be defined as the actions in which the people, using their free will can influence the decision making process in the political sphere. They show several criteria for measuring the political participation, like vote in elections, referendums, active participation, social disobedience and clientelism.

On the other hand, Ángel Rivero (1997) states that the participation can be considered as useful only when it can represents a positive and constructive opposition. For him, the participation can be categorized in two stages; the first one, during the voting exercise for legitimize the regime, and the secondly, when it the citizen make use of his political rights.

#### **Quality of democracy**

It is not only needed to have democracy, it also has to be quality in the regime. Morlino and Diamond (2005) have tried to define the concept of quality of democracy. In order to achieve this goal, they start defining democracy in its elementary level as the exercise of universal vote in a context of free and fair elections among different options during the electoral competence (Morlino & Diamond, 2005).

In this order of ideas, they highlight the importance of guarantee the respect of individual liberties, which are cornerstone of democratic regimes.

These authors approach to the quality concept since three different perspectives. The first one is merely procedural. In other words, quality is understood as the result of a strict, precise and recurrent process. The second approach put more emphasis in the content of the process. They refer to basic characteristics such as structure, design and effectiveness.

And finally, the result is the focal point of the last perspective. This means, like any other product or service, democracy can be assessed by the satisfaction of the clients, in this case, the citizens without evaluating the process.

These three approaches can be measured through eight variables. The procedure dimension is assessed trough: 1) Rule of law 2) competitiveness 3) Accountability (vertical and horizontal) The content dimension is centered in the essential values of effective democracy: liberty and equity. Finally, the result dimension is measured through the responsiveness of the government.

Scott Mainwaring, Timothy Scully and Jorge Vargas-Cullell (2011) try to measure

democratic quality, for this purpose they identify nine dimensions of democratic governance: level of democracy, respect for rule of law, control of corruption, economic growth, inflation under a reasonable level, reducing poverty, job creation, improving education and providing citizen security.

This idea is based on to statements; the first one is the fact that a positive outcome in the variables will represent a wellbeing context for the citizens. Secondly, it is believed that states significantly influence those outcomes.

### **Quality of Mexican democracy**

The electoral reforms that started in 1977 were the beginning of a gradual empowerment of the small political forces. The process has been slow, but through the pass of the years, the pluralism has been gaining spots in the Congress, and as a consequence, it has strengthened the emerging democracy. Before the reforms, the Legislative branch was subordinated to the Executive branch. When the President was the leader of its party, the Congress used to approve almost all the initiatives without questioning. In current times, this situation has changed and even in one administrative period the party with the majority in the Congress was different from the party of the President.

During the last 20 years the political system has transited form a hegemonic party regime to a moderated pluralism (Sartori, 1992) Probably the highest point in the alternation process was in the year 2000. After seventy-one years of uninterrupted PRI mandate, PAN won the presidency. However, the first evidences of democratization came at the state level, where local political parties became more competitive, and after some year they become a real opposition at the federal level. (Aranda, 2003)

The 1986 electoral reform was designated to attend two attend two main points, the proportional representation and the provision of autonomy to the electoral institutes. Probably, one of the most important legacies of this reform was the inclusion of 100 more deputies, allocated by a proportional representation methodology. This meant more spots for the opposition, making a more pluralistic congress and reducing power of the hegemonic party. And, in order to strengthen the rule of law, the reform proposed the creation of a new Electoral Tribunal, in order to prevail the cleanness of the elections.

The reforms continued and in 1994, the Federal Electoral System promoted the creation of a Commission in charge of attending electoral crimes. It was until 1996 when the Executive branch was totally removed from the electoral organisms. This point is relevant because one year later, Mexico City had elected a head of government form a different party than the party in the Federal Government. The first alternation was in 1996, in the northern state of Baja California (that coincidently, is one of the states with less percentage of population below the poverty line). The PAN's victory in Baja California is not understandable without exogenous phenomena like the rise of the EZLN or the electoral conflicts of 1988 and 1994 (Ortega Ruíz, 2008) The changes continued and in the year 2000 for the first time in the independent era Mexico has alternation in the presidency.

Sirvent (2005) states that even when it is possible to have several political parties and a certain degree of competition in the electoral arena, there are some participatory modes that can complement the parties system. The community in the local level can promote the development of social links, based on solidarity that can provide sustentation to several plural and participative conditions. One example of this community practices are the indigenous populations. In Mexico, indigenous communities have certain common elements; their own authorities than can solve their every day problems (Sirvent, 2005).

#### Legitimacy

Legitimacy can be defined as the feature of the state where a big part of the population, by consensus, agrees to obey without the use of force. Hence, all political position tries to earn the support of its citizens, when this goal is achieved, it is recognized as legit. According to Bobbio (2006), when a leader is legitimized, the obedience is transformed into adhesion.

Lipset (1967) defined legitimacy as the capacity of the system for creating and maintaining the belief that the political institutions are valid and the most appropriate for the society. On the other hand, for Rosanvallon (2007) legitimacy is a legal condition, and the only measurable thing is the trust in institutions and governments. When a regime lacks of trust of their citizens, it is not possible to talk about legitimate and stable bases for a well functioning democracy.

### **Accountability**

Accountability is one of the main characteristics of a well functioning regime. Accountability is the crucial complement for transparency. In order to function properly, a democratic regime does not only need to show transparency in the management and allocation of the resources and decision-making process. It also needs to provide the citizens the opportunity of evaluating the responsible. This means, to limit the power of the elites and to have the opportunity of reward or punish the responsible. It is not possible to conceive a high quality institutional framework without a good transparency and accountability system.

Almond and Verba (1963) stated that a responsible citizen trend to analyze and evaluate the political system. During this process, it is possible to generate a loyalty to the system and its institutions, which can be understood as legitimacy and consequently a trend to reach political stability. On the contrary, when there is a lack of loyalty or a negative evaluation, it is more probable to find a society that refuses the institutions and the political structures.

#### Clientelism

For Norberto Bobbio (1981), the clientelism can be defined as the relationship of two individuals with different socio economic status that generates a strong economic dependence. In this relationship, the individual with the higher status works as a patron protecting its clients. Then, the clients should behave in a submissive way, accepting all the desires of the patron and, can protect him.

A capitalist welfare state characterized by two main elements; a state with strong legitimacy among its citizens and an efficient market that provides formal labor. When both conditions are accomplished, the welfare state can guarantee equal benefits to all citizens, regardless of income. The citizens can rely on their institutions (state & market) and the wellbeing is considered a right and not consequence of mean-tested practices.

On the contrary, when state and market are weak and cannot guarantee the good live hood to citizens, the individuals are pushed to should base their trust in the community and in the family for satisfying the basic needs, creating informal and hierarchical relationships.

In other words, the society will turn into a correlation between individuals in two different positions, where ones can be considered as a patrons and the rest as a clients. This

relationship will be based in the exchange of support or help for the immediate security provision that the state cannot guarantee. Following Gough arguments, it is possible to state that in societies with strong patron-client relationships, economic growth will reinforce the gap between individuals and in the long term these differences will generate poverty. Hence, for Gough it is only through a de-clientelization process that a country can move from an informal (and unequal) security regime toward a proper welfare state, where the benefits are universal.

According to Barreda & Costafreda; (2006: 122-123) the clientelism is one of biggest traps that impede the consolidation of democratic regimes. Patron and client exchange different interests,, votes, support, money favors, and incentives etcetera. Sometimes, clientelism can be related with other practices like corruption and favoritism in the political behavior. It can mean to privilege a person, organization, labor union or political parties in despite of others. One of the biggest examples of clientelism is during electoral periods in poor communities, where the candidates exchange food, a clothes or money and the clients pay with their vote. Trying to explain the switch from clientelism to citizenship, Jonathan Fox (Cornelius, W. Craig, A. and Fox: 1994). argues it is needed to guarantee that the polls will be free and fair, providing a universal suffrage during electoral competition. But at the same time, Fox also mention that electoral competition is not the only way for eliminating authoritarian clientelism.

#### **Clientelism in Mexico**

The Partido Revolucionario Institucional (PRI) has ruled Mexico for more than seventy years. In this time, the party had the opportunity for creating a perfect machinery of clientelism. These relationships were legitimated by the revolution discourse. This element is particularly interesting in order to understand the clientelism in Mexico, because based in the Revolution's discourse; the popular sector has traded votes and support for a limited access to power. For example, some labor unions like the National Peasant Confederation (CNC) has political representation inside de party. In 1938, the PNR has incorporated four different labor unions to the party and as a result, it avoids possible coups or demonstrations against the corrupted electoral system.

Between academics, it is a common belief that the economic recession of 1982 and the later one in 1994 have strengthened the clientelistic relationships trough the anti-poverty

programs. President Carlos Salinas implemented the Programa Nacional de Solidaridad (PRONASOL) with the purpose of combat poverty. However, it became the cornerstone for supporting PRI's regime. The program received several critics, the most common was that the program was not targeted to the poorest municipalities and the second one, argues that the program was used to allocate resources according to political criteria (Molinar and Weldon, 1994).

### **Contribution of this paper**

The literature review and the definition of concepts provide a basis for start approaching to the poverty situation in Mexico. In order to fix something that is broken, it is necessary to analyze and understand the circumstances that generated the phenomenon. In a first sight to the numbers, it would seem that despite the slow growth and the increase of the public expenditure, México has been stocked in poverty. This argument can lead to different conclusions. First of all, it can question the idea that poverty is almost automatically solved with the economic growth. Secondly, it can question if the anti-poverty programs are functioning properly, according to their objectives and if they are reaching their goals.

Nevertheless, even when the numbers in a national level have remained almost constant, it is possible to identify that at a local level the poverty has experimented different changes. In other words, nine out of the 32% states (around 28.12%) have increased their percentage of population under poverty conditions. In brief, almost the 30% of Mexican states have more percentage of population in poverty than 20 years ago. On the contrary, the remaining 23 states have experience a reduction in their poverty levels.

After observing this, it is possible to question why are still poor people after 20 years of expenditure? Why some states are following a trend of reduction in their priority zones, while others are getting poorer? Why can this happen inside a same country?

Understanding that inside a country there are different realities, the gap this paper is aiming to fill is the approach to the institutional quality at a local level. The principal hypothesis of this paper is that rather than increasing the spending amount of money in anti poverty program, is the institutional framework who can moderate the success or failure of poverty reduction Hence, it is probable that the solution to reduce poverty is closer to be in the strengthening of the institutional framework rather than just increasing the amount spent in programs. In the following lines I will

try to explain in detail this idea.

The argument is that not only regarding to poverty issues, in general terms institutions trend to be more efficient and to give more satisfactory results when they are strong enough. The institutional framework is mainly strengthened by three elements, high level of legitimacy, high number of incentives and low levels of corruption. On the contrary, when an institutional framework is developed under a context of high levels of corruption, no incentives for being productive or for respecting the rules, the results can be far from the expected.

Within this framework, the anti poverty programs should be more efficient in the states with higher quality institutions that in those with a weak institutional framework. I will try to clarify with an example, if the normal citizen does not trust in his authorities (lack of legitimacy) he would not have any incentive for respect and follow them. If the citizen neither recognize nor respect the rules, he will be more vulnerable to fall in corruption acts because he lacks incentives for not accepting immorally offers. If we transfer this example to the anti-poverty programs the result could be the same.

# **Methods**

As it has been mentioned since the begging the main purpose of this paper is to answer if the institutional framework can shape the success or failure of poverty reduction. The main hypothesis is that if there is a causal relationship between the quality of the institutional framework and the reduction of poverty. In order to test this hypothesis I will use quantitative methods expecting find a stronger statistical correlation between institutional quality and poverty, rather than the relationship between social expenditure and poverty reduction. The idea is to test f the institutional quality can mediate the poverty alleviation, like in the figure 2.

In order to reach this goal, first of all based on the concepts and characteristics mentioned in the theoretical section I will create a tool for measuring the quality of Mexican institution. Secondly, I will generate several statistical linear regressions in order to determine if the quality of institutions can contribute in the poverty alleviation.

