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Centro de Estudios  
Distributivos, Laborales y Sociales

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Maestría en Economía  
Universidad Nacional de La Plata



## **Income Distribution, Institutions and Conflicts: An Exploratory Analysis for Latin America and the Caribbean**

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Documento de Trabajo Nro. 41  
Septiembre, 2006

# Income Distribution, Institutions and Conflicts

**An exploratory analysis for Latin America and the Caribbean\***

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*Keywords:* income distribution, polarisation, cohesion, inequality, poverty, institutions, instability, conflict, corruption, Latin America, Caribbean

*JEL codes:* I3, D3, D6

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\* This document is part of a project on Social Cohesion in Latin America and the Caribbean carried out by CEDLAS and UNDP. The authors are very grateful to Gerardo Munck, Matías Horenstein, Enrique Ganuza, Sergio Olivieri, Stefano Petinatto, Patricio Meller and André Urani for valuable comments and suggestions. All the views expressed in the paper are the sole responsibility of the authors.

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# 1. Introduction

It has long been argued that the income distribution of a country is associated to its institutional development and its degree of social cohesion and conflictivity. An economy where income is more equally distributed is probably characterised by better and more stable institutions, fewer conflicts and a stronger sense of social cohesion. However, although intuitive, the links are theoretically ambiguous and have not been well-established by the empirical literature. The difficulties are enormous: (i) there are not obvious empirical counterparts for concepts like institutions, social cohesion and conflicts; (ii) the theory stresses that causality may go in all directions, (iii) it is not clear which dimension of the income distribution (inequality, polarisation, poverty, mobility) is the most relevant, and (iv) the data at hand is insufficient to implement valid tests for causality. Despite these empirical limitations, the topic is sufficiently important to have attracted the attention of social scientists for decades. The academic community is continuously searching for new datasets and ideas that contribute to the understanding of the links between income distribution, institutions and conflicts.

The issue is particularly relevant for Latin America and the Caribbean (henceforth, LAC). This region has arguably the highest levels of inequality in the world, and it is also one of the regions with weaker institutions, and higher levels of conflictivity and violence. Moreover, the evidence suggests increasing income disparities in several LAC countries over the last two decades, raising questions on the implications for the socio-political instability.<sup>1</sup>

This document explores the relationship between income distribution, institutions and conflicts in Latin America and the Caribbean by using a new database of income distribution statistics computed from microdata of 54 household surveys from 21 LAC countries in the period 1989-2004.

The paper makes at least three contributions to the existing literature. On the one hand, it is based on a set of distributional measures computed from microdata using a consistent methodology across countries. The cross-country literature has been increasing at a fast pace since the 1990s, fuelled by the availability of household survey data. However, several of these studies include a large number of country/year observations without being cautious over the comparability issues. Although naturally not fully consistent, the database used for this paper has been constructed taking the comparability problems seriously into account.

Second, we analyse the interactions between several measures of institutions and conflict with three different dimensions of the income distribution: inequality, polarisation and poverty. Institutions and conflict may interact in different ways with

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<sup>1</sup> See IADB (1998), Morley (2000), Ganuza *et al.* (2001), Bourguignon and Morrison (2003) and Gasparini (2003) for evidence on inequality in LAC.

these three characteristics. In fact, the paper provides some preliminary evidence that in the LAC context institutional development has been associated to lower poverty, but not significantly lower inequality and polarisation. Instead, conflicts seem more related to inequality and polarisation than to income poverty.

Some authors have recently argued for the use of polarisation as a key variable when studying conflict and social tension. A population is polarised if there are few groups of important size in which their members feel some degree of identification with members of their own group, and feel alienated from members of other groups. The research on polarisation is mainly motivated by the conjecture that the differences among homogeneous groups cause social tension and instability. To our knowledge this is the first study in LAC that includes polarisation measures, along with inequality and poverty indicators, as potential covariates of institutional and conflict variables.

Most of the empirical research is ideally aimed at detecting causal relationships among variables. Is the income distribution affecting the development of certain institutions, and provoking social tension, conflicts and violence? Or the causality goes in the opposite direction, *e.g.* certain institutions preclude changes in the income distribution? Are there some factors affecting the income distribution and the political institutions at the same time, and then creating a correlation without causality between them? As commented above, these questions are very difficult to answer, and we do not attempt to do it in this paper, due to the unavailability of the data needed for that task. We do show the structure of correlations among variables, and try to lay down consistent interpretations of the results based on the theory.

We divide the empirical research into two stages. First we explore the relationship between measures of the income distribution and institutions, and then we investigate the links between these variables and measures of conflict, instability and corruption.

The rest of the document is organised as follows. In section 2 we survey the literature on the links between income distribution, institutions, conflict and corruption. Section 3 discusses alternative measures of different dimensions of the income distribution. We present the database from which we draw the statistics, and summarise the main patterns. In section 4 we survey an increasing number of studies containing data on institutions, conflicts and corruption, and show basic statistics for the region. In sections 5 and 6, which are the core of the paper, we show and discuss the results of empirically analysing the relationship between income distribution, institutions, conflicts and corruption in Latin America and the Caribbean. We close in section 7 with some brief concluding remarks.

## **2. The literature**

In the last three decades many countries in the world have witnessed a sizeable increase in income inequality. This fact brought the topic of income distribution “out of the cold” (Atkinson, 1997). At the same time, economists realised the inconvenience of treating

institutions as a black box, and hence a literature on institutions, identified nowadays as the New Institutional Economics, started to develop. All of this provided the necessary inputs for the theories linking income distribution with institutions and conflict to emerge.

In this paper we are particularly interested in those contributions that empirically assess these links. That literature, which has been growing at a fast pace, faces the problem of causal inference, in particular due to the need of relying on cross-country statistical analysis.<sup>2</sup> Although researchers are using state-of-the-art techniques to disentangle the links between income distribution, institutions and conflict, the issue of causality remains pretty much unsolved.

Ritzen, Easterly and Woolcock (REW) (2000 and 2005) put forward the hypothesis that social cohesion (in their paper measured by income inequality, share of middle class and ethnic fractionalisation) determines institutional quality, which in turn is a key determinant for economic growth. In a similar vein Keefer and Knack (2002) conjecture that social polarisation (measured as income inequality, land inequality and ethnic fragmentation) affects growth through the institutional channel. They argue that the rule of law is endogenous to social polarisation: a more polarised economy would cause investors to perceive the rule of law not as a solid institution, and flee away from the country, affecting economic growth. Glaeser (2005) finds that a balanced income distribution is highly correlated with high quality institutions, but is very cautious not to speak of causality given the identification problems commented above.

After reviewing the negative correlation between income inequality and institutional quality, Chong and Gradstein (2004, 2005) put forward the idea of bidirectional causality. While it could be true that better institutions cause a reduction in income inequality, they propose a model where it also could happen that economic conditions, as an increase in income inequality, cause institutions to deteriorate.<sup>3</sup> Making use of state-of-the-art econometrics, such as GMM techniques and VAR, they find supporting evidence for the double-causality theory. They conclude that the link that goes from income inequality to institutions is stronger than the one that goes the other way.

The view that economic conditions, such as the shape of the income distribution, may affect institutional quality is not new. Engerman and Sokoloff (1997, 2002, 2005) argue that initial factor endowments, such as the distribution of wealth, human capital and political power, play a key role in accounting for the dissimilar degree of institutional development among former colonies. Boix (2003) also argues that higher income inequality induces a lower probability of democratisation.

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<sup>2</sup> A typical bias appears when omitting a variable correlated with the treatment variable that also affects the dependent variable. Other frequently-found problems are the self-selection, the post-treatment and the non-independence biases. For an in-depth analysis of these issues see Przeworski (2005).

<sup>3</sup> See also Cervellati *et al.* (2005) for a theory that addresses bicausality.

So far we have reviewed papers dealing with the link between income distribution and institutions. Now we focus on the relationship with conflict and instability. One of the classic references for this topic is Alesina and Perotti (1996). This paper argues that income inequality generates social discontent that translates into political conflict and instability. They find empirical evidence validating the hypothesis in a sample of 70 countries for the period 1960-85. Then, they argue that political instability reduces investment, which in turn harms the growth process. Sachs (1990) studies how high income inequality in Latin America stimulates social disorder and political conflict. He argues that social discontent prevent leaders from applying good policies and turn them into populist ones.

Regarding the link between corruption, institutions and income distribution, the literature is vast and growing. The theoretical underpinnings for this link are drawn from the ideas of Krueger (1974). She asserts that corruption could create inefficiencies that are beneficial to some groups of people and harm others. The idea later develop by other scholars is that corruption may help the rich stay rich and prevent the poor from escaping poverty, increasing the level of inequality in the income distribution. Corruption distorts institutions of governance, and through the institutional channel affects the income distribution.

One of the main empirical references is Li *et al.* (2000). They find that the relationship between corruption and income distribution is not linear, but has an inverted U shape. Gupta *et al.* (2002) find that corruption increases income inequality and poverty through various channels. They argue that by biasing the tax system in favour of the rich and powerful, not targeting social programs, lowering social spending, and providing an unequal access to education, corruption increases income inequality and poverty. They test this hypothesis using cross-country regressions for the period 1980-1997. In order to asses causality they instrumentate the variables, and argue that corruption is the cause of both income inequality and poverty.

In a recent paper for the US states Dincer and Gunalp (2005) also find that corruption increases income inequality. One of the advantages of this study is the use of information from only one country, which ameliorates the problem of data comparison across countries.

In summary, the empirical literature on income distribution, institutions, conflict and corruption has been growing recently fuelled by the availability of new data sets. The basic links among these variables are being documented, and more complex interactions are being examined. In sections 5 and 6 we explore the links among these variables in the Latin American context. But first, we briefly present the measures of income distribution, institutions and conflict to be used in the empirical analysis.

### 3. Measures of income distribution

The term *income distribution* refers to a list specifying the income level of each individual in the economy. Several dimensions can be defined from an income distribution: poverty, inequality and polarisation are among the most relevant ones. Poverty basically refers to the proportion of people below a threshold income level known as poverty line; inequality refers to proportional differences in income levels across the population, while polarisation is related to groups internally homogeneous that antagonize each other.

In this paper we measure poverty as the proportion of individuals with household per capita income below a threshold level. We take the international standard of USD2 a day at PPP values as the poverty line.<sup>4</sup> The USD-2-a-day line is used, along with the USD-1-a-day line, to monitor the Millennium Development Goals in middle-income countries, like most of the LAC ones. Although the USD-1 or 2-a-day lines have been criticised, their simplicity and the lack of reasonable and easy-to-implement alternatives have made them the standard for international poverty comparisons.

The economic unfairness of a society has always been associated to income inequality. The concept of inequality is closely linked to the principle of Dalton-Pigou: a transfer from an individual with higher income to another individual with lower income generates a more equal distribution.<sup>5</sup> The literature on the measurement of inequality is vast. In this paper although we report a set of indices to characterise inequality in the region, we focus on the Gini coefficient when turning to the empirical analysis of the interactions between inequality, institutions and conflict.

The notion of polarisation refers to homogeneous clusters that antagonize with each other. The difference with inequality can be explained with an example. Suppose a country with six persons labelled as A, B, C, D, E, F with incomes equal to \$ 1, 2, 3, 4, 5 and 6, respectively. Suppose now two transfers of one peso: the first one from C to A, and the second one from F to D. The two transfers are equalizing (from richer to poorer persons), so all inequality indices complying with the Dalton-Pigou criterion will fall, or at least not increase. The inequality analysis assesses the new situation as “better” than the initial one. In particular, it is expected that the new distribution leads to a more stable society.

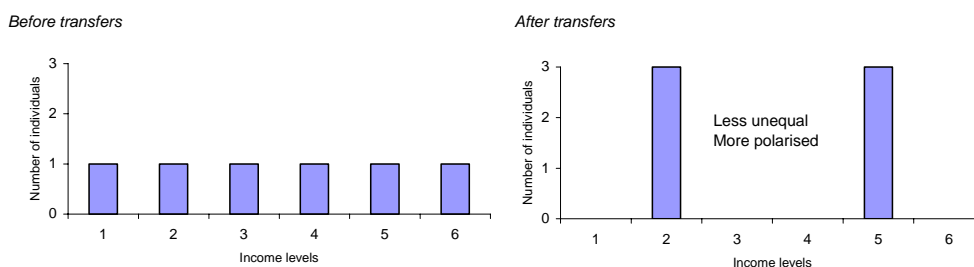
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<sup>4</sup> See Ravallion *et al.* (1991), Chen and Ravallion (2001) and SEDLAC (2005).

<sup>5</sup> See Atkinson and Bourguignon (eds.) (2000), Deaton (1997), Cowell (2000) and Lambert (2001).

## Histograms of the income distribution

Before and after an inequality-decreasing  
but polarisation-increasing transfer



Notice, however, that in this example the new income distribution has three persons with \$ 2 (A, B and C), and three persons with \$5 (D, E and F). The population in this country is divided into two clearly differentiated groups that are internally perfectly homogeneous. Although less unequal, this society has become polarised. In the new situation people may identify themselves as part of clearly defined groups which are significantly different from the rest. This polarisation may derive in greater social tension than in the initial distribution, and then in more social and political instability. The polarisation measures depend on the degree of equality within each group (identification) and the degree of differences across groups (alienation). In this paper we present several measures of income polarisation, but for simplicity we concentrate in the indicator recently developed by Duclos, Esteban and Ray (2004) when analyzing the interactions with institutions and conflicts.

The previous example is designed to illustrate a case where polarisation goes in opposite direction to inequality. However, it is likely that in most cases polarisation and inequality go in the same direction. Thus, the analysis of polarisation should be viewed as complementary to that of inequality. Both polarisation and inequality are different although related dimensions of the same distribution.

Social cohesion and the development of a strong institutional framework surely depend on both economic and non-economic variables. Even in a quite economically homogeneous society tensions may emerge because of, for instance, religious or racial differences. Similarly, a very economically-polarised and unequal society may exhibit high social cohesion and strong institutions if the sharing of some values, ideas and views is strong. Even if the income distribution remains stable in a given period of time, internal tensions may decrease under certain circumstances (*e.g.* under a war with other country) and increase in others. This study focuses only on *economic* inequality, polarisation and poverty. We expect these measures to be positively correlated with situations of instability, lack of social cohesion, social tensions, and violence.

This study deals with the *income* distribution. Income is usually taken as a proxy for well-being, but it is certainly not the only variable we should consider in the analysis. People may care not about incomes but about the opportunities to generate incomes, and then be more concerned about the distribution of variables like education, assets, health,



or access to basic services. In this document we follow the tradition of studying the income distribution as a proxy for the distribution of living standards.

We study *static* measures of the income distribution *i.e.* those computed from cross-section data from household surveys. Following the above example, suppose that for seasonal reasons individuals A, B and C earn \$2 per month in the first half of the year and \$ 5 per month in the second half, while individuals D, E and F earn \$5 in the first semester, and \$2 in the second one. In each semester, the income distribution is unequal and polarised; however, on average the yearly income distribution is egalitarian and not polarised. Unfortunately, household surveys do not follow individual over long periods of time to allow computing a more dynamic picture of the income distribution. The inequality studies exploiting the few short panels in the region suggest that although the levels of income inequality are lower than when using cross-sections, the basic patterns persist. In particular, the region continues exhibiting very high levels of inequality. Our conjecture, then, is that the income distribution picture emerging from our study would not be very different from the one obtained with panel data.

The income distribution statistics of this paper are based on microdata from a large set of household surveys carried out by the National Statistical Offices of the LAC countries in the period 1989-2004. The database used for this study is a sample of a larger database put together by CEDLAS and the World Bank: the Socioeconomic Database for Latin America and the Caribbean (SEDLAC). The sample includes information for Argentina, Bolivia, Brazil, Colombia, Costa Rica, Chile, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Uruguay and Venezuela (see table 3.1). The sample covers all countries in mainland Latin America and four of the largest countries in the Caribbean – Dominican Republic, Haiti, Jamaica and Suriname. In each period the sample of countries represents more than 92% of LAC total population.

Whenever possible we select three years in each country to characterize the two main periods in the last 15 years: the growth period of the early and mid 1990s when several structural reforms were implemented, and the stagnation and crisis period of the late 1990s and early 2000s. Unfortunately, there is not enough information to characterize the recent recovery of the LAC economies that started around 2003.

Household surveys are not uniform across LAC countries. The issue of comparability is of a great concern. We make all possible efforts to make statistics comparable across countries and over time by using similar definitions of variables in each country/year, and by applying consistent methods of processing the data. However, perfect comparability is far from being assured. A trade-off between accuracy and coverage arises. The particular solution adopted contains an unavoidable degree of arbitrariness. We try to be ambitious enough to include all countries in the analysis, and accurate enough so not to push the comparisons too much.

In what follows we briefly comment on the main patterns of the income distribution in the region.<sup>6</sup> As commented above LAC is characterised by high levels of polarisation and inequality compared to the rest of the world. Poverty is also relatively high, although lower than in Africa and most of Asia. Table 3.2 presents a set of polarisation, inequality and poverty measures computed over the distribution of household per capita income, while table 3.3 shows statistics for the distribution of earnings.

There is a considerable degree of dispersion among the countries in the region in the three distributional dimensions (Figure 3.1). A set of nations have relatively low (for LAC standards) levels of inequality, polarisation and poverty: Uruguay, Costa Rica and to a lesser extent Argentina belong to that group. Chile enjoys low poverty despite relatively high levels of income inequality and polarisation. To a lesser extent that is also the case of Brazil, Panama and Colombia. Some countries are characterised by high inequality and poverty: Haiti and Bolivia are the two main examples.

Correlation among polarisation indices is high (Table 3.4). These indicators are also highly correlated to inequality measures, in particular to the Gini coefficient. Countries with high inequality tend to have also a highly polarised income distribution. Due to this fact, in the analysis that follows we find similar interactions between institutions/conflicts and either polarisation or inequality. The correlations with poverty are instead much weaker. In the case of the polarisation indicators, the correlations with the poverty headcount ratio are positive but not significant at the 5% confidence level. The poverty measures that take the income distribution among the poor into account (*e.g.* FGT(2)) are more closely linked to polarisation and inequality indices.

