Income Inequality, Poverty, and the Rule of Law: Latin America vs the Rest of the World1

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Abstract

This paper investigates the relationship between the rule of law and income inequality and poverty in twenty Latin American countries using an unbalanced panel over the period 1995 - 2014. These results are then compared to estimates for non-Latin American counties. Using feasible GLS panel methods, we find that in many cases, improvements to legal systems reduce inequality and poverty in Latin America while having the opposite effect in the rest of the world. Results are robust to different definitions of inequality and rule of law. Protection of property rights is the most significant rule of law indicator for Latin America economies.

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Introduction

What role does the rule of law play in income inequality and poverty? There is no *ex ante* reason that a well designed legal systems should function as a re-distributive entity. However, a country's rule of law also accompanies other institutions which play a larger role in flattening the playing field for its' citizens. For example, we might expect that imbuing an economy with protection of property rights, in this case labor, would yield better outcomes for utility maximizing workers. Alternatively, reducing corruption, or bribery, will lessen opportunities for rent seeking members of higher income quintiles while protecting lower income workers from dishonest employers. Or some combination of the two.

To date, the majority of empirical income inequality literature is concentrated on five major categories: growth, human capital (i.e. education and health), government policy, institutions, and investment. The effects of institutions on income inequality, Alesina and Perotti (1996) confirm that reduced equality fuels social discontent which destabilizes the political structure making investment more uncertain potentially undermining future growth. On the other hand, Barro (2000) is unable to corroborate this result, but does find evidence supporting the Kuznets curve. In their examination of corruption and inequality and poverty, Gupta, Davoodi, and Alonso-Terme (2002) demonstrate that rising levels of corruption, and their channels, exacerbate inequality and poverty. Later, Esfahania and Ramírez (2003) find that institutions in concert with better infrastructure can lead to lower income inequality.

The OECD (2014) confirms the rise of inequality among OECD countries, with the Gini coefficient rising three points over the past two decades. Furthermore, the OECD argues that this increase in inequality has led to a 0.35% decline in annual growth rates for the past 25 years. Adding to the ambivalence, Anand and Segal (2008) establish there is no conclusive evidence as to which direction inequality is heading. In Latin America much of the research on income inequality and poverty in Latin America has focused on the historical and colonial past of the countries in the region and how economic growth has effected distribution and poverty. Berry (1997) provides a nice overview of the causes of high equality in Latin America through 1995 – including: agricultural reforms, liberalization of trade policies, educational deficiencies, and market reforms, some imposed by austerity programs and others home-grown.

Another canonical response is that rising development leads first to a worsening of inequality before it gradually declines, known as the Kuznets' "inverted-U" hypothesis (Kuznets, 1955). In a similar vein, de Janvry and Sadoulet (2000) pay special attention to this in their investigation of growth and inequality in twelve Latin American countries. They add a twist to their investigation by considering the asymmetric impacts of income growth on inequality during recessionary and expansionary periods. Whereas the Kuznets' hypothesis can be considered a "long run" relationship, de Janvry and Sadoulet (2000) consider the impacts of short run fluctuations on inequality and poverty. They find that recessions lead to rising inequality and that offsets any gains during expansions. Moreover, they also show that inequality gains or losses are contingent upon what "stage" of development a country is in, corroborating the Kuznets' hypothesis.

As an alternative, much of the literature on income inequality in Latin America has concentrated on historical colonial ties, Leamer, Maul, Rodriguez, and Schott (1999) focus on the relative abundance of

natural resources in the region as a potential culprit. They compare Latin America with Asian countries, which are relatively less endowed with resources, and find that access to greater resources does lead to higher inequality. At first blush, this appears to be somewhat independent of the historical or institutional perspective. However, as Acemoglu, Johnson, and Robinson (2001) show, this is, in part, due to the nature of historical ties. Using a novel IV approach, they demonstrate that the type of institutions was a function of European mortality rates. When rates were relatively high, colonizers sought out resource rich regions and established institutions to exploit those resources, this created separate classes of both colonizers and indigenous populations, Robinson and Sokoloff (2004).

In this paper, I investigate the role the rule of law plays in influencing inequality and poverty across Latin America and the rest of the world. Using an unbalanced panel roughly 147 countries over the period 1995 – 2014 with feasible GLS this paper concludes that the protection of property rights leads to a reduction of both inequality and the poverty gap in Latin America, whereas the opposite is true in the rest of the world. An additional conclusion is impartial courts have no impact on inequality in Latin America while in the rest of the world it leads to an increase in inequality.

The remainder of the paper is structured as follows: Section 1 provides a brief overview of the extant literature on the effects of legal systems on economic outcomes; Section 2 outlines the empirical FGLS panel model strategy, 3 reviews the and presents the descriptive statistics of the data used; results are presented in Section 4. Finally 4.2 provides some brief summary remarks.

1 Background

The literature on economic growth and institutions and/or the rule of law is far deeper than the effects of legal systems and income inequality and poverty. Rather, for many studies the examined causal relationship is of the form $\Delta y_t = f(g_t|x_t)$, where y is the log of real GDP, g is a measure of inequality, and x represents a vector control variables. But the results remain inconclusive. In his review of the literature to date Bénabou (1996) concludes that inequality leads to lower growth. Deininger and Squire (1998) find that there is a negative relationship between initial inequality and output growth. Moreover, they demonstrate that inequality has an asymmetric effect on the bottom and top 20% income quintiles, with growth benefiting the rich and hurting the poor.

Tests of the Kuznets' hypothesis are similarly uncertain. Kuznets' models essentially "flip" the growth regression so we have $g_t = h(q(\Delta y_t)|x_t)$ where $q(.)$ is a nonlinear, e.g. quadratic, function. In addition to investigating the effects of inequality on growth Barro (2000) also estimates the Kuznets' curve. He is able to find weak evidence for an inverted-U, but finds that the majority of inequality is better explained by other variables: such rule of law, education, democracy, and trade openness. On the other hand, Forbes (2000), using dynamic panel GMM analysis and more recent data, shows inequality leads to better economic outcomes. Splitting the difference, Bénabou (1996), concludes that the effects of inequality on growth are ambiguous: "...our data has little to say ...we are at the beginning of an enormous enterprise." They also warn that results can be sensitive to econometric techniques and data manipulation.

1.1 The Rule of Law and Economic Growth

I use the same breakdown of the same four theoretical avenues that the rule of law can follow to improve economic performance, succinctly and nicely summarized, as in Haggard and Tiede (2011), here we will only provide a brief overview, interested readers are recommended to refer to Haggard and Tiede (2011) for further details and references. Later I will tie together each of these theoretical paths to the legal variables chosen.