Once that the Mexican Institutional Quality Index (MIQ) is created I will proceed with the statistical tests. The equation to solve will be  $Poverty = \beta_0 + \beta_1 X_n$  where poverty will act as (Y) the dependent variable, and for some tests I will measure Y as patrimonial poverty, and

then, my second dependent variable will be poverty as capability deprivation. Conversely, the independent variables (Xn) are going to be  $X_1$  the MIQ,  $X_2$  the public expenditure and  $X_3$  the economic growth. I will make simple regression test with each one of the variables, and then I will compare the results.

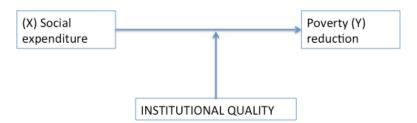


Figure 2. Social expenditure, institutional quality and poverty reduction

#### The Mexican Institutional Quality Index (MIQ)

In order to determine if the institutional framework can moderate the poverty reduction in the Mexican States I have constructed the Mexican Institutional Quality Index, which is an attempt for measuring the quality in the institutions at a local level. As it was mentioned in the theoretical part, there are different and many institutional quality indices. The main differences are located in the elements that are considered as crucial for determining the quality of the institutional framework. In other words, even when there are many quality indices not all measure the same elements neither use the same scale or values.

As a result, it is possible to find differences between the indices, however, it does not necessarily mean that one index is better than another; it is just that they are measuring different conditions or using alternative scales. Mainly two aspects can determine the variation in the results, the first one by how concepts like quality and institutions are defined, and the second one, by the purpose of the assessment. There are measurements that privilege one special feature related with the institutional quality of the institutional framework. For example, in Mexico exists the Democratic Development Index (IDD) measured by the Konrad Adenauer Foundation (2014), that, as it names shows, they emphasize in the importance of democracy. Some other indicators give more importance to economic growth or social participation.

As a consequence of the lack of time and resources, it is not possible to measure all the elements that mediate the quality of the institutional framework. Hence, for the purpose of constructing the MIQ I will obey the following path: I will collect information about eleven variables his paper, the institutional framework will be composed by the definitions and elements identified in the theoretical section.

The path to follow was the next one: first of all I will The Mexican Institutional Quality index is a composite index because it has aggregated and amalgamated the information provided by the eleven variables that moderates the quality of the three institutions (political, economic and social). After selecting the eleven variables, it was necessary to standardize them before aggregating it. This means that as a result of coming from different sources, it was possible that the variables were using different scale. Hence, it was necessary to standardize in order to amalgamate and make it comparable.

For this process the variables were standardized in four possible values regarding to its qualitative condition, in 1 for a minimum quality value, 2 for a low value, 3 for a medium quality value and finally 4 for a high quality value. It is worth to mention that some variables were standardized in inverse way. This means that variables like degree of corruption, clientelism and the Gini coefficient have more qualitative value when they have a lower number. In other words, while a high the degree of participation represents a positive or high quality value for the purpose of this index, a high number in the Gini Coefficient will represent more inequality, a value that definitely cannot be considered as synonym of institutional quality. Hence the result was that the lower original value of these four variables was adjusted with the highest value in the standard scale. A full list of the original values of the variables is presented in the appendix of this paper.

The MIQ will be similar to the indices mentioned in the previous section. However despite the similarities it will present a few novelties. First of all, this index is created for Mexico and the variables that are going to be used are in a state level, not at national level like the many of the previous indices. Secondly, the statistical tests will be run and later compared among states and not nations. Thirdly, I will use formal and informal variables. I will use clientelism as a variable, that during the last twenty years it has been consolidated as a rule of the democratic game, informal institutionalized.

The MIQ will be composed by three categories pertaining to the Political, economic and social institutions. The main objective of the MIQ is to quantify the institutional conditions for expecting a successful result in the implementation of an anti-poverty program. In the strict sense, the higher MIQ value, the more prone to have better results in the poverty diminution.

Differing with some of the mentioned indexes, I will use formal and informal institutions. It is important to state that sometimes can be difficult to find official data about informal institutions and relative terms, such as clientelism or legitimacy respectively.

During the construction process there can be several difficulties. The most common one is how to give an adequate value to the different variables, because it is probable that one measure should have a bigger impact than another. Another problem is that up to the point of writing this paper, there is no one official or unique formula for constructing an institutional quality index. This means that there are different proposals that include unequal variables with alternative methodologies for measure.

The Quality of Government index is fed by different surveys that have the purpose of collect citizen's perceptions and experiences with corruption. In order to construct the European Quality of Government Index (EQI) Charron (2013) utilizes four main indicators: control of corruption, government effectiveness, rule of law and choice accountability, After identifying the four pillars, he transforms them into a composite index, giving equal weight to all the variables.

The common trend in the literature is to average or sum indices. Which should mean to give the same value to the different variables. However, when it is required to give different weights to the variables it is possible to assign them trough a Principal Factor Analysis. This technique allows the researcher to reduce the dimensionality of the dataset. The Principal Factor Analysis provides the fewest number of linear combination of the components, that for further references is going to be called factors.

The first step was to combine several components for a similar institutional proxy in order to get a sub-index heading. For example, all the components related with democracy are combined into a sub-index called democratic quality. In the second stage the process was repeated but, this time instead of performing the Principal Factor Analysis to the components, it was on all sub-indices that are parte of each category.

#### Inequality

The first variable that I will take into account for measuring the quality of political institutions is the Gini index. This variable is a measurement of the degree of equality between the inhabitants of a certain population. The values goes from cero to one where the closer to cero will represent a more heterogeneous income in the society, while the opposite, and closer to one will represent a perfectly unequal society. Even when the Gini measures the inequality according to income, it can represent how is distributed a society.

I chose this variable because equality should be the cornerstone of a democratic regime. Macías (2006) state that inequality is a crucial element for the failure of political systems. When a society is divided in two groups, a big and poor base with a small and rich elite, it can just end in an oligarchy or in a tyranny based on popular bases. (Macías; 2006: 147)

According to Macías (2006) big differences among the citizens can provoke weakened the social cohesion and as a consequence, a weak democratic system (Macías: 2006: 156). As it was mentioned in the theory section, equality is a crucial element for a well functioning democratic system. In addition, an unequal society is vulnerable to suffer high levels of clientelism and corruption, crucial elements for inhibiting the consolidation and efficiency of democratic practices, and as a consequently, low quality in the political institutions.

#### **Electoral competition**

The second variable selected is the degree of participation during the electoral journey. By definition, in a democratic context equality and participation are almost always together. A society that does not participate in the election of its governors it cannot reach the democratic ideals. This variable is determined by the resultant of dividing the number of votes registered during the federal elections of 2000, 2006 and 2012 into the number of citizens registered in the electoral institute.

This means that not all the people that has reached the majority of age or that are registered in the electoral institute put in practice one of its the political rights, the right to express themselves and to decide their representatives.

This variable, which is expressed in percentage, contributes to the democratic quality because a state with high percentage of abstentions cannot represent an inclusive and participatory regime. There are many elements that can influence the level of participation,

since lack of interest from the citizens, apathy to external conditions that inhibit the vote. However, and in despite of the reasons, it is not possible to refer to a high quality democracy with low participation level.

The third variable included in this section refers to the cleanness of the elections. In order to have a high quality democracy it is necessary not just to have equality and participation, this also need to be fair and respected.

The Federal Code of Electoral Procedures and Institutions (COFIPE) states that any kind of behavior that attempts to the public interest or that affects the federal elections are considered as electoral crimes. The same law identifies the following electoral crimes: 1) To vote without accomplishing the minimum requirements for participate. This means, to vote without electoral ID, without reaching the minimum age, or to vote in the name of a different person. 2) To vote more than one time

3) To make proselytism or to pressure the voters during the election day 4) To block the development of the elections 5) To steal electoral ID cards, 6) To exchange votes for money 7) To attempt to the secrecy of the voter 7) To force one to vote for a particular party or candidate 8)To impede the installation of the polls 9) To steal suffrages or 10) To use religion as an argument for pressuring the voter to participate

The third variable corresponds to the number of inquiries presented to the local authorities during the election journey represents a threat to the universality and validity of the votes, and it makes reference to the crimes mentioned above. The Federal Specialized Prosecutor for Electoral Offenses (FEPADE) who is in charge of producing this indicator, acts like the referee during the electoral process, its function is to guarantee that the elections elapse in a free and democratic way.

Even when in many cases people that suffer an electoral abuse do not file a complaint, this variable is important because it can give an idea of how free and clean are the elections. As a result, a state with a high number of complaints can represent a turbulent election, which of course, affect the democratic quality.

The fourth variable refers to another pillar of democratic regimes, the competitiveness. This means, to measure present the level of competition between different political parties. With this information is possible to analyze the voter behavior and the way the political power is distributed in a democratic system. For example, it the majority of the votes are concentrated

in only two political parties, it is possible to state that the system reflects bipartisanship even when there can be more political parties registered.

This variable is measured with the Rae's fragmentation index (Rae, 1971), which is calculated Subtraction of the sum of the squares of voting percentages from 1. The formula is the following one:

$$F = 1 - (A^2 + B^2 + C^2 + n^2)$$

Where F means the fragmentation, and the letters are the percentages of votes received by each party. The result will give a value smaller than 1 and bigger than 0. The resultant value will prove us the opportunity to sight how is the power distributed. The closer to cero will represent the less distribution of power, this means, that it is a hegemonic party regime. However, if the resulting value fluctuates around 0.5 will mean that there are two strong parties in the regime, but the closer the value gets to one, the more distribution of power, a multi-party system.

For Sartori (1992), the fragmentation measurement is an important tool for determining two basic things in a democracy: first of all, the possibilities of coalitions among parties, and the probabilities of having blackmail. This variable can contribute to the measurement of the institutional quality because a hegemonic party can make abuses and it is probable that the minorities will not be properly represented. For the purpose of this paper, the closer to 1 should mean a higher quality in the division of power.

The next variable that I included in the index is the degree of interest in political issues. A participatory society should trend to be more democratic than a passive one. However, in order to have high quality of democracy, it is needed to be informed and use different channels of communication with the authorities. The participation should not be reduced to the electoral journey. A society that is not interested in the political context is in risk of having authoritarian policies. The National Survey of Political Culture (ENCUP) provides the degree of interest in politics, through the question "How interested are you in political issues?" The possible answers were: 1) Nothing, 2) A little, 3) Something, and 4) Much. I believe that an informed and interested society can participate more and demand more quality in their institutional framework.

#### Clientelism

The clientelism variable was recovered from the Panel Study made by the Massachusetts Institute of Technology during the political campaigns of 2000, 2005 and 2012. The study consists in a major survey project. The intention of the Panel Study was to examine the democratic process in Mexico. The goal was to identify the responsible of the agenda setting during the electoral periods and how does the citizenship reacts to these situations. From the survey I used the questions about clientelistic behavior before and during political campaigns (MIT, 2008)

In this survey, are several questions related with clientelist practices. They question like: *Have you ever received any gift, help or support from a political party?* 

I decided to use the information of this survey for several reasons; first of all, because it is extremely hard to find information about clientelism. As it was mentioned above, it is considered a crime. Even when clientelism is a recurrent topic in research it is extremely hard to find reliable data that can measure clientelism in a local level and during at least two electoral processes. The MIT'S survey can provide such information regarding to the 2000, 2006 and 2012 Federal elections. As we mentioned in the theoretical part, clientelism can weaken the democratic institutions.

#### **Access to information**

Regarding to the information access, as it was mentioned in the theoretical framework, a crucial element for effective democracies is the access to information. This variable is the result of dividing the solved inquiries into the total information request presented to the Federal Institute for Access to Public Information (IFAI).

