

# **Poverty and Corruption in Latin America: Challenges for a sustainable development strategy.**

Carballo Ana Estefania.

Cita:

Carballo Ana Estefania (2010). *Poverty and Corruption in Latin America: Challenges for a sustainable development strategy*. V Congreso Latinoamericano de Ciencia Política. Asociación Latinoamericana de Ciencia Política, Buenos Aires.

Dirección estable: <https://www.aacademica.org/000-036/419>

# Poverty and Corruption in Latin America

---

## Challenges for a sustainable development strategy

**Ana Estefanía Carballo**

Universidad Católica de Córdoba, Argentina – University of Applied Sciences, Germany  
aecarballo@gmail.com

Paper presented to the V Latin American Congress of Political Sciences, organized by the Latin American Association of Political Sciences (ALACIP). Buenos Aires, July 28-30 2010.

Trabajo presentado en el V Congreso Latinoamericano de Ciencia Política, organizado por la Asociación Latinoamericana de Ciencia Política (ALACIP). Buenos Aires, 28 a 30 de julio de 2010.

## TABLE OF CONTENTS

---

I. DO INSTITUTIONS MATTER FOR DEVELOPMENT?	4
1. It's politics, stupid	4
2. Corruption in the center of the debate	5
a. Defining and measuring corruption	5
b. Economic effects of corruption	6
c. Links between poverty and corruption	9
II. FAILED STRATEGIES FOR DEVELOPMENT: THE CASE OF LATIN AMERICA	10
1. Shared paths of development	10
2. A common challenge: Poverty and Income Inequality	11
III. BUILDING A MODEL THAT LINKS POVERTY AND CORRUPTION	12
1. Running the empirical analysis for Latin American countries	13
a. Evolution of the corruption indicators in the region	13
c. Results of the regressions between indicators: corruption and development in Latin America	15
3. What are the effects of corruption on poverty and development indicators?	17
a. Direct corruption measurements and poverty in the region	17
b. Non- direct indicators of corruption: Government measures against corruption and its impact on Poverty and Development	22
IV. CORRUPTION AND POVERTY: CONCLUDING REMARKS	27
1. Pending challenges for Latin America	27
2. A call to reshape development thinking for Latin America: the role of the citizenry	28
LIST OF REFERENCES	29

## ABBREVIATIONS

---

CC	Control of Corruption
CPI	Corruption Perceptions Index
ECLAC	Economic Commission for Latin America and the Caribbean
GCB	Global Corruption Barometer
GDP	Gross Domestic Product
LA	Latin America
NGO	Non-Governmental Organization
RL	Rule of Law
SEDLAC	Socio Economic Database for Latin America and the Caribbean
TI	Transparency International
UN	United Nations
UNDP	United Nations Development Program
UNU - WIDER	United Nations University – World Income Inequality Database
WBI	World Bank Institute
WGI	Worldwide Governance Indicators
UNSTATS	United Nations Statistical Division - National Accounts.

## ABSTRACT

---

The effects of corruption in the economic performance at the country-level are part of a dynamic debate in the social sciences, around the discussions on how to measure and monitor corruption. In Latin America, the coexistence of high poverty levels with high economic growth rates continues to be a puzzling situation that might be partly explained by corruption trends. This study discusses the links between poverty and corruption, by constructing an econometric model regressing corruption measurements with poverty and development indicators for Latin America, for the 1998-2008 decade.

### **Versión en Español:**

Los efectos de la corrupción en el desempeño económico a nivel país son parte de un debate muy dinámico en las ciencias sociales, alrededor de las discusiones sobre cómo medir y monitorear la corrupción. En América Latina, la coexistencia de altos niveles de pobreza junto a altas tasas de crecimiento económico continúan siendo una situación desconcertante, que puede ser explicada en parte por las tendencias en materia de corrupción. Este estudio discute los vínculos entre corrupción y pobreza, desde la construcción de un modelo econométrico que regresa medidas de corrupción con indicadores de pobreza y desarrollo para América Latina, para la década entre 1998-2008.

## I. DO INSTITUTIONS MATTER FOR DEVELOPMENT?

---

*“Corruption hurts the poor disproportionately--by diverting funds intended for development, undermining a government's ability to provide basic services, feeding inequality and injustice, and discouraging foreign investment and aid.”*

Kofi Annan, conference for the United Nations Convention  
against Corruption in 2003

### 1. It's politics, stupid

In 1992, Bill Clinton used a powerful motto for his presidential campaign, in opposition to his rival George H. W. Bush. *It's the economy, stupid*, turned out to be a catchy political phrase used to remind voters of the importance of bringing more attention from the government to the economy of the United States. Paraphrasing this motto, the title of this section aims to draw attention to the perspective of many economists that argue that focusing on the economy alone does not necessarily ensure sustained development. Politics do matter for development. And especially corruption, an issue inherently involved in politics all over the world.

In the quest for economic development political scientists, development economists and politicians of all kinds and levels have focused on the conditions that will ensure the take-off of the economies all over the world, guaranteeing better living conditions for the population of every nation. Theories that describe the need for a certain level of human resources, capital flows, infrastructure or financial stability as a requirement for development have shared the stage with those ones that consider that ‘getting the politics right’ is a prerequisite for development. As Hyden and Court (2002) pointed out, the issue of the quality of political institutions has been taken into account for most of the late development economists.

These authors present an analysis of the evolution of development strategies in the world since the establishment of the Marshall Plan, showing how the issue of politics has received growing attention. Development thought, they argue, evolved from strategies focused on the development of projects, in the early 1950s to what they call development “*by the people*” since the mid 1990s. This shift in development strategies, boosted by the policies promoted by international organizations and civil society, presents a focus on the role of citizenry to promote sustainable development, requiring higher levels of transparency, anti-corruption measures and accountability from their governments. (Hyden & Court, 2002).

At the same time, several schools of economic thought have devoted part of their studies to analyze the effect of political institutions and corruption in development. Sound institutions that build efficient strategies to avoid the proliferation of corrupt practices have been advocated for since the early days of economic and political theory. Their roots can be found back in time, for example in the work of Max Weber and his view on the role of the State (Nee, 2003). As Cypher and Dietz (2004) discussed, new institutionalists in economics such as Gunnar Myrdal or Douglas North have argued the importance of the role of the State institutions in the promotion of development. (Cypher & Dietz, 2004, p. 176).

A focus on corruption and the political environment of development has also been taken into account by, for example, the neoliberal economists. The ideas sustained by authors like Lord Bauer, Deepak Lal, Anne Krueger, Tullock or Bhagwati presented critiques to the extension of state intervention with arguments based on its harming effects deriving in crowding out of private investment, or the creation of opportunities for rent-seeking activities and corruption. Less

involvement of the state would imply less space available for the flourishing of corrupt practices (Deonandan, 2006) (Cypher & Dietz, 2004).

It is noticeable that throughout the last decades of economic development thinking, the analysis of the role of politics in the development strategies has been gaining importance. (Heller, 2008) However, it is remarkable that after the 1990s, this issue has received a particular boost. In the words of Deonandan (2006) “*As the geopolitical rationale for supporting dictators waned, and globalization, democratization, privatization and stabilization became the objectives of the new millennium, the rise of official corruption has become the new enemy of western economic security. It is a major threat because it puts in jeopardy the successful realization of these new goals*”(Deonandan, 2006, p. 2). Even when discussions from several decades ago<sup>1</sup> show an early interest in the issue several decades ago, there is still a lack of consensus on the methodological approach of this analysis and the debates in social sciences around it, are still alive and producing numerous academic initiatives, in empirical as well as in theoretical research (Dreher & Herzfeld, 2005).

## **2. Corruption in the center of the debate**

### ***a. Defining and measuring corruption***

Usually understood as the misuse of entrusted power for private gain, the first definitions of corruption responded to a focus on the work of government officials. In this sense, Huntington (1968), in a definition used by Goodman (1974) presented corruption as the “*behavior of public officials which deviates from accepted norms in order to serve private ends*” (Goodman, 1974, p. 144). Rose-Ackerman (1978) debated the same question, and compared the definition of corruption with the concept of *rent-seeking* activities used by Krueger (1974) or Bagwhati (1974) (Coolidge & Rose-Ackerman, 1995). Shleifer and Vishny (1993) also focused on the so-called *public corruption*, when arguing that corruption was understood as “*the sale by government officials of government property for personal gain*” (Shleifer & Vishny, 1993, p. 599). The main focus on corruption perpetrated by public officials has been maintained in time and similar approaches can be found in (Tanzi, 1998), (Mauro, 1995), (Aidt, 2009), (Aidt, 2003) or (Treisman, 2000), (Treisman, 2007) to point some of the recent studies.

However, the main institutional initiatives in the field have a broader perspective of corruption not only including the public sphere. In this sense, several international institutions, understand corruption as the abuse of entrusted power for private gain in the public, as well as in the private spheres. Regarding the level of corruption, these institutions distinguish cases of *petty corruption* which involves street-level, everyday corruption from *grand (or political) corruption* that takes place involving higher levels of government (UNDP & Global Integrity, 2008) (Transparency International, 2009)(World Bank Institute, 2009).