Although LAC countries share many structural characteristics, have experienced similar shocks, and most of them have carried out similar economic policies during the 1990s, the distributional performances have been strikingly heterogeneous (see Figure 3.2). Polarisation and inequality decreased in Mexico, Brazil, El Salvador, Nicaragua and also slightly in Chile. In contrast, the income distributions in Argentina, Uruguay, Colombia, Venezuela, Costa Rica, Bolivia, Panama and Peru became more polarised and unequal. In some cases the changes have been small and even negligible, but in others changes have been sizeable. That is the case of Argentina, Colombia and Venezuela, where poverty also went significantly up. Instead, income poverty was reduced in Chile, Brazil, urban Bolivia and some Central American countries.

Summarizing, on average changes have been small: polarisation and inequality slightly increased, while poverty went moderately down in the region. However, as stated above, the behaviour of the averages is not a good representation of the great diversity of experiences within the region.

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<sup>6</sup> A detailed analysis of polarisation and inequality statistics can be found in a companion paper (Gasparini *et al.* 2006). Poverty statistics are analyzed in Gasparini *et al.* (2005).

## 4. Measures of institutions and conflicts

In the last decades there has been a renewed interest among economists in understanding the working of institutions. The economists' policy prescriptions were usually based in models that treated institutions as a black box, and as a consequence did not take the form of government, the country's history or their culture and habits into account.

In this paper we follow North's (1990) definition: "Institutions are the humanly devised constraints that structure human interaction. They are made up of formal constraints (*e.g.*, rules, laws, constitutions), informal constraints (*e.g.*, norms of behaviour, conventions, self-imposed codes of conduct), and their enforcement characteristics". Ideally, we would like to have separate and objective measures of formal and informal institutions, although, naturally, measuring informal constraints is an extremely hard task.

In this paper we use two types of measures: indices of broad-base institutions, and measures of specific political institutions. The first type of indices combines information on formal institutions with measures of the actual functioning of certain institutions and rules. For instance, indices do not just look at what a Constitution says about property rights, but try to assess the actual respect for the private property. Naturally, this introduces some subjectivity into the measures, since the assessment of the working of institutions cannot be made on fully objective grounds. However, disregarding informal institutions for the sake of objectivity may not be a good solution. For instance, although many Latin American constitutions are inspired by the US or European constitutions, the actual functioning of the formal institutions is certainly very different.

The measurement of specific political institutions, instead, can be done in a relatively objective way. Once we agree on the formula to compute the index, the measures are easily reproduced by any researcher.

Table 4.1 shows a summary of the main measures of institutions available. In the Appendix we provide a brief explanation of each measure. Figure 4.1 shows data for two of the main indicators: the Voice and Accountability Index (VAI) and The Rule of Law Index (RLI). The VAI measures the extent to which citizens of a country are able to participate in the selection of governments. It includes a number of indicators measuring various aspects of the political process, civil liberties and political rights. The RLI measures the respect of citizens and the state for the institutions which govern their interactions. The index includes several indicators which measure the extent to which agents have confidence in and abide by the rules of society. These include perceptions of the effectiveness and predictability of the judiciary, and the enforceability of contracts. Together, these indicators measure the success of a society in developing an environment in which fair and predictable rules form the basis for economic and social interactions, and the extent to which property rights are protected.

OECD countries have developed stronger institutions than LAC countries (Figures 4.1 and 4.2).<sup>7</sup> For instance, for the RLI the average OECD value is higher than the maximum in LAC (Chile). In fact, Chile seems an outlier in the LAC context. If we take that country out of the sample, the contrast is even more impressive. OECD countries are also more homogeneous than LAC nations regarding institutions. The coefficient of variation for the VAI is 0.04 for OECD, and 0.31 for LAC.

Now we focus on LAC, and add the Government Effectiveness Index (GEI) into the analysis. This indicator measures the quality of public service provision, the quality of the bureaucracy, the competence of civil servants, the independence of the civil service from political pressures, and the credibility of the government's commitment to policies.

Figure 4.3 documents the large institutional volatility in the region. Over the last decade LAC countries have experienced an increase in the lack of respect for the rule of law, but the participation of the citizens in the selection of government continued to grow.

The second panel in figure 4.3 focus on the VAI and breaks down LAC in three regions: South America, Central America and the Caribbean.<sup>8</sup> South America has become the worst region in terms of Voice and Accountability after the problems of representation that various countries (Ecuador, Peru, Colombia, Bolivia, Venezuela and Argentina) have suffered during this period.

Figure 4.4 illustrates other broad-base institutions indices: the Political Constraint Index, the Legal Structure Index and the Democracy Index. Chile ranks as one of the countries with the best institutional quality in LAC, while Haiti ranks as the worst.

The rest of the section is aimed at presenting statistics on conflict and corruption. Table 4.3 shows the Political Stability and Absence of Violence Index (PSAVI), and the Control of Corruption Index (CCI) for LAC countries. The PSAVI (also labelled as the General Conflict Index) combines several indicators which measure perceptions of the likelihood that the government in power will be destabilized or overthrown by possibly unconstitutional and/or violent means, including domestic violence and terrorism. The CCI is a measure of perceptions of corruption, defined as the exercise of public power for private gain.

The level of conflictivity is substantially higher in LAC, when compared to OECD countries (figure 4.5). A majority of LAC countries has negative values for the Political Stability and Absence of Violence index, while in the OECD just one country, Turkey, out of 29 is in that situation. Again, the dispersion in this index is significantly higher for LAC countries (0.64 vs. 0.09 in the OECD).

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<sup>7</sup> For comparison purposes we take Mexico out of the OECD group since it also belongs to LAC.

<sup>8</sup> By concentrating in the VAI more countries could be included in the graph (compared to the first panel in figure 4.3). The countries that were added are: Antigua and Barbuda, The Bahamas, Barbados, Belice, Dominica, Grenada, Guyana, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines and Trinidad and Tobago. Including these countries somewhat modifies the average LAC pattern for the VAI.

During the last decade (1996-2004) there has been an increase in the level of conflict in the region (figure 4.6). This was mainly driven by the political conflicts that unravelled in many South American countries during this period. Central America is the only region that experienced a positive change in this index when looking at the whole decade. Since 2000 the level of conflict seems to have risen across all Latin America.

Figure 4.7 illustrates the country values of the Labour Standard Index (LS) (also known as Labour Conflict Index). This index is a composed measure of the worker's freedom to organize themselves, negotiate collectively and to be declared in strike. It covers a variety of rights violated, but does not measure the frequency of its violation neither the quantity of workers affected by such violations. Venezuela, that lags behind in most of the institutional and general conflict indicators, is one of the countries with the lowest levels of labour conflict.

Corruption is also perceived as a more serious problem in LAC countries than in the OECD. Figure 4.8 shows enormous differences between the two regions. With the exceptions of Chile, Costa Rica, Uruguay and Suriname, all LAC countries have negative values in the CCI.

## **5. Income distribution and institutions**

As discussed in previous sections, there are several arguments suggesting a link between the income distribution and the development of certain institutions. In this section we provide some empirical evidence on these links.

The literature points out that the income distribution may interact with both the broad base institutions of a country and its specific political institutions. More equal or less polarised economies with lower poverty rates are expected to be found in more democratic countries with better institutions. The second link is more subtle as it refers to specific formal institutions that regulate the political process of a country. At that level, the links with the income distribution are more complex and weaker, and hence more difficult to document in the data. For this reason, this section is mainly focused on the relationship between the income distribution and the broad-based institutions. We start by comparing LAC with the industrialised countries, and then focus the analysis on Latin America and the Caribbean.

### **5.1. Comparing LAC to the advanced countries**

In this section we compare LAC to a sample of industrialised countries. In that group we include most European countries plus Australia, Canada, Israel, Taiwan and the US.<sup>9</sup> For simplicity, we call that group Advanced Countries (AC).

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<sup>9</sup> In Europe the sample includes Belgium, Czech Republic, Denmark, Finland, France, Germany, Hungary, Italy, Luxembourg, Netherlands, Norway, Poland, Russia, Sweden and the UK.

Table 5.1 shows the (non-weighted) mean of the main indicators of income distribution and broad-based institutions in LAC and AC countries in the late 1990s. As income distribution measures we include the DER index of polarisation and the Gini coefficient of inequality.<sup>10</sup> We include six measures of broad-base institutions discussed in section 4: the Rule of Law index, the Voice and Accountability index, the Legal Structure index, the Government Effectiveness index, the Democracy index, and the Political Constraint index. Naturally, these measures are significantly correlated.<sup>11</sup> However, the correlation is not perfect, so we include them all to check the results for robustness.

The last column in table 5.1 records the difference in each variable between AC and LAC and indicates with a star whether that gap is statistically significant. LAC countries are more polarised and unequal than the advanced countries. The differences are not only statistically significant but economically large. A difference of 10 points in the DER or 20 points in the Gini are signs of dramatic differences in the income distributions between these two groups.

The gaps are also significant in term of institutions. In all six measures considered the differences in favour of the advanced countries are positive and large. The strong process toward democratisation in Latin America in the last three decades has reduced the gap in some variables (*e.g.* the Democracy index and the Political Constraint index), although significant differences still persist.

Income distribution and broad-based institutions measures are negatively correlated in the country data (table 5.2). Countries with high levels of income polarisation are more likely to be institutionally weak. The correlations seem statistically strong over the whole period (early 1990s to early 2000s) and in each sub period. When controlling for the level of per capita GDP (in PPP terms) most of the correlations remain significant, although the values become smaller. This evidence indicates (still at a very preliminary level) that although the level of development can account for much of the relationship between income polarisation and institutions, the link between these two variables may go beyond that.

Figure 5.1 suggests that the correlations may be driven mainly by the differences between the two groups (LAC and AC). In all the scatterplots the cloud of observations for LAC is clearly differentiated from the AC set of points. To take that into account we run regressions of distributional measures on institutional indicators, controlling for (log) per capita GDP and a dummy for LAC. The results in table 5.3 indicate that the relationship between polarisation/inequality and broad-based institutions remains negative and significant.

So far, the empirical analysis suggests a link between the shape of the income distribution and the strength of its institutions. The results however do not point out to a

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<sup>10</sup> We do not include poverty since poverty measures based on international standards are not usually available for developed countries.

<sup>11</sup> In fact, some aggregated indices even share some components.

particular dimension of the income distribution or to a particular characteristic of the institutional framework. Results for income polarisation and inequality are basically the same. The low number of observations and the high correlation between indicators make difficult to distinguish the potential different effects of the two dimensions of the income distribution.

The same applies for most of the institutional indicators. The Rule of Law index, The Voice and Accountability index, the Legal Structure index, and the Government Effectiveness index are all closely related to the income distribution. The relationship seems somewhat weaker in the case of the Democracy index and the Political Constraint index. As discussed above, LAC countries have strongly moved forward toward institutionalised democracies, and in that respect they are not very different from the AC societies. However, they are still lagging behind in terms of the effective functioning and respect for the institutions governing their interactions.

## **5.2. Distribution and institutions within LAC**

In this section we restrict the analysis to our sample of Latin American countries. That allows us to focus the study in the region, to reduce comparability problems, and to add poverty into the analysis. LAC can be divided into three regions: (i) Southern South America (SSA) that includes Argentina, Brazil, Chile, Paraguay and Uruguay,<sup>12</sup> (ii) the Andean South America (ASA), including Bolivia, Peru, Ecuador, Colombia and Venezuela, and (iii) Central America (CA) that includes countries in that region plus Mexico and the Caribbean countries. Table 5.4 shows that the regions are not significantly different in terms of mean inequality and polarisation. In contrast, given that the level of GDP is significantly higher in SSA, poverty is also lower in that region compared to the rest of Latin America. All institutional indices are also significantly higher in SSA. The result of the comparison between CA and ASA depends on the indicator.

Table 5.5 shows changes in the distributional and institutional indicators over the 1990s and early 2000s. There was not much action in the distribution when regional means are considered. On average, only the Andean countries became more polarised and unequal. However, as discussed in section 3 the quiet mean is in some cases the consequence of substantial changes in different directions within a region. This is for instance the case in SSA, where while polarisation increased in Argentina and Uruguay, it went down in Brazil and Chile (at least when measured by the DER 0.5). On average, poverty did not significantly changed in Southern South America, it went up in the Andean region and decreased a bit in Central America.

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<sup>12</sup> This is the region of the Mercosur.

On average changes in institutional variables were small. The results are not robust, as patterns in regional means change sign from one indicator to another. Only the Andean region appears to have suffered a clear process of weakening institutions.

At the country level there seems to exist a close link between the income distribution and the institutional strength. The correlations in table 5.6 and the scatterplot in figure 5.2 and 5.3 suggest that more polarised/unequal/poor countries are on average also those with weaker institutions. The correlations seem particularly strong with the Rule of Law index, the Voice and Accountability indicator, and the Government Effectiveness index. Poverty is also significantly negatively correlated to the Democracy index. Most of the correlations remain significant when controlling for per capita GDP, although the values are substantially reduced.

### **Box 1: The Chilean particularism**

Chile is omitted in the scatterplot of figure 5.2 and in the correlations because it has particularly very high levels in the institutional indicators and in the polarisation/inequality indicators. This extreme combination goes against the negative relationship between these two variables that seems to be present in the rest of LAC. Two reasons can be argued to treat Chile as a special case. First, that country has experienced a very fast increase in the institutional indicators that contrast with the rest of the region. Chile was not significantly different from the rest of LAC three decades ago. The fast change in institutional strength captured by the statistics may affect growth (and hence poverty) relatively fast, but modify the income distribution slowly. The second reason has to do with a measurement problem that is exclusive of Chile. The household survey (CASEN) is adjusted to match National Accounts: in particular capital income is greatly expanded, inflating the measures of inequality and polarisation (but only slightly affecting poverty indicators). Although Chile is surely a very polarised/unequal country, the recorded level is likely overestimated compared to the rest of LAC, and then moves Chile away from the regression line in figure 5.2.

There seems to be some relationship between the level of different dimensions of the income distribution and the level of some broad-based institutions indicators. The links become weaker or even vanish when considering changes over the last decade. The topic is relevant: have changes in the income distribution experienced by LAC countries since the early 1990s been associated to changes in their institutional situations? Figure 5.4 and table 5.7 do not offer strong evidence for this hypothesis. Although in most cases the correlations have the expected sign (negative) they are non-significant.

Poverty is the only distributional variable for which some of the institutional variables are significant in a panel data regression (see table 5.8). When considering polarisation or inequality as the left-hand-side variables the coefficients of the institutional variables are significant in a cross-section regression, but non-significant when controlling for



fixed effects. In contrast, the coefficients remain significant when using poverty as the left-hand-side variable.

Table 5.8 shows the regression when controlling for per capita GDP (at PPP). We also run regressions with several other controls: social spending, spending in education and health, indices of reforms, indices of trade liberalisation, and terms of trade. The basic results remain unchanged. We do not include all the controls together because of low degrees of freedom.

Summing up, poverty is the only distributional dimension for which the negative link with institutions holds when considering changes. This result makes sense. An improvement in the institutional environment may be quickly translated into a better business climate and better conditions for investments, which in turn may foster economic growth, which implies lower poverty given a stable income distribution. While some Latin American countries seemed to have experienced this virtuous process (Chile and some Central American countries are the main examples), some others have suffered a similar process but with the opposite sign: Argentina, Colombia, Paraguay and Venezuela are the main examples. Although the income distribution may quickly translate horizontally, reducing or increasing poverty, the shape of the distribution is much more difficult to transform. To say it in a more colloquial way: an improvement in the institutional setting may serve to increase the size of the cake relatively fast, but it takes time to change the way it is divided among the population. Both the income distribution and the broad-based institutions change slowly over time, so it is reasonable that we cannot capture a clear pattern of association in a short period of time with noisy measures.

### **Box 2: Malapportionment**

As stated above, the relationship between the income distribution and the specific political institutions is more subtle and hence more difficult to analyze empirically. In this box we comment the results of studying the case of malapportionment. The literature has recently stressed legislative malapportionment as a measure of inequality in representation.<sup>13</sup> Malapportionment means a discrepancy between the shares of legislative seats and the shares of population held by electoral districts, and implies a failure in the golden rule “one person-one vote”. A score of  $x\%$  in the malapportionment index (MI) means that  $x\%$  of seats are allocated to districts that would not receive those seats in case of perfect apportionment. Samuels and Snyder (2001) show that the MI is significantly higher in LAC than in the rest of the world, even when controlling for other institutional variables. In our sample the MI index is 0.08 for LAC and 0.03 in the advanced countries (the difference is statistically significant at 1%).

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<sup>13</sup> See for instance Samuels and Snyder (2001).

The linear correlation between the DER measure of income polarisation and the MI index is positive and significant (0.61) when using the extended sample of LAC and AC countries. The relationship holds when controlling for GDP and when including a dummy for LAC in a regression. When restricting the analysis to the sample of LAC countries the positive relationship between malapportionment and polarisation/inequality/poverty remains. Countries that violate the golden rule “one person-one vote” are those where the political process tend to favour pivotal voters, which could translate into a more unequal/polarised distribution, and given a level of national income, also into higher poverty.

## 6. Income distribution, conflict and corruption

In this section we turn to the relationship between conflict and income distribution. As discussed above the available data does not allow disentangling causal relationships. However, in most of the discussions in this section we implicitly tend to view conflicts as caused, among other factors, by different dimensions of the income distribution. We also briefly examine in this section the potential relationship between the income distribution and corruption.

In order to capture the level of conflict in the society we use the Political Stability and Absence of Conflict Index (PSAVI) (also named General Conflict indicator). This indicator, introduced in section 4, is measured in units ranging from -2.5 to 2.5, with higher values corresponding to a system which is least likely destabilised or overthrown, and where conflict plays a minor role. We also use the Labour Standard Index (LSI) discussed in section 4. This index is measured in units ranging from 0 to 76.5, with higher values corresponding to less respect for the worker’s rights. We expect to find high values of the LSI in highly polarised/unequal societies. To measure corruption we use the Control of Corruption Index (CCI). This index is measured in units ranging from -2.5 to 2.5, with higher values corresponding to less corruption.

### 6.1. LAC and the advanced countries

As discussed in section 4 LAC and AC countries are substantially different in terms of conflicts and corruption. Table 6.1 shows the average values for the PSAVI and the CCI. The differences in means between the two groups in both variables are clearly significant. In table 6.2 we show simple and partial correlations between income distribution, and conflict/corruption variables. Countries where polarisation and inequality are high tend to be those with high levels of conflict and corruption.<sup>14</sup> Even when we control for GDP per capita the correlations remain significant. Figure 6.1

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<sup>14</sup> Notice that the variables measure the *control* of conflict and corruption, so the correlations with the income distribution measures are negative

suggests that observations from LAC and from AC countries are far from each other. The advanced countries are almost all located at the bottom right of the figure, indicating low levels of both conflict and polarisation. It is remarkable how homogeneous these countries are compared to LAC. When running a regression with a LAC dummy both income distribution indicators remain significant.