This variable can provide important information mainly by two reasons: first of all it can show how interested is the population in asking what are the public workers doing, where are the resources going or about how is used the money collected by taxes. The second reason is that it show how effective are the authorities answering to the information requests about the activities of the head of the ministries or about Governmental Offices reports. As a result, a high number of solved requests will mean that the public issues are becoming more transparent and, this will conduce to more qualitative institutions.

## Legitimacy

A crucial element for a high quality democratic regime is the legitimacy in front of the citizens. It is really difficult to put a number on a concept like legitimacy. However, when the trust in institutions is measured, it is possible to have an idea of how strong is the relationship between the reliability of institutions and the political and social stability. In 1995 Fukuyama said "in order to have functioning institutions, it is necessary to have the support of the citizens". The variables related with the trust in institutions are an attempt for measuring the relative concept of legitimacy.

For the aim of this paper, the legitimacy was measured through ten questions of the ENCUP survey. The questions were about the degree of trust that the respondent had in the following institutions or actors: *How much can you trust in your...President, Head of State, Local Ministry, Judges, in the electoral system, in the Supreme Court, police, deputies, ministries and political parties?*"

In order to resume all in one unique value I created an aggregated sub-index adding all the answers, because all of them have the same weight and scale of response. As in the question about interest in politics, the possible answers were: 1) Nothing, 2) A little, 3) Something, and 4) Much.

Even when legitimacy is a hard concept to measure, the trust in institutions can provide important information. A high trust degree can mean that the institutional frameworks in working properly, and consequently, that it has quality.

### **Economic competitiveness**

The economic competitiveness is an index provided by the Mexican Institute for the Competitiveness. For its construction, the organization uses more than eighty variables condensed in ten categories that contribute to measure the general conditions in order to determine the competitiveness of the market at the local level. Between all the indicators it includes average time for commercial procedures, average GDP growth, public debt, economic productivity, bank efficiency, insurances, economic transparency, facilities for starting a new business, fiscal autonomy and tax collection efficiency, among others.

Even when the index is intended to give more value to economical competitiveness, it

includes different categories like: rule of law, social cohesion, and political system and of course macroeconomics and innovation. The more competitive a state is, the more quality in their institutions. If a state is competitive it is because it has inclusive economies that can promote the creativity and the innovation. In addition, if the state is competitive, the citizen will be incentive to prepare itself and to be part of the economic dynamics.

#### **Social institutions**

For measuring the quality of social institutions in the MIQ I took in account two variables, the first one corresponds to the corruption index and the second one is related with the social participation. Both measures can provide valuable information in order to determine if the society can be considered a high quality institutions.

Regarding to the corruption index, it is a measurement that has been used since 2001 and it measures the corruption in procedures and public services. Among its more than 30 variables, the index considers the acts of bribery in order to obtain a benefit or to facilitate procedures. The aim of the corruption index is to measure the power abuse and the lack of rules that can make the society and the market work properly. It is not possible to find a causal link between poverty and corruption, but empirical studies have shown that usually, both variables have proportional relation. In other words, it is common that poor societies have high corruption index, while economic develop societies have low levels of corruption. In addition, a society with high level of corruption, which can pay a bribery in order to avoid fines or to streamline official procedures, cannot be considered as a high quality institution.

Concerning to the social participation, it is measured through the results of the ENCUP. This time, the questions were related with participation in NGOs, political parties, working unions, neighborhood association, academic society and religious organizations. It is not a rule, but a society which individuals have high degree participation can reflect more social cohesion. A society that is united can compensate the political and economic spheres becoming an important player in the decision making process. Furthermore, a society with high participation can be supports if the economic or political system fail or pass through a critical event and it capabilities are exceeded, for example, the new ways of public management.

#### **Data sources:**

The period of analysis was intended to comprehend the twenty years between 1990 and 2010. This was one of the most difficult parts of the paper, because during the last twenty years Mexico has passed through several changes and nowadays the institutional framework is different. This has influenced the election of variables, because in order to create an index that can be used for measuring in two period of time, it is compulsory to use the same variables; otherwise, it would not be comparable. One example is the variable provided by the FEPADE, it is not possible to have the same variable in the period 1990-2001 because the FEPADE did not exist at that time. The same situation happened with the IFAI that is a public institution that was created in 2001; hence, they will not have any report before this year. In addition, it was even harder to create a measure of institutional quality before 2000 because some institutions did not exist and they did not had a substitute.

A second point that is important to have in mind is that even when the variables can proceed from serious institutions, it is possible that some values can be far from the reality. This is in particular regarding to the informal institutions like corruption and clientelism. It is possible that the repliers of the questioners do not answer with all the truth because corruption can be ethically questionable and clientelism can also be considered a crime. Practices such as clientelism or bribery are illegal; hence the data is not totally reliable. The information was collected through surveys and there is a possibility that people does not answer honestly or afraid of being judged or denounced to the authorities.

One of the limitations in the construction of the MIQ is that as a consequence of the limited resources (time and money) it is not possible to go to Mexico and raise a survey or make interviews for collecting the most pertinent data. Through the different statistical analysis it will be probable to find information from governmental and private organizations in Mexico. For official and formal data, such as poverty level, income, voting statistics and political practices I will use variables from official databases. The official cited sources will be the National Council for the Evaluation of Social Development Policy (CONEVAL) National Statistics and Geography Institute (INEGI), the Electoral Institute (IFE) Social Assistance Ministry (SEDESOL) and the Ministry of Government Services (SEGOB).

### **Reliability and Validity**

Many of the decisions taken during the construction of the MIQ were arbitrary. In this case, I tried decided to use equal weighting for the standardization process, instead giving special value to a selected variable. The MIQ is a composite measure constructed by eleven indicators. However, these indicators are measuring different things and as a consequence, with different ranges. In order to contribute to the validity of the MIQ it was needed to recode the variables, in order to make the same starting and ending point in all the scales.

After recoding the variables, it is compulsory to test the reliability and validity of the MIQ. The reliability is a measure that shows how free form error is the scale. In order to measure the reliability, it is possible to run an internal consistency. The result shows the average correlation between all the items used in the scale. The values in this range goes from 0 to 1, where the closer to 1 is the highest level of reliability of the index. Conversely, if the result is below .7 it can be considered poor or weak but still acceptable. If it is below .6 it is unacceptable because the index is not internally consistent, and as a consequence, is not reliable. For these purpose I used the Reliability in the Statistical Package for Social Sciences (SPSS).

For the composed variables of social participation the Cronbach coefficient was, 982, for the composed variable of political trust the coefficient was, 901, for interest in politics it was, 753 and for the MIQ the Cronbach coefficient was .601

## **Analysis**

After 20 years of monitoring the levels of poverty, the case of Mexico has shown that if it is desired to eradicate or at least diminish the poverty in the country, it is insufficient to have a small economic growth and an increment in the anti-poverty programs' budget.

As it has been mentioned in the sections above, during this period of time (1990-2010) the GDP per capita has grown around 30% at the national level. Meanwhile, in the same period of time, the budget for the anti-poverty programs has increased in more than 90%. However, even with this samples of development, the poverty levels at the national level have remained nearly the same.

Among other concepts, the theoretical part of this paper presents a contrast of some of the

perspectives and efforts that have been done in order to understand why poverty still exists until our days. With the intention of solving the problem, two main arguments have been confronted; the first one, defended by Sachs (2005) states that including other factors, the key element for eradicating poverty is to expand the amount of resources given to poverty reduction strategies.

Still when the second argument does not refuses completely the idea of incrementing the public expenditure in social programs; it makes special emphasis in construct a strong institutional framework as a prior step than spending money.

Based on these two arguments, the main purpose of this paper is to identify until which point does the quality of the institutional framework can mediates the success or failure of poverty reduction. With the intention of achieving the mentioned goal, this section has the purpose of setting the problem in numerical values in order to find a possible answer for the aim of this thesis.

The structure in for this section will be as follows; First of all, a primary sight of the dataset will be presented. And secondly, five sets of regressions will try to answer five questions in order to identify the relationships between variables and consequently to understand more clear the role of institutions in the success or failure of poverty reduction.

According to the numbers presented in the Tables 1 and 2 (located in the appendix) 21 Mexican states (which represents 34% of the total) showed an inverse relation between the change in their percentage of population in situation of patrimonial poverty and the MIQ value. This means that, in these eleven states the change in the MIQ represents a change in the other direction in the patrimonial poverty levels. In other words, when the MIQ of these states increases its value, the poverty decreases, and when the MIQ decreases the poverty has increased.

As it was mentioned in the previous sections, one proposal for reducing the poverty levels is to increase the expenditure in anti-poverty programs. In the Mexican case, from 1990 to 2010 come across four Presidential administrations; Carlos Salinas (1988-1994), Ernesto Zedillo (1994-2000), Vicente Fox (2000-2006) and Felipe Calderón (2006-2012). With the changes of the Presidents, the programs have evolved from PRONASOL to Oportunidades, passing through PROGRESA.

This alternations does not only represented changes in name of the anti-poverty program, it also represented expansion in the number of beneficiaries and in the spent resources. The Table 3. Presents hot the mentioned programs increased their budget in more than \$44,000 million pesos

in ten years. Veracruz and Chiapas were the two states that received more than 4 thousand million pesos more in 2010 than in 2000.

Up to this point, the statistical analysis has been based in the definition of poverty as a matter of the insufficiency of income. However, when the definition of poverty becomes broader, and it is understood as Amartya's Sen definition of poverty as the privation of capabilities, it is possible to measure the success or failure of the anti-poverty programs in different measures than just reducing its impact to monetary terms.

Following this idea, and for the purpose of this paper of understanding how the institutional quality can mediate the success or failure of the antipoverty programs, three indicators related with the capability deprivation are going to be analyzed.

The criterion for selecting these indicators was that they should be representative measurements of the satisfaction of thee basic human needs; education, health and housing. The indicators selected are; the percentage of illiterate population older than 15 years, the percentage of population without access to health care services, and the third one is the percentage of population that live in houses with dirt floor (See Table 5).

In a first sight of these markers, it is possible to observe that in the three indicators present improvements in all the 32 states during the selected period.

For example, the percentage of illiterate population older than 15 years has decreased in all the states. The three biggest differences between 1990 and 2010 were in Oaxaca (-5.20%), Chiapas (-5.11%) and Guerrero (-4.87%).

Regarding to the percentage of houses with dirt floor, it has also decreased in all the states. In addition, in this indicator the three states that had experimented the biggest change were the same as with the previous indicator. Chiapas population experimented a reduction of 23.74%, while Oaxaca 20.97% and Guerrero 18.57% Finally, in the third indicator of Capability deprivation, the percentage of population with access to healthcare, has increased in 44-27% in Tabasco, 38.32% in Campeche and 36.09 in Chiapas.

After this first approach to the dataset, it is possible to get a general view of the situation and to make some assumptions and conclusions about the relationships among variables. However, these first conclusions can be speculative and informal. As a result, the second part of this analysis will be focused on ratifying or refusing the assumptions with statistical

arguments. Based on the numbers presented in Tables 1, 2, 3, 4, and 5 and on the defined concepts in the theoretical section, five questions are formulated.

- Until which extent the patrimonial poverty levels can be explained by the MIQ?
- Which variables can explain the changes in the poverty levels?
- The changes in the MIQ can explain changes in poverty?
- Until which extent the current capability-deprivation levels can be explained by the MIQ?
  - Which variables can explain the changes in the capability-deprivation?

The questions will be answered trough the results of five groups of regressions. Seeking to answer the first question, the linear regression model is  $Y = \beta_0 + \beta_1 X_n$  where Y is the Patrimonial Poverty and the independent variables are going to be MIQ (X<sub>1</sub>) Social Expenditure in Anti-poverty programs will be the (X<sub>2</sub>), and the GDP will be (X<sub>3</sub>).