1. **Security of the Populace:** The rule of law should be primarily focused on the security of agents as well as property. For contract theorists this the overarching goal of legal systems, because other objectives, such as the ones discussed below, are irrelevant if an economy lacks security. What is the point of the protection of property rights if the rights are not secured? As an example, consider Enamoradoa, López-Calva, and Rodríguez-Castelán (2014) who use municipality level data to show that drug-related homicides, a proxy for violent crime, are a drag on economic growth. They also show that non-drug related homicides have no effect on growth. Similarly, Ayers (1998) demonstrates the negative relationship between violence in Latin America on overall economic development. More recently, we can see the very real effects of violence in Central America, (e.g. Sacchetti, 2018). The cycle of violence can be very difficult to shrug off and concurrently may require a complete overhaul of the legal institutional structure: constructing a credible police force and legal and penal systems, see Samuels (2006).
2. **Check on Government:** Of the four type of rule of law, this is more political and legal-centric. In this framework, the legal system as a counterbalance to political power and discretion. From an economic perspective, an impartial and/or independent judicial system is viewed as integral to reducing the time-inconsistency problem which states that governments can and will renege on contractional agreements (see Kydland and Prescott, 1977).
3. **Protection of Property Rights:** Property rights are well understood in growth economics. First, as argued by North and Thomas (1973) and North (1989) well developed institutions contribute to economic growth via incentives, property rights, and the reduction of transaction costs. North (1989) further developed a theory of the impacts of institutional change on economic growth. Acemmoglu, Johnson, and Robinson (2005) corroborate the findings of North (1981, 1989) and North and Thomas (1973) in that the protection of property rights and the allocation of resources are necessary for economic growth. Later Acemoglu et al. (2001), Acemmoglu et al. (2005), and Acemoglu and Johnson (2005) further enhance the empirical link between well defined property rights and economic performance. On the importance of institutions on warrants considering them in the context of income inequality, see Bennett and Vedder (2013).
4. **Corruption:** An implicit assumption well operating legal system is that challenges to integrity arise from "external" malevolent players. However, if the challenges arise from the state itself in the form of corruption, bribery, and or rent-seeking, the legal system itself might be captured by internal players. With respect to the rule of law, the first issue is that such a situation reduces individuals trust in the legal system to objectively solve disputes. Secondly, rent-seeking potentially diverts resources away from productive use reducing output and incomes of those without access to rent seeking, see

Murphy, Shleifer, and Vishny (1991). And third, corruption and bribery lead to market distortions that undermine long run economic performance and inequality, for example, monopoly and monopsony power, misallocation of government spending and transfers, e.g. "corporate socialism", and protectionism.

It is important noting that none of these variants are mutually exclusive. Later we apply an rule of law interaction variable to estimate the optimal "mix" of legal innovations that yield the best results for reducing inequality and poverty.

2 Empirical Model, Data, and Results

We begin our discussion by specifying a standard random effects panel model given by:

$$g_{it} = \alpha + \beta LS_{it} + \theta LA_i + z'_{it}\gamma + \lambda_t + \mu_i + \epsilon_{it}, \tag{1}$$

where g represents the measure of income inequality or poverty; LS is the legal system variable, LA is a Latin American dummy variable, z is a vector of controls, μ_i is a country specific random effect and ϵ is an *i.i.d.* error term. λ_t is a time fixed effect. The list of controls includes: two human capital variables, the literacy rate and life expectancy at birth, real per capita GDP, in local currency units, and to measure the structure of the economy I use government consumption, fixed private investment, and value added of manufacturing, all as a percent of GDP, and the percentage of population that lives in rural area. Given that changes in inequality and poverty are relatively invariant to time, this is a "decadal" fixed effect. Details of the data are in Section 3 below.

Of most interest to us is the sign and significance of estimated coefficient for the legal variable, $\hat{\beta}$. *Ex ante* we have no preconceived notions of what impact improvements to the legal system will have on inequality and poverty. Clearly arguments could be made on both sides. If the judicial system exists within more democratic society, courts may be more willing to answer to the citizenry and be less beholden to political power, thus reducing inequality. On the other hand, a better and more independent judicial system may feel less inclined to side in favor of redistribution, worsening inequality.

Indeed, is there any reason for the legal system to intervene on behalf of income inequality? Dimick (2016) argues that rather than simply using tax policy for redistribution, a more efficient means is to use a mix of legal rules and taxes. Similarly, Liscow (2014), using a Coasian framework, contends that tweaking legal systems based on factors other than income can efficiently reduce inequality, given the right conditions. Moreover, though some laws *may* reduce inequality, perhaps they are better viewed as a positive externality.

In this general specification of the model, we assume standard strict exogeneity of the individual effect, given by μ, and the error term, ϵ – defining $X = (LS, z)'$, we have the following conditions: $E(\epsilon_{it}|X) = E(\mu_i|X) = 0, E(\epsilon_{it}^2|X) = \sigma_\epsilon^2$ and $E(\mu_{it}^2|X) = \sigma_\mu^2$. But more to importantly to our discussion, the off-diagonal elements of the covariance matrix are zero: $E(\mu_i|X) = 0, \forall i, j,$ and $t, E(\epsilon_{it}\epsilon_{js}) = 0$ if $t \neq s$ or $i \neq j,$ and $E(\mu_i\mu_j) = 0$. However, *if* these strong exogeneity conditions are not present in the data, the efficiency of the estimates is worsened, potentially leading to type II errors. The phrase "Africa

is not a country" is applicable here. While there are similarities across the countries in Latin America, obvious differences are apparent.[2] Mexico has relatively close ties to the US and Canada because of trade agreements, in particular, the updated version of NAFTA, the US-Mexico-Canada Agreement (USMCA). Argentina's economy has grown in fits and starts as successive governments have used expansionary policy to curry favor with the voting populace, resulting in large macroeconomic fluctuations. The Venezuelan economy's dependence on oil as the fuel for growth and income distribution.

Nevertheless, despite the idiosyncrasies across Latin America there do exist, as discussed in Robinson and Sokoloff (2004) and Gasparini and Lustig (2012), considerable historical similarities over the whole region. Given the nature of the Latin American legal system which is based on historic ties to Spain and many of the countries adopting the Chilean Civil law, which is based on the Napoleonic Code, and the close economic ties between the Latin American economies, strong exogeneity is not a reasonable assumption to make. Moreover, strong trade ties and the relative homogeneity of culture, history, etc. leads to a breakdown of "standard" independence assumptions.

Thus, for our purposes we relax the strong exogeneity assumption and allow for the off-diagonal elements to be non-zero, using a feasible GLS (FGLS) panel model. The FGLS estimator is given by

$$\hat{\beta} = (\mathbf{X'\Sigma^{-1}X})^{-1}\mathbf{X'\Sigma^{-1}y}$$

where Σ is the variance-covariance matrix. For the standard homoskedastic model we have

$$\Sigma = \sigma^2 \otimes I$$

where I is the identity matrix. If, on the other hand, we have heteroskedastic errors Σ becomes

$$\Sigma = \sigma_i^2 \otimes I, \forall\ i.$$

However, a further complication occurs if data if there is cross-sectional correlation meaning the off-diagonal elements are non-zero. Moreover, given the slow moving nature of the inequality and legal system data, we must also consider the effects of serial correlation. Therefore, the study employs a FGLS model with heteroskedasticity and correlation corrected error to conduct the analysis. Our empirical strategy will allow for this last possibility, with errors generated within the group. Note, this does not mean members of a group are contiguous countries, only that they share the same, OLS, error characteristics. This is similar in spirit to error clustering or "clubs".

Two versions of the model are considered, the first is equation (1). The second uses the model in equation (1) but with two different panels of data, a Latin American (LA) sample and a non-Latin American sample, $\theta = 0$. Subsample analysis allows us to consider asymmetric impacts of legal systems on inequality across the two regions. We will refer to Non-Latin America countries as the "rest of the world", RoW.