Corruption is also correlated to income distribution (table 6.2). Figure 6.1 shows a somewhat different pattern than for the case of the General Conflict Index. Now the advanced countries are more dispersed and the LAC countries are more homogeneous. Despite the fact that the advanced countries have low levels of polarisation, some of them still have serious problems of corruption.

## **6.2 Distribution, conflict and corruption within LAC**

In this section we restrict the analysis to our sample of LAC countries. Table 6.4 illustrates that, as with the institutional variables, there are significant differences across regions within LAC. Southern South America has lower levels of conflict (measured by both the PSAVI and the LSI) and corruption than the rest of LAC. Table 6.5 shows changes in the conflict and corruption indicators over the 1990s and early 2000s. On average, changes in the General Conflict Index were small for the SSA, but considerable in the ASA and CA. This does not mean that for all the countries in the SSA region there has been no change, but instead that some countries (*e.g.* Chile) have experienced improvements while others (*e.g.* Argentina) have suffered an increase in the level of conflictivity. The Andean region appears to have experienced a process of escalating conflict and instability, which translated into a loss of almost 1/3 of a point in the General Conflict Index. Central America, on the other hand, moved up 0.35 points in the scale.

Regarding the Control of Corruption Index, on average the SSA region is the one that improved the most, with again different paths across the countries of that region. The ASA experienced a similar pattern with a positive overall mean.

The correlations in table 6.6 and the scatterplots in figure 6.2 and 6.3 suggest that more polarised/unequal/poor countries are on average also those with higher levels of conflicts (both general and labour conflict). The correlations with the General Conflict index remain significant when controlling for per capita GDP.<sup>15</sup> In fact, the values are almost unchanged when including controls. The correlations with the measures of control of corruption have the expected sign (negative), although the relationships do not seem strong, in particular when we control for other variables.

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<sup>15</sup> Colombia is omitted in the scatterplot of figure 6.3 and in the correlations because it has very high levels in the general conflict index for very particular reasons that we cannot control for.

Table 6.7 and figure 6.4 show that some of the links become weaker or even vanish when considering changes over the last decade. However correlations between changes in the General Conflict Index and changes in inequality and poverty remain significant.

Table 6.8 shows the results of panel regressions where we control for fixed effects. Changes in polarisation, inequality and poverty seem to be related to changes in conflict. This piece of evidence is consistent with the idea that increasing levels of polarisation, inequality and poverty generate a hostile atmosphere within the society that could imply higher levels of social conflict and political instability. The relationship with corruption, instead, is not clear.

In what follows we include a set of institutional controls to the analysis. It has long been argued that institutions are key features to understand social conflicts. This was the main argument in Thomas Hobbes's famous *Leviathan* where he asserts that without a powerful State conflict between people were unavoidable. Nowadays a vast majority of the academic field agrees that a State needs to set the "*rule of the game*" as clear as possible in order to avoid conflict and instability.

Table 6.9 illustrates the high correlations between institutions and conflict in the LAC context. Countries which succeed in developing an environment in which fair and predictable rules form the basis for economic and social interactions are those with less conflict and corruption. One interesting finding is that the variable that measures the degree of institutionalized democracy is not significantly correlated with the control of corruption. This could be due to the fact that institutionalized democracy is related to some institutional process, like for example voting, but it does not take into account the informal constraints that shape the way democracy actually works. Democracy in LAC is today much more common than what it used to be, and without any doubt this was an enormous step forward for the region. But having to vote every now and then, having a constitution that protect freedom and private property, and having a constitutional separation of powers does not mean that democracy is working as it should.

The regression results for the General Conflict index when institutions are included in the analysis are shown in table 6.10. In the right hand side we include income distribution measures, along with institutional indicators and other controls (basically GDP per capita, although we tried with several variables).

The results suggest that both polarisation and inequality are closely related to situations of conflict. The measures of these distributional dimensions are always significant when controlling for different institutional measures. That is not the case with the poverty headcount ratio: coefficients have the expected signs but seem to be non-significant.

The results of the regressions suggest that both income distribution and institutions do matter for social conflict and instability. Polarisation and inequality seem to be the relevant dimensions of the income distribution, while the RLI and the VAI seem to better capture the formal and informal institutions more closely linked to conflict and instability. These links are not strong when using a more specific labour conflict index.

The income distribution coefficients are non-significant for the Control of Corruption Index. The Rule of Law and Government Effectiveness Index are the only significant institutional variables in the regressions. This means that the quality of the bureaucracy, the competence of civil servants, the independence of the civil service from political pressures, and the credibility of the government's commitment to policies (GEI) are correlated with the degree of corruption even after controlling for the level of economic development and the level of income distribution.

### **Box 3: Trust and political views: evidence from the World Values Survey**

The shape of the income distribution surely interacts with the views and values of a society. In this box we briefly analyse this issue by using the World Value Survey (henceforth, WVS). This survey is a worldwide investigation of basic values and beliefs carried out in more than 80 countries.<sup>16</sup> We use data for 77 countries taken mostly from the 1999–2000 round of the survey.<sup>17</sup> Table B.1 shows mean values for LAC, the Rest of the World (RW), and a set of Advanced countries (AC).

The concept of social cohesion is related to that of *trust*. Social cohesion implies the sharing of common values and the respect for each other. The first row in Table B.1 records the mean across countries of the share of individuals that respond that in their countries “most people can be trusted”. The difference between LAC and the rest of the world is noticeable. On average, only 17% of people in LAC answer this question positively, in contrast to 30% in RW and 37% in AC.

The share of people that *strongly* agrees with the statement that “democracy is the best form of government” is higher in LAC than in the rest of the world, and similar than in the advanced countries. Compared to this group more people in LAC believe that “the country is run by a few big interests” and that “the entire way our society is organized must be radically changed by revolutionary action”. However, there are large differences in the acceptance of these two propositions. While on average 70% of the population believes that governments are “captured” by a few groups, only 9% seems to approve revolutionary actions.

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<sup>16</sup> The WVS has given rise to more than 300 publications, in 16 languages. The project is being carried out by an international network of social scientists. Coordination and distribution of data are based at the Institute for Social Research of the University of Michigan.

<sup>17</sup> The countries in the sample are: Albania, Algeria, Azerbaijan, Argentina, Australia, Austria, Armenia, Belgium, Bosnia and Herzegovina, Brazil, Bulgaria, Belarus, Canada, Chile, China, Taiwan (province of China), Colombia, Croatia, Czechrep, Denmark, Dominican Republic, El Salvador, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, India, Indonesia, Iran, Ireland, Israel, Japan, Italy, Jordan, Korea, Latvia, Lithuania, Luxembourg, Malta, Mexico, Moldavia, Morocco, Netherlands, New Zealand, Nigeria, Norway, Pakistan, Peru, Philippines, Poland, Portugal, Puerto Rico, Romania, Russia, Singapore, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Uganda, Ukraine, Republic of Macedonia, Egypt, Great Britain, Tanzania, United States of America, Uruguay, Venezuela, Serbia y Montenegro.

Income inequality and trust are negatively correlated in the country data (table B.2). When controlling for the level of per capita GDP, and for the percentage of unskilled people in each country the correlation remains significant. There is a weak negative correlation between income inequality and the support to democracy as the best form of government. Finally, higher levels of income inequality seem to be related to the acceptance of radical actions.

Figure B.1 shows the scatterplots of these relationships. It is interesting to notice that given their levels of inequality, LAC countries are in general more prone to accept democracy and to avoid revolutionary changes. Table B.3 shows that income inequality is associated to less confidence in democracy and more acceptance of radical changes, even after controlling for the level of economic development and a LAC dummy.

The signs of these dummies confirm the higher acceptance of democracy in LAC (controlling for the level of GDP and inequality). That characteristic could be due to the process of learning that these countries had gone through years of painful dictatorial regimes.

## 7. Concluding remarks

This document explores the relationship between income distribution, institutions and conflicts in Latin America and the Caribbean by using a new database of income distribution statistics. As it is well known in the cross-country literature, the evidence is mostly limited to correlations between variables, rather than causal relationships. Nonetheless, we put forward a set of hypothesis consistent with the empirical results of the paper.

Countries that are institutionally weak are more likely to have high levels of income disparities. This result is robust to different measures of polarisation and inequality, and holds even when controlling for GDP and other variables.

In contrast, we could not find a robust association between changes in the income distribution and changes in various broad-based institutions in LAC over the last decade.

Poverty is the only variable for which the negative link with institutions holds when considering changes since the early 1990s. We argue that improvements in the institutional environment quickly foster investments and economic growth, which in turn contribute to lowering poverty, but better institutions cannot be easily translated into equalizing changes in the income distribution.

Countries with high income polarisation and inequality are more likely to have high levels of conflict and corruption. These distributional dimensions are always significant “determinants” of the degree of conflict, even when controlling for different institutional measures and GDP. Instead, changes in poverty do not seem to be closely associated to higher conflictivity.

In summary, the paper suggests that institutions and conflict interact in different ways with the various characteristics of the income distribution. There is some evidence that in the LAC context institutional development has been associated to lower poverty, but not significantly lower inequality and polarisation. Instead, conflicts seem more related to inequality and polarisation than to income poverty.

Income disparities are associated to a lower sense of trust, less confidence in democracy and more acceptance of radical changes. Since inequities are relatively high in Latin America and the Caribbean, the region seems more prone to situations of political instability, social tension and conflict. However, on the other hand, when controlling for inequality LAC countries seem to have a higher acceptance of democracy, a fact that could be due to the process of learning that these countries had gone through years of painful dictatorial regimes.

Some LAC countries (*e.g.* Chile and some Central American economies) seem to have followed a virtuous path of stronger institutions, sustainable growth, and lower poverty. However, very few countries have managed to reduce income polarisation/inequality. In that scenario, situations of conflict, social tension and instability are always latent.

Another group of LAC countries have suffered a cycle of institutional and economic setbacks (*e.g.* Argentina and Venezuela). The combination of weaker institutions with larger inequalities quickly translated into situations of social tension and conflict.

Fortunately, most LAC countries are now in a stage of economic growth. Governments should take advantage of this opportunity to take concrete steps toward reducing inequities. There are many reasons why some income redistribution is socially desirable. The results of this paper highlight the role of a more equitable distribution in reducing the probability of social tension and conflicts.

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## Annex

### Indicators of institutions, conflict and corruption<sup>18</sup>

**CCI:** Control of Corruption Index. The index is a measure of perceptions of corruption, defined as the exercise of public power for private gain. It is measured in units ranging from about -2.5 to 2.5, with higher values corresponding to less corruption. Source: Kaufmann, Kraay and Mastruzzi (2005) and Kaufmann, Kraay and Zoido-Lobaton (1999).

**DI:** Democracy Index. The index is a measure of the degree of institutionalized democracy as opposed to institutionalize autocracy based on conceived democracy as three essential, interdependent elements. One is the presence of institutions and procedures through which citizens can express effective preferences about alternative policies and leaders. The second is the existence of institutionalized constraints on the exercise of power by the executive. The third is the guarantee of civil liberties to all citizens in their daily lives and in acts of political participation. The index is measured in units ranging from -10 to 10, with higher values corresponding to a system with a more consolidate democracy. Source: Polity IV Project.

**DNW:** Days Not Work index. This index measures the number of days not worked as a result of strikes and lockouts. This is usually measured in terms of the sum of the actual working days during which work would normally have been carried out by each worker involved had there been no stoppage. Source: ILO (International Labour Organization) Yearbook of Labour Statistics (2005).

**ECI:** Executive Constraints Index. The index is a measure of the extent of institutionalized constraints on the decision-making powers of chief executives, whether individuals or collectives. Source: Polity IV Project.

**ECIWB:** Executive Constraints Index. This index refers to the extent of institutionalized constraints on the decision-making powers of chief executives. Source: World Bank (Database of Political Institutions) (2002).

**EDI:** Electoral Democracy Index. This index is an aggregation of four indicators: right to vote, clean elections, free election and elected public officials. Source: Democracy in Latin America: Towards a Citizens' Democracy. United Nations Development Programme (UNDP) (2004).

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<sup>18</sup> For a complete description of each variable refer to the Statistical Compendium.

**EF:** Ethnic Fractionalization's index. This index measure how fractionalize is a given country in terms of its different ethnic groups. Source: Alesina, Devleeschauwer, Easterly and Kurlat (2003).

**FREEDOM:** Complains Presented Before the Union Freedom Committee. This index measures the number of complains presented before the union freedom committee. This is a cumulative index, which means that if, for example, in Bolivia the first complain in the decade occurs in 1990 and then another in 1991, the index for 1990 will be one and for 1991 will be two, reflecting both complains. Source: ILO (International Labour Organization) Yearbook of Labour Statistics. (2005).

**FTI:** Freedom to Trade Internationally index. This index is a measure of the possibility to engage in international trade in a country. It consists in an aggregation of indexes which try to capture the taxes on international trade, regulatory trade barriers, differences between official exchange rate and black market rate, international capital market controls, etc. Source: Gwartney and Lawson (2005).

**GDP:** Gross Domestic Product Per Capita (PPP). Source: Internationally Monetary Fund (IMF).

**GEI:** Government Effectiveness Index. The index is a measure of the quality of public service provision, the quality of the bureaucracy, the competence of civil servants, the independence of the civil service from political pressures, and the credibility of the government's commitment to policies. It is measured in units ranging from -2.5 to 2.5, with higher values corresponding to a more effective government. Source: Kaufmann, Kraay and Mastruzzi (2005) and Kaufmann, Kraay and Zoido-Lobaton (1999).

**IED:** Index of Electoral Disproportionality. This index is a measure of the deviation of party's seat shares from their vote shares. The measure of disproportionality, for the lower house or single chamber of parliament, is the least-squares index (LSq), which is calculated by squaring the vote-seat share difference for each party, adding all these figures, dividing the total by two, and finally taking the square root of the resulting value. Lower numbers can be interpreted as a sign that parties receive a number of seats that is closely proportional to their number of votes, while higher numbers indicate that the relationship between parties' votes and seats is more disproportional. Source: United Nations Development Programme (UNDP) (2004). Democracy in Latin America: Towards a Citizens' Democracy.

**IENP:** Index of Effective Number of Parties (based on percentage of votes). The effective number of parties-votes is a measure of the fragmentation of voters' preferences among parties. This index is calculated using Laakso and Taagapera's (1979) formula, that is, by squaring each party's fractional share of votes, summing the results and then dividing 1 by this value. Source: United Nations Development Programme (UNDP) (2004). Democracy in Latin America: Towards a Citizens' Democracy.

**IER:** Index of Economic Reforms. The index of economic reforms consists of five components: trade reform, tax reform, financial liberalization of privatization, and liberalization of external capital transaction. This index tries to capture the complex wave of economics reform that went on in Latin America & Caribbean during the past decade. The scale goes from 0.000 to 1.000, the higher the score indicating a greater degree of market orientation in the economic reforms. Sources: Morley, Machado and Pettinato (1999), Lora (2001) and CEPAL (2003).

**LCM:** Lower-Chamber Malapportionment. This index measures the degree in which one vote is equally weight across a given country. It tries to capture the idea that one of the cornerstones of democracy involves that every vote should count exactly the same independent of who is casting the vote. The index, which is computed using Snyder and Samuels' formula, reflects how far are the countries from the “ideal” democracy where the rule “every vote should we weighted equally” is respected. Source: Snyder and Samuels (2001).

**LF:** Language Fractionalization’s index. This index measure how fractionalize is a given country in terms of language. Source: Alesina, Devleeschauwer, Easterly and Kurlat (2003).

**LS:** Labour Standards index. The index is a composed measure of the worker’s freedom to organize themselves, negotiate collectively and to be declared in strike. This index covers a variety of rights violated, but does not measure the frequency of its violation neither the quantity of workers affected by such violations. The index is measured in units ranging from 0 to 76.5, with higher values corresponding to less respect for the worker’s rights. Source: Mosley and Uno (2002).

**LSI:** Legal Structure and security of property rights index. This index is a measure of the functioning’s of the legal system in a country. Consist in an aggregation of indexes which try to capture the degree of judicial independence, the court’s impartiality, the military interference in rule of law and in the political process, etc. It is measured in units ranging from 0 to 10, with higher values corresponding to a system with a better working of the legal system. Source: Gwartney and Lawson (2005).

**PCI:** Political Constraints Index. This index estimates the feasibility of policy change (the extent to which a change in the preferences of any one actor may lead to a change in government policy). The index is measured in units ranging from 0 to 1, with higher values corresponding to a system where policy changes are more feasible. Source: Henisz, W. J. (2006).

**PEE:** Public Expenditures in Education. Expenditures in education as a percentage of the gross domestic product. Source: CEPAL. (2002)

**PEH:** Public Expenditures in Health. Expenditures in health as a percentage of the gross domestic product. Source: CEPAL (2002).

**PF:** Press Freedom index. The index is a composite measure of legal, political, and economic constraints on the freedom of the press generated by Freedom House. Source: Compiled by Gerardo Munck (UNDP).

**PI:** Particularism Index. The index is a measure of the degree in which candidates for public office need to differentiate them from his party leaders in order to lift their chances of winning the election. Seddon, Gaviria, Panizza and Stein (2002).

**PSAVI:** Political Stability and Absence of Violence Index. The index is a measure which try to capture the idea that the quality of governance in a country is compromised by the likelihood of wrenching changes in government, which not only has a direct effect on the continuity of policies, but also at a deeper level undermines the ability of all citizens to peacefully select and replace those in power. This index combine several indicators which measure perceptions of the likelihood that the government in power will be destabilized or overthrown by possibly unconstitutional and/or violent means, including domestic violence and terrorism. It is measured in units ranging from -2.5 to 2.5, with higher values corresponding to a system which is least likely destabilized or overthrown and where conflict plays no part in the society. Source: Kaufmann, Kraay and Mastruzzi (2005) and Kaufmann, Kraay and Zoido-Lobaton (1999).