Testing each independent variable individually, the correlation coefficient was 0.231 for  $X_1$  0.657  $X_2$ , and 0.419 for  $X_3$ . This means that it is a positive but weak relationship between Patrimonial Poverty and Institutional Quality. Moreover, the explanatory power of  $R^2$  is just 0.053. This means that only the 5.3% of the variance in Patrimonial Poverty in 2000 can be explained by the Quality of the institutions.

The ANOVA test divides the total variance can be associated or explained by X, and the rest that cannot be or cannot be associated with X and remain as a component left unexplained, in that case is called residual value. In this test, the regression component is not bigger enough in relation with the residual. As a result, the relationship is not significant.

After the regression and with the objective of answering the first question, is possible to conclude as follows. For the 32 states the mean value of Institutional Quality was 29, which represents low quality of the institutional framework, at the same time the mean percentage of population under poverty conditions was 51.1% On average, the percentage of population under patrimonial poverty conditions decreases by 0.03 for each additional point that the states improve in their MIQ.

In order to answer the second question it is necessary to regress a new variable. In this occasion, the dependent variable is going to be the change in patrimonial poverty levels, and the independent variables are going to be the same as in the previous regression.

The equation  $Changeinpp = \beta_0 + \beta_1 X_n$  provides the next values coefficients for  $X_1$  is 0.139, for  $X_2$  is 0.169 and with  $X_3$  is 0.185. When the regression was multiple, the R-value has increased to 2.94. As in the previous regression, it is possible to interpret that there is a weak and positive relationship between the change in patrimony level and the independent variables. The highest  $R^2$  value was in the regression between GDP of the states and the change in the poverty levels. In other words, 3.4% of the changes in the poverty level can be explained by the GDP of the states.

One of the main difficulties experimented in the writing process of this document, was the difficult access to valid information. Some indicators are relatively new (some of them, are about two or three years old) or some others are not updated regularly. Consequently, it results extremely difficult to make analysis from some time series. With the purpose of filing the mentioned gap, the main goal of the third question is to identify if the changes in the independent variables can explain the reduction or increase of patrimonial poverty.

For answering the third question, the regression utilizes the same dependent variable as before (Change in the patrimonial poverty) but different independent variables. The equation is Changeinpatrimonial poverty =  $\beta_0 + \beta_1 X_n$  Where the  $X_1$  will be calculated as 2010 MIQ – 2000 MIQ. The  $(X_2)$  will be the change in the Social Expenditure in Anti-poverty programs and finally, the change in the GDP will be  $(X_3)$ . The correlation coefficient for  $X_1$  is 0.068. This means that its closeness to cero represents an extremely weak correlation. According to the  $R^2$  value, the changes in the MIQ can explain the 0.05% of the changes in the population in patrimonial poverty conditions. On average, for every point that the MIQ increases, the patrimonial poverty is modified in 0.082%

The fourth question is related with the use of the MIQ for explaining the current capability-deprivation levels. For this regression, the equation will be  $Capability deprivation = \beta_0 + \beta_1 X_n$  where the dependent variable will be the capability deprivation and the independent variable is going to be the MIQ.

For the 32 Mexican states in 2010, the mean grade of Quality in the institutions was 30 points. At the same time, the average value of capability deprivation is 43.21.

The correlation coefficient of this regression is 0.107; this means that as in the previous regressions, the statistical correlation is positive but weak. For example, the R<sup>2</sup> can explain the 1.1% of the variances in the capability deprivation numbers. Finally, according to the values in

the equation, on average, every time the MIQ increases in one unit, the capability deprivation number is reduced in 0.671

The final regression will have the *Change in Capability-deprivation* as a dependent variable and the independent variables will be MIQ  $(X_1)$  Social Expenditure in Anti-poverty programs will be the  $(X_2)$ , and the GDP will be  $(X_3)$ .

After regressing the variables, the correlation values were the following: 0.33 for  $X_{1,0.83}$  for  $X_2$ , and 0.083 for  $X_3$  The expenditure in anti poverty programs was the variable with the highest correlation coefficient. The value is closer to 1, which means that it is a strong and positive correlation. Regarding to the explanatory power of the exercise, the  $R^2$  value states that public expenditure can explain in 69.5% of the capability deprivation.

Finally, in order to understand the differences among the states I will test a last regression. The percentage of population in patrimonial poverty has remained nearly the same at the national level. However, it is interesting to see that in only 9 out of the 32 states have presented a raise in their patrimonial poverty percentage. The other 23 states (around 71% of the total) presented a reduction in the same indicator. In a new regression, the dependent variable is the change in patrimonial poverty and the independent variable is the MIQ. The correlation is a weak relationship of .139, and its explanatory power is just 1.9%

As a conclusion of the two parts of the analysis, it is possible to state that statistically, the amount spent in anti-poverty programs has stronger correlations with the poverty levels and the capability deprivation. The results point out that the public expenditure can help to explain the level of poverty or the level of capability deprivation. In both cases, the explanatory power exceeds the 60%.

The main standpoint of this paper was that rather than expanding the budget for the antipoverty programs, it was necessary to strengthen the institutional framework. However, the regressions indicate statistically that rather than the role of institutions, what can determine the success or failure of the programs is the amount of resources.

Despite the low correlation coefficients, it is still possible that the quality of institutions can mediate the success or failure of anti-poverty programs. It will be task for further studies to build a stronger and bigger tool for measuring the institutional quality at a local level.

After making several regressions it was refused the hypothesis of this paper in which the institutional quality can moderate the success or failure of poverty reduction. On the contrary, the

strongest correlations were those between poverty and public expenditure. When the dependent variable is patrimonial poverty, the correlation with the MIQ is .231 while the correlation with expenditure is .657. When the dependent variable was capability deprivation, the strongest correlation was .834 and it was again with public expenditure.

### Limits

The MIQ is an attempt for measuring the institutional quality, however, it is precise to define the limits of this tool. First of all, quality is an abstract concept that lacks a unique and standard definition. It is probable that several definitions of quality have elements in common, however it is also possible even small differences in the definition of quality can result in different ways of measuring it. The eleven indicators that have been included in this document were those that fit better with the definitions proposed in the theoretical section and the general conditions of this paper.

The concept of quality is not the only one that its definition is ambiguous, other concepts included in this paper are harder to define or to measure; for example, democracy and legitimacy. According to the definitions mentioned here, the trust in institutions can be the most accurate variable for having an approach to legitimacy. The author recognizes that the inclusion of more variables can produce a sturdier and more precise tool. But at the same time, for the purpose of this paper, the variables used were carefully selected.

The second limit of this paper is that many of the variables that have been used in the construction of the MIQ are perception variables. This means that it is not a standardized or stable measurement. For example, the variables related with interest in politics or trust in institutions can be subject to the time and mood of the interviewee. In spite of that, sometimes the opinion/perception surveys can be the only way to approach and perceive the citizen's way of thinking. In addition, this paper does not try to show an absolute truth, it is just a suggestion for understanding the poverty problem.

The third limit is related with the amount of available information. It is evident that the Mexican institutional framework has changed in the last twenty years. However, sometimes it is hard to measure those changes because of the lack of information. For example, in 1990 the IFE did not even exist, and until the electoral reform in 1996 it became an autonomous organism. Or

with the offices of IFAI and FEPADE, that they were created in the last ten years; consequently, it is hard to get information prior to this date.

This institutional change or the emergence of new institutions can also mislead the numbers of the indicators. That is because once the organism is created, it is necessary that the people start recognizing it, trust in it, and then to be consulted by the citizens. For example, in the particular case of FEPADE, it is possible that the raise in their inquiries during the last years, does not necessarily means that nowadays are more electoral crimes than before. There is a possibility that before its creation there were no space for denouncing the electoral crimes.

Following the point of the availability of the data sometimes is difficult to construct a variable at a local level because not all the states have the same indicators. In addition, the methodology for measuring some indicators can also be different among the states or among the periodicity when they are measured; therefore, there is not comparable or it result extremely hard to construct an indicator in a time series.

For example, in the five ENCUP's it is possible to find questions that are similar between two of the surveys, but not equal. Maybe the phrasing or responding options have been changed, and as a consequence, it is possible to have numbers that are not totally comparable.

The fourth limitation that can be included in this document is the informal variables. One of the characteristics of the MIQ is the effort for including variables such as clientelism and corruption as possible threats for the institutions well functioning. It can be a positive element, in order to get a more accurate description of institutional quality; nevertheless, it is precise to keep in mind that it is extremely hard to get access to such kind of information and that it is possible that the results are not totally true.

Electoral clientelism is considered a crime that can be sanctioned by the authorities, and corruption is not morally accepted. In addition, the clientelist practices or the corruption acts are not always denounced. Furthermore, the other source for this data can be through surveys. However, as it was mentioned above, one is considered a crime and the other one is not really accepted by the society. As a result, the respondent can lie and the numbers can be far from reality. Nevertheless, it can be worthy to include both variables, because even with its limitations they can produce valuable information.

## **Conclusions**

Through the different sections of this paper it has been explained the current situation of the poverty in Mexico. As it has been mentioned in several occasions in the text, after twenty year of implementing anti poverty programs, the percentage of population in patrimonial poverty has not decreased.

In order to understand this problematic, the theoretical section has presented a review of the different perspectives about how to eradicate poverty. The main argument supported by this paper was that rather than expanding the social budget, the key element to reduce poverty is to strengthen the institutional framework.

In order to test that hypothesis, I collected information from several sources and created the MIQ. The main purpose of this index was to serve as a tool for assessing the quality of Mexican institutions and then, to analyze it statistically.

The goal was to find stronger relationships between institutional quality and poverty reduction rather than poverty reduction and public expenditure. The idea was to evidence that the quality of institutions can shape or hold up the poverty reduction.

After the statistical test, the results did not fit with the expectations. According to the variables utilized in this paper, it seems that the big determinant for poverty alleviation is the public expenditure.

However, despite the statistical results, it is possible to obtain some positive lectures about this research. First of all, it is not possible to completely dismiss t the role of institutions as determinant for the reduction of poverty. It is possible that with a stronger tool it is going to be possible to obtain better results.

Secondly, it is extremely interesting how does the capability deprivation indicator have reduced its values around a 50% while patrimonial poverty remains almost the same at the national level.

And the final one is related with the relevance of giving some time to the anti-poverty programs to work. It would be really interesting to keep track to the people that have been beneficiary of the programs related with the capability deprivation indicators. Because, even when the conditions are still precarious, it is a fact that after getting access to education, to health care and to housing, the life quality has improved. It is necessary to give some time in

order to transform this progress into monetary benefits. In other words, it is possible that the benefits of reducing illiteracy today can be present in tomorrow generation

## **Executive Summary**

The Master Thesis the *Institutional quality as determinant for the success or failure in poverty reduction The case of Mexican States* presents the case of Mexico and its percentages of population in poverty conditions. The main objective is to understand why after twenty years of spending big amounts of money in the implementation of different anti-poverty programs, the percentage of population under such condition remains still the same.

The main thesis of the author is that rather than increasing the budget for the anti-poverty strategies, the determinant element of the poverty reduction is the institutional framework. According to this argument, a strong and well function institutional framework can generate successful programs, and consequently, poverty reduction.

In order to test the main argument, the paper is divided as it follows: The first one addresses the problem of poverty since a theoretical perspective. In the second section the author presents the quantitative methodology for testing his argument, and finally he present analysis, limitations and conclusions.

In the theoretical section, the author defines the elemental concepts for the purpose of the paper. It is explained two different ways of measuring the poverty, as an income condition or as a capabilities condition. Afterwards, two of the main perspectives for alleviating the poverty are contrasted. The first perspective supports the use of resources and technology; and the opposite one, which claims for strengthening the institutional framework.

Following this line, the author present a brief summary of the different anti-poverty programs that have been implemented in Mexico during the last twenty years. It explains the role of institutions, the institutional quality and he also includes the description of different elements that defines the institutional quality. Among these concepts, there are terms such as Democracy, legitimacy, clientelism, and accountability.