Despite these minor differences in the definition of corruption, the main disagreements appear when debating on the different methodologies to measure it. As Kauffman et al (2006) presents it: “*Since corruption is clandestine, it is virtually impossible to come up with precise objective measures of it*” (Kaufmann, Kraay, & Mastruzzi, 2006, p. 3).

Measurements available are the result of institutional efforts to elaborate proxies that attempt to capture corruption practices the most accurate way possible. Two broad categories of measurement can be pointed out in the process of development of proxy-indicators of corruption: *Perception-*

---

<sup>1</sup> For instance, the discussions maintained in the studies by Goodman (1974) and Huntington (1968), or the studies of Rose- Ackerman (1978) or Johnston (1983) (Goodman, 1974) (Johnston, 1983) or (Coolidge & Rose-Ackerman, 1995).

*based* indicators and *experience-based* indicators. The *perception-based* indicators are composite indexes that aggregate the perceptions of different stakeholders related to corruption levels, whereas the *experience-based* indicators are built based in polls made to citizens asking their actual experience in dealing with corruption.

The two most widely-known perception-based indicators are the Corruption Perceptions Index (CPI) developed by Transparency International and the Worldwide Governance Indicators (WGI) built by the World Bank Institute (WBI). Both methodologies focus their efforts in trying to capture third-party perceptions on the issue and aggregating them in the construction of different indexes. By aggregating different sources the results are expected to become a good proxy of the corruption phenomenon in reality.<sup>2</sup>

The main critics done to these two indicators relate both to the weight given to the sources when aggregating them, as well as to the type of sources used. Critics point also to the use of the external-sources in the first place: “Aggregate indicators are also susceptible to misuse due to their selection bias (favoring expert over population surveys), poor methodology and scoring criteria transparency, lack of reliable comparisons over time or across countries (if the component sources differ year-to-year or between units of analysis), and the likelihood of correlation errors in sources (i.e., the influence of other expert assessments, political/financial crises and country economic performance, as well as respondent errors on perception data)” (UNDP & Global Integrity, 2008, p. 21).

However, despite the rather strong criticism directed at these main two measurements, empirical research relies mainly in both of the rankings mentioned. As Kauffman (2007) and Lambsdorff (2007) point out, there is hardly any other source that provides systematically measurement of corruption. The lack of other alternatives remains as one of the strongest rationale to continue with their use. Besides, both authors (being the main responsible for the construction of the indexes for both institutions) claim to use as many controls as possible to maintain the objectivity of the indicators at the highest levels (Lambsdorff, 2007) (Kaufmann, Kraay, & Mastruzzi, 2007). Several empirical studies defend the quality of these indicators by performing correlation analysis between the different indicators constructed. The sustained trends of correlation among the different indexes, as well as the high correlation with also *experience-based* indicators are arguably a sign that they should serve as a good proxy of what the corruption phenomenon is in reality, as most of the different perceptions coincide. (Treisman, 2007), (Weber Abramo, 2000).

### ***b. Economic effects of corruption***

The analysis of corruption trends and its effects on countries’ economic performance has been catching the attention of scholars in every corner of the world. The availability of the corruption measurements that started in the early nineties caused a significant increase of empirical research in the field. In general terms, very few empirical conclusions have reached a high level of acceptance, across indicators, studies and regions of the world.

Perhaps the most widely accepted conclusion is derived from the debate on the possibilities of corrupt practices to become a tool to fasten growth. The “Greasing the growth wheels” hypothesis, presented in the mid 60s by some authors like Huntington (1968) or Leff (1964) who pointed that corruption was an effective method to avoid rigid bureaucracies and raise the pace of economic development, gained substantial opposition at theoretical, ethical and empirical levels. It is clear that even though corrupt practices might produce some efficiency gain in the micro-level (for instance, paying bribes to speed up long, bureaucratic procedures) they at least distort resource allocation, in

---

<sup>2</sup> To develop these indexes, both institutions gather information from several sources, including international risk rating agencies, academics, business people, surveys and consultants on the topic, giving different weight to each one of them. In this sense, the type and number of sources used for each country differs for both of these main indicators (Heller, 2008).

the macro level (Aidt, 2009, p. 19). As seen in Table 2 (in the following page), most of the empirical research done in the area shows that high corruption levels relate to poor macroeconomic results. However, the way and extent that corruption affects economic performance remains still unclear, and several studies come to different conclusions as it can be clearly seen from the next table.

**Table 1 - Findings from the last decades of empirical research**

EFFECTS ON	ECONOMIC LINKS OF CORRUPTION -	KIND OF STUDY	AUTHORS
INTERNATIONAL TRADE	Exporters from less corrupt countries face disadvantages in import countries with a high corruption level. Corruption harms level of FDI.	Cross country panel analysis.	(Habib and Zurawicki 2002) (Wei 1998)
	Openness of the economy, as measured by economic freedom, has a positive relation with corruption levels.	Cross-country panel analysis.	(Shen and Williamson 2005)
	Higher levels of Regional integration are associated with lower levels of corruption.	Cross-country panel analysis.	(Sandholtz and Gray 2003)
LOCAL ECONOMIES	Decentralization processes obtain poor results with high levels of corruption.	Cross country panel analysis.	(Freille, Haque and Kneller 2007)
	In the municipal level, corrupt governments obtain worse financing conditions.	Panel Study in the US.	(Butler 2004)
	Unofficial economy mitigates government-induced distortions because of corruption and as a result, leads to enhanced economic activities in the official sector.	Cross-Country dynamic model of general equilibrium.	(Choi and Thum 2002)
INCOME INEQUALITY AND POVERTY	Corruption positively correlates to higher income inequality and poverty.	Cross-Country dynamic model of general equilibrium.	(Blackburn and Forgues-Puccio 2007)
	Corruption increases income inequality and poverty by: reducing economic growth, increasing the progressivity of the tax system, distorting the level and effectiveness of social spending.	Cross country panel analysis.	(Gupta, Davoodi, & Alonso-Terme, 1998)
	Income inequality increases the level of corruption.	Cross-country panel analysis.	(You und Khagram 2005)
ECONOMIC PERFORMANCE	No effects of corruption levels on GDP growth rate - Strong inverse relation with genuine wealth per capita.	Cross-country panel analysis.	(Aidt, 2009)
	Corruption has no significant effect on economic growth in democracies, while non-democracies suffer significant economic harm from corruption practices.	Cross-country panel analysis.	(Drury, Kriekhaus and Lusztig 2006)
	An increase of corruption reduces GDP growth and GDP per capita.	Cross-country panel analysis.	(Dreher & Herzfeld, 2005) (Meon and Sekkat 2005) (Mauro, 1995)
	Lower perceived corruption correlates closely with higher economic development.	Cross-country panel analysis.	(Treisman, 2000)
	High corruption levels are associated with: Higher public investment but lower productivity of these investments, lower government revenues, lower expenditures on operations and maintenance and lower quality of public infrastructure.	Cross-country panel analysis.	(Tanzi & Davoodi, 1997)

Source: author's own elaboration based on the papers quoted. (2009)

**c. Links between poverty and corruption**

The debate on whether corruption has direct effects on poverty rates has led to two kinds of analyses: the *economic model* and the *governance model*. The first model focuses on the effects of corruption on hampering economic growth, which in turn affects poverty rates. In this line, the effects analyzed in Table 2 can derive in an increase of poverty levels.

The *governance model* focuses on the impacts of governance factors, which in turn affect poor people. In this case, focus is set, for example, on the study of the increase in poverty due to poor performance of the government in the collection of taxes and revenues or on the loss and misallocation of resources due to corrupt public officers (Chetwynd, Chetwynd, & Spector, 2003).

The channels through which corrupt practices hamper economic performance and prevent poverty reduction strategies are varied in their nature, and have been studied with different perspectives. The World Bank Institute (2002) produced a study showing possible links wherein higher corruption levels could be associated with higher poverty levels, summarized in Table 3.

**Table 2 - Synthesis Nexus between Corruption and Poverty**

CORRUPTION CAUSES:		DUE TO:
<b>IMMEDIATE/PROXIMATE CAUSE OF POVERTY</b>	<b>Lower Growth</b>	<ul style="list-style-type: none"> <li>· Unsound economic/institutional policies due to vested interests</li> <li>· Distorted allocation of public expenditures</li> <li>· Low human capital accumulation</li> <li>· Absence of Rule of Law and property rights</li> <li>· Governance obstacles to Private sector development</li> <li>· Capture by elite firms reduces overall enterprise sector growth.</li> </ul>
	<b>Poor gets smaller share in growth</b>	<ul style="list-style-type: none"> <li>· ‘Capture’ by elite of government policies and resource allocation</li> <li>· Regressivity of Bribery ‘Tax’ on small entrepreneurs and the poor</li> <li>· Regressivity in public expenditures and investments</li> <li>· Unequal income distribution</li> <li>· Smaller firms are disproportionately affected by corruption/bribery</li> </ul>
	<b>Impaired access to public services</b>	<ul style="list-style-type: none"> <li>· Bribery impairs access and quality of basic services for health, education, justice – particularly to the poor</li> <li>· Capture by elites of access to quality public services</li> </ul>
	<b>Health/Education</b>	<ul style="list-style-type: none"> <li>· Corruption affects human capital accumulation (incl. infant mortality, literacy, as per above, with disproportional impact on the poor)</li> </ul>

Source: (Kaufmann, Transparency, Incentives and Prevention (TIP) for Corruption Control and Good Governance Empirical Findings, Practical Lessons, and Strategies for Action based on International Experience, 2002, p. 7)

Many empirical studies have tried to provide evidence from the links between poverty and corruption around the world. Surprisingly, few of these initiatives have been focused in the regional trends of Latin America, a region where both, high corruption levels and high poverty rates coexist presenting enduring challenges for the regional governments.