**RDH:** Rate of Deceitful Homicide index. This index measures the number of homicides by each 100.000 inhabitants. Sources: Interpol (2004), UNODC (2002); Krug (2002: 274, 308-12); and United Nations, Population Division, Department of Economic and Social Affairs (2001, 2002).

**RDI:** Regime Durability Index. The index is a measure of the number of years since the most recent regime change or the end of transition period defined by the lack of stable political institutions. Source: Polity IV Project.

**RDIWB:** Regime Durability Index. This index refers to how long the country has been autocratic or democratic. Source: World Bank (Database of Political Institutions) (2002).

**REGCLBI:** Regulation of Credit, Labor, and Business Index. This index is a measure of the regulatory policy's quality carried out in a country. Consist in an aggregation of indexes which try to capture the degree of competition in the bank industry, of interest rate controls, the percentage of credit extended to private sector, the hiring and firing practices, the price controls, etc. Source: Gwartney and Lawson (2005).

**RF:** Religion Fractionalization's index. This index measures how fractionalize is a given country in terms of religion. Source: Alesina, Devleeschauwer, Easterly and Kurlat (2003).

**RLI:** Rule of Law Index. The index is measured in units ranging from -2.5 to 2.5, with higher values corresponding, in broad terms, to the respect of citizens and the state for

the institutions which govern their interactions. This index includes several indicators which measure the extent to which agents have confidence in and abide by the rules of society. These include perceptions of the incidence of crime, the effectiveness and predictability of the judiciary, and the enforceability of contracts. Together, these indicators measure the success of a society in developing an environment in which fair and predictable rules form the basis for economic and social interactions, and importantly, the extent to which property rights are protected. Source: Kaufmann, Kraay and Mastruzzi (2005) and Kaufmann, Kraay and Zoido-Lobaton (1999).

**RQI:** Regulatory Quality Index. The index is a measure of the effective regulatory policy. It includes measures of the incidence of market-unfriendly policies such as price controls or inadequate bank supervision, as well as perceptions of the burdens imposed by excessive regulation in areas such as foreign trade and business development. Source: Kaufmann, Kraay and Mastruzzi (2005) and Kaufmann, Kraay and Zoido-Lobaton (1999).

**SAL:** Strike and Lockout index. This index measures the quantity of strikes and lockouts in a given country. A strike is a temporary work stoppage by one or more groups of workers with a view to enforcing or resisting demands or expressing grievances, or supporting other workers in their demands or grievances. A lockout is a total or partial temporary closure of one or more places of employment, or the hindering of the normal work activities of employees, by one or more employers with a view to enforcing or resisting demands or expressing grievances, or supporting other employers in their demands or grievances. Source: ILO (International Labour Organization) Yearbook of Labour Statistics (2005).

**VAI:** Voice and Accountability Index. The index is a measure of the extent to which citizens of a country are able to participate in the selection of governments. It includes a number of indicators measuring various aspects of the political process, civil liberties and political rights. It also includes indicators measuring the independence of the media. The index is measured in units ranging from -2.5 to 2.5, with higher values corresponding to a system where the citizenship has more voice and accountability. Source: Kaufmann, Kraay and Mastruzzi (2005) and Kaufmann, Kraay and Zoido-Lobaton (1999).

**VAJ:** Violence Against Journalists index. For 1990 and 1991, the measure records the number of confirmed and unconfirmed cases of journalists killed in the line of duty for a given country, either in direct reprisal for their work or in cross fire. From 1992 onwards, the measure records only the number of clearly confirmed cases of journalists killed in the line of duty, either in direct reprisal for their work or in cross fire. This is a cumulative index Source: United Nations Development Programme (UNDP). Compiled by Gerardo Munck.

**VVRAP:** Valid Votes Relative to Voting Age Population. This variable measure the percentage of valid votes relative to the voting age population (VVRAP). VVRAP

estimates are based on population data for those 18 years and older. The data refers to legislative elections for the lower house or single chamber or to first round presidential elections. Source: Democracy in Latin America: Towards a Citizens' Democracy. United Nations Development Programme (UNDP) (2004).

**WR:** Woman's Representation in the legislative chamber. Measure of the percentage of women in the legislative chamber. Source: PIU (1995, 2003). Compiled by Gerardo Munck.



**Table 3.1**  
**Household surveys used in the study**

Country	Name of survey	Acronym	Years	Coverage
<b>Argentina</b>	Encuesta Permanente de Hogares	EPH	1992-2003	Urban
	Encuesta Permanente de Hogares-Continua	EPH-C	2003-2004	Urban
<b>Bolivia</b>	Encuesta Integrada de Hogares	EIH	1993	Urban
	Encuesta Nacional de Empleo	ENE	1997	National
	Encuesta Continua de Hogares- MECOVI	ECH	2000-2002	National
<b>Brazil</b>	Pesquisa Nacional por Amostra de Domicilios	PNAD	1990-2003	National
<b>Chile</b>	Encuesta de Caracterización Socioeconómica Nacional	CASEN	1990-2003	National
<b>Colombia</b>	Encuesta Nacional de Hogares - Fuerza de Trabajo	ENH-FT	1992	Urban
	Encuesta Nacional de Hogares - Fuerza de Trabajo	ENH-FT	1996-2000	National
	Encuesta Continua de Hogares	ECH	2000-2004	National
	Encuesta de Calidad de Vida	ECV	2003	National
<b>Costa Rica</b>	Encuesta de Hogares de Propósitos Múltiples	EHPM	1992-2003	National
<b>Dominican R.</b>	Encuesta Nacional de Fuerza de Trabajo	ENFT	1996-2004	National
<b>Ecuador</b>	Encuesta de Condiciones de Vida	ECV	1994-1998	National
	Encuesta de Empleo, Desemple y Subempleo	ENEMDU	2003	National
<b>El Salvador</b>	Encuesta de Hogares de Propósitos Múltiples	EHPM	1991-2003	National
<b>Guatemala</b>	Encuesta Nacional sobre Condiciones de Vida	ENCOVI	2000	National
	Encuesta Nacional de Empleo e Ingresos	ENEI - 2	2002	National
<b>Haiti</b>	Enquête sur les Conditions de Vie en Haïti	ECVH	2001	National
<b>Honduras</b>	Encuesta Permanente de Hogares de Propósitos Múltiples	EPHPM	1992-2003	National
<b>Jamaica</b>	Jamaica Survey of Living Conditions	JSLC	1990-2002	National
<b>Mexico</b>	Encuesta Nacional de Ingresos y Gastos de los Hogares	ENIGH	1992-2002	National
<b>Nicaragua</b>	Encuesta Nacional de Hogares sobre Medición de Nivel de Vida	EMNV	1993-2001	National
<b>Panama</b>	Encuesta de Hogares	EH	1995-2003	National
<b>Paraguay</b>	Encuesta Integrada de Hogares	EIH	1997	National
	Encuesta Permanente de Hogares	EPH	1999-2003	National
	Encuesta Integrada de Hogares	EIH	2001	National
<b>Peru</b>	Encuesta Nacional de Hogares	ENAHO	1997-2003	National
<b>Suriname</b>	Expenditure Household Survey	EHS	1999	Urban/Paramaribo
<b>Uruguay</b>	Encuesta Continua de Hogares	ECH	1989-2004	Urban
<b>Venezuela</b>	Encuesta de Hogares Por Muestreo	EHM	1989-2003	National

**Table 3.2**  
**Indicators of income polarisation, inequality and poverty**  
**Distribution of household per capita income**

	Pure income polarisation				Income inequality				Income poverty (USD 2 a day)			
	Wolfson	EGR (3)	DER (0.5)	DER (0.75)	Gini	Theil	A(1)	A(2)	FGT(0)	FGT(1)	FGT(2)	
<b>Argentina (*)</b>												
1992	0.413	0.734	0.289	0.274	0.450	0.370	0.297	0.507	4.8	2.1	1.5	
1998	0.488	0.808	0.300	0.274	0.502	0.472	0.368	0.605	9.4	3.9	2.5	
2004	0.500	0.828	0.298	0.268	0.506	0.499	0.379	0.624	14.1	6.0	3.7	
<b>Bolivia (**)</b>												
1993	0.530	0.926	0.324	0.290	0.583	0.784	0.499	0.777	60.1	34.0	25.1	
1997	0.552	0.945	0.331	0.297	0.580	0.697	0.497	0.792	36.2	18.5	12.6	
2002	0.578	0.982	0.342	0.314	0.601	0.735	0.557	0.912	43.1	23.9	17.3	
<b>Brazil</b>												
1990	0.648	0.998	0.363	0.344	0.604	0.746	0.500	0.777	28.8	12.7	7.7	
1998	0.607	0.977	0.356	0.350	0.592	0.713	0.481	0.715	19.4	9.1	6.0	
2003	0.569	0.949	0.344	0.346	0.576	0.668	0.465	0.725	20.2	9.4	6.4	
<b>Chile</b>												
1990	0.501	0.908	0.319	0.289	0.551	0.648	0.420	0.667	14.4	4.8	2.5	
1998	0.518	0.912	0.318	0.289	0.555	0.645	0.423	0.656	6.5	2.2	1.2	
2003	0.476	0.888	0.312	0.283	0.546	0.662	0.410	0.631	5.1	1.8	1.0	
<b>Colombia (*)</b>												
1992	0.411	0.802	0.292	0.277	0.487	0.502	0.329	0.489	9.5	5.5	4.8	
2000	0.492	0.911	0.323	0.307	0.553	0.676	0.428	0.681	17.5	11.2	9.6	
2004	0.518	0.905	0.321	0.299	0.553	0.623	0.434	0.711	21.7	12.8	10.3	
<b>Costa Rica</b>												
1992	0.406	0.715	0.262	0.223	0.446	0.369	0.307	0.564	12.8	6.1	4.3	
1997	0.412	0.725	0.260	0.221	0.449	0.367	0.305	0.543	8.5	4.0	2.7	
2003	0.464	0.794	0.278	0.241	0.490	0.452	0.358	0.616	8.8	4.3	3.0	
<b>Dominican Rep.</b>												
2000	0.494	0.853	0.297	0.262	0.520	0.532	0.387	0.625	8.8	3.2	1.6	
2004	0.464	0.841	0.295	0.263	0.514	0.543	0.373	0.584	16.4	5.2	2.5	
<b>Ecuador</b>												
1994	0.468	0.873	0.305	0.267	0.538	0.607	0.428	0.752	36.2	16.4	10.4	
1998	0.497	0.905	0.310	0.275	0.534	0.552	0.435	0.804	39.1	18.7	12.4	
2003	0.464	0.839	0.293	0.258	0.518	0.547	0.390	0.646	36.3	15.7	9.5	
<b>El Salvador</b>												
1991	0.481	0.853	0.297	0.260	0.527	0.567	0.414	0.746	49.7	24.5	16.2	
2000	0.491	0.844	0.295	0.252	0.519	0.531	0.422	0.785	39.7	19.9	13.5	
2003	0.472	0.822	0.286	0.244	0.509	0.503	0.411	0.779	39.1	19.1	12.8	
<b>Guatemala</b>												
2000	0.480	0.890	0.309	0.276	0.549	0.604	0.435	0.713	29.7	11.8	6.6	
<b>Haiti</b>												
2001	0.558	0.973	0.334	0.300	0.592	0.746	0.495	0.768	78.0	47.4	33.6	
<b>Honduras (***)</b>												
1992	0.494	0.836	0.295	0.258	0.515	0.524	0.382	0.643	33.9	12.6	6.4	
1997	0.476	0.852	0.300	0.263	0.526	0.585	0.399	0.681	32.6	13.7	7.9	
2003	0.515	0.883	0.315	0.281	0.538	0.588	0.407	0.631	37.4	16.0	9.2	
<b>Jamaica</b>												
1990	0.639	0.924	0.311	0.260	0.574	0.638	0.514	0.841	58.7	39.7	33.0	
1999	0.626	0.961	0.334	0.308	0.551	0.626	0.482	0.850	35.2	22.0	17.6	
2002	0.610	0.974	0.345	0.316	0.599	0.729	0.575	0.932	44.6	32.3	27.7	
<b>Mexico</b>												
1992	0.478	0.894	0.308	0.276	0.555	0.687	0.436	0.718	26.8	12.4	8.1	
1996	0.474	0.856	0.297	0.264	0.540	0.663	0.417	0.705	37.3	18.4	12.7	
2002	0.467	0.834	0.290	0.256	0.506	0.500	0.383	0.703	25.1	11.7	8.0	
<b>Nicaragua</b>												
1993	0.548	0.919	0.318	0.281	0.565	0.653	0.465	0.754	61.6	33.7	23.1	
1998	0.475	0.876	0.308	0.271	0.540	0.628	0.422	0.701	52.2	24.7	15.3	
2001	0.478	0.886	0.310	0.279	0.543	0.698	0.416	0.662	48.4	20.6	11.9	
<b>Panama</b>												
1995	0.545	0.900	0.306	0.262	0.551	0.576	0.459	0.783	20.5	13.0	10.5	
2003	0.572	0.922	0.321	0.285	0.561	0.607	0.455	0.723	16.9	7.3	4.3	
<b>Paraguay</b>												
1997	0.557	0.920	0.319	0.281	0.564	0.620	0.481	0.805	30.3	18.7	14.8	
2002	0.557	0.927	0.318	0.281	0.571	0.713	0.481	0.798	34.8	17.2	11.3	
<b>Peru</b>												
1997	0.514	0.871	0.306	0.267	0.537	0.581	0.422	0.675	32.2	14.2	8.4	
2002	0.502	0.885	0.312	0.274	0.546	0.636	0.423	0.650	32.0	13.5	7.6	
<b>Suriname (*)</b>												
1999	0.493	0.849	0.291	0.244	0.528	0.534	0.419	0.882	35.8	22.1	17.4	
<b>Uruguay (*)</b>												
1989	0.366	0.680	0.252	0.217	0.424	0.354	0.271	0.468	2.7	0.7	0.3	
1998	0.401	0.709	0.257	0.218	0.440	0.344	0.294	0.541	3.4	1.1	0.6	
2003	0.418	0.728	0.265	0.230	0.449	0.367	0.294	0.614	4.9	1.4	0.6	
<b>Venezuela</b>												
1989	0.376	0.683	0.265	0.243	0.425	0.335	0.274	0.485	18.5	7.7	4.9	
1998	0.433	0.762	0.272	0.233	0.472	0.415	0.338	0.606	28.0	11.9	7.3	
2000	0.408	0.709	0.259	0.222	0.441	0.357	0.297	0.535	30.8	12.7	7.5	
2003	0.430	0.745	0.267	0.229	0.462	0.395	0.326	0.590	44.5	20.8	13.4	

Source: Own calculations based on SEDLAC.

(\*) Urban estimates. In Argentina, 1992 figures estimated by extrapolating results from a smaller sample of cities.

(\*\*) 1993 figures estimated by extrapolating result for urban areas

(\*\*\*) 1992 figures estimated by extrapolating results of the EPH 92 that covered only labour incomes.

**Table 3.3**  
**Indicators of income polarisation and inequality**  
**Distribution of earnings**

	Pure income polarisation				Earnings inequality (Gini)	
	Wolfson	EGR (3)	DER (0.5)	DER (0.75)	All	Urban monetary
<b>Argentina (*)</b>						
1992	0.355	0.638	0.283	0.260	0.396	0.396
1998	0.392	0.739	0.276	0.239	0.461	0.461
2004					0.470	0.470
<b>Bolivia (**)</b>						
1993	0.472	0.926	0.342	0.336	0.568	0.534
1997	0.497	0.924	0.342	0.328	0.568	0.534
2002	0.507	0.930	0.323	0.295	0.571	0.551
<b>Brazil</b>						
1990	0.626	0.988	0.486	0.620	0.597	0.592
1998	0.543	0.943	0.506	0.675	0.571	0.564
2003	0.494	0.906	0.536	0.797	0.552	0.548
<b>Chile</b>						
1990	0.429	0.884	0.363	0.394	0.536	0.526
1998	0.459	0.906	0.381	0.421	0.554	0.547
2003	0.452	0.887	0.389	0.441	0.546	0.542
<b>Colombia (*)</b>						
1992	0.340	0.721	0.312	0.287	0.451	0.464
2000	0.347	0.799	0.379	0.449	0.504	0.519
2004	0.353	0.816	0.377	0.436	0.504	0.513
<b>Costa Rica</b>						
1992	0.313	0.640	0.245	0.218	0.404	0.412
1997	0.346	0.677	0.246	0.208	0.423	0.422
2003	0.371	0.729	0.276	0.247	0.454	0.456
<b>Dominican Rep.</b>						
2000	0.441	0.814	0.293	0.258	0.499	0.503
2004	0.450	0.778	0.281	0.243	0.479	0.493
<b>Ecuador</b>						
1994	0.463	0.880	0.302	0.274		
1998	0.468	0.883	0.309	0.277		
2003	0.404	0.785	0.320	0.332	0.491	0.498
<b>El Salvador</b>						
1991	0.385	0.774	0.301	0.294	0.486	0.482
2000	0.403	0.752	0.282	0.256	0.470	0.477
2003	0.408	0.791	0.291	0.266	0.496	0.468
<b>Guatemala</b>						
2000	0.504	0.919	0.330	0.298	0.572	0.580
<b>Haiti</b>						
2001	0.907	1.143	0.431	0.445	0.682	0.712
<b>Honduras (***)</b>						
1992	0.428	0.794	0.284	0.259	0.503	0.496
1997	0.449	0.845	0.302	0.281	0.524	0.515
2003	0.494	0.846	0.304	0.272	0.524	0.527
<b>Jamaica</b>						
1990	0.317	0.656	0.253	0.227	0.413	0.408
1999	0.249	0.650	0.257	0.241	0.395	0.432
2002	0.339	0.710	0.266	0.241	0.444	0.476
<b>Mexico</b>						
1992	0.437	0.878	0.316	0.308	0.547	0.523
1996	0.466	0.844	0.305	0.292	0.538	0.510
2002	0.446	0.813	0.311	0.309	0.528	0.457
<b>Nicaragua</b>						
1993	0.524	0.891	0.318	0.284	0.551	0.498
1998	0.477	0.914	0.313	0.278	0.565	0.558
2001	0.493	0.949	0.325	0.296	0.586	0.577
<b>Panama</b>						
1995	0.420	0.786	0.283	0.240	0.488	0.483
2003	0.428	0.852	0.338	0.340	0.529	0.490
<b>Paraguay</b>						
1997	0.414	0.827	0.301	0.270	0.511	0.496
2002	0.478	0.863	0.300	0.269	0.560	0.519
<b>Peru</b>						
1997	0.441	0.821	0.292	0.255	0.510	0.510
2002	0.479	0.911	0.312	0.278	0.559	0.558
<b>Suriname (*)</b>						
1999	0.341	0.716	0.264	0.238	0.446	0.446
<b>Uruguay (*)</b>						
1989	0.373	0.702	0.251	0.212	0.450	0.464
1998	0.409	0.747	0.266	0.226	0.463	0.482
2003	0.431	0.796	0.283	0.249	0.494	0.511
<b>Venezuela</b>						
1989	0.298	0.628	0.394	0.535	0.398	0.386
1998	0.369	0.705	0.286	0.275	0.443	0.446
2000	0.301	0.641	0.297	0.308	0.403	0.398
2003	0.344	0.676	0.286	0.278	0.425	0.378

Source: Own calculations based on SEDLAC.