In the methodological part, the author constructed an Institutional Quality Index, with the purpose of assessing the quality of the political, economical and social institutions in the Mexican states. He describes how each variable that is included in the index, measures one or more of the elements mentioned as characteristics of institutional quality in the previous section.

The variables added to the index are the Gini Coefficient that measures the inequality, the

percentage of population that participated in the federal elections, the number of registered complaints during the electoral journey, the Rae's Fragmentation index, which measures the distribution of power in the cameras, the perception of clientelism, corruption, the trust in institutions, the economic competitiveness and the social participation.

Furthermore, in this same section, he presents the regression model that is going to be testing the main argument of the paper.

The equation of the regression model is  $Poverty = \beta_0 + \beta_1 X_n$  where poverty is de dependent variable, and the independent variables are the Mexican Institutional Quality Index as (X1), the Public Expenditure (X2) and economic growth (X3)

In the following part, the author presents a first sight of the dataset and tries to make some assumptions about poverty and the relationship with the variables.

Next to this first approach, five statistical tests were executed and the main results with the purpose of discover if there is any relationship between poverty and institutional quality.

The main results demonstrate that the strongest relationship among the variables was between poverty and public expenditure.

In addition, the dataset showed that at a first impression it is possible to state that during the last twenty years income poverty has barely diminished. However, when we refer to poverty in a broader definition, like the one proposed by Amartya Sen, and we compare levels in specific commodities such as housing, education, health care have presented some evolution.

In the next part, the author presents the limitations of the research. The main elements pertain to the validity of the data and the limitation of using informal variables such as clientelism and corruption.

Finally, the author presents his conclusions, highlighting the fact that even when the statistical tests did not showed a string relationship between institutional quality and poverty reduction. It should not be proper to dismiss the relationship between these two variables.

The last comment is related with the indictors of capabilities. The author states the importance of providing time to the anti-poverty programs so they can achieve the impact that is desired. He took as an example the reduction in illiteracy rate and the increase in the health care access, and he mention that now the responsibility is to transform this capabilities in economic terms.

## References

- Acemoglu, D. & Robinson, J. (2012). *The Origins of Power, Prosperity, and Poverty. Why nations fail* London, Profile Books, 529 pp.
- Acemoglu, D. & Robinson, J. (2008). *The Role of Institutions in Growth and Development*. The International Bank for Reconstruction and Development. Washington D.C: The World Bank On behalf of the Commission on Growth and Development. Retrieved from: http://siteresources.worldbank.org/EXTPREMNET/Resources/489960-1338997241035/Growth\_Commission\_Working\_Paper\_10\_Role\_Institutions\_Growth\_D evelopment.pdf
- Aixalá Pastó, J. Fabro Esteba, G. (2008) Does the impact of institutional quality on economic growth depend on initial income level? Economic Affairs, 28/3, pp. 45-49, 2008;
- Aixalá Pastó, J. Fabro Esteba, G. (2011) *Calidad institucional y crecimiento económico.*Nuevos Avances y evidencia. Ekonomiaz: Revista vasca de economía retrieved from <a href="http://dialnet.unirioja.es/servlet/articulo?codigo=3710033">http://dialnet.unirioja.es/servlet/articulo?codigo=3710033</a>
- Alesina, A. and Rodrik, D. (1993): Income Distribution and Economic Growth: A Simple Theory and Some Empirical Evidence, in: Cukierman, Alex, Zvi Hercovitz and Leonardo Leiderman: *The Political Economy of Business Cycles and Growth*, MIT Press, Cambridge;
- Almond, G. A. & Verba, S. (1989). *Political Attitudes and Democracy in Five Nations*. The Civic Culture. Newbury California: Sage publications. (Original work published 1989)
- Aranda Vollmer, R. (2003). *Poliarquías urbanas: competencia electoral en las ciudades y zonas metropolitanas de México*. México D.F: Instituto Federal Electoral-Miguel Ángel Porrúa
- Aron, J (2000) *Growth and Institutions: A review of evidence*. The World Bank Research Observer, vol. 15 No. 1
- Axford, B and Rosamond, B. (1999) "Political Participation", in Axford, B. et al. (eds.) Politics: An Introduction, London: Routledge.
- Barnes, G. (2000) Evolución del gasto publico. In *Las Finanzas del Sistema Federal Mexicano*. *La Reforma del Sistema Fiscal*. *La visión parlamentaria*. Mexico, Instituto Nacional de Administración Pública, A.C. retrieved from

- http://biblio.juridicas.unam.mx/libros/libro.htm?l=1440
- Barreda, M, Costafreda, A. (2006). La democracia importa, pero no basta para la igualdad. in Carlos Binnetti y Fernando Carrillo-Flórez, ¿Democracia con desigualdad? Una mirada de Europa hacia América Latina. Inter American Development Bank
- Bobbio, N. (2006) Estado, Gobierno y Sociedad, por una teoría general de la política. Fondo de Cultura Económica, México
- Bobbio, N. et. al. (1981) Diccionario de Política. Siglo XXI editores, México
- Brachet, V. (2007). *Mexico's Welfare State: Birth growth and retrenchment (1822-2002)*, in Latin America, a New Developmental Welfare State Model in the making? Palgrave
- Charron, N. (2013) From Aland to Ankara: European Quality of Government Index. The Quality of Government Institute. Gothenburg, Sweden. Retrieved from: http://www.qog.pol.gu.se/digitalAssets/1455/1455551 2013 11 charron.pdf
- Charron, N., Lapuente, V. V. (2010). Does democracy produce quality of government?. *European Journal Of Political Research*, 49(4), 443-470. Retrieved from http://onlinelibrary.wiley.com/doi/10.1111/j.1475-6765.2009.01906.x/abstract
- Citrin, J. (1974). *Comment: The Political Relevance of Trust in Government. U.S.A:* American Political Science Association. Retrieved from: http://web.stanford.edu/class/polisci92n/readings/oct30.2.citrin.jstor.pdf
- CONEVAL (2007). *Los mapas de la pobreza en México*. Retrieved from: http://www.coneval.gob.mx/rw/resource/coneval/med\_pobreza/1024.pdf
- CONEVAL (2010). *Medición de la pobreza*. Retrieved from:

  http://www.coneval.gob.mx/Medicion/Paginas/Medición/Que-es-la-medicion-multidimensional-de-la-pobreza.aspx
- CONEVAL (2011). Índice de Rezago Social 2010 a nivel municipal y por localidad. Retrieved from <a href="http://www.coneval.gob.mx/Medicion/Paginas/Índice-de-Rezago-social-2010.aspx">http://www.coneval.gob.mx/Medicion/Paginas/Índice-de-Rezago-social-2010.aspx</a>
- CONEVAL (2012) Informe de Evaluación Específica de Desempeño 2012-2013. Retrieved from
  - http://www.coneval.gob.mx/Informes/Evaluacion/Especificas\_Desempeno2012/SEDESO
    L/20\_S054/20\_S054\_

- CONEVAL (2013), *Medición de la pobreza. Evolución de las dimensiones de la pobreza 1990-2010* retrieved from: http://www.coneval.gob.mx/Medicion/Paginas/Evolucion-de-las-dimensiones-de-la-pobreza-1990-2010-.aspx
- Cook, T. Reichardt, C. (1986). *Métodos cualitativos y cuantitativos en investigación educativa*. Madrid: Morata.
- Cornelius, W. Craig, A. and Fox (1994). *The national solidarity strategy*, San Diego, center for U. S.-mexican studies university of California
- Dahl, R. (1999). La democracia: una guía para los ciudadanos. : Taurus.
- Diamond, M. (2005). Assessing the Quality of Democracy. : Johns Hopkins University Press
- Easterly, W. (2006). The white man's burden: why the West's efforts to aid the rest have done so much ill and so little good / William Easterly. New York: Penguin Press, 2006.
- Eicher, T, Röhn, O. (2007) Institutional determinants of Economic Performance in OECD Countries- An Institutions Climate Index. Research reports. Center for Economic Studies CESifo DICE Report 1/2007 retrieved from http://ideas.repec.org/a/ces/ifodic/v5y2007i1p38-49.html
- FEPADE (2012) *Informe de actividades* retrieved from:

  <a href="http://www.pgr.gob.mx/Combate%20a%20la%20Delincuencia/Delitos%20Federales/Delitos%20Electorales/FEPADE/informe%20de%20actividades.asp">http://www.pgr.gob.mx/Combate%20a%20la%20Delincuencia/Delitos%20Federales/Delitos%20Electorales/FEPADE/informe%20de%20actividades.asp</a>
- Fukuyama, F. (1995). *Trust: The social virtues and the creation of prosperity*. New York: Free press
- Gough, I. Sharkh, M. (2010) *Global Welfare Regimes: A Cluster Analysis*. Global Social Policy vol 10: 27-58. Retrieved from http://gsp.sagepub.com/content/10/1/27.abstract
- Guijarro, J. M. (2004, January 1). *La legitimidad de las instituciones superiores de control*. Española de control externo.
- Gwarteney, J, Lawson R, and Hall, J (2013) Economic Freedom of the World 2012 Annual Report. Fraser Institute retrieved from http://www.freetheworld.com/2012/EFW2012-complete.pdf
- IFAI (2012). *Estadísticas e indicadores* retrieved from http://inicio.ifai.org.mx/\_catalogs/masterpage/AIP-Estadisticas.aspx

- IFE (2012) *Estadísticas y resultados electorales*, retrieved from: http://www.ine.mx/archivos3/portal/historico/contenido/Elecciones/
- IMCO (2010). *Índice Estatal de competitividad* retrieved from: http://imco.org.mx/indice\_de\_competitividad\_estatal\_2012/
- INEGI (2000), Sistema de Cuentas Nacionales. Producto Interno Bruto por Entidad Federativa retrieved from <a href="http://www.inegi.org.mx/prod\_serv/contenidos/espanol/bvinegi/productos/derivada/regionales/pib/pibe1.pdf">http://www.inegi.org.mx/prod\_serv/contenidos/espanol/bvinegi/productos/derivada/regionales/pib/pibe1.pdf</a>
- INEGI (2014) *Producto Interno Bruto por Entidad Federativa* retrieved from <a href="http://www.inegi.org.mx/sistemas/olap/proyectos/bd/consulta.asp?p=16859&c=17383&s">http://www.inegi.org.mx/sistemas/olap/proyectos/bd/consulta.asp?p=16859&c=17383&s</a> =est&#"
- Kirzner, I. (1973), Competition and Entrepreneurship. Chicago: University of Chicago Press.
- Konrad Adenauer Foundation (2014), Indice de Desarrollo Demorático de América Latina (IDD). Retrievable from http://www.idd-lat.org/2013/
- Krause, M. (2009) *Índice de Calidad Institucional 2009* Available at: http://works.bepress.com/martin\_krause/37
- Kuncic, A. (2014). *Institutional Quality Dataset*, Journal of Institutional Economics: https://sites.google.com/site/aljazkuncic/research
- Lijphart, A. (1984), Democracies. Patterns of Majoritarian and Consensus. Government in Twenty-One Countries, Yale University Press, New Haven.
- Lipset, S, Rokkan, S.(1967), Party Systems and Voter Alignments: Cross-National Perspectives, New York, Free Press,
- Lipset, S. (1981). *Political man: the social bases of politics* Baltimore: Johns Hopkins U.P., 1981.
- Listhaug, O. and Ringdal K. (2007) *Trust in Political Institutions: The Nordic Countries Compared with Europe* The Norwegian University of Science and Technology retrieved from <a href="http://www.svt.ntnu.no/iss/fagkonferanse2007/intern/papers/ola.listhaug@svt.ntnu.noFag">http://www.svt.ntnu.no/iss/fagkonferanse2007/intern/papers/ola.listhaug@svt.ntnu.noFag</a>
  - http://www.svt.ntnu.no/iss/fagkonferanse2007/intern/papers/ola.listhaug@svt.ntnu.noFagkonfTrdtrust0611.doc.
- Macías.I (2006) ¿La desigualdad de ingresos limita la calidad de la democracia?. in Carlos Binnetti y Fernando Carrillo-Flórez, ¿Democracia con desigualdad? Una mirada de