[2]The Latin American countries are: Argentina, Beliz, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Grenada, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Uruguay, and Venezuela.

3 Data and Characteristics

The overall unbalanced panel sample period covers the years 1995 – 2014 for 147 countries, of which seventeen are from Latin America. With the exception of the institutional variables, discussed below, most of the data are available from the World Bank's World Development Indicators (WDI) collected from various sources. The list of the variables and their sources are in Table 1. For dependent variables, and as a robustness check, I use three different measures of income inequality: the Gini coefficient, $Gini \in (0, 1)$ with 1 being the most unequal. An issue with with using the Gini coefficient it is a relative measure that is unable to capture absolute income, thus, it is conceivable that a drop in Gini coincides with a rise in poverty. As such, and as a robustness check, I also use the Palma ratio, which is the ratio of the richest 10% to the poorest 40% income share, this measure, or similar to it, for inequality can be found in a number of studies, such as Gottschalk and Smeeding (2000) and Daly and Wilson (2013). The third inequality variable I use is the intra-time standard deviation of income shares across income quintiles, $SD(Share) = \sum_{i=1}^{5} \sqrt{\omega_i^2}$ where ω^2 is the variance of income shares at any point in time. Poverty is measured using the poverty gap based on an income of three PPP 2011 $US per day. For all these measures, larger magnitudes mean less equality and a larger poverty gap.

Four rule of law variables are included, all from the Fraser Institute's Economic Freedom of the World Index (EFWI) (Gwartney, Lawson, and Hall, 2016). The Fraser Institute adapts the rule of law data from the World Economic Forum's *Global Competitiveness Report* (*WEF*, 2017). For this study, we use Area 2, the overall legal system index, and three sub-indices: Court impartiality (Area 2B), the protection of property rights (Area 2C), and extra payments/bribes/favoritism (Area 5Civ, denoted "Bribe"), which acts as a proxy for corruption.

Table 1 Here

These data were chosen for the breadth of coverage and to keep the number of legal variables within reason – the other legal system variable considered was court independence (Area 2A) as well as how they coincide with the four rule of law definitions in Haggard and Tiede (2011), discussed in Section 1.1. However, all the legal system indices are highly correlated, with average correlation between Areas 2, 2A, 2B, and 2C of about 0.83. All data are quantitative ranging from 1 to 10, with 10 denoting the most "free", or best rule of law.

The variable Legal Systems (Area 2), is the average score across the nine sub-indices, which in addition to the variables discussed below includes: Military interference in rule of law and politics; integrity of the legal system;legal enforcement of contracts; regulatory restrictions on the sale of real property; the reliability of police; and the business costs of crime. All freedom law variables are in the range of 1 to 10, with 1 being the least free and 10 being the most free, put another way, as the indices get close to 10, legal systems are more independent and less corruptible. This overall index is an instrument for "Security", discussed in Item 1 in Section 1.1

Court impartiality is measures a country's ability to settle disputes between private businesses and the government. This is used as "Check on Government", discussed in Item 2 of Section 1.1 This index captures how "captive" the court system is to government oversight. It is very similar to judicial

independence which measures whether or not courts are free from political influences (the correlation between the two is about 0.884). This variable also skirts issues of corruption in the courtroom, which is different than the bribery variable discussed below, in that it measures whether or not the legal system is free of government influence when deciding cases and whether not there is "crony" bias, or the perception of it, (e.g. Hellman and Kaufman, 2004).

Property rights, Section 1.1 Item 3, is derived from the it Global Competitiveness Report and is loosely defined as whether or not property rights, which includes financial assets, are poorly defined and/or whether or not they are protected by law.

The category "bribes" is chosen as it is aligned with corruption and rent-seeking which are likely to impact access to energy and serves as an instrument for democracy, summarized in Item 4 of Section 1.1. This measure is not included in the size of government or legal system, but rather in Area 5, Regulation. Area 5C is Business Regulations which asks respondents to estimate the number of undocumented payments a firm must make to conduct business, e.g. import/export licenses, getting favorable decisions in court, of interest to the current research, etc. Also, there is a literature on corruption and economic performance which makes comparisons to the growth literature possible, for example, Barro (1996), Barro (2000), and Podobnik, Shao, Njavro, Ivanov, and Stanley (2008), and inequality, Gupta et al. (2002). Transparency International, among others, also constructs a corruption index, the Corruption Perceptions Index (CPI), see `https://www.transparency.org/`. However, this version was not used to keep the calculation of the legal variables consistent.

The control variables used include those generally found in the inequality and growth literature. First, to account for economic growth and/or technological change, we use per capita real GDP in local currency units. As shown by Nuxoll (1994), using international prices, such as the $US, leads to systematically different growth rates as compared to using GDP in domestic prices, called the Gerschenkron effect. Thus, Nuxoll (1994) suggests that estimates using GDP in the domestic currency are more reliable.[3] Two human capital controls are included: 15 and older literacy rate of and life expectancy at birth. Private non-financial investment and government consumption, both as a percentage of GDP, are used to account for changes in productivity, the accumulation of real assets and infrastructure investment.

Economic composition differences across the countries are proxied by the percent rural population and the value added of manufacturing as percent of GDP. Regional cross sectional heterogeneity is accounted for by time invariant regional fixed effects. Also included is the IMF's global recession indicator used to correct for global downturns. The IMF recession dates correspond to the 2007-08 financial crisis, so this variable also captures this impacts. Variables which are *not* in percent or ratios are in natural logs.

Table 2 Here

Descriptive statistics of the unbalanced panel data can be found in Table 2 which includes the overall panel number of observations, mean, standard deviation, minimum, and maximum for each of the data. In the interest of saving space, only the inequality and poverty and law variables are presented. Panel A shows the descriptive statistics for Latin America Only and Panel B contains the same variables for the

[3]Per capita real GDP in $US and PPP per capita real GDP in $US were also used with little change in the results.

rest of the world, Not Latin America.

Immediately we can see that Latin America has more inequality and a larger poverty gap than the rest of the world (RoW). It is also worth noting that while the standard deviation of each of the inequality variables is low compared to the RoW, the poverty gap has a larger standard deviation. Moreover, the difference between the minimum and maximum of each of the data is small across Latin America as compared to the RoW, though this makes sense given the inclusion of, say, African and Western European countries in the same panel. Turning our attention to the legal variables, a similar pattern appears. Rule of law tends to be less robust in Latin America and generally less heterogeneous, with the exception of the Palma Ratio. Also, as before, the difference between the minimum and maximum are smaller in Latin America.

Table 3 Here

Correlations for the same eight variables are in Table 3, again separated into Latin American and non-Latin American variables. All the correlations are significant at the 1% level. If we look at the correlations between the legal variables and the measures of inequality and poverty, we see that the correlations are, generally, negative, but *smaller* in Latin American than the RoW, implying a stronger relationship between the rule of law and economic outcomes in the RoW. It is also worth noting that the bribe variable is negatively correlated with the dependent variables in the RoW, but *positive* in Latin America.