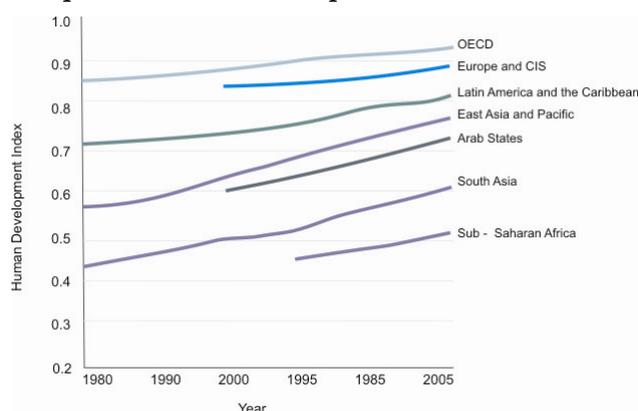
### 1. Shared paths of development

*En pocas palabras, América Latina es una región de contrastes marcados, conquistas históricas y retos colosales*<sup>3</sup>. (Munck, 2003, p. 567)

Latin American countries share a wide range of cultural, political and economic characteristics, and have done so ever since early days in history. The legacy of Spanish colonial times configured a geographical space where the convergence of cultural traditions and language clashes with deep divergences in the construction of a regional identity. From Tijuana to Tierra del Fuego, one can observe many instances in which various nations of Latin America drifted down their own development path. The so-called “melting pot” in which national identities in the region emerged resulted in numerous parallels in the countries’ economic and political choices throughout Latin American history, as well as in some divergent paths.

In general terms, the development path for many of the countries of the region followed similar strategies and was accompanied by comparable political changes. It is important to point out that Latin American countries showed a fair increase in their development indicators. As it can be observed in Graph 1, the region maintained an overall increase in the Human Development Indicators (HDI) in the last decades, as measured by the United Nations Development Program (UNDP). However, by the second half of the nineties and the beginning of the twenty-first century, many regional crises<sup>4</sup> exposed the weaknesses of the neoliberal model of development. High growth rates in the economies coexisted with increasing unemployment rates and, above all, extremely high poverty rates and income inequality. Throughout the twentieth century and in the beginning of the new millennium, poverty and inequality rates have shown to be the most persistent challenges for every Latin American government.

**Graph 1 - Human Development trends 1980-2005**



Source: Human Development Reports (2009) accessible in <http://hdr.undp.org/>

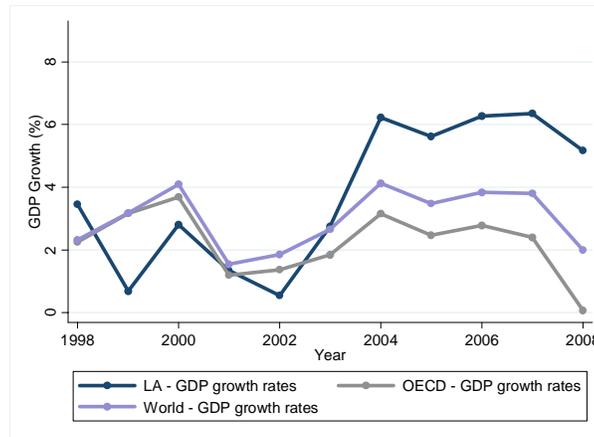
<sup>3</sup> Translation: “In a few words, Latin America is a region of deep contrasts, historical achievements and colossal challenges.” The author presents the high level of democracy and political rights achieved in the region as historical achievements of the last decades, coexisting with an increase in inequalities within the countries and among them and with great challenges pending in terms of security, poverty, health, education, gender and income equality and social rights.

<sup>4</sup> According to Williamson (2006), the financial crises that were unleashed in other regions of the world during the last decade of the twentieth century (such as the Asian, Russian or Turkish crises) affected the region in different moments, generating foreign exchange crises – where countries would run out of reserves and be forced to abandon exchange rate regimes – happened in Mexico in 1994, in Brazil and Ecuador in 1999, in Argentina in 2001, and in Uruguay in 2002 (Williamson, 2006).

## 2. A common challenge: Poverty and Income Inequality

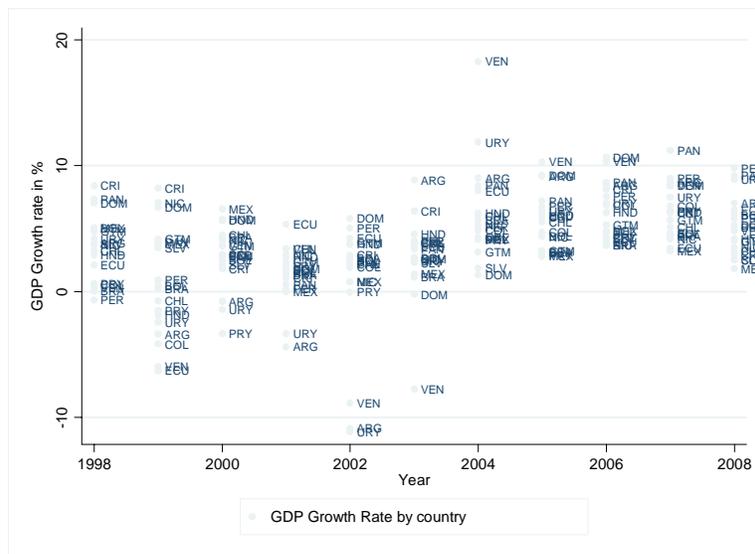
In the last decade, as shown in Graphs 2 and 3 (below), Latin American economies have shown relatively strong GDP growth. Relative to global economic trends, especially when considering the period following 2002, Latin American GDP growth were significantly higher than the OECD and world averages, and this phenomenon has been relatively homogeneous in the whole region.

**Graph 2- GDP Growth Rates 1998-2008**



Source: (World Bank Institute, 2009) (UNSTATS, 2009) author own calculations (2009)

**Graph 3 - GDP Growth Rates for LA economies - 1998-2008**



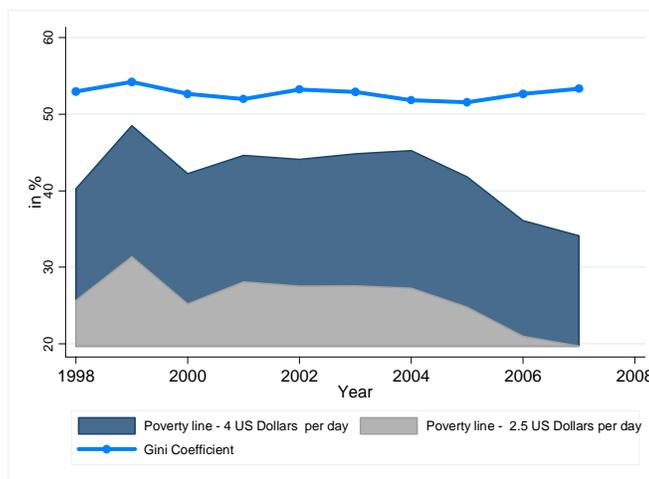
Source: (UNSTATS, 2009) author's own calculations (2009)

However, it is important to remark that the recent and positive economic trends are insufficient to address the challenges in terms of poverty and inequality that previous strategies of development have left in the region. According to data provided by the ECLAC, by the end of 2007, 184 million people were living in poverty, out of which 67 million lived in indigence.

Even when the poverty rates in the region show a sustained decline since 2003, the absolute number of citizens under the poverty line is still higher than 1980 and the percentage rates show a

poor improvement, going from 40.5% in 1980 reduced to 34.6% in 2007 (ECLAC, 2008). The average poverty figures in the region are alarmingly high, as is seen in Graph 4, and are accompanied by steadily high income inequalities measures.

**Graph 4 - Poverty and Income Inequality in LA 1998- 2008 /Data by SEDLAC**



Source: (SEDLAC, 2009) (UNU - WIDER, 2008), author own calculations (2009)

The analysis of income distribution is perhaps the most discouraging result of a century of poor development strategies: Latin America exhibits the highest income inequality rates in the whole world. With a Gini coefficient of 0.53 in 2007 with a range of 0.43 and 0.57 the region shows a worse income distribution pattern than other developing regions in the world (ECLAC, 2009, p. 26). Though high levels of income inequality are persistent throughout the region, one observes that this has been improving for the 2002-2007 period for Argentina, Venezuela, Bolivia, Brazil, Chile, El Salvador, Nicaragua, Panama and Paraguay, concurrent to the establishment of leftist governments throughout the region (ECLAC, 2008, p. 58).