- Europa hacia América Latina.. Inter American Development Bank
- Macpherson, C.(1991): *Ascenso y caída de la justicia económica y otros ensayos*. El papel del estado, las clases y la propiedad en la democracia del siglo XX, Argentina, Ediciones Manantial, pág. 11-33.
- Mainwaring, S. Scully, T. and Vargas-Cullell, J. (2011) Measuring success in Democratic Governance. Revista Latinoamericana de Política comparada. Centro Latinoamericano de Estudios Políticos. Volume 5, July, 2011, Ecuador, retrieved from <a href="http://www.hss.de/fileadmin/americalatina/Ecuador/downloads/Revista-Latinoamericana\_05.pdf">http://www.hss.de/fileadmin/americalatina/Ecuador/downloads/Revista-Latinoamericana\_05.pdf</a>
- Medina, J. (2004). *La legitimidad de las instituciones superiores de control*. Revista española de control externo. Retrieved from <a href="http://dialnet.unirioja.es/servlet/articulo?codigo=1155677">http://dialnet.unirioja.es/servlet/articulo?codigo=1155677</a>
- Miller, A. H. (1974). 'Political Issues and Trust in Government: 1964-1970.' 'American Political Science Review' 68 (September): 951-72. *The American Political Science Review*, (4), 681
- MIT (2012) *The Mexico 2000 Panel Study: An Introduction* retrieved from http://web.mit.edu/clawson/www/polisci/research/mexico06/intro.shtml#
- MIT (2012) *The Mexico 2012 Panel Study: An Introduction* retrieved from http://web.mit.edu/clawson/www/polisci/research/mexico06/intro.shtml#
- Molinar Horcasitas, J. and Weldon, J. (1990) "Elecciones de 1988 en México: crisis del autoritarismo." Revista
- Mexicana de Sociología , 52, 4 (October-December): 229-62.
- Molinar Horcasitas, Juan and Jeffrey A. Weldon. (1994). "Electoral Determinants and Consequences of National Solidarity." In Cornelius, W. Craig, A. and Fox . *The national solidarity strategy*, San Diego, center for U. S.-mexican studies university of California
- Morlino, L. (2008). *Calidad democrática entre líderes y partidos*. retrieved from: <a href="http://www.ine.mx/docs/IFE-v2/CDD/CDD-EventosForosAcademicos/EventosForos-2008/PPs-CalidadDemocracia/PPs-CalidadDemocracia-docs/Conferencia01-LeonardoMorlino.pdf">http://www.ine.mx/docs/IFE-v2/CDD/CDD-EventosForosAcademicos/EventosForos-2008/PPs-CalidadDemocracia/PPs-CalidadDemocracia-docs/Conferencia01-LeonardoMorlino.pdf</a>
- Morlino, L. and Diamond, L. (2005) Assessing the Quality of Democracy. Johns Hopkins University Press

- North, D. (1990) *Institutions, Institutional Change and Economic Performance*. New York: Cambridge University Press
- OECD (2010) Acuerdo de Cooperación México-OCDE para mejorar la calidad de la educación retrieved from http://www.oecd.org/edu/school/46216786.pdf
- Olsson, O. (1999). *A Microeconomic Analysis of Institutions*. Göteborg University retrieved from http://swopec.hhs.se/gunwpe/papers/gunwpe0025.pdf
- Olsson, O. (2003). *Geography and Institutions: A review of Plausible and Implausible Linkages* Göteborg University, retrieved from https://gupea.ub.gu.se/handle/2077/2805
- Olsson, O. and Douglas A. (2000). *Biogeography and Long-Run Economic Development*Göteborg University, retrieved from http://www.douglas-hibbs.com/HibbsArticles/EER%202005.pdf
- OPORTUNIDADES (2001), Evaluación del Programa de Educación, Salud y Alimentación (PROGRESA) a partir de Indicadores de Seguimiento, Evaluación y gestión 1998-2001. Encuestas de evaluación 2000 retrieved from:

  <a href="http://www.oportunidades.gob.mx/EVALUACION/es/wersd53465sdg1/docs/2001/cide">http://www.oportunidades.gob.mx/EVALUACION/es/wersd53465sdg1/docs/2001/cide</a>
  2001 evaluación impacto.pdf
- OPORTUNIDADES (2010), Acuerdo por el que se da a conocer el monto asignado y la distribución de la población objetivo del Programa de Desarrollo Humano Oportunidades retrieved from http://www.oportunidades.gob.mx/Portal/wb/Web/poblacion\_objetivo\_y\_montos\_asigna dos\_para\_el\_ejer
- Ortega, R. (2008), *Movilización y democracia: España y México*, El Colegio de México, México. retrieved from http://www.redalyc.org/articulo.oa?id=59820671011
- Putnam, R. (1993) *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton, N.J. Princeton University Press
- QoG, (2014). *The Quality of Government Institute*. retrieved from http://www.qog.pol.gu.se/data/
- Rae, W. (1971). *The political consequences of electoral laws*. New Heaven, Yale University Press retrieved from http://www.seep.ceu.hu/alpsa/readings/lijphart.pdf
- Rivero, A (1997). *Representación política y participación* in Manual de Ciencia Política, coord. by Rafael del Aguila, Madrid, Editorial Trotta

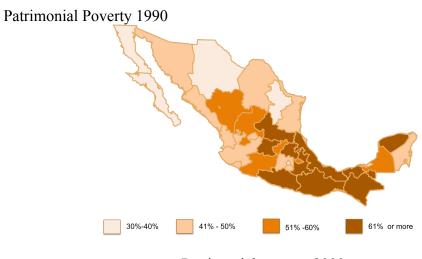
- Rosanvallon (2007). La contrademocracia. La política en la era de la desconfianza, Argentina, Manantial,
- Sachs, J. (2005) The End of Poverty: Economic Possibilities for Our Time. England Penguin Press
- Sartori G. (1992). Elementos de Teoría política, Madrid. Alianza Editorial
- SEDESOL. (2013). *Programa para el desarrollo de zonas prioritarias (PDZP)*. Retrieved from: http://www.sedesol.gob.mx/es/SEDESOL/Programa para el Desarrollo de Zon
- SEGOB (2012), *Primera Encuesta Nacional de Cultura Política (ENCUP)* retrieved from: http://www.encup.gob.mx
- SEGOB (2012), *Quinta Encuesta Nacional de Cultura Política (ENCUP)* retrieved from http://www.encup.gob.mx
- Sen, A. (1999) Desarrollo y libertad. Planeta, Barcelona
- Silver, H. (2005): "Reconceptualización de la desventaja social: tres paradigmas de la exclusión social", in Luengo, J. (Comp.), *Paradigmas de gobernación y de exclusión social en la educación. Fundamentos para el análisis de la discriminación escolar contemporánea*, México, Ediciones Pomares
- Sirvent, C. Rodríguez Araujo, O. (2005). *Instituciones y partidos políticos en México*, D.F., México, Jorale Editores, 252 p.
- Transparencia Mexicana (2010). *Índice Nacional de Corrupción y Buen Gobierno* retrieved from <a href="http://www.tm.org.mx/indice-nacional-de-corrupcion-y-buen-gobierno-primera-serie-historica-de-corrupcion-en-mexico/">http://www.tm.org.mx/indice-nacional-de-corrupcion-y-buen-gobierno-primera-serie-historica-de-corrupcion-en-mexico/</a>
- Wittman, D. (1989) Why *Democracies Produce Efficient Results*. The Journal of Political Economy, Vol. 97, No. 6 retrieved from: http://www.jstor.org/discover/10.2307/1833245?uid=3739256&uid=2129&uid=2&uid=70&uid=4&sid=21104573433343
- Wood, G, Gough, I. (2006). *A comparative Welfare Regime Approach to Global Social Policy*.

  World Development. Volume34, Issue 10. retrieved from:

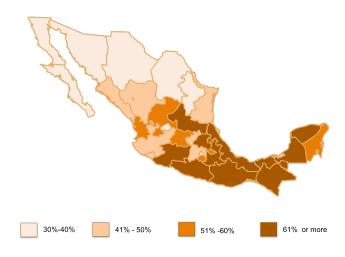
  <a href="http://www.sciencedirect.com/science/article/pii/S0305750X06001124">http://www.sciencedirect.com/science/article/pii/S0305750X06001124</a>

# **Appendix**

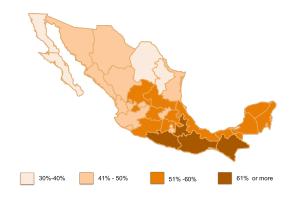
Map 1. The evolution of patrimonial poverty (1990-2010)



Patrimonial poverty 2000



Patrimonial poverty 2010



Map 2. The Mexican Institutional Quality Index

# **MIQ 2000**



# **MIQ 2010**



Table 1 Patrimonial Poverty

Patrimony Poverty										
State	1990	2000	2010	Difference between 2010 and 1990						
NATIONAL	53.2	53.6	51.3	-2.0						
Aguascalientes	49.4	37.8	45.4	-4.0						
Baja California	35.8	23.7	40.5	4.7						
Baja California Sur	37.8	31.9	32.3	-5.5						
Campeche	60.3	66.8	53.7	-6.6						
Coahuila	43.1	36.2	38.8	-4.3						
Colima	46.6	47.7	43.0	-3.6						
Chiapas	75.1	79.1	78.1	3.0						
Chihuahua	39.2	30.2	44.5	5.3						
Distrito Federal	34.6	28.0	31.7	-2.9						
Durango	51.8	48.4	49.7	-2.1						
Guanajuato	61.6	56.2	55.1	-6.5						
Guerrero	69.9	75.7	71.0	1.2						
Hidalgo	64.0	62.1	53.1	-10.8						
Jalisco	48.7	41.3	43.2	-5.5						
México	48.3	47.7	51.2	2.9						
Michoacán	58.1	61.6	57.7	-0.4						
Morelos	48.2	53.1	44.8	-3.4						
Nayarit	50.0	52.7	44.4	-5.6						
Nuevo León	35.6	28.0	35.8	0.2						
Oaxaca	70.4	76.1	67.4	-3.0						
Puebla	63.8	68.0	63.6	-0.2						
Querétaro	55.7	50.4	44.5	-11.2						
Quintana Roo	47.3	52.4	52.8	5.4						
San Luis Potosí	61.3	61.3	56.6	-4.7						
Sinaloa	50.7	44.6	43.5	-7.3						
Sonora	41.9	39.5	44.4	2.5						
Tabasco	61.0	65.1	53.0	-8.0						

Patrimony Poverty										
State	1990	2000	2010	Difference between 2010 and 1990						
Tamaulipas	47.0	40.1	47.8	0.9						
Tlaxcala	53.7	56.1	51.2	-2.5						
Veracruz	63.3	65.7	58.2	-5.2						
Yucatán	61.0	62.4	52.9	-8.1						
Zacatecas	60.1	56.3	52.8	-7.3						

Note: Source: CONEVAL (2013), *Medición de la pobreza*, retrieved from http://www.coneval.gob.mx/Medicion/Paginas/Evolucion-de-las-dimensiones-de-la-pobreza-1990-2010-.aspx

Table 2 Mexican Institutional Quality Index

Mexican Institutional Quality Index										
State	2001	2010	Difference in quality from 2000- 2012							
NATIONAL	29	30	1							
Aguascalientes	30	33	3							
Baja California	32	25	-7							
Baja California Sur	34	33	-1							
Campeche	27	32	5							
Coahuila	30	32	2							
Colima	32	30	-2							
Chiapas	29	34	5							
Chihuahua	25	32	7							
Distrito Federal	34	28	-6							
Durango	28	30	2							
Guanajuato	30	29	-1							
Guerrero	27	25	-2							
Hidalgo	26	26	0							
Jalisco	29	27	-2							
México	30	32	2							
Michoacán	29	28	-1							
Morelos	28	30	2							
Nayarit	29	35	6							
Nuevo León	28	28	0							
Oaxaca	29	28	-1							
Puebla	30	33	3							
Querétaro	34	33	-1							
Quintana Roo	28	35	7							
San Luis Potosí	30	28	-2							
Sinaloa	30	29	-1							
Sonora	27	31	4							
Tabasco	29	32	3							
Tamaulipas	25	36	11							