(\*) Urban estimates. In Argentina, 1992 figures estimated by extrapolating results from a smaller sample of cities.

(\*\*) 1993 figures estimated by extrapolating result for urban areas

(\*\*\*) 1992 figures estimated by extrapolating results of the EPH 92 that covered only labour incomes.

**Table 3.4**  
**Correlations between polarisation, inequality and poverty measures**

	Pure income polarisation				Income inequality			Income poverty (USD 2 a da			Earnings		
	Wolfson	EGR 3	DER 0.5	DER 0.75	Gini	Theil	A(1)	A(2)	FGT(0)	FGT(1)	FGT(2)	DER (0.5)	Gini
wolfson	1.0000												
egr3	0.9092*	1.0000											
der05	0.9159*	0.9774*	1.0000										
der075	0.8443*	0.9017*	0.9647*	1.0000									
gini	0.9041*	0.9966*	0.9672*	0.8811*	1.0000								
theil	0.7991*	0.9563*	0.9220*	0.8383*	0.9611*	1.0000							
A(1)	0.9217*	0.9391*	0.9063*	0.8014*	0.9523*	0.8795*	1.0000						
A(2)	0.7057*	0.6426*	0.5760*	0.4514*	0.6741*	0.5563*	0.8244*	1.0000					
FGT(0)	0.3425	0.4246	0.3463	0.2153	0.4408*	0.4679*	0.4860*	0.4521*	1.0000				
FGT(1)	0.4672*	0.4993*	0.4267	0.2906	0.5175*	0.5073*	0.5954*	0.5997*	0.9567*	1.0000			
FGT(2)	0.5235*	0.5205*	0.4564*	0.3242	0.5407*	0.5052*	0.6450*	0.6827*	0.8899*	0.9829*	1.0000		
der05_ea	0.2547	0.4285	0.4303	0.4944*	0.4171	0.4276	0.2853	0.1287	0.1942	0.1874	0.1653	1.0000	
gini_all	0.3455	0.5916*	0.5381*	0.4935*	0.5710*	0.6581*	0.4059	0.1303	0.4366*	0.3672	0.2747	0.5175*	1.0000

Source: Own calculations.

**Table 4.1**  
**Indicators of institutions, conflict and corruption**

<b>Measures of Institutions</b>	<b>Name</b>	<b>Source</b>	<b>Acronym</b>	<b>Years</b>
Broad Base Institutions	Democracy Index	Polity IV Project	di	1989 - 2003
Broad Base Institutions	Executive Constraints Index	Polity IV Project	eci	1989 - 2003
Broad Base Institutions	Executive Constraints Index	World Bank: Database of Political Institutions	eciwb	1989 - 2003
Broad Base Institutions	Electoral Democracy Index	United Nations Development Programme	edi	1990 - 2002
Broad Base Institutions	Government Effectiveness Index	Kaufmann, Kraay and Mastruzzi (2005)	gei	1996-2004
Broad Base Institutions	Legal Structure and security of property rights Index	Gwartney and Lawson (2005)	lsi	1980-2003
Broad Base Institutions	Political Constraints Index	Henisz, W. J. (2002)	pci	1989 - 2004
Broad Base Institutions	Press Freedom index	Freedom House.	pf	1993-2002
Broad Base Institutions	Regime Durability Index	Polity IV Project	rdi	1989 - 2003
Broad Base Institutions	Regime Durability Index	World Bank: Database of Political Institutions	rdiwb	1989 - 2003
Broad Base Institutions	Regulation of Credit, Labor, and Business Index.	Gwartney and Lawson (2005)	regclbi	1980-2003
Broad Base Institutions	Rule of Law Index	Kaufmann, Kraay and Mastruzzi (2005)	rli	1996-2004
Broad Base Institutions	Regulatory Quality Index	Kaufmann, Kraay and Mastruzzi (2005)	rqi	1996-2004
Broad Base Institutions	Voice and Accountability Index	Kaufmann, Kraay and Mastruzzi (2005)	vai	1996-2004
Political Institutions	Index of Electoral Disproportionality	United Nations Development Programme (UNDP)	ied	1990 - 2002
Political Institutions	Index of Effective Number of Parties	United Nations Development Programme (UNDP)	ienp	1990 - 2002
Political Institutions	Lower-Chamber Malapportionment (**)	Snyder and Samuels (2001)	lcm	1990 - 2002
Political Institutions	Particularism Index	Seddon, Gaviria, Panizza and Stein (2002)	pi	1989 - 2001
Political Institutions	Valid Votes Relative to Voting Age Population	United Nations Development Programme (UNDP)	vvrp	1990 - 2002
Political Institutions	Woman's Representation in the legislative chamber	United Nations Development Programme (UNDP)	wr	1990 - 2002
<b>Measures of conflict</b>	<b>Name</b>	<b>Source</b>	<b>Acronym</b>	<b>Years</b>
General Conflict Index	Political Stability and Absence of Violence Index	Kaufmann, Kraay and Mastruzzi (2005)	psavi	1996-2004
General Conflict	Rate of Deceitful Homicide index. (**)	United Nations, Population Division, Department of Economic and Social Affairs (2001, 2002). For the beginnings of the nineties and 1995 CEPAL.	rdh	1990-2002
Labor Conflict	Labour Standards index	Mosley and Uno (2002).	lsi	1990-2000
Labor Conflict	Complains Presented Before the Union Freedom Committee.	International Labour Organization (2005)	freedom	1990-2004
Labor Conflict	Days Not Work index (*)	International Labour Organization (2005)	dhw	1989-2004
Labor Conflict	Strike And Lockout index (*)	International Labour Organization (2005)	sal	1990-2004
Political Conflict	Violence Against Journalists index	UNDP. Compiled by Munck	vaji	1990 - 2002
<b>Measures of corruption</b>	<b>Name</b>	<b>Source</b>	<b>Acronym</b>	<b>Years</b>
Control of Corruption	Control of Corruption Index	Kaufmann, Kraay and Mastruzzi (2005)	cci	1996-2004
<b>Control Measures</b>	<b>Name</b>	<b>Source</b>	<b>Acronym</b>	<b>Years</b>
	Ethnic Fractionalization's index. (**)	Alesina, Devleeschauwer, Easterly and Kurtat	ef	1985-2001
	Freedom to Trade Internationally index	Gwartney and Lawson (2005)	fti	1980-2003
	Gross Domestic Product per capita (PPP)	Internationally Monetary Fund (IMF)	gdp	1989-2004
	Gross Domestic Product per capita (PPP) growth (annual %)	Internationally Monetary Fund (IMF)	gdpr	1988-2004
	Standar Deviation of the G. D. P. pc (PPP) growth (annual %)	Internationally Monetary Fund (IMF)	gdprsd	1985-2004
	Language Fractionalization's index (**)	Alesina, Devleeschauwer, Easterly and Kurtat	lf	2001-2001
	Index of Economic Reforms	Morley, Machado and Pettinato (1999), Lora (2001) and CEPAL (2003)	ier	1989-2002
	Public Expenditures in Education	CEPAL	pee	1980-2000
	Public Expenditures in Health	CEPAL	peh	1980-2000
	Religion Fractionalization's index (**)	Alesina, Devleeschauwer, Easterly and Kurtat	rf	2001-2001

(\*) These measures are not reported for all countries and all the years in the study. “dnw” do not appear for several years in Argentina and Costa Rica, and do not appear for any year in Bolivia, Colombia, Dominican Rep. , Ecuador, Guatemala, Haiti, Honduras, Paraguay, Uruguay and Venezuela. Similar is the case of “sal”. It does not have any observation for Haiti, Paraguay and Uruguay.

(\*\*) For these measures we only have one observation for each country.

(\*\*\*) This measure is not available for all years from 1990 to 2002. We have observations in the beginnings of the nineties, around 1995 and one more observation for each country in the period 1998-2001.

**Table 4.2**  
**Selected indicators of institutions**

	Broad Base Institutions		
	VAI	RLI	GEI
<b>Argentina</b>			
1996	0.604	0.281	0.451
1998	0.290	0.173	0.456
2004	0.490	- 0.706	- 0.329
<b>Bolivia</b>			
1996	0.097	- 0.661	- 0.441
1998	0.337	- 0.352	- 0.106
2002	0.008	- 0.648	- 0.530
<b>Brazil</b>			
1998	0.589	- 0.083	- 0.102
2002	0.345	- 0.323	- 0.203
<b>Chile</b>			
1998	0.652	1.269	1.413
2002	1.072	1.237	1.257
<b>Colombia</b>			
1996	- 0.066	- 0.463	0.071
2000	- 0.525	- 0.655	- 0.311
2004	- 0.473	- 0.698	- 0.176
<b>Costa Rica</b>			
1996	1.366	0.640	0.163
1998	1.245	0.904	0.516
2002	1.163	0.666	0.446
<b>Dominican Rep.</b>			
2000	0.433	- 0.198	- 0.111
2004	0.273	- 0.537	- 0.459
<b>Ecuador</b>			
1996	0.065	- 0.395	- 0.655
1998	0.273	- 0.669	- 0.757
2002	- 0.064	- 0.650	- 0.935
<b>El Salvador</b>			
1996	- 0.219	- 0.481	- 0.376
2000	0.237	- 0.453	- 0.110
2002	0.064	- 0.430	- 0.501
<b>Guatemala</b>			
2000	- 0.257	- 0.770	- 0.504
<b>Haiti</b>			
2000	- 0.790	- 1.496	- 1.468
<b>Honduras</b>			
1996	- 0.358	- 0.846	- 1.418
1998	0.117	- 0.565	- 1.196
2002	- 0.155	- 0.769	- 1.562
<b>Jamaica</b>			
1996	0.553	- 0.214	- 0.409
2000	0.697	- 0.150	- 0.193
2002	0.509	- 0.463	- 0.040
<b>Mexico</b>			
1996	- 0.230	- 0.122	- 0.124
2002	0.363	- 0.306	0.214
<b>Nicaragua</b>			
1996	- 0.222	- 0.682	- 0.462
1998	- 0.009	- 0.824	- 0.532
2000	- 0.076	- 0.906	- 0.715
<b>Panama</b>			
1996	0.333	0.255	- 0.550
2002	0.501	- 0.026	- 0.113
<b>Paraguay</b>			
1996	- 0.390	- 0.505	- 0.688
2002	- 0.527	- 1.157	- 1.246
<b>Peru</b>			
1996	- 0.733	- 0.352	- 0.182
2002	0.114	- 0.501	- 0.455
<b>Suriname</b>			
1998	0.187	- 0.730	- 0.117
<b>Uruguay</b>			
1998	0.744	0.542	0.666
2002	0.948	0.539	0.525
<b>Venezuela</b>			
1998	0.163	- 0.636	- 0.892
2000	- 0.326	- 0.823	- 0.831
2002	- 0.412	- 1.063	- 1.130

Source: Kaufmann, Kraay and Mastruzzi (2005)  
and Kaufmann, Kraay and Zoido-Lobaton (1999).

**Table 4.3**  
**Selected indicators of conflict and corruption**

General Conflict and Control of Corruption			
	PSAVI	CCI	
<b>Argentina</b>			
1996	0.475	-0.124	
1998	0.448	-0.224	
2004	-0.240	-0.442	
<b>Bolivia</b>			
1996	-0.231	-0.871	
1998	0.079	-0.414	
2002	-0.061	-0.823	
<b>Brazil</b>			
1998	-0.384	0.096	
2002	0.109	-0.064	
<b>Chile</b>			
1998	0.609	1.198	
2002	1.033	1.533	
<b>Colombia</b>			
1996	-1.247	-0.433	
2000	-1.734	-0.401	
2004	-1.694	1.443	
<b>Costa Rica</b>			
1996	0.886	-0.433	
1998	1.077	-0.609	
2002	1.101	-0.510	
<b>Dominican Rep.</b>			
2000	0.183	-0.302	
2004	-0.009	-0.498	
<b>Ecuador</b>			
1996	-0.612	-0.749	
1998	-0.582	-0.740	
2002	-0.680	-0.999	
<b>El Salvador</b>			
1996	-0.094	-0.755	
2000	0.466	-0.165	
2002	0.323	-0.488	
<b>Guatemala</b>			
2000	-0.891	-0.638	
<b>Haiti</b>			
2000	-0.771	-0.995	
<b>Honduras</b>			
1996	-0.398	-0.965	
1998	-0.181	-0.748	
2002	-0.080	-0.765	
<b>Jamaica</b>			
1996	0.638	-0.328	
2000	0.282	-0.173	
2002	-0.173	-0.212	
<b>Mexico</b>			
1996	-0.362	-0.148	
2002	0.246	-0.457	
<b>Nicaragua</b>			
1996	-0.656	-0.148	
1998	-0.212	-0.753	
2000	0.216	-0.882	
<b>Panama</b>			
1996	0.357	-0.503	
2002	0.390	-0.236	
<b>Paraguay</b>			
1996	-0.061	-0.495	
2002	-1.095	-1.203	
<b>Peru</b>			
1996	-0.903	-0.097	
2002	-0.691	-0.228	
<b>Suriname</b>			
1998	-0.191	0.060	
<b>Uruguay</b>			
1998	0.602	0.419	
2002	0.859	0.806	
<b>Venezuela</b>			
1998	-0.370	-0.772	
2000	-0.442	-0.614	
2002	-1.175	-0.935	

Source: Kaufmann, Kraay and Mastruzzi (2005) and Kaufmann, Kraay and Zoido-Lobaton (1999).

**Table 5.1**  
**Indicators of income distribution and institutions**  
**LAC and advanced countries**  
**Late 1990s**

	Advanced	LAC	Diff.
<i>Distribution</i>			
Polarisation (DER(.5))	0.206	0.304	-0.098*
Polarisation (DER(.75))	0.186	0.271	-0.085*
Inequality (Gini)	0.307	0.527	-0.220*
<i>Institutions</i>			
Rule of Law	1.4	-0.3	1.7*
Voice and Accountability	1.2	0.2	1.1*
Legal structure	7.7	4.5	3.2*
Gov't Effectiveness	1.5	-0.3	1.7*
Democracy	8.8	7.6	1.2*
Political constraints	0.7	0.5	0.2*

\* = significant at 10%

**Table 5.2**  
**Correlations between indicators of income distribution and institutions**  
**Sample of LAC and advanced countries**  
**Late 1990s**

DER 0.5				
	pooled	Correlations		controlling for GDP pc
		period 1	period 2	
Rule of Law	-0.8118*	-0.7402*	-0.8191*	-0.3326*
Voice and Accountability	-0.7571*	-0.6077	-0.8196*	-0.3028*
Legal structure	-0.7775*	-0.6974*	-0.8297*	-0.3333*
Gov't Effectiveness	-0.8034*	-0.5217	-0.8248*	-0.2473*
Democracy	-0.3898*	-0.3540*	-0.5333*	-0.064
Political constraints	-0.5843*	-0.6351*	-0.4947*	-0.1937*
<i>Gini</i>				
	pooled	Correlations		controlling for GDP pc
		period 1	period 2	
Rule of Law	-0.8324*	-0.7111*	-0.8354*	-0.3495*
Voice and Accountability	-0.7821*	-0.507	-0.8430*	-0.3395*
Legal structure	-0.7953*	-0.7155*	-0.8452*	-0.3566*
Gov't Effectiveness	-0.8318*	-0.6912	-0.8461*	-0.2873*
Democracy	-0.4069*	-0.3635*	-0.5577*	-0.0871
Political constraints	-0.6187*	-0.6887*	-0.5326*	-0.2541*

\* = significant at 10%

period 1=early 1990s

period 2=late 1990s and early 200s



**Table 5.3**  
**Model of indicators of income distribution on institutional measures**  
**Sample of LAC and advanced countries**

	Polarisation DER	Inequality Gini
Rule of Law	-0.020*	-0.046*
Voice and Accountability	-0.027*	-0.067*
Legal structure	-0.009*	-0.021*
Gov't Effectiveness	-0.015*	-0.040*

\* = significant at 10%

Note: OLS estimates controlling for log of per capita GDP (PPP) and dummy for LAC.