The social exclusion, the levels of violence and deprivation linked to the high rates of poverty coexisting in Latin America, a region that at the same time shows extremely high levels of wealth and high development standards are, therefore a key element of the development agenda of the region. Whether these apparently irreconcilable sides of economic growth are correlated with the high levels of corruption exhibited as well in the Latin American governments is the topic of discussion of the next section.

### III. BUILDING A MODEL THAT LINKS POVERTY AND CORRUPTION

For the empirical analyses in this section, the main corruption measurements used come from two of the institutions presented before. Despite the disagreements discussed in the first section on the difficulty to establish valid corruption measurements, the work of Transparency International (TI), and the World Bank Institute (WBI) work has become the main source for the empirical research done in the last years and it has been used for this study as well.

Both the results from the Corruption Perceptions Index (CPI) and some of the indicators that comprise the Worldwide Governance Indicators (WGI) have been used. In combination with these two main indexes, the Global Corruption Barometer (GCB), a worldwide population survey

conducted by TI between 2004 and 2008, and a series of indicators aiming to measure both development and Poverty trends in Latin America have been used<sup>5</sup>. The analysis focuses on 18 Latin American<sup>6</sup> countries that exclude mainly Caribbean countries, due to lack of sufficient data. The information of the dataset has been obtained from each one of the original sources, as well as from the Quality of Government Dataset, prepared by the Quality of Government Institute from the University of Gothenburg in Sweden. (Teorell, Charron, Sammani, Holmberg, & Rothstein, 2009).

The following sections will present the different results of this econometric analysis, in several tables and graphs. Please note that all the tables displayed below are a result of the Author's calculation, based on the indicators developed by Transparency International, the World Bank Institute, the UN Development Program, the Economic Commission for Latin America, the UN Statistical Division, the UN University - World Income Inequality database and the Socio Economic Database for Latin America and the Caribbean, as it is detailed in the references (Transparency International, 2009), (World Bank Institute, 2009), (UNDP - HDR, 2009) (ECLAC, 2009) (UNSTATS, 2009) (UNU - WIDER, 2008) (SEDLAC, 2009). For space reasons, the complete regressions and the detail of the variables is not included but can be provided upon request.

## **1. Running the empirical analysis for Latin American countries**

### ***a. Evolution of the corruption indicators in the region***

When analyzing the evolution of corruption trends in Latin America, it can be observed that all the different WGI indicators follow a similar path. The performance of each one of them shown in Graph 8 makes visible that the indicator with the worst performance is consistently the Rule of Law (RL), with values that range between -.34 and -.52.

It is noticeable that this indicator has a worsening path throughout the years, where the rest of the indicators show a somewhat low but improving performance since 2005. The fact that in the perceptions of the experts the RL has been worsening in the region especially after 2002, might reflect the rise of some leftist governments in the last years in a clear opposition to the neoliberal agenda that ruled the governments in the 90s.

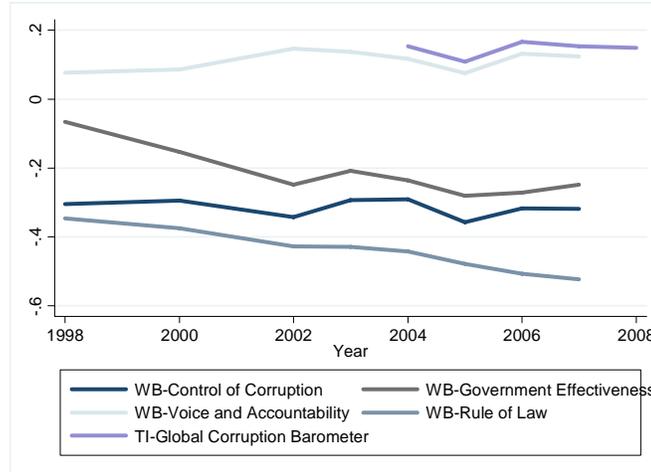
As Salas points out in his 2009 study, the rise of leftist governments all over Latin America presents big challenges for the implementation of a political agenda that has historically been associated with the role of political opposition, rather than being the ones in charge of the State (Tinker Salas, 2009, p. 149). Some of the political reforms proposed by this new wave of governments in the region aimed at increasing the focus on social issues, have caused increased suspicion from the international business arena that might affect the perceptions of the RL indicator.

---

<sup>5</sup> Please note that many variables that account for the same kind of measurements have been included (e.g. several different indicators for the measurement of poverty) as none of the databases available were complete. There are gaps in all the different measurements, however, the database prepared by the SEDLAC is the most complete of all. The use of the log form of some variables has been included as an attempt to capture more completely the nature of the relation between variables, following similar empirical research in the area as the models presented by Daniel Treisman, Claudio Weber Abramo or Evan Osborne (Treisman, 2000)(Treisman, 2007)(Osborne, 2004)(Weber Abramo, 2000).

<sup>6</sup> The countries studied include: Argentina, Dominican Republic, Nicaragua, Bolivia, Ecuador, Panama, Brazil, El Salvador, Paraguay, Chile, Guatemala, Peru, Colombia, Honduras, Uruguay, Costa Rica, Mexico and Venezuela

**Graph 5 - Evolution of corruption Indicators in LA 1998-2008**

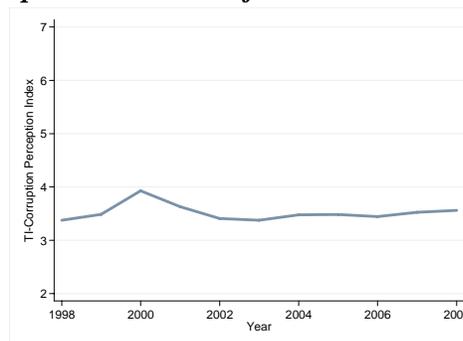


Source: author's own calculations (2009)

Taking into consideration that this indicator assesses the level of contract enforcement, among other issues, it is not surprising that the decisions of some Latin American governments to re-nationalize companies, expropriating them from their private owners, might have affected the overall performance of this indicator for the region. This might be the case of the oil and gas nationalizations in Bolivia, the pension schemes and the airlines in Argentina, or the cement industries in Venezuela, for example.<sup>7</sup>

The rest of the indicators, including the GCB, which is expressed in decimals, show a relatively poor performance of the region in terms of its corruption trends. The WGI indicators have systematically scored below 0.2 in average for the region. To make a comparison, in 2008, the average score for the region in the WGI Control of Corruption (WGI – CC) was -0.25, where in the OECD for the same period it was +1.17. In line with these results, the evolution of the CPI from TI also presents a gloomy panorama, as shown in Graph 9. The CPI performance, exhibits a relatively constant average score for the region, with a small range of variation that reached a maximum peak of 3.92 in the year 2000 and a minimum peak of 3.37 in 1998. The 2008 average of the CPI in the region was 3.56, a score that has been growing at a slow pace since 2006.

**Graph 6 - Evolution of TI-CPI 1998-2008**



Source: author's own calculations (2009)

<sup>7</sup> In this sense, the performance of Argentina or Venezuela result paradigmatic. Argentina in 1998 with Carlos Menem in power - following a right-wing neoliberal agenda- scored +0.08 in the Rule of Law indicator. Since then, its performance has been decreasing especially after 2002, reaching a score of -0.61 in 2008, with Cristina Fernandez in office that sustains a leftist discourse. Venezuela in the same period, with Hugo Chavez leading a leftist presidency, has seen its performance in the RL indicator fall from -0.71 to -1.59, placing the country in the 2.9% lowest positions of the world ranking.

However, as shown in Table 6, the results within the region vary widely. The countries that have had the worst performance on average in the last decade have been Paraguay, Ecuador, Honduras and Venezuela, with averages below 2.5. On the opposite side, the best performers in the region during the period 1998-2008 have been Chile, Uruguay and Costa Rica, with average scores over 4.5.

**Table 3 - Average CPI scores 1998-2008**

Country	CPI Score	Country	CPI score
Chile	7.218	Dominican Republic	3.075
Uruguay	5.650	Argentina	2.930
Costa Rica	4.791	Guatemala	2.730
El Salvador	3.873	Nicaragua	2.660
Peru	3.873	Bolivia	2.527
Brazil	3.800	Venezuela	2.373
Colombia	3.518	Honduras	2.370
Mexico	3.491	Ecuador	2.300
Panama	3.375	Paraguay	2.022

Source: author's own calculations (2009)

**c. Results of the regressions between indicators: corruption and development in Latin America**

As a last stage of the empirical analysis, regression models have been conducted to uncover the possible links between corruption indicators and poverty and development indicators in the region. The construction of the models has followed similar patterns to those developed by empirical research already done in the topic, in line with the type of analysis proposed by (Alesina & Weder, 2002), (Gupta, Davoodi, & Alonso-Terme, 1998),(Mauro, 1995),(Morris, 2004),(Osborne, 2004),(Treisman, 2000) or (Tanzi & Davoodi, 1997), to point some of them out. In this sense, in this study, linear regression models have been developed in different stages, using the variables described.