Mexican Institutional Quality Index										
State	2001	2010	Difference in quality from 2000- 2012							
Tlaxcala	34	33	-1							
Veracruz	28	33	5							
Yucatán	26	32	6							
Zacatecas	28	33	5							

Table 3 Public expenditure in anti-poverty programs

	Expenditure											
State	Expenditure in PROGRESA (Million pesos) 2000	% from total Expenditure 2000	Expenditure in OPORTUNIDADES (Million pesos) 2010	% from total Expenditure 2010	Increment of expenditure (Difference in the amount received 2010-2000)	Difference amount received as percentage of total expenditure						
NATIONAL	9,590	100.00	54,421.87	100.00	44,832	-						
Aguascalientes	8	0.08	307	0.56	299	0.48						
Baja California	10	0.10	287	0.53	277	0.42						
Baja California Sur	10	0.10	129	0.24	119	0.13						
Campeche	122	1.27	554	1.02	432	-0.25						
Coahuila	74	0.77	495	0.91	421	0.14						
Colima	16	0.17	193	0.35	177	0.19						
Chiapas	931	9.71	5,763	10.59	4,832	0.88						
Chihuahua	68	0.71	652	1.20	584	0.49						
Distrito Federal	506	5.28	556	1.02	50	-4.25						
Durango	117	1.22	767	1.41	650	0.19						
Guanajuato	424	4.42	2,582	4.75	2,158	0.32						
Guerrero	686	7.15	3,668	6.74	2,982	-0.41						
Hidalgo	422	4.40	2,097	3.85	1,675	-0.55						
Jalisco	157	1.64	1,751	3.22	1,594	1.58						
México	617	6.43	4,597	8.45	3,980	2.01						
Michoacán	534	5.57	2,694	4.95	2,160	-0.62						
Morelos	72	0.75	800	1.47	728	0.72						
Nayarit	131	1.37	464	0.85	333	-0.51						
Nuevo León	61	0.64	510	0.94	449	0.30						
Oaxaca	760	7.92	3,984	7.32	3,224	-0.60						
Puebla	769	8.02	4,407	8.10	3,638	0.08						
Querétaro	149	1.55	767	1.41	618	-0.14						
Quintana Roo	85	0.89	564	1.04	479	0.15						

			Expenditure			
State	Expenditure in PROGRESA (Million pesos) 2000	% from total Expenditure 2000	Expenditure in OPORTUNIDADES (Million pesos) 2010	% from total Expenditure 2010	Increment of expenditure (Difference in the amount received 2010-2000)	Difference amount received as percentage of total expenditure
San Luis Potosí	424	4.42	1,991	3.66	1,567	-0.76
Sinaloa	259	2.70	1,305	2.40	1,046	-0.30
Sonora	99	1.03	705	1.30	606	0.26
Tabasco	286	2.98	1,749	3.21	1,463	0.23
Tamaulipas	145	1.51	967	1.78	822	0.27
Tlaxcala	49	0.51	701	1.29	652	0.78
Veracruz	1051	10.96	6,069	11.15	5,018	0.19
Yucatán	251	2.62	1,364	2.51	1,113	-0.11
Zacatecas	297	3.10	981	1.80	684	-1.29

Note: Sources: OPORTUNIDADES (2001), Evaluación del Programa de Educación, Salud y Alimentación (PROGRESA) a partir de Indicadores de Seguimiento, Evaluación y gestión 1998-2001. Encuestas de evaluación 2000 retrieved from http://www.oportunidades.gob.mx/EVALUACION/es/wersd53465sdg1/docs/2001/cide 2001 evaluacion impacto.pdf OPORTUNIDADES (2010), Acuerdo por el que se da a conocer el monto asignado y la distribución de la población objetivo del Programa de Desarrollo Humano Oportunidades retrieved from

Table 4 Growth

	Growth											
State	GDP 2000 (Million pesos)	GDP 2010 (Million pesos)	Percentage of national GDP 2000	Percentage of national GDP 2010	Change in the percentage of PIB							
NATIONAL	4,974.46	12,485.51	100.00	100.00	-							
Aguascalientes	59.65	134.86	1.20	1.08	-0.12							
Baja California	178.70	337.67	3.59	2.70	-0.89							
Baja California Sur	27.05	74.29	0.54	0.59	0.05							
Campeche	58.98	646.39	1.19	5.18	3.99							
Coahuila	149.55	385.96	3.01	3.09	0.08							
Colima	27.46	70.61	0.55	0.57	0.01							
Chiapas	80.40	235.45	1.62	1.89	0.27							
Chihuahua	228.72	371.86	4.60	2.98	-1.62							
Distrito Federal	1,134.50	2,141.31	22.81	17.15	-5.66							
Durango	59.84	156.89	1.20	1.26	0.05							
Guanajuato	156.68	489.78	3.15	3.92	0.77							
Guerrero	85.28	185.66	1.71	1.49	-0.23							
Hidalgo	65.23	195.04	1.31	1.56	0.25							
Jalisco	318.59	781.86	6.40	6.26	-0.14							
México	508.86	1,175.67	10.23	9.42	-0.81							
Michoacán	111.57	299.91	2.24	2.40	0.16							
Morelos	67.64	137.85	1.36	1.10	-0.26							
Nayarit	26.23	75.28	0.53	0.60	0.08							
Nuevo León	350.86	947.16	7.05	7.59	0.53							
Oaxaca	73.76	197.23	1.48	1.58	0.10							
Puebla	192.81	423.14	3.88	3.39	-0.49							
Querétaro	86.24	230.76	1.73	1.85	0.11							
Quintana Roo	69.47	176.78	1.40	1.42	0.02							
San Luis Potosí	85.47	232.92	1.72	1.87	0.15							
Sinaloa	94.54	266.02	1.90	2.13	0.23							
Sonora	132.93	318.13	2.67	2.55	-0.12							

	Growth											
State	GDP 2000 (Million pesos)	GDP 2010 (Million pesos)	Percentage of national GDP 2000	Percentage of national GDP 2010	Change in the percentage of PIB							
Tabasco	60.06	467.34	1.21	3.74	2.54							
Tamaulipas	154.23	385.50	3.10	3.09	-0.01							
Tlaxcala	26.38	67.03	0.53	0.54	0.01							
Veracruz	197.24	586.59	3.97	4.70	0.73							
Yucatán	69.24	175.38	1.39	1.40	0.01							
Zacatecas	36.26	115.22	0.73	0.92	0.19							

Note: Sources: INEGI (2000), *Sistema de Cuentas Nacionales. Producto Interno Bruto por Entidad Federativa* retrieved from http://www.inegi.org.mx/prod\_serv/contenidos/espanol/bvinegi/productos/derivada/regionales/pib/pibe1.pdf INEGI (2014) *Producto Interno Bruto por Entidad Federativa* retrieved from http://www.inegi.org.mx/sistemas/olap/proyectos/bd/consulta.asp?p=16859&c=17383&s=est&#"

Table 5 Capability deprivation indicators

	Percentage of illitera population, older than years		Percentage o with no access		Percentage of dirt f		Sum of vulnerabilities		
State	2000	2010	2000	2010	2000	2010	2000	2010	
National	9.46	6.88	56.99	33.85	13.81	6.15	80.26	46.88	
Aguascalientes	4.84	3.26	43.40	21.06	3.52	1.66	51.76	25.98	
Baja California	3.52	2.57	38.10	28.81	4.95	3.29	46.57	34.67	
Baja California Sur	4.20	3.21	39.24	22.79	10.81	5.74	54.25	31.74	
Campeche	11.80	8.31	60.47	22.15	14.41	4.66	86.68	35.12	
Coahuila	3.86	2.63	28.41	21.92	4.90	1.55	37.17	26.10	
Colima	7.15	5.13	48.22	17.34	11.93	4.46	67.30	26.93	
Chiapas	22.91	17.80	77.82	41.73	38.45	14.71	139.18	74.24	
Chihuahua	4.79	3.66	39.28	23.45	6.62	3.16	50.69	30.27	
Distrito Federal	2.90	2.09	45.94	33.57	1.90	1.02	50.74	36.68	
Durango	5.40	3.82	49.23	29.85	12.82	6.30	67.45	39.97	
Guanajuato	11.98	8.18	64.52	29.61	10.71	4.15	87.21	41.94	
Guerrero	21.55	16.68	78.12	45.75	36.92	18.35	136.59	80.78	
Hidalgo	14.91	10.23	69.59	33.79	18.24	7.12	102.74	51.14	
Jalisco	6.45	4.36	53.81	34.51	7.27	3.02	67.53	41.89	
Mexico	6.39	4.38	54.81	40.39	7.12	3.76	68.32	48.53	
Michoacán	13.89	10.18	71.98	44.36	18.57	10.25	104.44	64.79	
Morelos	9.24	6.42	61.74	35.28	13.90	7.21	84.88	48.91	
Nayarit	9.04	6.31	58.47	22.77	12.11	3.96	79.62	33.04	
Nuevo León	3.32	2.20	31.18	20.33	3.78	2.01	38.28	24.54	
Oaxaca	21.47	16.27	76.02	43.08	39.71	18.74	137.20	78.09	
Puebla	14.59	10.38	71.45	49.28	22.69	9.46	108.73	69.12	
Querétaro	9.79	6.31	52.61	25.18	9.89	3.74	72.29	35.23	
Quintana Roo	7.52	4.77	51.55	29.81	10.54	3.70	69.61	38.28	

	Percentage of illiterate population, older than 15 years		_	Percentage of population with no access to healthcare		Percentage of houses with dirt floor		Sum of vulnerabilities	
San Luis Potosí	11.28	7.91	61.16	25.92	22.09	8.73	94.53	42.56	
Sinaloa	7.96	4.97	45.43	24.47	14.18	6.14	67.57	35.58	
Sonora	4.39	3.04	41.75	25.03	12.78	5.26	58.92	33.33	
Tabasco	9.72	7.06	69.48	25.21	13.11	6.44	92.31	38.71	
Tamaulipas	5.13	3.61	46.52	22.46	9.05	3.33	60.70	29.40	
Tlaxcala	7.80	5.19	68.79	37.77	9.44	3.85	86.03	46.81	
Veracruz	14.85	11.44	68.12	39.87	26.56	11.68	109.53	62.99	
Yucatán	12.29	9.23	53.88	24.08	5.92	2.78	72.09	36.09	
Zacatecas	7.96	5.55	66.33	30.46	8.95	3.41	83.24	39.42	

Note: Source: CONEVAL (2011). *Índice de Rezago Social 2010 a nivel municipal y por localidad*. Retrieved from http://www.coneval.gob.mx/Medicion/Paginas/Índice-de-Rezago-social-2010.aspx