**Table 5.4**  
**Indicators of income distribution and institutions**  
**LAC**

	Southern SA	Andean SA	Central America
<i>Distribution</i>			
Polarisation (DER(.5))	0.308	0.301	0.302
Polarisation (DER(.75))	0.282	0.270	0.266
Inequality (Gini)	0.524	0.522	0.532
Poverty (USD 2 a day)	14.2	32.4	34.3
<i>Institutions</i>			
Rule of Law	0.115	-0.612	-0.354
Voice and Accountability	0.438	-0.110	0.238
Legal structure	5.357	3.710	4.482
Gov't Effectiveness	0.200	-0.524	-0.310
Democracy	8.214	7.600	7.167
Political constraints	0.660	0.480	0.445
<i>Other variables</i>			
GDP per capita	8162	4501	4765
Public spending in education (%)	3.5	4.3	4.2
Public spending in health (%)	2.8	1.8	3.6
Ethnic fractionalization	0.3	0.6	0.4
Regional fractionalization	0.4	0.2	0.4

**Table 5.5**  
**Indicators of changes in income distribution and institutions**  
**LAC, between early 1990s and early 2000s**

	Southern SA	Andean SA	Central America
<i>Distribution</i>			
Polarisation (DER(.5))	0.00	0.01	0.00
	0.01	0.02	0.02
Polarisation (DER(.75))	0.00	0.01	0.00
	0.01	0.02	0.02
Inequality (Gini)	0.01	0.02	0.00
	0.03	0.03	0.03
Poverty (USD 2 a day)	-0.4	4.2	-4.9
	8.2	16.0	6.1
<i>Institutions</i>			
Rule of Law	-0.04	-0.34	-0.11
	0.91	0.42	0.18
Voice and Accountability	0.42	-0.04	0.16
	0.57	0.52	0.20
Legal structure	-1.31	-1.91	-0.22
	1.23	1.60	1.75
Gov't Effectiveness	0.05	-0.40	0.13
	0.84	0.41	0.26
Democracy	0.40	0.00	1.83
	0.55	4.64	3.13
Political constraints	-0.07	-0.04	0.04
	0.12	0.31	0.21

**Table 5.6**  
**Correlations between indicators of income distribution and institutions**  
**Sample of LAC countries**

Polarisation (DER 0.5)				
	Correlations			controlling for GDP pc
	pooled	period 1	period 2	
Rule of Law	-0.5457*	-0.6011*	-0.4523*	-0.4176*
Voice and Accountability	-0.4180*	-0.4317*	-0.3966*	-0.2802*
Legal structure	-0.2688	-0.161	-0.3336	-0.106
Gov't Effectiveness	-0.4704*	-0.5236*	-0.3946	-0.2941*
Democracy	-0.2058	-0.2019	-0.2291	-0.1648
Political constraints	-0.0393	0.0522	-0.114	-0.089
Inequality (Gini)				
	Correlations			controlling for GDP pc
	pooled	period 1	period 2	
Rule of Law	-0.6272*	-0.6467*	-0.5831*	-0.4289*
Voice and Accountability	-0.5136*	-0.5032*	-0.5267*	-0.3303*
Legal structure	-0.3454*	-0.2393	-0.4468*	-0.1128
Gov't Effectiveness	-0.6044*	-0.6702*	-0.5218*	-0.3531*
Democracy	-0.2772	-0.2623	-0.3264	-0.2358
Political constraints	-0.1476	-0.1215	-0.1385	0.025
Poverty (headcount ratio)				
	Correlations			controlling for GDP pc
	pooled	period 1	period 2	
Rule of Law	-0.6802*	-0.7298*	-0.7071*	-0.3916*
Voice and Accountability	-0.5230*	-0.4888*	-0.5679*	-0.2532*
Legal structure	-0.4992*	-0.5127*	-0.5562*	-0.1814
Gov't Effectiveness	-0.6858*	-0.7065*	-0.6967*	-0.2882
Democracy	-0.3869*	-0.1622	-0.6911*	-0.4336*
Political constraints	-0.3850*	-0.4429*	-0.319	-0.2144

\* = significant at 10%

**Table 5.7**  
**Correlations between changes in indicators of income distribution and institutions**  
**Sample of LAC countries**

Polarisation (DER 0.5)		
	Unconditional	controlling for GDP growth
Rule of Law	0.020	0.141
Voice and Accountability	-0.271	-0.251
Legal structure	0.074	0.146
Gov't Effectiveness	0.039	0.214
Democracy	-0.233	-0.224
Political constraints	-0.019	0.000
Inequality (Gini)		
	Unconditional	controlling for GDP growth
Rule of Law	-0.195	-0.159
Voice and Accountability	-0.404	-0.400
Legal structure	-0.050	0.009
Gov't Effectiveness	-0.231	-0.230
Democracy	-0.397	-0.389
Political constraints	-0.297	-0.283
Poverty (headcount ratio)		
	Unconditional	controlling for GDP growth
Rule of Law	-0.5506*	-0.372
Voice and Accountability	-0.407	-0.240
Legal structure	-0.465	-0.318
Gov't Effectiveness	-0.5302*	-0.325
Democracy	-0.265	-0.244
Political constraints	-0.6777*	-0.6807*

**Table 5.8**  
**Model of indicators of income distribution on institutional measures**  
**Sample of LAC countries**

	Cross-section			Panel		
	Polarisation DER	Inequality Gini	Poverty Headcount	Polarisation DER	Inequality Gini	Poverty Headcount
Rule of Law	-0.019*	-0.036*	-11.2*	-0.008	-0.027	-9.5*
Voice and Accountability	-0.024*	-0.044*	-9.2*	-0.006	-0.029*	-10.7*
Legal structure	-0.007	-0.012	-3.6*	-0.001	-0.003	-1.8*
Gov't Effectiveness	-0.019	-0.035	-8.98	-0.001	-0.020	-9.4
Democracy	-0.001	-0.002	-2.7*	-0.001	-0.003*	-0.4
Political constraints	0.015	0.015	-8.3	-0.006	-0.020	-17.3

\* = significant at 10%

**Table 6.1**  
**Indicators of control of conflict and corruption**  
**LAC and advanced countries**  
 Late 1990s

	Advanced	LAC	Diff.
General Conflict (PSAVI)	0.8690	-0.1192	0.988*
Control of Corruption (CCI)	1.2562	-0.3425	1.598*

**Table 6.2**  
**Correlations between indicators of income distribution and conflict and corruption**  
**Sample of LAC and advanced countries**  
**Late 1990s**  
 DER 0.5

	Correlations			controlling for GDP pc
	pooled	period 1	period 2	
General Conflict	-0.6663*	-0.7621*	-0.1873	-0.291*
Control of Corruption	-0.7563*	-0.7734*	-0.0473	-0.2737*

\* = significant at 10%.

Gini

	Correlations			controlling for GDP pc
	pooled	period 1	period 2	
General Conflict	-0.6757*	-0.7782*	-0.2077	-0.2935*
Control of Corruption	-0.7836*	-0.7941*	-0.1124	-0.3146*

\* = significant at 10%.

period 1 = early 1990s

period 2 = late 1990s and early 2000s

**Table 6.3**  
**Model of indicators of income distribution on conflict and corruption measures**  
 Sample of LAC and advanced countries

**Conflict and Corruption**

	General Conflict PSAVI	Control of Corruption CCI
Polarisation (DER)	-11.85*	-4.480
Inequality (Gini)	-5.791*	-2.646

Note: OLS estimates controlling for log of per capita GDP (PPP) and dummy for LAC.

**Table 6.4**  
**Indicators of conflict and corruption**  
LAC

	Southern SA	Andean SA	Central America
General Conflict (PSAVI)	0.214	-0.739	0.089
Labor Conflict (LS)	11.1	20.4	18.1
Control of Corruption (CCI)	0.136	-0.588	-0.485

**Table 6.5**  
**Indicators of changes in the conflict and corruption measures**  
LAC, between early 1990s and early 2000s

	Southern SA	Andean SA	Central America
General Conflict (PSAVI)	0.05	-0.26	0.35
Labor Conflict (LS)	7.64	-4.01	0.83
Control of Corruption (CCI)	0.25	0.12	-0.09
	0.91	1.05	0.42

**Table 6.6**  
**Correlations between indicators of income distribution and conflict and corruption**  
Sample of LAC countries

<b>Polarisation (DER 0.5)</b>				
	Correlations			controlling for GDP pc
	pooled	period 1	period 2	
General Conflict (PSAVI)	-0.4486*	-0.4859*	-0.4120*	-0.4346*
Labor Conflict (LS)	0.3313*	0.1525	0.6848*	0.2155
Control of Corruption (CCI)	-0.1799	-0.0687	-0.2768	-0.0465
<b>Inequality (Gini)</b>				
	Correlations			controlling for GDP pc
	pooled	period 1	period 2	
General Conflict (PSAVI)	-0.4522*	-0.4417*	-0.4710*	-0.4097*
Labor Conflict (LS)	0.4190*	0.2559	0.7682*	0.2536
Control of Corruption (CCI)	-0.2977*	-0.1892	-0.4273*	-0.0757
<b>Poverty (headcount ratio)</b>				
	Correlations			controlling for GDP pc
	pooled	period 1	period 2	
General Conflict (PSAVI)	-0.5123*	-0.5313*	-0.5023*	-0.2747*
Labor Conflict (LS)	0.4211*	0.4318*	0.6251*	0.0949
Control of Corruption (CCI)	-0.4766*	-0.4191*	-0.5351*	-0.1593

**Table 6.7**  
**Correlations between changes in indicators of income distribution and conflict and corruption**  
**Sample of LAC countries**

<b>Polarisation (DER 0.5)</b>		
	Unconditional	controlling for GDP growth
General Conflict (PSAVI)	-0.1619	-0.1219
Labor Conflict (LS)	-0.2986	-0.28
Control of Corruption (CCI)	0.4011	0.567*
<b>Inequality (Gini)</b>		
	Unconditional	controlling for GDP growth
General Conflict (PSAVI)	-0.4296*	-0.4478*
Labor Conflict (LS)	-0.3422	-0.3233
Control of Corruption (CCI)	0.2974	0.4474*
<b>Poverty (headcount ratio)</b>		
	Unconditional	controlling for GDP growth
General Conflict (PSAVI)	-0.7269*	-0.6428*
Labor Conflict (LS)	-0.4141	-0.3153
Control of Corruption (CCI)	-0.0953	0.2145

**Table 6.8**  
**Model of indicators of income distribution on conflict and corruption measures**  
**Sample of LAC countries**

	PSAVI	LS	CCI
Polarisation (DER)	-14.498*	-29.2583	5.8861
Inequality (Gini)	-8.7571*	6.3265	0.9199
Poverty (Headcount)	-0.0157*	0.0194	-0.0053

**Table 6.9**  
**Correlations between indicators of conflict and corruption and institutional measures**  
**Sample of LAC countries**

	General Conflict	Control of Corruption	Labor Conflict
<i>Institutions</i>			
Rule of Law	0.6875*	0.5787*	-0.2546
Voice and Accountability	0.7843*	0.2889*	-0.3208*
Legal Structure	0.5757*	0.5162*	-0.467*
Gov't Effectiveness	0.4979*	0.7385*	-0.1147
Democracy	0.4018*	0.1097	-0.1692
Political Constrains	0.3232*	0.0453	-0.3353*

\* Significant at 10%

**Table 6.10**  
**Model of indicators of conflict and corruption on income distribution and institutional measures**

	General Conflict PSAVI									
<i>Distribution</i>										
Polarisation (DER)	-12.926*	-11.854*	-14.614*	-13.270*	-13.820*					
Inequality (Gini)						-7.3356*	-6.8553*	-8.1770*	-8.1127*	-8.2423*
Poverty (Headcount)										-0.008 -0.007 -0.012 -0.01 -0.014
<i>Institutions</i>										
Voice and Accountability	0.4751*					0.3333*				0.4604*
Rule of Law		0.5981*					0.5074*			0.6249*
Gov't Effectiveness			0.3668*				0.1878			0.2441
Political constraints				0.5461*				0.5034*		0.4938
Democracy					0.0567*			0.0483		0.0577
	Labour Conflict LS									
<i>Distribution</i>										
Polarisation (DER)	20.57686	14.43729	10.58299	-34.53754	-26.77927					
Inequality (Gini)						7.316207	2.453393	1.4267	3.4973	9.6958
Poverty (Headcount)										-0.105 -0.145 -0.083 -0.013 0.0228
<i>Institutions</i>										
Voice and Accountability	-4.643498					-4.56102				-5.546
Rule of Law		-7.6322*					-7.6424*			-8.7726*
Gov't Effectiveness			-5.050688				-5.082			-5.693
Political constraints				-2.864039				-2.511		-2.806
Democracy					0.0951271			0.1419		0.1188
	Control of Corruption CCI									
<i>Distribution</i>										
Polarisation (DER)	6.644173	8.3341*	5.729763	4.61	5.854048	5.523862				
Inequality (Gini)							1.983604	3.055195	2.6274	0.8606 0.5765
Poverty (Headcount)										-0.003 0.0016 0.0023 -0.007 -0.006
<i>Institutions</i>										
Voice and Accountability	0.2290699						0.249431			0.1629
Rule of Law		0.5537*						0.5697*		0.5029*
Gov't Effectiveness			0.4947*					0.5528*		0.5190*
Political constraints				-0.014259				-0.046		-0.18
Democracy					-0.030343			-0.032		-0.036



**Table B.1**  
**Indicators of trust and other values**  
**World Sample**  
Late 1990s

	LAC	Rest_world	Diff.	LAC	Advanced	Diff.
People can be trusted	0.17	0.30	0.13*	0.17	0.37	0.2*
Democracy is the best form of government	0.48	0.39	-0.09	0.48	0.47	-0.01
Country is run by a few big interests	0.70	0.67	-0.03	0.70	0.57	-0.13
Revolutionary actions are needed	0.09	0.11	0.02	0.09	0.05	-0.04*
Inequality (Gini)	51.6	35.2	-16.4*	51.6	32.1	-19.5*

**Table B.2**  
**Correlations between indicators of values and income inequality (Gini)**  
World Sample

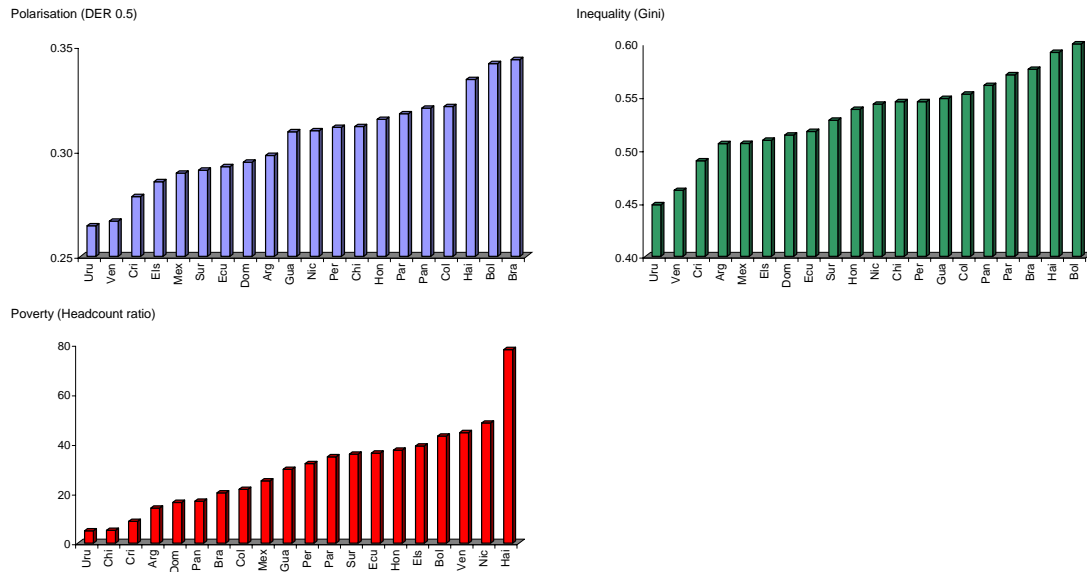
	simple	controlling for GDP pc	controlling for share of unskilled
People can be trusted	-0.3959*	-0.2634*	-0.3973*
Democracy is the best form of government	-0.1552	-0.0194	-0.1357
Country is run by a few big interests	0.1034	0.0209	0.1496
Revolutionary actions are needed	0.3296*	0.1581	0.3405*

\* = significant at 10%.

**Table B.3**  
**Model of indicators of value measures on income inequality (Gini)**  
World Sample

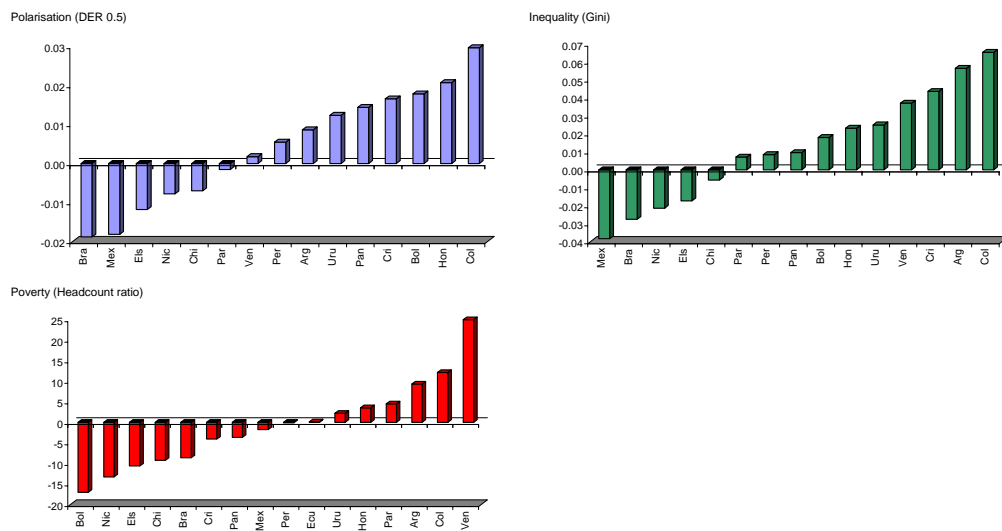
	Gini	GDP	LAC
People can be trusted	-0.002	0.040*	-0.093
Democracy is the best form of government	-0.005*	0.012	0.158*
Country is run by a few big interests	-0.001	-0.036	0.081
Revolutionary actions are needed	0.002*	-0.032*	-0.037

**Figure 3.1**  
**Polarisation, inequality and poverty in LAC**  
**Last survey available (early 2000s)**



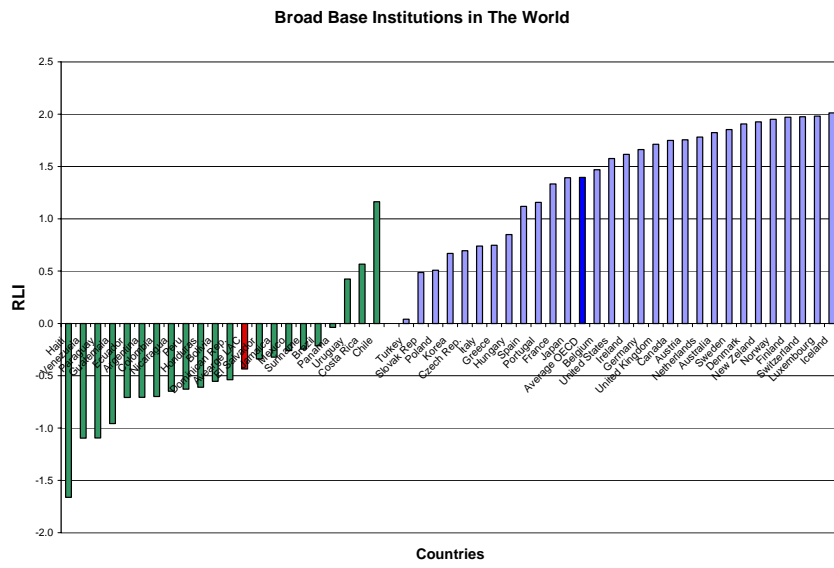
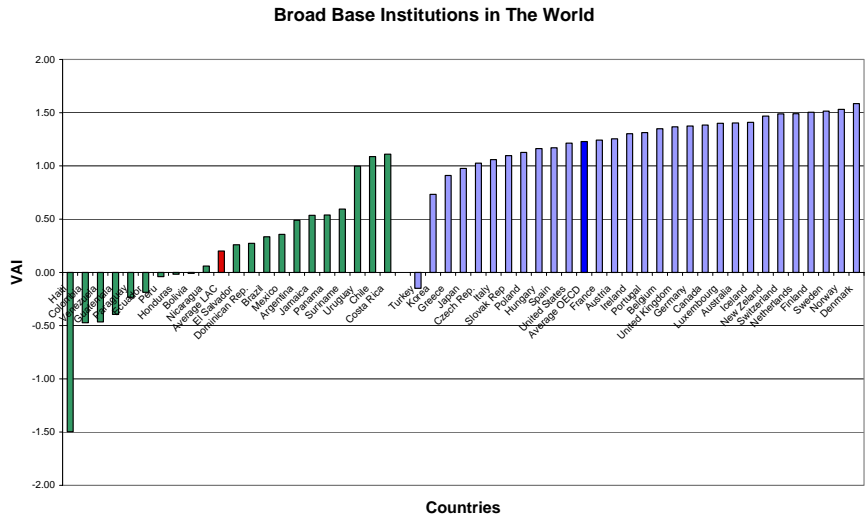
Source: own calculations.