Figure 1 Here

Figures 1 and 2 show the median of each of the income inequality, poverty and law variables, with the upper and lower bound for each period in Latin America. Generally speaking, income inequality has improved over the sample period, Figure 1. This is contrary to earlier findings, such as Berry (1997), which showed rising inequality between 1970-1995. Reasons given are a number of financial crises;[4] structural and democratic reforms; a movement away from import substitution strategy, labor reforms, currency-overvaluation, etc. in the earlier decades. Today, however, Latin American economies are now benefiting from the reforms of earlier periods. Over the same period, two of the law variables have remained more or less the same, Areas 2 and 2B. And while there has been an improvement in the protection of property rights, including a sizable jump between 2003 and 2006, the opposite is true for bribery which has steadily dropped since about 2003.

Figure 2 Here

Lastly, we consider the bivariate relationship between, in the interest of saving space, the Gini coefficient, the poverty gap, and the natural log of the four rule of law indices. Figure 3 shows bivariate scatter plots, with a fitted line, for the Gini coefficient against the four rule of law variables for the Latin American subsample, shaded areas are the 95% confidence interval. With the exception of Bribes, better

[4]For example, the Latin American Debt Crisis, the Peso Crisis, or the Argentinian peso crisis.

rule of law coincides with more equality. Similar results are for the poverty gap, Figure 4, though the relationship to Bribes has become marginally negative.

Figure 3 Here

Figure 4 Here

4 Results

4.1 Benchmark Models

We begin the discussion by considering a set of benchmark models first, presented in Table 4. The benchmark model runs the panel FGLS regression in equation (1) without the legal variables. Because much of the inequality literature concentrates on human capital as a determinant, only the estimates for the literacy rate, life expectancy, real PC GDP, and the recession indicator are presented. Additional benchmark regressions were also done isolating the education and health indicators, but are not presented, results available on request as there is little difference between the results.

For each indicator, two different models are presented: the first uses the whole sample with a Latin American fixed effect and the second divides the overall sample into Latin America only, denoted LA, and the rest of the world, RoW. $p-$values are in parentheses, the regression $Wald$ test, denoted χ^2, and the the number of correlation "groups", denoted Covs., are also presented. We will concentrate the summary on the two human capital variables: the literacy rate and life expectancy. For the model with the Latin American fixed effect, we note that *all* estimates for Latin America are positive and statistically significant at the 1% level. For the four models which use a fixed effect, literacy rate increase income inequality whereas life expectancy reduces it. For the poverty gap, both human capital improvements cause reductions in the gap.

Table 4 Here

A different pattern arises when the sample is divided, which allows us to consider possible asymmetric effects of the variables on income inequality. Unlike in the previous model, for Latin America, the literacy rate reduce inequality, whereas in the RoW it increases it, though the estimates are not statistically significantly from zero. And while in the RoW, literacy rates have the expected sign for the impact on poverty, they are not significant, unlike for Latin America, where literacy rates do reduce poverty. As before, life expectancy also ameliorates inequality and poverty, it does not do so in a statistically meaningful way for the Gini coefficient and the income share standard deviation in Latin America.

We also note that GDP growth increases inequality in Latin America, contrary to the results from the OECD (2014). But, as discussed in Anand and Segal (2008), we have further evidence of the ambivalence of the effects of growth on inequality because for the RoW, rising RGDP reduces inequality. Unfortunately, results below will further add to the ambivalence on GDP's impact on inequality as the results show that either possibility is likely. Across the board, recessions reduce inequality and poverty

in all models. Group sizes are consistent, with Latin America having 15 groups and the RoW 20.

4.2 Rule of Law

We now consider the effects of the four rule of law variables on each of the dependent variables in turn, in Tables 5 – 8. Each of the tables is organized, as before, with the whole sample and a Latin American dummy variable, and the two subsamples, *LA* and *RoW*. Panel I presents the results for the overall Legal System index (Area 2); impartial courts (Area 2B) are in Panel II; Panel III has protection of property rights (Area 2C); and results for bribes (Area 5Civ) are in Panel IV. Similarly, $p-$values are in parenthesis, the number of groups, and the regression χ^2. Again, only the results for the legal system, the Latin American fixed effect, the two human capital variables, per capita RGDP, and the recession indicator are presented. Results for the remaining control variables, %GDP investment, %GDP government expenditure, %GDP manufacturing value added, % rural population, and time fixed effects, are available on request.

The Gini Coefficient

Results for the Gini Coefficient can be found in Table 5. Regarding the entire sample with the Latin American FE, a improved legal system reduces inequality for each of the indicators except an impartial court, which has an elasticity of statistically significant estimate of 0.05. Latin American countries have statistically significant positive impact on all four inequality measures. Generally literacy raises the Gini coefficient while life expectancy reduces inequality. As before rising GDP raises inequality while recession lead to a more equitable income distribution. In the overall sample, we can identify between 26 and 29 country groups.

If we now consider the *LA* and *RoW* subsamples, changes to the legal system have no statistically significant impact on inequality, except for improvements to the protection of property rights, which has a negative coefficient estimate. For the rest of the world, a better legal system leads to a higher Gini when using Areas 2, 2B, and 2C, the impartial courts has no significant impact. And while bribe estimates are negative in both subsamples, they are not significantly so in Latin America. It is worth highlighting the protection of property rights across the two subsamples. The elasticity is –0.056 and 0.181 in Latin America and the RoW respectively, both are significant at 1%.

Table 5 Here

Estimates for the reported controls are robust to the different legal variables. A rising literacy rate lower the Gini in Latin America, the estimated coefficient is about –0.005 and positive for the non-Latin American subsample. Results for life expectancy are less conclusive. For Latin America, the estimates are always negative, but not significant, and for the RoW, two estimates are negative, using Areas 2 and 5Civ, one positive, with property rights as the rule of law measure, and the fourth no different than zero. Lastly, estimates for output and the recession are robust to the different legal variables, elasticities for the RGDP are positive for LA and significant, and the results for the RoW are less clear, estimates using Areas 2C and 5Civ are significant but with opposite signs. Group sizes are roughly the same for each

specification, Latin America is split into 14 groups, while the rest of the world is either 12 or 15 groups.

The Palma Ratio

Table 6 presents the results using the Palma Top 10%-Bottom 40% ratio. Results for the Palma ratio are similar to those of the Gini coefficient, with different magnitudes, given the way the ratio is calculated. Our discussion will use semi-elasticities rather than standard elasticities in the discussion above. Following the same sequence as above, we will concentrate first on model which uses the full sample and a Latin American FE. With respect to education and health, literacy has mixed results, though three of the four have the predicted sign, they are insignificant, except when impartial courts are used as the law variable. Life expectancy reduces the ratio with all but impartial courts, Area 2B, which has a positive estimated coefficient. As before, RGDP and recessions respectively raise and reduce the Palma ratio. The number of correlation groups is the same as above.

Similar results as above are found when we split the sample into two subsamples. We get ambiguous results for Areas 2, 2B, and 5Civ for both subsamples. Again protection of property rights reduces inequality in Latin America and raises it in the RoW, which provides additional support for importance of their protection, as elucidated in North and Thomas (1973), North (1981), North (1989), Acemmoglu et al. (2005), and Bennett and Vedder (2013). Bribes, a proxy for corruption, another well researched research topic in the literature, has no significant impact on inequality. Perhaps, this because low income people are generally unable to provide payments to receive favorable court decisions or gain access to utilities for their businesses so it has little impact on income distribution.