Table 6 Variables for the 2000 MIQ Index

	Gini Index	Participatio n in elections (in %)	Complaints presented to the authorities during electoral journey	Degree of interest in politics	Rae's Fragmentat ion Index	Clientelism (% of participatio n in clientelist acts)	Percentage of solved inquiries about government al information	Degree of trust in institutions	State competitive ness index	National Index of Corruption	Degree of Social Participatio n
Aguascalien	0.45	66.71	12	7.4234	0.57	6.5	54.7	29.34	47.38	4.5	.40
tes Baja California	0.44	57.55	12	7.8951	0.59	0.0	55.6	33.40	46.71	5.7	.38
Baja California Sur	0.49	67.18	12	7.4314	0.67	0.0	52.4	37.70	41.56	3.9	.66
Campeche	0.52	67.86	12	6.2549	0.63	7.7	56.8	24.48	41.21	7.3	.24
Coahuila	0.46	58.6	12	5.3091	0.65	4.4	47.9	32.84	43.00	5	.37
Colima	0.51	66.33	12	6.3243	0.57	23.1	46.4	28.42	40.45	3	.67
Chiapas	0.54	52.19	199	6.2013	0.59	5.1	62.4	32.41	27.23	6.8	.44
Chihuahua	0.50	58.2	12	8.1910	0.60	1.9	60.2	27.72	44.06	5.5	.68
Distrito Federal	0.50	70.59	152	8.4158	0.67	6.6	52.7	31.85	58.70	22.6	.63
Durango	0.47	58.03	12	8.1341	0.60	2.8	47.1	27.58	40.32	8.9	.59
Guanajuato	0.52	66.71	12	7.7143	0.52	6.7	47.4	34.01	35.63	6	.42
Guerrero	0.54	54.15	33	7.1694	0.64	5.6	43.9	31.89	28.52	13.4	.25
Hidalgo	0.53	61.8	12	7.0000	0.64	6.4	48.5	33.23	31.75	6.7	.96
Jalisco	0.52	68.21	63	7.3770	0.57	6.3	52.3	34.93	39.40	11.6	.30
Mexico	0.49	67.9	87	9.0598	0.66	20.4	54.2	30.13	34.49	17	.70
Michoacán	0.50	60.79	35	8.4172	0.67	9.0	53.9	36.65	33.45	10.3	.32
Morelos	0.56	65.33	12	5.3291	0.65	1.7	57.7	30.00	36.31	7.7	.87
Nayarit	0.49	62.7	12	7.3796	0.63	20.3	43.1	27.45	38.09	6.4	.85
Nuevo León	0.46	63.47	13	8.7322	0.57	22.7	50.4	28.18	51.99	7.1	.48
Oaxaca	0.56	58.73	50	5.5594	0.66	3.7	65.3	30.54	22.07	7.4	1.00
Puebla	0.55	62.55	73	6.3030	0.62	8.0	63.5	32.52	33.28	12.1	.96
Querétaro	0.52	70	13	7.3279	0.59	3.1	58.3	33.42	45.03	8.1	1.19
Quintana Roo	0.57	62.07	13	7.8989	0.63	12.0	49.7	28.72	41.72	6.1	1.41

	Gini Index	Participatio n in elections (in %)	Complaints presented to the authorities during electoral journey	Degree of interest in politics	Rae's Fragmentat ion Index	Clientelism (% of participatio n in clientelist acts)	Percentage of solved inquiries about government al information	Degree of trust in institutions	State competitive ness index	National Index of Corruption	Degree of Social Participatio n
San Luis Potosí	0.54	63.12	13	9.3176	0.59	6.6	53.5	26.81	40.91	5.7	.69
Sinaloa	0.48	64.32	42	8.1301	0.51	13.4	59.3	26.92	34.59	7.8	1.39
Sonora	0.49	63.91	13	8.3789	0.60	9.9	44.4	23.66	42.83	5.5	.15
Tabasco	0.52	62.72	13	6.9596	0.67	3.8	54.1	30.94	30.96	8.5	.77
Tamaulipas	0.50	62.86	13	6.6842	0.59	15.3	54.4	30.62	42.70	6.3	.56
Tlaxcala	0.51	62.02	13	7.8765	0.67	0.0	65.7	40.95	39.89	6.6	.98
Veracruz	0.55	63.19	53	7.3063	0.65	6.0	49.3	30.87	31.43	7.9	.36
Yucatán	0.59	71.96	34	6.8083	0.55	13.3	48.3	35.57	34.69	6.8	.83
Zacatecas	0.52	60.66	12	9.6176	0.67	0.0	34.4	25.85	37.35	6.2	.35

Note: Sources:

CONEVAL (2013) *Medición de la pobreza*, retrieved from http://www.coneval.gob.mx/Medicion/Paginas/Evolucion-de-las-dimensiones-de-la-pobreza-1990-2010-.aspx

IFE (2012) Estadísticas y resultados electorales, retrieved from

http://www.ine.mx/archivos3/portal/historico/contenido/Elecciones/

FEPADE (2012) Informe de actividades retrieved from

http://www.pgr.gob.mx/Combate%20a%20la%20Delincuencia/Delitos%20Federales/Delitos%20Electorales/FEPADE/informe%20de%20actividades.asp

MIT (2012) The Mexico 2000 Panel Study: An Introduction retrieved from

http://web.mit.edu/clawson/www/polisci/research/mexico06/intro.shtml#

IFAI (2012). *Estadísticas e indicadores* retrieved from http://inicio.ifai.org.mx/\_catalogs/masterpage/AIP-Estadisticas.aspx IMCO (2010) *Índice Estatal de competitividad* retrieved from http://imco.org.mx/indice de competitividad estatal 2012/

Transparencia Mexicana (2010). *Índice Nacional de Corrupción y Buen Gobierno* retrieved from <a href="http://www.tm.org.mx/indice-nacional-de-corrupcion-y-buen-gobierno-primera-serie-historica-de-corrupcion-en-mexico/">http://www.tm.org.mx/indice-nacional-de-corrupcion-y-buen-gobierno-primera-serie-historica-de-corrupcion-en-mexico/</a>

The Degree of interest in politics, the Degree of trust in institutions and the Degree of Social Participation were prepared by the author on the basis of SEGOB (2012), *Primera Encuesta Nacional de Cultura Política (ENCUP)* retrieved from http://www.encup.gob.mx

The Rae's fragmentation index was prepared by the author on the basis of the electoral results (IFE, 2012) *Estadísticas y resultados electorales*, retrieved from http://www.ine.mx/archivos3/portal/historico/contenido/Elecciones/

Table 7 Variables for the 2010 MIQ Index

	Gini Index	Participatio n in elections (in %)	Complaints presented to the authorities during electoral journey	Degree of interest in politics	Rae's Fragmentat ion Index	Clientelism (% of participatio n in clientelist acts)	Percentage of solved inquiries about government al information	Degree of trust in institutions	State competitive ness index	National Index of Corruption	Degree of Social Participatio n
Ags,	0.43	60.68	17	4.41	0.66	3.4	72.9	25.57	44.30	4.7	.73
Baja California	0.39	53.77	14	4.15	0.66	8.5	56.7	20.82	41.08	7.1	.60
Baja California Sur	0.44	58.81	10	3.85	0.65	0.0	47.6	24.25	46.70	1.8	1.35
Campeche	0.47	67.26	9	3.72	0.69	1.3	52.7	23.90	45.67	8.3	1.12
Coahuila	0.41	61.88	18	4.03	0.64	2.3	58.4	26.40	46.85	8.3	1.20
Colima	0.44	64.34	11	4.55	0.66	4.9	55.6	28.46	41.40	10.4	1.44
Chiapas	0.51	67.32	48	4.21	0.67	2.7	54.5	23.05	26.71	7.6	1.34
Chihuahua	0.41	53.2	19	3.50	0.67	0.7	57.9	22.84	43.29	7.1	.80
Distrito F.	0.43	67.16	211	2.80	0.56	3.5	57.3	21.17	58.88	17.9	.34
Durango	0.45	59.75	23	3.57	0.66	4.8	52.4	25.33	36.28	3.9	1.02
Guanajuato	0.46	59.63	16	3.27	0.56	3.1	61.4	22.52	37.32	7.6	.81
Guerrero	0.47	60.11	78	3.86	0.61	0.5	51.6	18.66	28.24	16	1.07
Hidalgo	0.47	65.73	189	2.56	0.68	3.4	54.2	17.37	33.05	11.6	.61
Jalisco	0.44	64.73	77	3.74	0.64	3.4	56.3	22.77	39.82	10.3	.83
México	0.43	66	104	4.22	0.66	6.4	59.4	21.37	34.46	16.4	.75
Michoacán	0.45	52.5	30	4.11	0.66	3.6	53.6	21.87	30.35	8.4	1.28
Morelos	0.45	65.17	17	4.69	0.66	4.6	57.7	20.52	37.77	6.7	1.40
Nayarit	0.46	62.63	21	4.78	0.66	0.6	63.4	27.12	40.69	4.4	1.40
Nuevo León	0.40	60.41	19	3.62	0.64	10.2	60.8	24.02	51.29	9.1	.67
Oaxaca	0.50	61.99	25	4.19	0.63	3.2	63.9	21.84	22.53	13.4	1.61
Puebla	0.48	63.31	33	4.32	0.68	2.0	53.4	21.47	31.41	7.6	1.57

	Gini Index	Participatio n in elections (in %)	Complaints presented to the authorities during electoral journey	Degree of interest in politics	Rae's Fragmentat ion Index	Clientelism (% of participatio n in clientelist acts)	Percentage of solved inquiries about government al information	Degree of trust in institutions	State competitive ness index	National Index of Corruption	Degree of Social Participatio n
Querétaro	0.48	66.8	9	3.54	0.64	0.0	60.1	26.03	42.97	6.9	.90
Quintana Roo	0.43	58.12	17	5.52	0.68		45.5	24.12	41.46	5.9	2.23
San Luis Potosí	0.47	63.28	20	3.95	0.64	0.9	48.6	25.25	34.26	5.6	.63
Sinaloa	0.42	61.68	9	3.74	0.68	3.3	42.5	22.80	41.32	9.9	1.28
Sonora	0.40	57.84	72	4.31	0.63	6.9	55.1	24.82	40.63	8.4	1.16
Tabasco	0.50	71.28	39	5.87	0.52	3.2	53.3	26.04	33.28	10.8	1.85
Tamaulipas	0.41	58.46	38	4.20	0.67	3.3	61.6	28.29	42.82	6.5	1.38
Tlaxcala	0.44	63.9	9	4.39	0.64	1.3	57.8	21.72	31.14	10.2	1.43
Veracruz	0.47	67.08	116	4.05	0.68	3.4	56.0	23.11	34.31	6.9	.86
Yucatán	0.45	77.42	17	4.34	0.63	1.7	54.6	27.32	36.05	5	.97
Zacatecas	0.45	61.44	24	5.33	0.68	1.4	53.1	22.45	39.24	6.1	.91

Note: Sources

CONEVAL (2013) *Medición de la pobreza*, retrieved from http://www.coneval.gob.mx/Medicion/Paginas/Evolucion-de-las-dimensiones-de-la-pobreza-1990-2010-.aspx

IFE (2012) Estadísticas y resultados electorales, retrieved from

http://www.ine.mx/archivos3/portal/historico/contenido/Elecciones/

FEPADE (2012) Informe de actividades retrieved from

http://www.pgr.gob.mx/Combate%20a%20la%20Delincuencia/Delitos%20Federales/Delitos%20Electorales/FEPADE/informe%20de%20actividades.asp

MIT (2012) The Mexico 2012 Panel Study: An Introduction retrieved from

http://web.mit.edu/clawson/www/polisci/research/mexico06/intro.shtml#

IFAI (2012). *Estadísticas e indicadores* retrieved from http://inicio.ifai.org.mx/\_catalogs/masterpage/AIP-Estadisticas.aspx IMCO (2010) *Índice Estatal de competitividad* retrieved from http://imco.org.mx/indice de competitividad estatal 2012/

Transparencia Mexicana (2010). *Índice Nacional de Corrupción y Buen Gobierno* retrieved from <a href="http://www.tm.org.mx/indice-nacional-de-corrupcion-y-buen-gobierno-primera-serie-historica-de-corrupcion-en-mexico/">http://www.tm.org.mx/indice-nacional-de-corrupcion-y-buen-gobierno-primera-serie-historica-de-corrupcion-en-mexico/</a>

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The Rae's fragmentation index was prepared by the author on the basis of the electoral results (IFE, 2012) *Estadísticas y resultados electorales*, retrieved from http://www.ine.mx/archivos3/portal/historico/contenido/Elecciones/