**Figure 3.2**  
**Changes in polarisation, inequality and poverty in LAC**  
**Between early/mid 1990s to early 2000s**

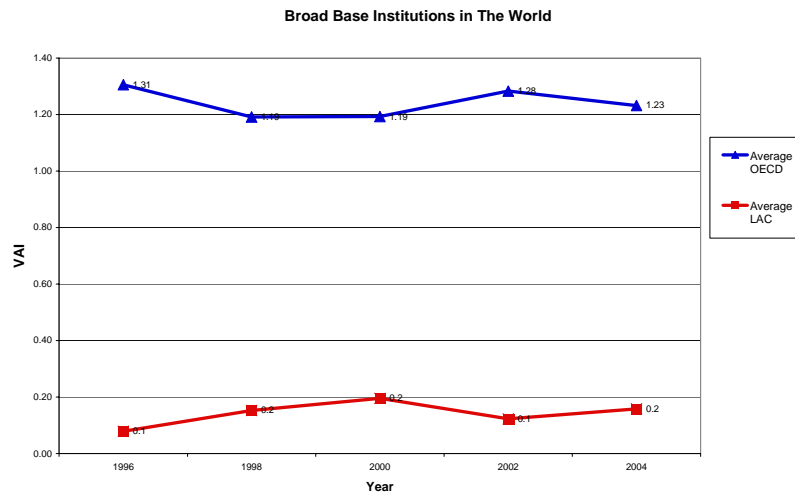


Source: own calculations.

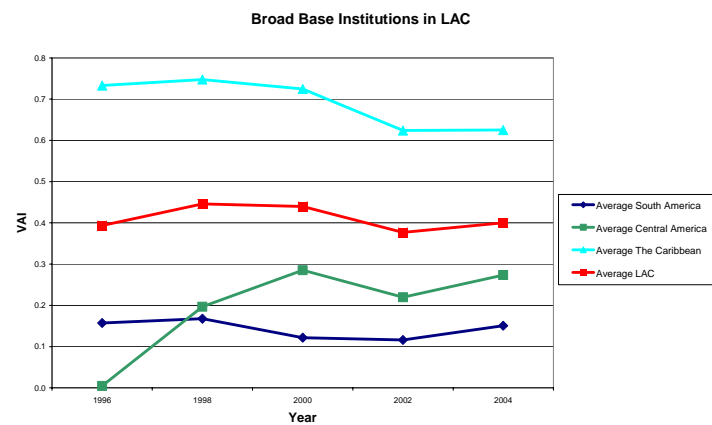
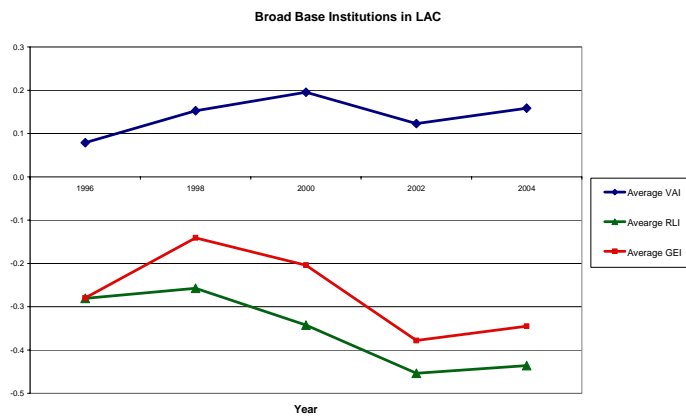
**Figure 4.1**  
**Broad Base Institutions: The Voice Accountability Index and The Rule of Law Index**  
 OECD and LAC countries



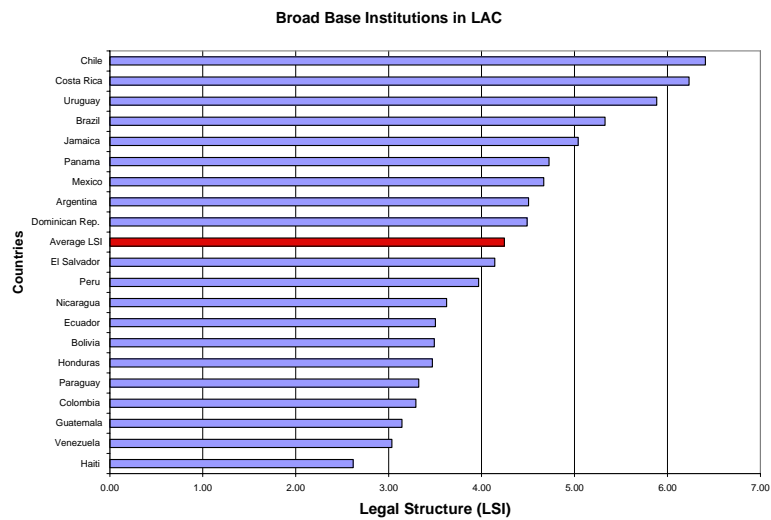
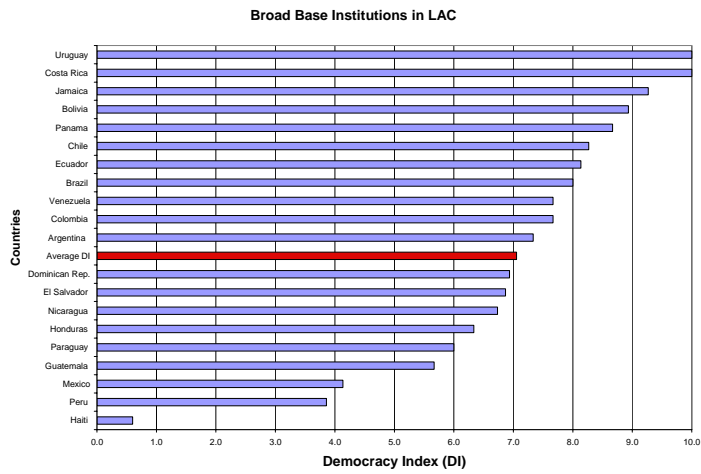
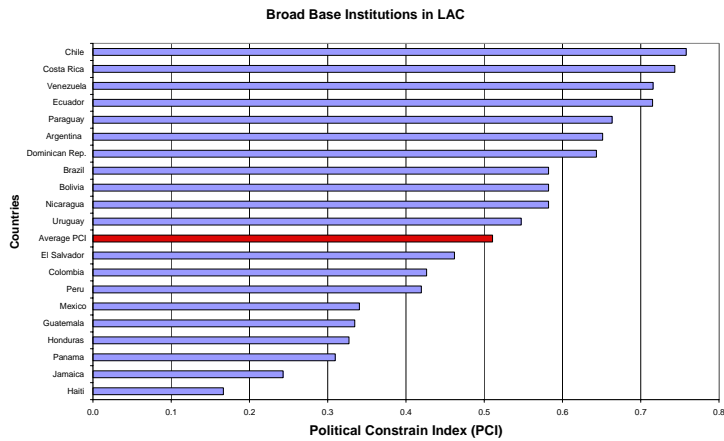
**Figure 4.2**  
**Broad Base Institutions: The Voice Accountability Index Through Time**  
 OECD and LAC countries



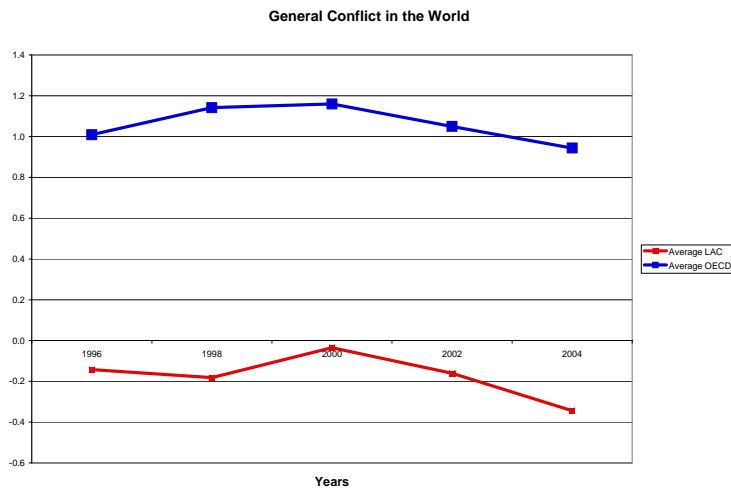
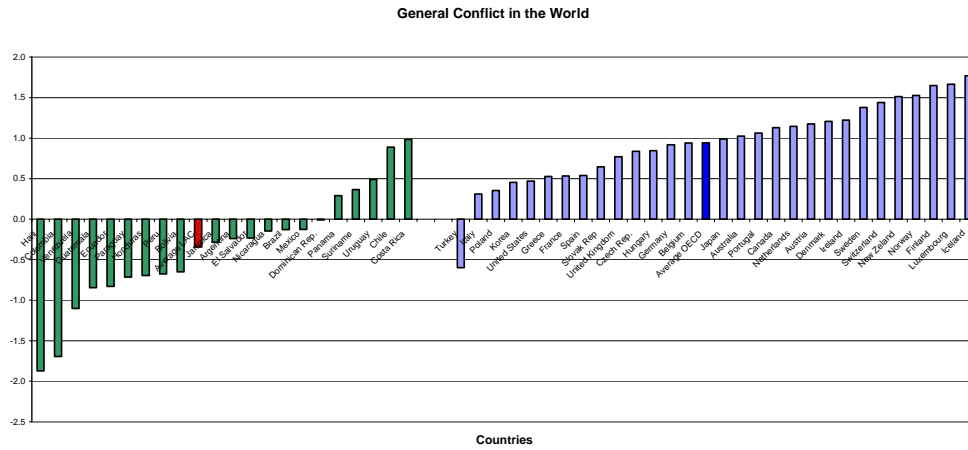
**Figure 4.3**  
**Selected Broad Base Institutions**  
 LAC countries



**Figure 4.4**  
**Broad-based institutions indices**

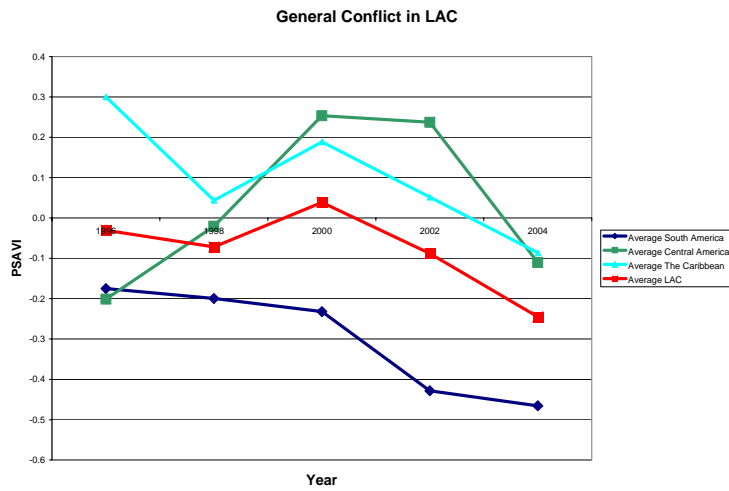


**Figure 4.5**  
**General Conflict: The Political Stability And Absence of Violence Index**  
 OECD and LAC countries



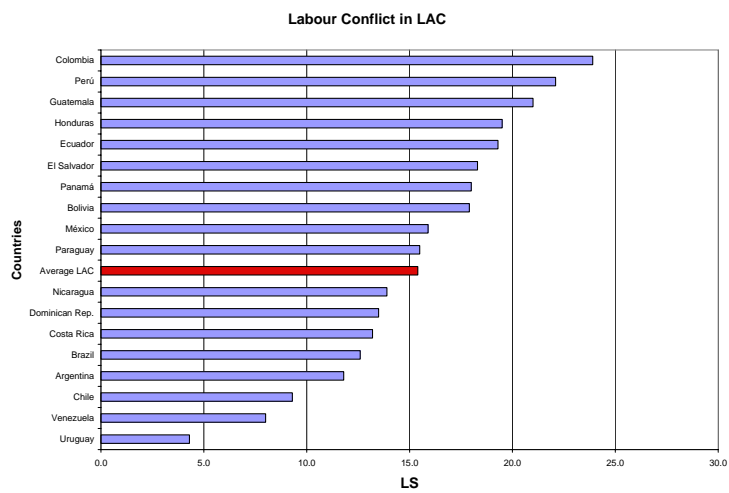
**Figure 4.6**

**Selected Indicators of Conflict and Corruption**  
LAC countries



**Figure 4.7**

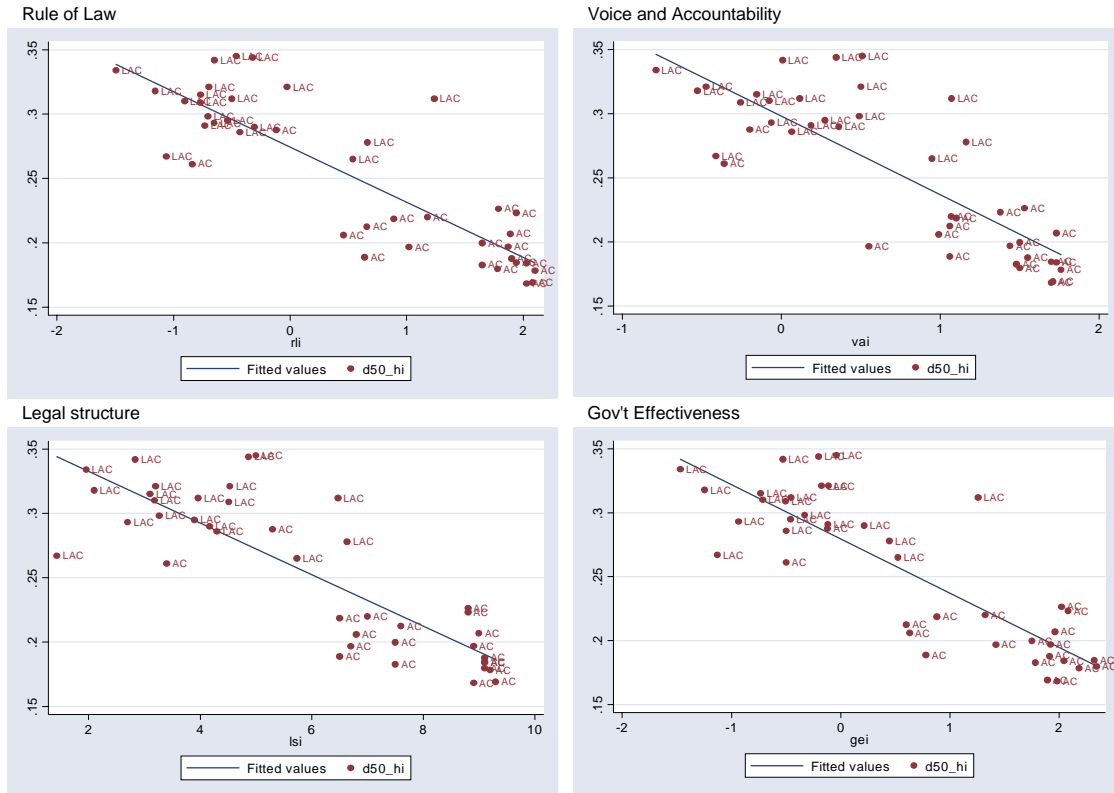
**The labour conflict index**





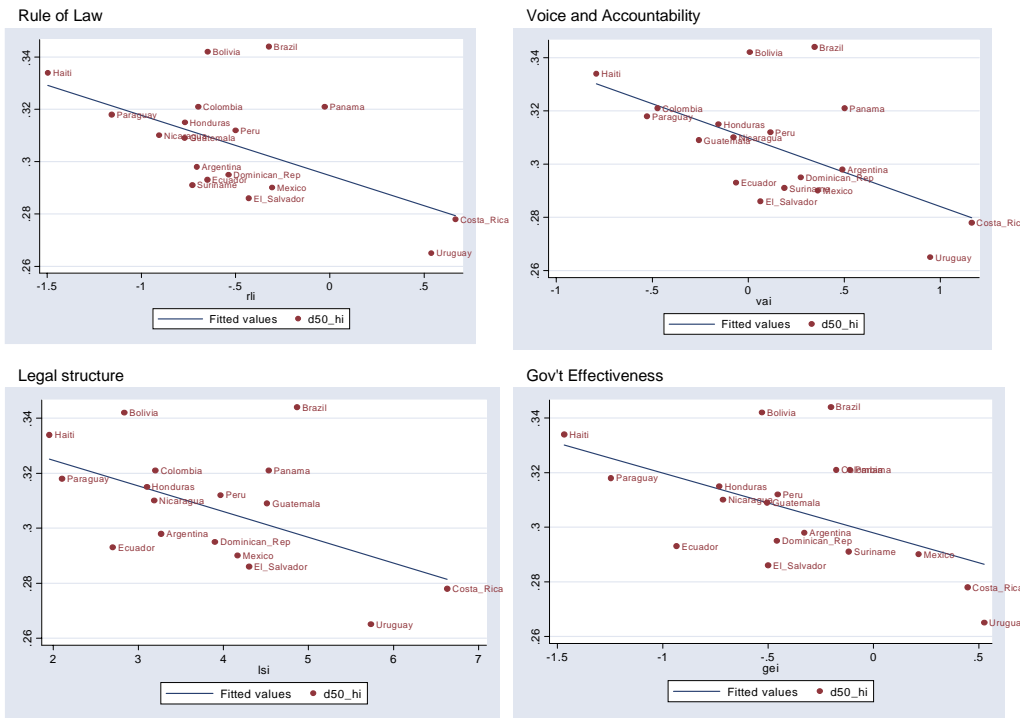


**Figure 5.1**  
**DER index of polarisation and broad-based institution indices**  
**LAC and advanced countries**



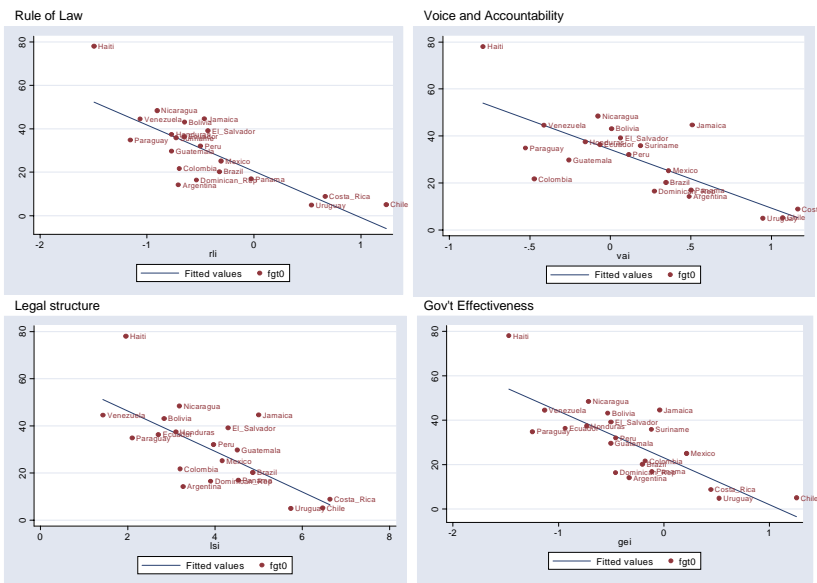
Source: own calculations.