Table 6 Here

For education and health, literacy always reduces inequality for Latin American countries but raises the Palma ratio for the RoW. Life expectancy lowers the Palma ratio for both Latin American and none countries, it is worth noting that declines in inequality are larger for the Latin sample with significant estimates above $|-5.8|$ compared to none LA countries estimates in the (3.5, 4.6) range. As before, higher RGDP leads to more inequality and recessions reduce it.

SD(Income Share)

Results for the standard deviation of the income shares are in Table 7. Concentrating first on the Latin American FE model, estimates for the LA dummy variable are again positive, similar and highly statistically significant. Only the overall legal system is significant at 5% or better, though the bribe variable is also significant, but at 9%, both have the expected negative sign. When we use the standard deviation of income shares, the literacy rate is not different zero in any of the estimates, but life expectancy does reduce inequality in a meaningful way. Also, as before, higher RGDP leads to higher inequality while the recession evens the playing field.

Table 7 Here

More interesting is how the various variables influence inequality when we break the data into subsamples. Only the enforcement property rights has the anticipated sign which is statistically significant, being –1.11. For the non-LA countries, the overall legal system and court impartiality lead to a higher standard deviation. Bribe plays no role in explaining income standard deviations in either sample. We also find the same number of country groups.

Estimates for literacy rates, life expectancy, RGDP and the recession also are robust across the models, the exception is when using bribes as the measure of the rule of law. In Panel IV estimates for RGDP are negative for both Latin America and the RoW, and significantly so, with semi-elasticities being –0.19 and –0.88 respectively. In Latin America, both of the human capital measures reduce inequality, though literacy is significant while life expectancy is not. For the RoW literacy increases inequality while estimates for health are ambiguous, two reduce inequality and two increase it.

The Poverty Gap

While the previous three discussions centered around inequality, results in Table 8 concentrate on the poverty gap. The Latin American dummy is again positive for the full sample, and significantly so in Areas 2B, 2C, and 5Civ. The rule of law estimates are split positive, Areas 2B and 5Civ, and negative for Areas A2, though not significant, and A2C. As before, we find that well defined property rights leads to better income equality outcomes. Literacy rates and life expectancy again reduce inequality. Rising RGDP reduces poverty when paired with the protection of property rights and raises poverty when bribes are used as the legal variable, both are significant at 1% and on par with previous estimates, as is the IMF recession indicator.

Table 8 Here

When the full sample is split into the subsamples, only the protection of property rights and bribe are significant, and at the 1% level of confidence. In Latin America Area 2C reduces the gap, the estimated coefficient is -3.5, while the opposite is true for the RoW, the semi-elasticity is 5.3. Bribes, on the other hand, increase poverty, with a semi-elasticity of 4.4 in Latin America and have no effect on the RoW. As with the full sample, both literacy and health reduce poverty in the Latin American sample, while for the RoW literacy raises the gap and life expectancy reduce it. The other control's estimates corroborate previous results, despite measuring a different concept.

Optimal "Combinations"

Finally, to answer the question of which combinations of legal reforms would yield the best results we conduct the analysis for the various legal combinations interacted. We have four legal variables which yields ten possible combinations. In the interest of saving space, only those estimates which are statistically significant at 10% or better are presented in Table 9. In all the regressions, combining an improvement of property right protection with a reduction bribes, C.3, will yield the best results. Combination C.6, the overall legal system and property rights is also significant, with the exception of the standard deviation of income being the inequality measure.

Table 9 Here

Summary

In this paper, I investigate the role the rule of law plays in explaining income inequality and the poverty gap, with special attention paid to Latin America. While the rule of law is not necessarily responsible for redistributing income, as would, say, tax policy, there are intuitively, and theoretically, attractive explanations as to why it does have an impact on income distribution and poverty. For example, the protection of property rights and corruption (i.e. bribery) have direct impacts on the distribution of income and the ability to climb out of poverty. In addition, improvements to the rule of law coincide with other measures of institutional improvements, such as democratization, government transparency, regulation, etc.

However, the results here demonstrate that the effects of the rule of law is somewhat unique in Latin America when compared to the rest of the world. In Latin America, improvements to the protection of property rights will lead to a reduction in inequality and the poverty gap, whereas outside of Latin America, the opposite is true. However, there is no statistically significant impact of improvements to the other rule of law indicators on income inequality. Court impartiality tends to increase income inequality in the rest of the world but has no significant impact on any of the dependent variables in Latin America. On the other hand, corruption, perhaps unsurprisingly, does exacerbate the poverty gap, as in Gupta et al. (2002).

When looking for an "optimal" mix of reforms to undertake, Latin America should concentrate the protection of property rights and a reduction of corruption to reduce income inequality using all three measures of distribution employed here. Alternatively, to improve income equality using the Palma ratio and the Gini coefficient, better protection of property rights and the augmenting the overall rule of law are effective. The poverty gap can be ameliorated through various combinations of legal enhancements, but the best results occur if the protection of property rights is matched to the overall rule of law.

The results presented in this paper indicate that countries in Latin America could improve income distribution by concentrating on enhancing the rule of law in Latin America. As seen in the descriptive statistics, the overall state of Latin American legal system lag behind the rest of the world. Given that, generally, Latin American inequality is also worse than in the rest of the world, the models presented here indicate that gains to the legal system, in particular the protection of property rights, will lead to a reduction of inequality and the poverty gap.

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Tables

Table 1: Data Description and Sources

Variable Name	Source
Dependent Variables	
ln Gini Coefficient	World Bank, Development Research Group
Palma Ratio	Same as above.
Std. Dev. of Income Share	Same as above.
Poverty Gap $3/day (2011 PPP)	Same as above.
Rule of Law	
Area 2: Legal System & Property Rights	Fraser Institute
Area 2B: Court Impartiality	Fraser Institute, World Economic Forum, *Global Competitiveness Report*
Area 2C: Protection of Property Rights	Same as above.
Area 5Civ: Extra payments, bribes, favoritism	Same as above.
Control Variables	
Per capita real GDP (local currency units)	World Bank national accounts data, and OECD National Accounts data files
Literacy rate (% 15 and older)	UNESCO Institute for Statistics.
Life Expectancy	World Health Organization Global Health Expenditure
Investment non-financial assests (%GDP)	International Monetary Fund, Government Finance Statistics Yearbook
Government consumption (%GDP)	World Bank national accounts data and OECD National Accounts
Value Added Manufacturing (%GDP)	World Bank national accounts data, and OECD National Accounts
Percent rural population	World Bank Staff based on United Nations, World Urbanization Prospects
IMF Global Recession	International Monetary Fund

Notes: All data are from the World Bank Development Indicators database except the Freedom indices which are from the Fraser Institute.