*c.1 Developing the Econometric model of analysis*

In the first stage, a model with the variables measuring corruption has been regressed against the poverty and development indicators without further restrictions (Model (a)). However, while all Latin American countries share many cultural and political traditions, many differences in the development performances can be found within the region. For this reason, a second model has been developed, with the inclusion of fixed effects by countries, as performances in the corruption area are influenced by many national institutions and particular trajectories of each country in the region (Model (b)). Finally, as some of the variables included in the analysis are prone to change subject to macroeconomic shocks, a fixed effect by year was established in the third model of regressions, a panel regression, where year fixed-effects were added to the country fixed effects (Model (c)). It is also important to point out that the different regressions have been tested to provide robust results, in terms of heteroskedasticity and serial correlation.

As a first approach, the models with further restrictions might provide results more robust or conclusive when analyzing their implications, but at the same time, the restrictions might impede to follow the behavior of the variables in a wider geographical scope, or in a trend sustained in time. Another point that needs to be addressed is the consideration of the explanatory power of each one of the regressions analyzed. When considering the R-Squared of the regressions performed, it is

noticeable that the outcomes in terms of R-squared for each one of the regressions are not high. Especially when considering the most and the least unrestricted models, the R-Squared doesn't present a high explanatory power in any of the regressions. While it is important to point out that these results imply that the variation on the development and poverty indicators cannot be explained by the corruption indicators alone, it is also important to focus on the objective of this particular study.

The main aim of this study is not to explain the evolution of the poverty and development indicators in the region, but to analyze whether a link can be established between corruption and poverty. More than focusing on the development of an in-depth analysis of the direction and extent of these links in each one of the countries, this research studies the results in a more general perspective, identifying the overall trends in the region. Furthermore, the levels of R-squared obtained from these regressions are not substantially different from the results obtained in other empirical studies, as the ones pointed out in sections 1. Therefore, the results will be analyzed for the different models of regressions, but it is important to take into account the drawbacks of using the different results.

In the following sections, the results for each one of the independent variables will be discussed, grouped in two main categories. In the first part, the results of those independent variables that directly measure corruption will be presented. In this sense, the results of the TI-CPI, the TI-GCB and the WGI-CC will be analyzed in their interaction with development and poverty indicators. In the second part, the second group of indicators that measure more the conditions that may affect the development of corruption in a more indirect way will be presented, that is the Worldwide Governance Indicator of Voice and accountability (WGI-VA) and the Rule of Law (WGI-RL). In these subsections, only the results with high significance levels will be displayed.

As general remarks of the results obtained from the regression, it is striking to point out the fact that none of the corruption indicators yielded significant results when regressed against the growth rates of the region, in none of the models.

These results compared to the ones of the emblematic study of Mauro in 1995, show that the relation is not clearly sustained in the same terms in Latin America (Mauro, 1995). One of the causes might be that the author used different indicators to measure for corruption and government effectiveness in his 70-country cross national study, when he affirmed: *The negative association between corruption and investment, as well as growth, is significant in both a statistical and an economic sense* (Mauro, 1995, p. 705). Another point is that the growth rates in the region, for the period included in this research, may also reflect the fact that the countries in the region -which are exporters of commodities- have benefited from the rising prices in the international market, and therefore growth rates are not in line with corruption performances, that have not experienced any significant change in their trends in the last decade. Another surprising result is that none of the regressions showed a relation among corruption Indicators and Inequality measures, even when Latin America is known for being the most unequal region in the world. (ECLAC, 2008, p. 19).

However, the results are different if the case of the GDP per capita is analyzed. In general terms, the findings for the region are quite similar to those presented by Treisman in his two studies of 2000 and 2007 where he stated that the GDP per capita was highly correlated with the corruption measurements of TI and the WGI. The results of the correlation for this sample are shown in Table 7. Even when the results reported for this sample show a lower level of correlation, the existence of a relationship among these indicators in the same line as the results presented by Treisman can still be confirmed for Latin America, but in a lower level (Treisman, 2007)(Treisman, 2000).

**Table 4 - Correlation between GDP per capita and Corruption Indicators**

	log GDP per Capita	GDP per Capita
Log GDP per Capita	1	
GDP per Capita	0.9654	1
TI - Corruption perception Index	0.5373	0.4839
WB - Control of Corruption	0.5848	0.5513
WB - Government Effectiveness	0.6810	0.6597
WB - Rule of Law	0.5852	0.5664
WB - Voice and Accountability	0.6529	0.6401

n=135 – Source: author’s own calculations (2009)

### 3. What are the effects of corruption on poverty and development indicators?<sup>8</sup>

#### a. Direct corruption measurements and poverty in the region

Using the main direct- corruption measures – WGI - CC, TI-CPI and TI-GCB – some links can be uncovered in the region.

When the WGI indicator of Control of Corruption is regressed against all the development and poverty indicators, several significant relations appear in the first model, as it can be observed in Table 9 (in the next page). The measurements done by the WBI show that an improvement in the scores of the WGI- CC will yield in a reduction in all the poverty measurements, for a 99% level of significance.

At the same time it describes a positive relation with the HDI and the GDP per capita measures. However, when controlling by country and year, the significant relations are reduced to only three, all of them related to poverty measurement. The regressions done following Model (b), with only country fixed effects restrictions, did not present any significant results.

These results reinforce the idea that there is a strong inverse relation between the corruption levels and the poverty levels in the region, when measured using the WGI-CC. This is also confirmed by the data shown in Table 8 that presents a strong correlation of the two most complete poverty measurements available, with the WGI-CC. In this sense, the results obtained for the region are in line with the ones pointed out by the literature in the area, discussed before.

---

<sup>8</sup> Please note that the sources for each one of the variables used in the regressions presented in these sections are detailed below, in Appendix A. The different models used and their levels of restriction, as detailed in section 2.c will be indicated in every table with the heading Model, referring to: (a) Model without restrictions, (b) Model with Country fixed effects and (c) Model with country and year fixed effects.

**Table 5 - Correlation between WGI-CC and Poverty measures**

	WB - CONTROL OF CORRUPTION	POVERTY LINE - 2.5 U\$\$ PER DAY	POVERTY LINE - 4 U\$\$ PER DAY
Poverty line - 2.5 U\$\$ per day	-0.6995	1	
Poverty line - 4 U\$\$ per day	-0.7360	0.9879	1

n=105 – Source: author’s own calculations (2009)

Even when the mechanisms by how corruption affect economic performance are not uncovered by this regression<sup>9</sup>, nor the causality of the relation among them<sup>10</sup> it is clear that this result shows a link between corruption and poverty trends for LA. This empirical evidence goes in line with the idea that a country showing better anti corruption mechanisms (indicated by a better score in the WGI-CC) can achieve a more efficient distribution of resources, yielding in better outcomes in terms of poverty alleviation.

---

<sup>9</sup> For a detailed discussion on the ways in which corruption can affect poverty and development indicators, please refer to section 1.

<sup>10</sup> For a discussion on the causality of the relations between poverty and development indicators and corruption indicators please refer to section 4.

**Table 6 - Regressions with WGI - Control of Corruption**

Model	(a)									(c)		
VARIABLES	Human Development Index	Poverty line - 2.5 US\$ per day	log Poverty line - 2.5 US\$ per day	Poverty line - 4 US\$ per day	log Poverty line - 4 US\$ per day	Extreme Poverty - ECLAC	National Poverty - ECLAC	GDP per capita	log GDP per capita	Extreme Poverty - ECLAC	Poverty line - 4 US\$ per day	Poverty line - 2.5 US\$ per day
WB - Control of Corruption	0.0552*** (0.0105)	-13.04*** (1.971)	-0.735*** (0.142)	-16.75*** (2.567)	-0.504*** (0.0957)	-9.608*** (1.894)	-17.05*** (3.451)	1306*** (170.1)	0.594*** (0.0965)	-6.825* (3.973)	-7.921* (4.627)	-8.929** (3.997)
Constant	0.790*** (0.00908)	20.93*** (1.369)	2.859*** (0.0915)	36.39*** (1.681)	3.506*** (0.0610)	11.60*** (1.435)	35.30*** (2.678)	2816*** (268.6)	7.776*** (0.109)	12.31*** (1.065)	39.02*** (1.343)	22.22*** (1.237)
Country fixed effects	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes
Year fixed effects	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes
Observations	144	107	107	106	106	62	64	144	144	62	106	107
R-squared	0.320	0.484	0.605	0.555	0.614	0.496	0.463	0.315	0.353	0.547	0.609	0.561
										16	18	18

Robust standard errors in parentheses - \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 –

Source: author's own calculations (2009)

To continue with the analysis of the direct measures of corruption, Table 11(in the next page) shows the results obtained when regressing the TI-CPI against the poverty and development indicators. The direction of the relations found between the TI-CPI and the different poverty and development indicators show similar results than those obtained when the WGI-CC was used, shown above. In fact, to confirm this trend, the correlations obtained between the poverty measures and the TI-CPI shown in Table 10 are highly similar to those of the WGI-CC, from Table 8 (above).