**Figure 5.2**  
**DER index of polarisation and broad-based institution indices**  
**LAC countries**



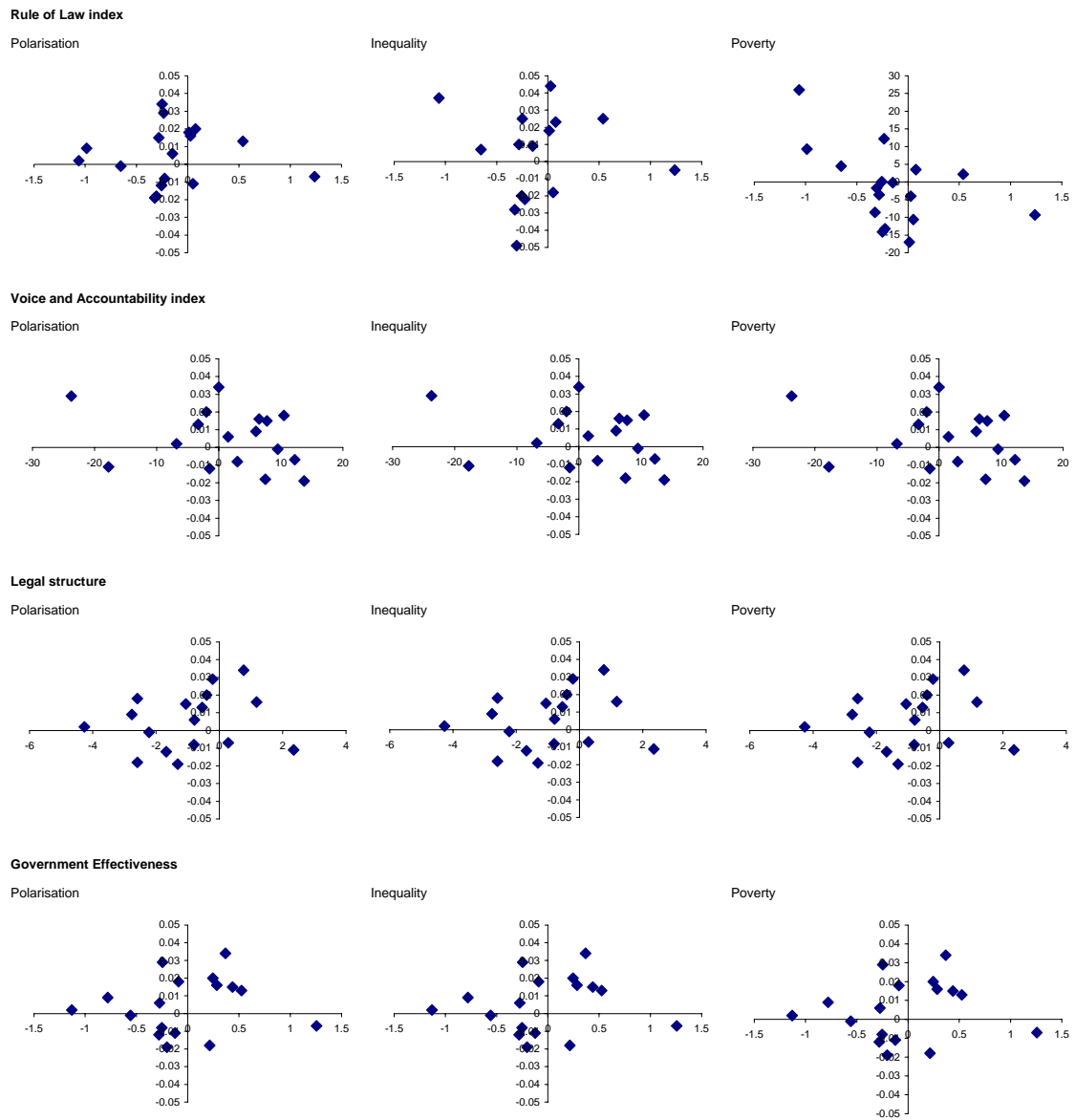
Source: own calculations.

**Figure 5.3**  
**Poverty headcount ratio and broad-based institution indices**  
**LAC countries**



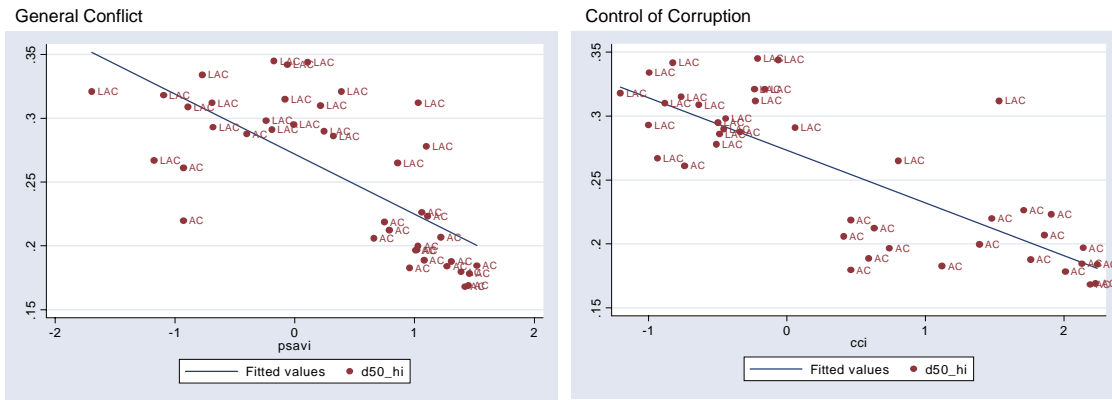
Source: own calculations.

**Figure 5.4**  
**Measures of changes in income distribution and changes in broad-based institution indices**  
**LAC countries**



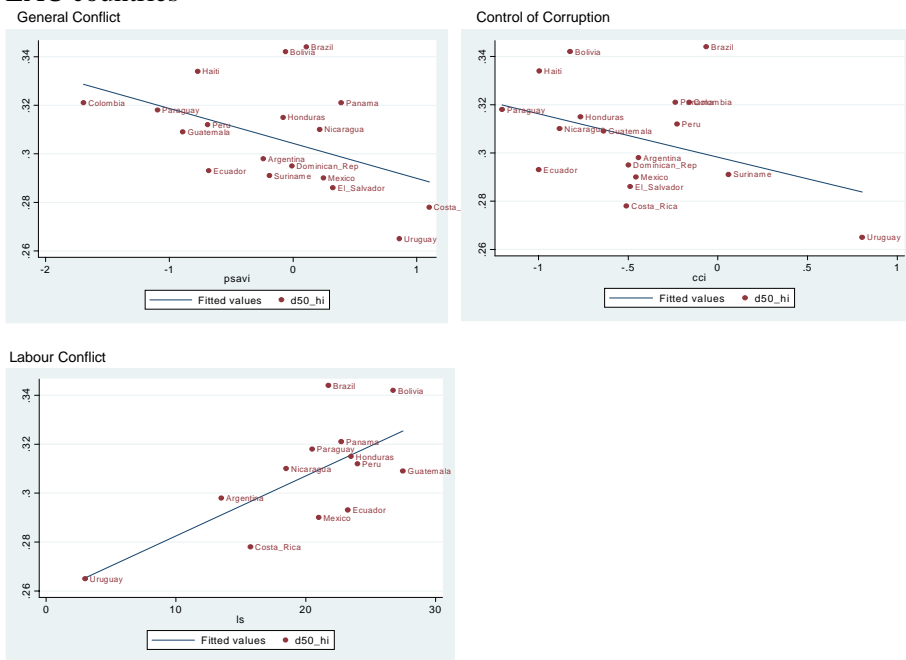
Source: own calculations.

**Figure 6.1**  
**DER index of polarisation and general conflict and control of corruption indices**  
**LAC and advanced countries**



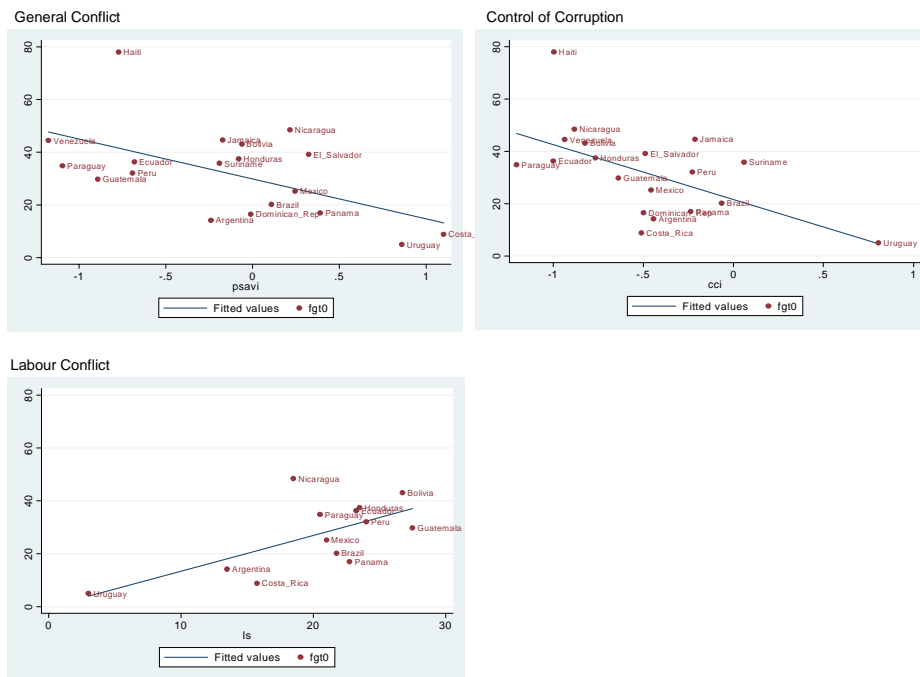
Source: own calculations.

**Figure 6.2**  
**DER index of polarisation and conflict and control of corruption indices**  
**LAC countries**



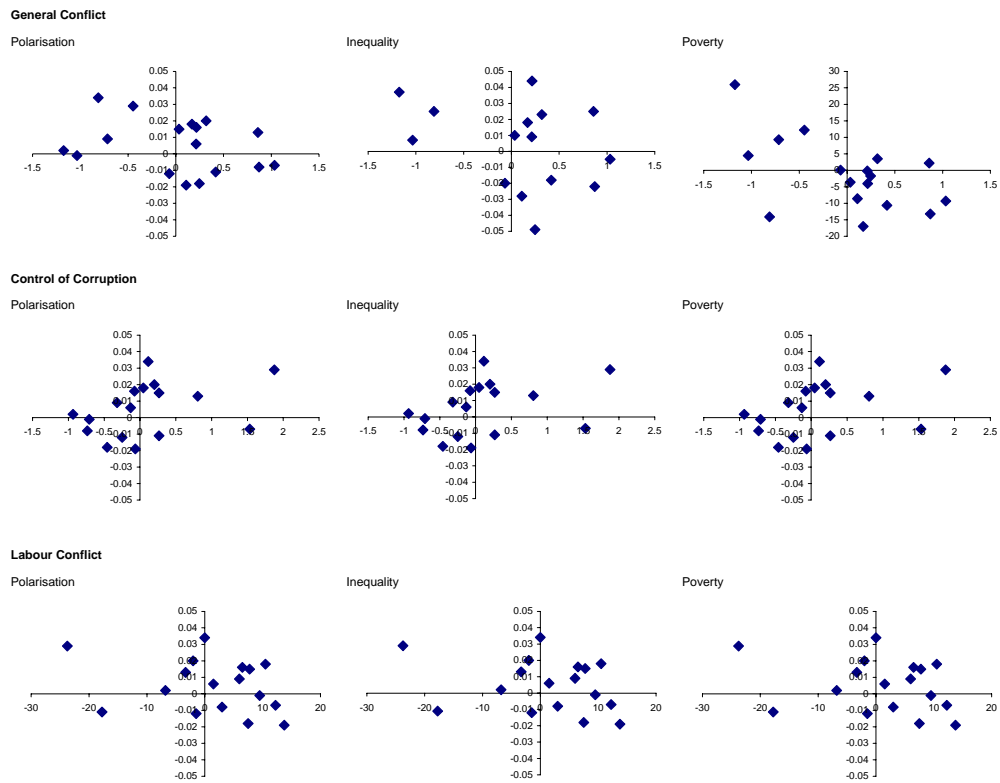
Source: own calculations.

**Figure 6.3**  
**Poverty headcount ratio and conflict and control of corruption indices**  
**LAC countries**



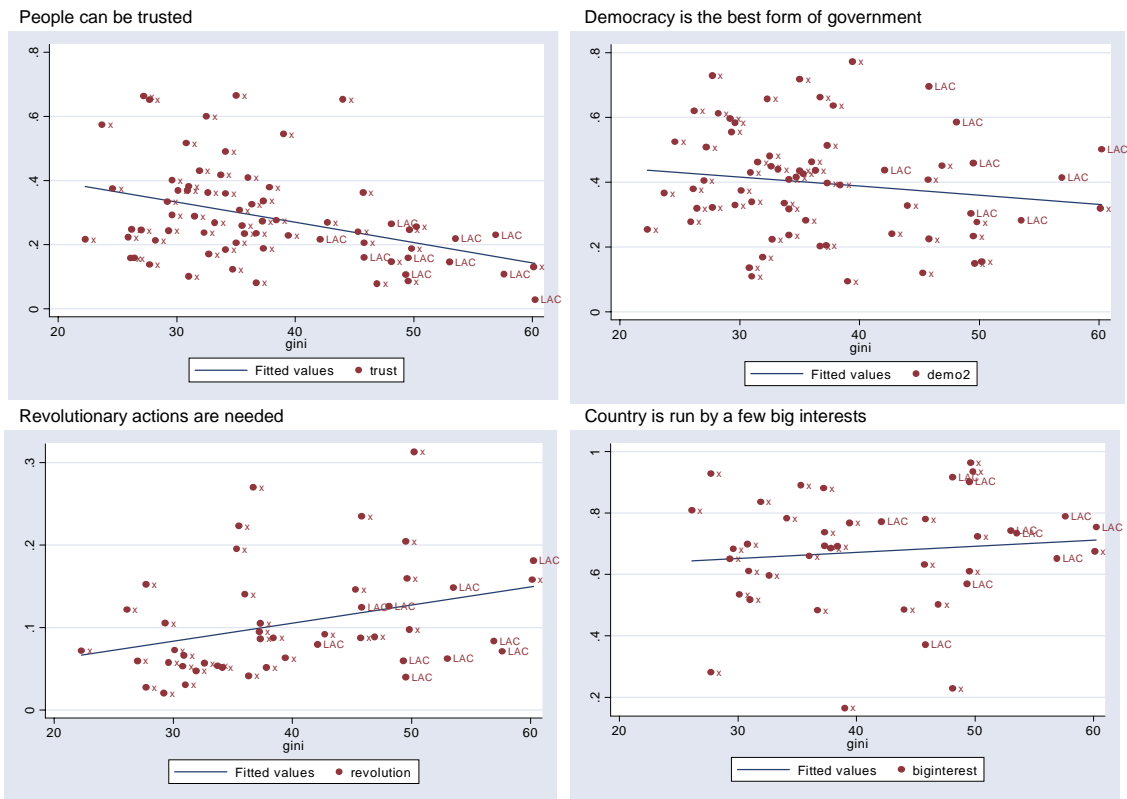
Source: own calculations.

**Figure 6.4**  
**Measures of changes in conflict and control of corruption indices**  
**LAC countries**



Source: own calculations.

**Figure B.1**  
**Income inequality (Gini) and values**  
**World Sample**



Source: own calculations based on World Values Survey.

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