Table 2: Descriptive Statistics

	Variable	Mean	Std. Dev.	Min	Max	$N \times T$
		A. Latin America Only				
Inequality	ln(*Gini*)	3.93	0.10	3.69	4.14	290
	Palma	3.68	1.11	1.88	8.60	289
	SD(Share)	21.00	2.33	15.93	26.20	289
	PovGap	8.64	6.08	0.33	33.80	291
Law	ln(*LegSys*)	1.50	0.26	0.63	2.08	310
	ln(*ImpCourt*)	1.20	0.48	-0.69	1.96	293
	ln(*PropRts*)	1.38	0.41	-0.14	2.02	268
	ln(*Bribe*)	1.51	0.32	0.39	2.14	267
		B. Not Latin America				
Inequality	ln(*Gini*)	3.56	0.21	2.79	4.19	851
	Palma	1.68	0.98	0.57	8.34	851
	SD(Share)	14.28	3.51	6.21	28.87	851
	PovGap	13.15	16.78	0.00	76.40	693
Law	ln(*LegSys*)	1.69	0.34	0.15	2.26	1992
	ln(*ImpCourt*)	1.52	0.37	-0.09	2.27	1895
	ln(*PropRts*)	1.67	0.37	-0.09	2.26	1587
	ln(*Bribe*)	1.66	0.39	-0.48	2.30	1564

Notes: The inequality variables are: the Gini coefficient, the 90/40 Palma ratio (*Palma*), the standard deviation of income quintile shares (*SD*(Share)), and the Poverty Gap (*PovGap*). For the legal variables: *LegSys* is the legal system (Area 2), *ImpCourt* is court impartiality (Area 2B), *PropRts* is protection of property rights (Area 2C), and *Bribe* is extra payments, bribes, favoritism (Area 5Civ).

Table 3: Correlations

	ln($Gini$)	Palma	SD(Share)	$PovGap$	ln($LegSys$)	ln($ImpCourt$)	ln($PropRts$)	ln($Bribe$)
	A. Latin America Only							
ln($Gini$)	1.00							
Palma	0.96	1.00						
SD(Share)	0.99	0.96	1.00					
$PovGap$	0.63	0.67	0.61	1.00				
ln($LegSys$)	-0.20	-0.23	-0.17	-0.51	1.00			
ln($ImpCourt$)	-0.08	-0.08	-0.04	-0.36	0.85	1.00		
ln($PropRts$)	-0.23	-0.29	-0.20	-0.53	0.79	0.77	1.00	
ln($Bribe$)	0.07	0.05	0.10	-0.07	0.59	0.51	0.48	1.00
	B. Not Latin America							
ln($Gini$)	1.00							
Palma	0.86	1.00						
SD(Share)	0.98	0.93	1.00					
$PovGap$	0.49	0.44	0.49	1.00				
ln($LegSys$)	-0.42	-0.35	-0.43	-0.57	1.00			
ln($ImpCourt$)	-0.11	-0.07	-0.11	0.02	0.75	1.00		
ln($PropRts$)	-0.23	-0.19	-0.24	-0.21	0.83	0.76	1.00	
ln($Bribe$)	-0.21	-0.15	-0.22	-0.29	0.83	0.76	0.75	1.00

Notes: All correlations are significant at the 1% level.

Table 4: Benchmark FGLS Model

	Gini	Gini: *LA*	Gini: *RoW*	Palma	Palma: *LA*	Palma: *RoW*
Lit. Rate	0.001***	-0.003***	0.001	0.001	-0.041***	0.001
	(0.000)	(0.001)	(0.212)	(0.746)	(0.000)	(0.525)
Life Expect	-0.899***	-0.286	-1.308***	-3.436***	-3.905*	-4.086***
	(0.000)	(0.102)	(0.000)	(0.000)	(0.062)	(0.000)
Latin Am.	0.336***	–	–	2.117***	–	–
	(0.000)			(0.000)		
PCRGDP	0.007***	0.011***	-0.007**	0.040**	0.110***	-0.005
	(0.000)	(0.000)	(0.022)	(0.028)	(0.000)	(0.550)
IMF Rec.	-0.018***	-0.016	-0.045***	-0.151***	-0.203**	-0.133***
	(0.002)	(0.121)	(0.001)	(0.000)	(0.040)	(0.001)
Obs.	145	84	61	145	84	61
	SD Qts	SD Qts: *LA*	SD Qts: *RoW*	Gap	Gap: *LA*	Gap: *RoW*
Latin Am.	6.337***	–	–	4.895***	–	–
	(0.000)			(0.000)		
Lit. Rate	0.008***	-0.102***	0.009	-0.157***	-0.303***	-0.026
	(0.008)	(0.000)	(0.373)	(0.000)	(0.000)	(0.204)
Life Expect	-15.112***	-6.273	-22.585***	-55.288***	-35.675***	-86.934***
	(0.000)	(0.150)	(0.000)	(0.000)	(0.000)	(0.000)
PCRGDP	0.137***	0.287***	-0.063**	0.360***	0.318***	-0.063
	(0.005)	(0.000)	(0.014)	(0.000)	(0.003)	(0.623)
IMF Rec.	-0.326**	-0.422*	-0.777***	-0.541**	-0.868***	-0.383
	(0.024)	(0.063)	(0.000)	(0.046)	(0.002)	(0.545)
Obs.	145	84	61	145	84	61
Covs.	35.0	15.0	20.0	36.0	15.0	21.0

Table 5: Dependent Variable: Gini Coefficient

	I. Legal System (A2)			II. Impartial Court (A2B)			III. Prop Rights (A2C)			IV. Bribe (A5Civ)		
	(All)	(LA)	(RoW)	(All)	(LA)	(RoW)	(All)	(LA)	(RoW)	(All)	(LA)	(RoW)
Rule of Law	-0.114***	0.000	0.048**	0.051***	-0.012	0.000	-0.006	-0.056***	0.181***	-0.044*	-0.012	-0.087*
	(0.000)	(0.992)	(0.033)	(0.000)	(0.571)	(–)	(0.705)	(0.003)	(0.000)	(0.074)	(0.621)	(0.067)
Latin Am.	0.250***	–	–	0.301***	–	–	0.331***	–	–	0.293***	–	–
	(0.000)			(0.000)			(0.000)			(0.000)		
Lit. Rate	0.002***	-0.004***	0.004***	0.001**	-0.005***	0.021***	0.003**	-0.005***	0.002***	-0.001	-0.005***	0.004**
	(0.001)	(0.000)	(0.000)	(0.011)	(0.000)	(0.000)	(0.047)	(0.000)	(0.007)	(0.486)	(0.000)	(0.024)
Life Expect	-0.710***	-0.328	-1.312***	0.764***	-0.315	0.000	-0.708***	-0.058	0.585***	-0.756***	-0.319	-1.245***
	(0.000)	(0.125)	(0.000)	(0.000)	(0.122)	(.)	(0.000)	(0.773)	(0.000)	(0.000)	(0.136)	(0.000)
PCRGDP	0.004*	0.011***	0.006	0.014***	0.011***	0.000	0.012***	0.012***	0.041***	0.012***	0.011***	-0.018*
	(0.071)	(0.000)	(0.174)	(0.000)	(0.000)	(.)	(0.004)	(0.000)	(0.000)	(0.000)	(0.000)	(0.051)
IMF Rec.	-0.015**	-0.035***	-0.024	-0.030***	-0.034***	0.000	-0.016**	-0.039***	-0.045**	-0.015*	-0.036***	0.004
	(0.031)	(0.000)	(0.163)	(0.000)	(0.000)	(.)	(0.011)	(0.000)	(0.011)	(0.089)	(0.000)	(0.843)
Obs.	127	78	49	127	78	49	121	78	43	121	78	43
Covs.	29.0	14.0	15.0	29.0	14.0	15.0	26.0	14.0	12.0	26.0	14.0	12.0

Notes: p-values in parentheses * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. All regressions include the following controls: %GDP investment, %GDP government expenditure, %GDP manufacturing value added, % rural population, and time fixed effects. Column (All) is the overall sample with a Latin American fixed effect; columns (LA) and (RoW) are results for Latin America only and the rest of the world subsamples, respectively.