When analyzing the regression coefficient of the TI-CPI, it is important to note that the WGI-CC indicator consistently presents higher values for each one of the relations regressed. Furthermore, the R-Squared values reported for the WGI-CC are higher as well, showing that the WGI-CC has a better explanatory power than the TI-CPI for these relations. Given the similarity in the construction of these two indicators, and the sources used, differences can be attributed to different weighing strategies used to add different sources of information when building the indexes. This can be confirmed when observing that the regression that better captures the poverty measurements and the TI-CPI are the variables in their log forms, an indicator that the relation among both variables is not as linear as the one with the WGI- CC. Once again, the results obtained show a strong link between the corruption indicator and the poverty measurements.

**Table 7 - Correlation between TI-CPI and poverty measurements**

	TI- Corruption Perceptions Index
Log Poverty line - 4 U\$\$ per day	-0.6857
Poverty line – 2.5U\$\$ per day	-0.6358
Poverty line - 4 U\$\$ per day	-0.6452

n=124 - Source: author's own calculations (2009)

It is important to note that the higher coefficients related to poverty were obtained relating it to the moderate measurements of poverty (4 US\$ per day and National Poverty-ECLAC). As it can be seen in the model (a) from Table 11, the coefficients are higher for both National poverty line of ECLAC and the 4 US\$ poverty line used by the SEDLAC. These results may suggest that higher corruption in the region is associated with a worsening of economic conditions, but not to the citizens that are already in extreme situations. In this sense, it can be argued that this is a sign that the social policies implemented by Latin American governments to alleviate poverty are distorted due to corrupt practices, but they still reach those citizens in worse conditions. In this case, if policies mainly reach indigents, instead of the whole poor population, the coefficients linking corruption measurements with poverty would be smaller for Extreme poverty measures, as it is in fact shown in Table 11.

*Table 8 - Regressions with TI -Corruption Perceptions Index*

Model	(a)										(b)		(c)
VARIABLES	Human Development Index	GDP per capita	Poverty line - 2.5 U\$S per day	Extreme Poverty - ECLAC	National Poverty - ECLAC	Poverty line - 4 U\$S per day	log Poverty line - 2.5 U\$S per day	log Poverty line - 4 U\$S per day	GDP per capita	log GDP per capita	log Poverty line - 2.5 U\$S per day	log Poverty line - 4 U\$S per day	log Poverty line - 4 U\$S per day
TI - Corruption Perception Index	0.0256***	544.7***	-6.060***	-4.544***	-7.878***	-7.433***	-0.323***	-0.216***	544.7***	0.261***	-0.323***	-0.216***	0.0851*
	(0.00568)	(105.2)	(1.100)	(1.111)	(1.772)	(1.298)	(0.0610)	(0.0404)	(105.2)	(0.0541)	(0.0301)	(0.0207)	(0.0464)
Constant	0.680***	501.2	46.77***	30.50***	69.42***	68.22***	4.245***	4.434***	501.2	6.676***	4.245***	4.434***	3.391***
	(0.0286)	(625.2)	(4.418)	(4.700)	(6.794)	(5.098)	(0.195)	(0.133)	(625.2)	(0.283)	(0.109)	(0.0760)	(0.165)
Country fixed effects	No	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes
Country fixed effects	No	No	No	No	No	No	No	No	No	No	No	No	Yes
Observations	168	168	125	76	76	124	125	124	168	168	125	124	124
R-squared	0.289	0.242	0.399	0.409	0.396	0.432	0.484	0.470	0.242	0.300	0.484	0.470	0.655
													18

Robust standard errors in parentheses - \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: author's own calculations (2009)

<sup>11</sup>Table 12 presents the results obtained when regressing the TI-GCB against the different poverty and development indicators. Very few regressions have resulted in significant outcomes when running all the models. This might bring us to the conclusion that the results obtained with the TI-GCB models are not robust, mainly due to the few observations available to build the comparisons that are not enough to allow to draw long-term conclusions. This can be confirmed both by the high standard errors obtained for each one of the correlations, as well as for the low R-Squared values obtained. This leads to the conclusion that in order to obtain better results when analyzing experience-based measures of corruption with poverty and corruption in LA, a longer period of measurement should be allowed in order to obtain more robust results.

**Table 9 - Regressions with TI - Global Corruption Barometer**

Model	(a)	(b)	(c)		
VARIABLES	Extreme Poverty - ECLAC	National Poverty – ECLAC	GDP per capita	National Poverty – ECLAC	log GDP per capita
TI - Global Corruption Barometer	40.96*** (13.18)	-34.83* (19.24)	1157* (564.1)	-34.83** (14.26)	0.463** (0.211)
Constant	5.600** (2.374)	16.14*** (1.347)	2830*** (93.79)	43.38*** (2.694)	7.782*** (0.0328)
Country fixed effects	No	Yes	Yes	Yes	Yes
Country fixed effects	No	No	Yes	Yes	Yes
Observations	24	26	38	26	38
R-squared	0.276	0.948	0.140	0.137	0.104
			14	12	14

Robust standard errors in parentheses - \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: author's own calculations (2009)

***b. Non- direct indicators of corruption: Government measures against corruption and its impact on Poverty and Development***

In this last section, the relation among the indicators that intervene in the control of corruption in an indirect way, measured by the WGI indicators of Voice and Accountability (WGI-VA) and Rule of Law (WGI-RL) will be presented. In general terms, as seen in Tables 13, 14 and 15 the link between poverty and development indicators is maintained. It can be argued upon these results, that a better institutional setting, given by a better performance in the WGI indicators, would indicate a better outcome of the development and poverty indicators, even when the results are not completely consistent through the different models, as it will be discussed below. However, when using the country and year restrictions, the regressions present an inverse relation to those that would be expected from the theoretical analysis.

As discussed in the first section, there is a wide recognition among scholars that governance indicators matter when it comes to obtain sustainable and fair outcomes from development strategies, and that these outcomes require effective approaches to tackle corruption. Authors such as (Birdsall,

2004);(Court, Hyden, & Mease, 2002);(ECLAC, 2002)(Kaufmann, Kraay, & Mastruzzi, 2009); (Korzeniewicz & Smith, 2000);(Pierre, 2009) or(Teichman, 2004) use different arguments that refer to the importance of high levels of governance in the establishment of national development strategies. It is important here to remark once again, that these high governance standards are strongly related to the levels of corruption in a country.

To start with this analysis, the results obtained when analyzing the regression of poverty and development indicators against the WB-RL are presented in Table 13 (in the next page). The trends pointed by many scholars regarding the relation between high governance levels and development outcomes are consistent with the results of the first model. However, when restricting the analysis to Models (b) and (c), the coefficients obtained show a direction of the relationship opposed to the literature in the field. As shown in Table 13, Model (b) and (c) predict an inverse relation between the HDI levels and the WGI-RL score, and a direct relation between the National Poverty measured by ECLAC and the WGI-RL score. These results might cover some of the relationships elaborated in section 2.a, which require new studies to be confirmed.

The reduction of poverty and at the same time a poorer performance in the WGI-RL score might be a result of the current left-wing governments established in the region that consistently decrease the performance in the WGI – RL score, even when the poverty indicators (or the HDI which presents a similar pattern) present a better outcome. This might as well be a result of the increase in the commodities prices that has provided these same governments with higher resources to tackle poverty, without any improvement in the rule of law of the nation. In another direction, the poor performance in the WGI-RL can also be linked to the political actions taken by LA governments to obtain new mechanisms to become reelected, that is weakening the validity of National Constitutions that have undergone suspicious reform processes in the last years, in several countries of the region. To improve the results of these regression models, variables to control the kind of government and/or the commodities prices should be included, providing an analysis that goes beyond the scope of this study.

*Table 10 - Regressions with WGI - Rule of Law*

Model	(a)									(b)		(c)	
VARIABLES	Human Development Index	GDP per capita	Poverty line - 2.5 U\$S per day	Extreme Poverty - ECLAC	National Poverty - ECLAC	Poverty line - 4 U\$S per day	log Poverty line - 2.5 U\$S per day	log Poverty line - 4 U\$S per day	log GDP per capita	Human Development Index	National Poverty - ECLAC	Human Development Index	National Poverty - ECLAC
WB - Rule of Law	0.0573*** (0.0128)	1403*** (211.4)	-13.51*** (1.951)	-9.415*** (2.050)	-16.49*** (3.912)	-17.50*** (2.660)	-0.753*** (0.147)	-0.522*** (0.102)	0.624*** (0.0700)	-0.0613** (0.0239)	23.53** (8.301)	-0.0613*** (0.0135)	23.53*** (4.977)
Constant	0.797*** (0.00818)	3023*** (265.2)	19.10*** (1.499)	10.63*** (1.400)	33.79*** (2.588)	33.93*** (2.031)	2.760*** (0.116)	3.434*** (0.0801)	7.864*** (0.0528)	0.925*** (0.0279)	-8.733 (9.635)	0.745*** (0.00645)	52.70*** (2.391)
Country fixed effects	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
Year fixed effects	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes
Observations	144	144	107	62	64	106	107	106	144	144	64	144	64
R-squared	0.317	0.335	0.496	0.440	0.460	0.570	0.607	0.618	0.358	0.904	0.956	0.415	0.548
Number of id2												18	16

Robust standard errors in parentheses - \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: author's own calculations (2009)

Similar patterns can be observed when regressing the WGI-VA indicator against the poverty and development indicators shown in Table 14 (in the next page). Here, the relations that are kept significant throughout all the restriction models, are the ones related to poverty measurements, including the different variables used for this analysis. In this case, all the poverty indicators when regressed against this measure, show an inverse relation with the WGI-VA. In general terms this implies that a better performance of the governments in terms of increasing their accountability and at the same time allowing the citizens to participate in the development of public policies, might result in better poverty and development outcomes.

This implies, as discussed before, that better participatory mechanisms, shown by a better outcome of the indicator, increase the possibility of the governments to be accountable to citizenry. Better accountability mechanisms and participatory channels for the citizens to get involved in the decision-making processes of their governments can ensure better outcomes from the measures implemented to alleviate poverty, as the regression coefficients of Table 14 show. This in turn might lead to a better allocation of resources, via two main roads: as less money is plausible to be devoted to corruption acts because of the higher levels of accountability obtained by the governments, more resources can be devoted to fight poverty and promote human development, and/or because the augmented citizen participation provides first-hand opinions to establish the central challenges to be addressed by governments in their search for development. In this sense, the results for the region are in line with the idea of a *development 'by the people' strategy* discussed previously.

**Table 11 - Regressions with WGI - Voice and Accountability**

Model	(a)									(b)					(c)			
VARIABLES	Human Development Index	Poverty line - 2.5 US\$ per day	log Poverty line - 2.5 US\$ per day	Extreme Poverty - ECLAC	National Poverty - ECLAC	Poverty line - 4 US\$ per day	log Poverty line - 4 US\$ per day	GDP per capita	log GDP per capita	Poverty line - 2.5 US\$ per day	log Poverty line - 2.5 US\$ per day	National Poverty - ECLAC	Poverty line - 4 US\$ per day	log Poverty line - 4 US\$ per day	Poverty line - 2.5 US\$ per day	log Poverty line - 2.5 US\$ per day	Poverty line - 4 US\$ per day	log Poverty line - 4 US\$ per day
WB - Voice and Accountability	0.0789***	-18.23***	-0.956***	-14.39***	-24.30***	-23.48***	-0.674***	2021***	0.888***	-6.691**	-0.287*	-8.034**	-9.145**	-0.212**	-6.691**	-0.287**	-9.145**	-0.212**
	(0.0171)	(2.379)	(0.192)	(2.317)	(5.618)	(2.930)	(0.122)	(356.3)	(0.156)	(2.996)	(0.142)	(3.445)	(3.168)	(0.0889)	(3.364)	(0.143)	(3.718)	(0.0969)
Constant	0.763***	27.29***	3.209***	16.88***	43.75***	44.61***	3.749***	2179***	7.490***	19.22***	2.807***	53.10***	35.23***	3.471***	25.85***	3.126***	42.64***	3.685***
	(0.0119)	(1.322)	(0.0554)	(1.730)	(2.898)	(1.429)	(0.0362)	(255.6)	(0.117)	(2.889)	(0.137)	(1.429)	(3.055)	(0.0857)	(0.739)	(0.0311)	(0.871)	(0.0229)
Country fixed effects	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
Observations	144	107	107	62	64	106	106	144	144	107	107	64	106	106	107	107	106	106
R-squared	0.367	0.566	0.614	0.555	0.532	0.645	0.648	0.424	0.444	0.823	0.870	0.940	0.853	0.862	0.684	0.737	0.740	0.770
															18	18	18	18

Robust standard errors in parentheses - \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: author's own calculations (2009)

### 1. Pending challenges for Latin America

Coming to an end with the analysis of the topic of this study, it is helpful to present a recap of the main empirical findings, as compared with the theoretical research presented in the first section.

In the first place, it is important to remark once more, that the empirical results for the regression models in the region do not show a significant association of corruption with GDP growth rates or income inequality measures.

In the case of the GDP growth rates, the results are in line with the empirical research studies done by (Aidt, 2009) or (Drury, Kriekhaus, & Lusztig, 2006). However, in the case of Latin America, the results of these regressions might respond to a favorable economic context in the whole world for the last decade, more than a constant trend in the anticorruption and development policies adopted by the national governments of the region. The increasing prices of the commodities have benefited greatly the economic growth rates of the Latin American countries, given the fact that these economies still rely mainly in the export of agricultural products, oil or semi-manufactured products, products whose prices and demand have been rising in the last years. This result can also be linked with the fact that the correlation patterns of corruption measurement and the level of GDP per capita have been established for the Latin American data. In this sense, whether the results in terms of GDP growth rates and GDP per capita are or not in line with the literature in the area still lacks from a conclusive definition.

However, the results in terms of income inequality remain as one of the most puzzling empirical results. The Gini coefficient variable did not yield in any significant result when regressed against any of the corruption measures used. This might be a sign, as (You & Khagram, 2005) point out, that the higher income inequality levels are a cause, rather than a consequence of the high corruption levels. In that sense, further research in the area, using different specifications of the regressions or different measures of income inequality, might shed more light on an issue that has been affecting the development standards of Latin America for the last decades.

Finally, and in line with the focus of this study, it is important to note that links between different poverty measurements and corruption indicators can be found for Latin America. Almost every model of regression conducted in this research, with different specifications, as well as with direct and indirect measures of corruption presented a significant negative relation between poverty and corruption levels. In some cases, as discussed in the previous section, the effects found were stronger, and clearer than in other cases. The extension of the WGI – Voice and accountability indicator is a clear example, showing the strongest effects in the relation between corruption and poverty levels in the region.

Despite these concluding remarks, it is necessary to point out, as a main reminder that the empirical results of the research conducted by this study, do not prove a causal directionality between the links presented between poverty and corruption. In this sense, the debate whether it is corruption that hinders economic development and therefore increases poverty and inequality levels, or whether higher poverty and inequality levels impede economic growth by fostering corrupt practices, remains unsolved. Further clarifications in this debate would require new and improved sources of information for both poverty and corruption levels in Latin America. However, as it is clear that the directionality debate is not solved, it is also clear that both, corruption and poverty levels are still main challenges for the region. The next section intends to praise for the establishment of a strategy that might tackle with both problems at the same time: a strategy developed upon the empowerment of citizens.

## **2. A call to reshape development thinking for Latin America: the role of the citizenry**

Development strategies in the 21<sup>st</sup> century should include citizen empowerment to ensure sustainability over electoral periods, and at the same time reduce corruption and poverty. As the results of the regressions show, the involvement of citizens in the design, control and implementation of public policies (shown by a higher level of the WGI – Voice and Accountability indicator) has a strong relation with poverty levels, presenting it as a strong tool to build a sustainable development strategy.

The extent of technological advancement has already enabled participatory mechanisms that were unthinkable of, a couple of decades ago. States have now at the reach of their hands, instruments that might enable citizens to become more involved in the policy-making processes. Democracy is not anymore necessarily a matter only of electoral results.

All over the world civil society movements have been advocating for a further involvement of the citizens in the shaping of the development strategies of their countries. As (Hyden & Court, 2002) pointed out, the economic development thinking that promotes a more active role of the citizens in the definitions of development policies has been gaining importance in the last decades.

Especially in the fight to alleviate poverty, the involvement of the citizens in the policy making of development strategies can become a useful tool, and at the same time, become an instrument that ensures the reduction of corrupt practices. Citizens monitoring the actions taken by the state become the strongest pillars in the fight against corruption, establishing a constant watchdog mechanism that prevents the flourishing of corruption.

At the same time, the development of strategies to alleviate poverty that allow participatory mechanisms for the citizenry, increase both the sense of ownership of the government actions and ensure the sustainability of the actions through a period that goes beyond the electoral mandate and promote a better allocation of resources. Citizens effectively involved in the policy making processes of the state, might ensure a continuity of the policies that overcomes the usual political rivalries that many Latin American countries present as well as allow the perspective of the beneficiaries to define their own policies. When the voices of those who are affected are taken into account, policies present stronger and more direct effects.

The increase in Right to Information mechanisms for the citizenry, the making of participatory budgets and the inclusion of other accountability mechanisms that enable the average citizen to get involved in the state actions is showing that it is the only way to deepen democratic mechanisms and achieve long-lasting development results.

Latin America should therefore, engage in the promotion of a development strategy that ensures sustainable and equitable growth for every member of the society, every citizen. In this sense, only a strategy that is built from their perspective can successfully address the pending challenges in terms of poverty, inequality and corruption trends.