Table 6: Dependent Variable: Palma Ratio

	I. Legal System (A2)			II. Impartial Court (A2B)			III. Prop Rights (A2C)			IV. Bribe (A5Civ)		
	(All)	(LA)	(RoW)	(All)	(LA)	(RoW)	(All)	(LA)	(RoW)	(All)	(LA)	(RoW)
Rule of Law	-1.102***	0.166	0.094	0.260**	0.073	0.523***	-0.351**	-0.645***	0.594***	-0.266	0.242	-0.002
	(0.000)	(0.693)	(0.127)	(0.026)	(0.736)	(0.000)	(0.015)	(0.000)	(0.001)	(0.130)	(0.358)	(0.993)
Latin Am.	1.842***	–	–	2.259***	–	–	2.077***	–	–	1.713***	–	–
	(0.000)			(0.000)			(0.000)			(0.000)		
Lit. Rate	0.004	-0.059***	0.016***	-0.018***	-0.060***	0.015***	-0.006	-0.063***	0.036***	-0.000	-0.055***	0.027***
	(0.455)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.385)	(0.000)	(0.000)	(0.988)	(0.000)	(0.000)
Life Expect	-3.516***	-6.288**	-4.083***	0.224*	-5.816***	-3.511***	-2.000**	-3.199	-4.274***	-4.435***	-6.106***	-4.608***
	(0.000)	(0.014)	(0.000)	(0.093)	(0.009)	(0.000)	(0.029)	(0.124)	(0.000)	(0.000)	(0.005)	(0.000)
PCRGDP	0.030	0.119***	0.044***	0.040*	0.116***	0.050***	0.067**	0.127***	0.101***	0.060***	0.118***	-0.008
	(0.167)	(0.000)	(0.006)	(0.057)	(0.000)	(0.001)	(0.018)	(0.000)	(0.000)	(0.007)	(0.000)	(0.834)
IMF Rec.	-0.112*	-0.342***	-0.034	-0.198***	-0.342***	-0.035	-0.145**	-0.383***	-0.045	-0.123*	-0.313***	0.060
	(0.082)	(0.000)	(0.572)	(0.001)	(0.000)	(0.382)	(0.031)	(0.000)	(0.497)	(0.086)	(0.000)	(0.297)
Obs.	127	78	49	127	78	49	121	78	43	121	78	43
Covs	29.0	14.0	15.0	29.0	14.0	15.0	26.0	14.0	12.0	26.0	14.0	12.0
χ^2	720.9	5187.6	5549.0	3.3e+09	888.4	78222.6	11385.4	1409.4	75000.8	776.7	908.3	716.6

Notes: p-values in parentheses * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. All regressions include the following controls: %GDP investment, %GDP government expenditure, %GDP manufacturing value added, % rural population, and time fixed effects. Column (All) is the overall sample with a Latin American fixed effect; columns (LA) and (RoW) are results for Latin America only and the rest of the world subsamples, respectively.

Table 7: Dependent Variable: Standard Deviation of Income Shares

	I. Legal System (A2)			II. Impartial Court (A2B)			III. Prop Rights (A2C)			IV. Bribe (A5Civ)		
	(All)	(LA)	(RoW)	(All)	(LA)	(RoW)	(All)	(LA)	(RoW)	(All)	(LA)	(RoW)
Rule of Law	-2.403***	0.003	0.876***	0.059	-0.222	3.513***	-0.184	-1.107***	0.341	-0.931*	-0.164	-1.115
	(0.000)	(0.998)	(0.003)	(0.879)	(0.635)	(0.000)	(0.625)	(0.009)	(0.652)	(0.091)	(0.758)	(0.170)
Latin Am.	5.258***	–	–	6.076***	–	–	6.954***	–	–	6.021***	–	–
	(0.000)			(0.000)			(0.000)			(0.000)		
Lit. Rate	0.008	-0.131***	0.077***	-0.002	-0.132***	0.073***	0.017	-0.146***	0.056***	-0.035	-0.137***	0.100***
	(0.573)	(0.000)	(0.000)	(0.860)	(0.000)	(0.000)	(0.519)	(0.000)	(0.000)	(0.159)	(0.000)	(0.001)
Life Expect	-10.153***	-7.535	-21.372***	-13.524***	-7.325	1.861***	-11.076***	-3.614	3.366***	-12.489***	-7.389	-21.897***
	(0.001)	(0.153)	(0.000)	(0.000)	(0.158)	(0.000)	(0.000)	(0.431)	(0.000)	(0.000)	(0.167)	(0.000)
PCRGDP	0.151**	0.280***	0.132*	0.182***	0.287***	0.290***	0.300***	0.298***	-0.547***	0.280***	0.282***	-0.217
	(0.011)	(0.000)	(0.057)	(0.005)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.185)
IMF Rec.	-0.401**	-0.926***	-0.535*	-0.407**	-0.890***	-1.317***	-0.427***	-0.951***	-1.258***	-0.417**	-0.925***	0.107
	(0.018)	(0.000)	(0.055)	(0.014)	(0.000)	(0.000)	(0.009)	(0.000)	(0.000)	(0.034)	(0.000)	(0.725)
Obs.	127	78	49	127	78	49	121	78	43	121	78	43
Covs	29.0	14.0	15.0	29.0	14.0	15.0	26.0	14.0	12.0	26.0	14.0	12.0
χ^2	850.2	548.3	4117961.0	802.8	479.5	1.4e+10	1604.3	576.7	8.7e+10	719.1	496.1	1452.0

Notes: p-values in parentheses * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. All regressions include the following controls: %GDP investment, %GDP government expenditure, %GDP manufacturing value added, % rural population, and time fixed effects. Column (All) is the overall sample with a Latin American fixed effect; columns (LA) and (RoW) are results for Latin America only and the rest of the world subsamples, respectively.