## LIST OF REFERENCES

---

- Aidt, T. S. (2009). Corruption, Institutions and economic development. *Oxford Review of Economic Policy*, 25, 271-291.
- Aidt, T. S. (2003). Economic Analysis of Corruption: A Survey. *The Economic Journal*, 113.
- Alesina, A., & Weder, B. (2002). Do Corrupt Governments Receive Less Foreign Aid? *The American Economic Review*, 92, 1126-1137.
- Birdsall, N. (2004). Why Global Inequality Matters. *Brookings Trade Forum, Globalization, Poverty, and Inequality*, 12, 297-303.
- Blackburn, K., & Forgues-Puccio, G. F. (2007). Distribution and Development in a Model of Misgovernance. *European Economic Review*, 51, 1534-1563.
- Butler, A. W. (2004). Corruption and Municipal Finance. *Working Paper Series - Rice University*, 28.
- Chetwynd, E., Chetwynd, F., & Spector, B. (2003). Corruption and Poverty: A Review of Recent Literature.
- Choi, J. P., & Thum, M. (2002). Corruption and the shadow economy. *CESifo Working Paper*, 5, 9224-1410.
- Coolidge, J., & Rose-Ackerman, S. (1995). High-Level Rent Seeking and Corruption in African Regimes: Theory and Cases. *World Bank Policy Research Working Paper No. 1780*.
- Corporación Latinobarómetro. (2008). *Reporte 2008*. Santiago de Chile.
- Court, J., Hyden, G., & Mease, K. (2002). Assessing Governance in 16 Countries: The Aggregate Picture. *World Governance Survey Discussion Paper*, 3.
- Cypher, J., & Dietz, J. (2004). *The process of Economic Development*. London: Routledge.
- Deonandan, K. (2006). Corruption and Development in Latin America: The Case of Nicaragua. *Annual Meeting of the Canadian Political Science Association - Draft*, 3, 1-16.
- Dreher, A., & Herzfeld, T. (2005). The Economic Costs of Corruption: A Survey and New Evidence. *Public Economics - EconWPA*.
- Drury, A. C., Kriechhaus, J., & Lusztig, M. (2006). Corruption, Democracy, and Economic Growth. *International Political Science Review*, 27, 121-136.
- ECLAC. (2009). *Cumbre de las Américas 1994-2009: Indicadores seleccionados*. Santiago de Chile.
- ECLAC. (2009). *Economic Commission for Latin America and the Caribbean - Statistics Database*. Retrieved October, from [www.eclac.org](http://www.eclac.org)
- ECLAC. (2002). *Globalization and development*. Santiago de Chile: Economic Commission for Latin America and the Caribbean.
- ECLAC. (2008). *Social Panorama of Latin America 2008*. Santiago de Chile: Economic Commission for Latin America and the Caribbean.
- Freille, S., Haque, M. E., & Kneller, R. (2007). Decentralisation, corruption and economic development.
- Goodman, M. (1974). Does Political Corruption Really Help Economic Development?: Yucatan, Mexico. *Polity*, 7, 143-162.
- Gupta, S., Davoodi, H., & Alonso-Terme, R. (1998). Does Corruption Affect Income Inequality and Poverty? *IMF Working Paper*.
- Habib, M., & Zurawicki, L. (2002). Corruption and Foreign Direct Investment. *Journal of International Business Studies*, 33, 291-307.
- Heller, N. (2008). Defining and measuring corruption: Where have we come from, where are we, and what matters for the future? *XIII Congreso Internacional del CLAD sobre la Reforma del Estado y de la Administración Pública*.
- Hyden, G., & Court, J. (2002). Measuring Governance: Methodological Challenges. *World Governance Survey Discussion Paper*.
- Johnston, M. (1983). Corruption and Political Culture in America: An Empirical Perspective. *Publius: The Journal of Federalism*, 13, 19-39.
- Kaufmann, D. (2002). Transparency, Incentives and Prevention (TIP) for Corruption Control and Good Governance Empirical Findings, Practical Lessons, and Strategies for Action based on International Experience. *Draft - world Bank institute*, 11-12.
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2006). {Measuring Corruption: Myths and Realities}. *The World Bank Institute - Working Paper Draft*.
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2007). {The Worldwide Governance Indicators Project: Answering the Critics}. *World Bank Policy Research Working Paper*.
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2009). Governance Matters VIII Aggregate and Individual Governance Indicators 1996-2008. *Policy Research Working Paper*.
- Korzeniewicz, R. P., & Smith, W. C. (2000). Pobreza, desigualdad y crecimiento en América Latina: En búsqueda del camino superior a la globalización. *Desarrollo Económico*, 40, 387-424.

- Lambsdorff, J. (2007). *The Institutional Economics of Corruption and Reform*. Cambridge University Press.
- Mauro, P. (1995). Corruption and Growth. *The Quarterly Journal of Economics*, 110, 681-712.
- Meon, P.-G., & Sekkat, K. (2005). Does Corruption Grease or Sand the Wheels of Growth? *Public Choice*, 122, 69-97.
- Morris, S. D. (2004). Corruption in Latin America: An Empirical Overview. *SECOLAS Annals* .
- Munck, G. L. (2003). Gobernabilidad democrática a comienzos del siglo XXI: Una perspectiva latinoamericana. *Revista Mexicana de Sociología*, 65, 565-588.
- Nee, V. (2003). The new institutionalisms, economic and sociological. *CSES Working Paper Series* .
- Osborne, E. (2004). Corruption and its alternatives: A takeoff theory of good governance. *The Institute of Social and Economic Research Osaka University - Discussion Paper* .
- Pierre, J. (2009). New Governance, New Democracy? *QoG WORKING PAPER SERIES*, 4.
- Sandholtz, W., & Gray, M. M. (2003). International Integration and National Corruption. *International Organization*, 57, 761-800.
- SEDLAC. (2009). *Socio Economic Database for Latin America and the Caribbean*. Retrieved 2009 October, from <http://www.depeco.econo.unlp.edu.ar/sedlac/eng/statistics-detalle.php?idE=34>
- Shen, C., & Williamson, J. B. (2005). Corruption, Democracy, Economic Freedom, and State Strength: A Cross-national Analysis. *International Journal of Comparative Sociology*, 46, 327.
- Shleifer, A., & Vishny, R. W. (1993). Corruption. *The Quarterly Journal of Economics*, 108, 599-617.
- Tanzi, V. (1998). Corruption Around the World: Causes, Consequences, Scope, and Cures. *Staff Papers - International Monetary Fund*, 45, 559-594.
- Tanzi, V., & Davoodi, H. (1997). Corruption, Public Investment, and Growth. *IMF Working Paper* .
- Teichman, J. (2004). The World Bank and Policy Reform in Mexico and Argentina. *Latin American Politics and Society*, 46, 39-74.
- Teorell, J., Charron, N., Sammani, M., Holmberg, S., & Rothstein, B. (2009). *The Quality of Government Dataset, version 17 June 09*. Retrieved June 2009, from <http://www.qog.pol.gu.se/>
- Tinker Salas, M. (2009). Challenges for the Latin American Left in 2009. *Latin American Perspectives*, 36.
- Transparency International. (2009). *Corruption Perceptions Index*. Retrieved October 2009, from [http://www.transparency.org/policy\\_research/surveys\\_indices/cpi](http://www.transparency.org/policy_research/surveys_indices/cpi)
- Transparency International. (2009). *Global Corruption Barometer - Report 2009*. Berlin.
- Treisman, D. (2000). The causes of corruption: A cross-national study. *Journal of Public Economics*, 76, 399-457.
- Treisman, D. (2007). What Have We Learned About the Causes of Corruption from Ten Years of Cross-National Empirical Research? *Annual Review of Political Science*, 10, 211-244.
- UNDP - HDR. (2009). *United Nations Development Programme - Human Development Reports*. Retrieved October 2009, from <http://hdr.undp.org/en/>
- UNDP & Global Integrity. (2008). *A Users' Guide to measuring corruption*. OSLO.
- UNSTATS. (2009). *United Nation Statistical Division - National Accounts*. Retrieved October 2009, from <http://unstats.un.org/unsd/databases.htm>
- UNU - WIDER. (2008, May 02). *United Nations University - World Income Inequality Database*. Retrieved October 2009, from [http://www.wider.unu.edu/research/Database/en\\_GB/database/](http://www.wider.unu.edu/research/Database/en_GB/database/)
- Weber Abramo, C. (2000). Relações entre índices de percepção de corrupção e outros indicadores em onze países da América Latina. In B. (. Wilhelm Speck, *Os custos da corrupção*. Sao Paulo: Konrad Adenauer Stiftung.
- Wei, S.-J. (1998). Corruption in Economic Development: Beneficial Grease, Minor Annoyance, or Major Obstacle? *paper to Workshop on Integrity in Governance in Asia*, 1.
- World Bank Institute. (2009). *Worldwide Governance Indicators*. Retrieved October 2009, from <http://info.worldbank.org/governance/wgi/index.asp>
- You, J.-S., & Khagram, S. (2005). {A Comparative Study of Inequality and Corruption}. *American Sociological Review*, 70, 136-157.