Table 8: Dependent Variable: Poverty Gap

	I. Legal System (A2)			II. Impartial Court (A2B)			III. Prop Rights (A2C)			IV. Bribe (A5Civ)		
	(All)	(LA)	(RoW)	(All)	(LA)	(RoW)	(All)	(LA)	(RoW)	(All)	(LA)	(RoW)
Rule of Law	-3.581	-2.407	-5.235	2.507***	0.810	1.659	-1.738***	-3.521***	5.343***	5.327***	4.411***	0.000
	(0.688)	(0.109)	(0.818)	(0.000)	(0.296)	(0.252)	(0.003)	(0.000)	(0.000)	(0.000)	(0.000)	(.)
Latin Am.	5.737			7.716***			4.778***			8.189***		
	(0.238)			(0.000)			(0.000)			(0.000)		
Lit. Rate	-0.042	-0.310***	0.086	-0.153***	-0.345***	0.060*	-0.270***	-0.288***	0.241***	-0.232***	-0.249***	0.224***
	(0.897)	(0.000)	(0.940)	(0.000)	(0.000)	(0.058)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Life Expect	-67.894	-43.719***	-93.687	-74.816***	-45.559***	-96.613***	-54.378***	-38.815***	-87.929***	0.000	-45.378***	0.000
	(0.162)	(0.000)	(0.621)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(.)	(0.000)	(.)
PCRGDP	0.432	0.616***	0.232	0.026	0.394***	0.158	0.543***	0.676***	0.399*	-0.190**	0.146*	-0.878***
	(0.601)	(0.000)	(0.955)	(0.654)	(0.002)	(0.380)	(0.000)	(0.000)	(0.085)	(0.024)	(0.059)	(0.000)
IMF Rec.	-0.932	-0.344	-1.612	-0.206	-0.273	-1.858***	-0.462**	-1.055***	-2.259***	0.024	-0.242	-5.911***
	(0.661)	(0.285)	(0.897)	(0.228)	(0.384)	(0.000)	(0.041)	(0.000)	(0.000)	(0.911)	(0.399)	(0.000)
Obs	127	78	49	125	78	47	119	78	41	119	78	41
Covs.	30.0	14.0	16.0	29.0	14.0	15.0	26.0	14.0	12.0	26.0	14.0	12.0
χ^2	62.0	3547.9	424.5	309465.1	798.8	54087.0	1227.2	1873.2	135392.4	3123.8	2067.3	10971363.9

Notes: p-values in parentheses * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. All regressions include the following controls: %GDP investment, %GDP government expenditure, %GDP manufacturing value added, % rural population, and time fixed effects. Column (All) is the overall sample with a Latin American fixed effect; columns (LA) and (RoW) are results for Latin America only and the rest of the world subsamples, respectively.

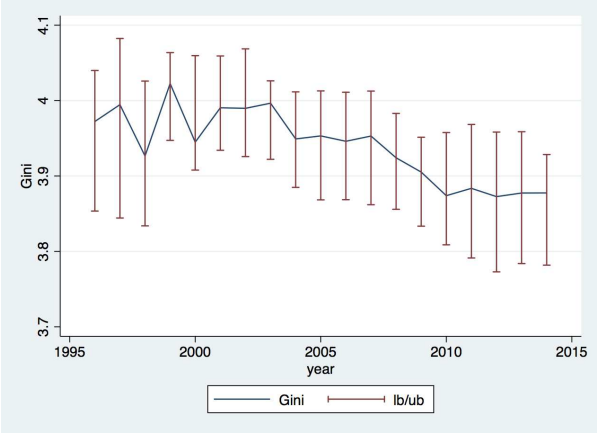
Table 9: Legal Mix

"Combination"	Gini	Palma	SD Qts	Gap
C.1	–	–	–	-0.393**
				(0.019)
C.2	–	–	–	-0.890***
				(0.006)
C.3	-0.027***	-0.224**	-0.431**	-0.936***
	(0.001)	(0.024)	(0.027)	(0.006)
C.4	–	–	–	-0.344*
				(0.075)
C.5	–	–	–	1.743***
				(0.000)
C.6	-0.023**	-0.257**	–	-1.569***
	(0.036)	(0.026)		(0.000)
C.7	–	–	–	1.249***
				(0.000)

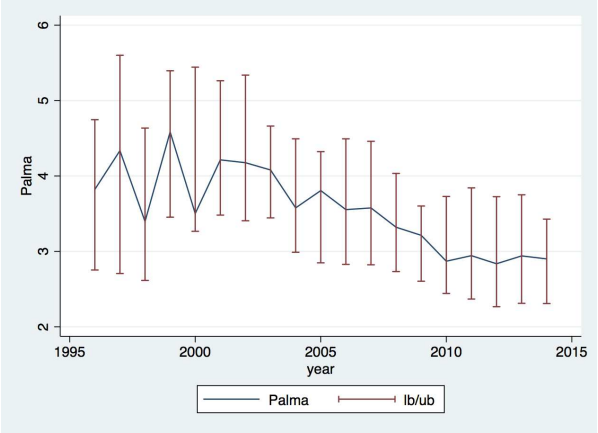
Notes: C.2 = Areas 2, 2B and 2C, C.2 = Areas 2B and 2C, C.3 = Areas 2C and 5Civ, C.4 = Areas 2, 2C and 5Civ, C.5 = Areas 2 and 5Civ, C.6 = Areas 2 and 2C, and Mix C.7 = Areas 2B and 5Civ

Figures

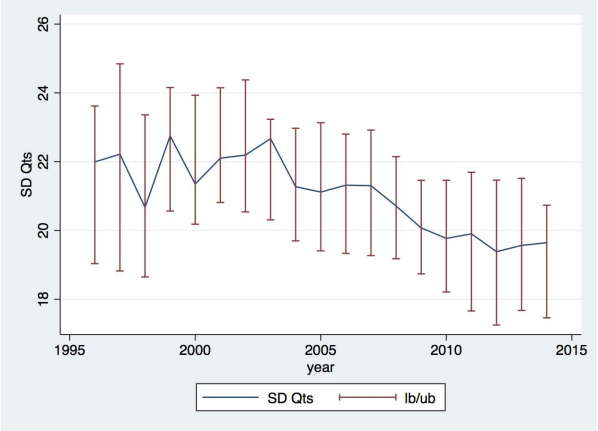
Figure 1: Latin American Inequality and Poverty: Median and Upper/Lower Bounds



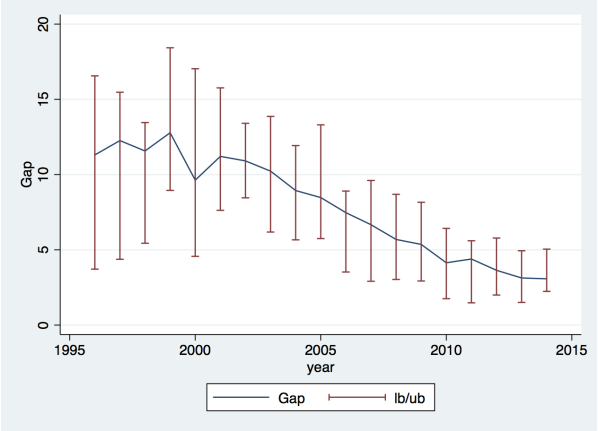
(a) Gini



(b) Palma Ratio

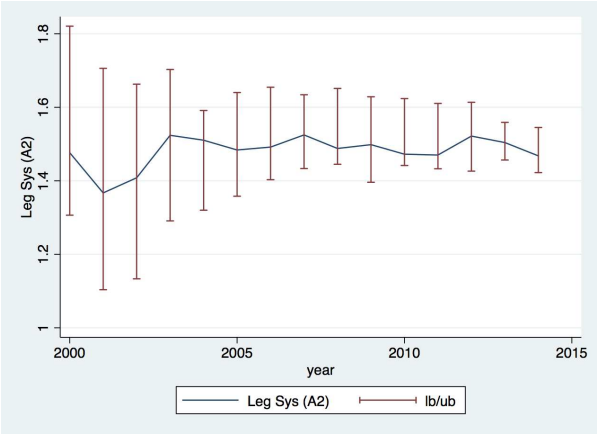


(c) SD(Share)

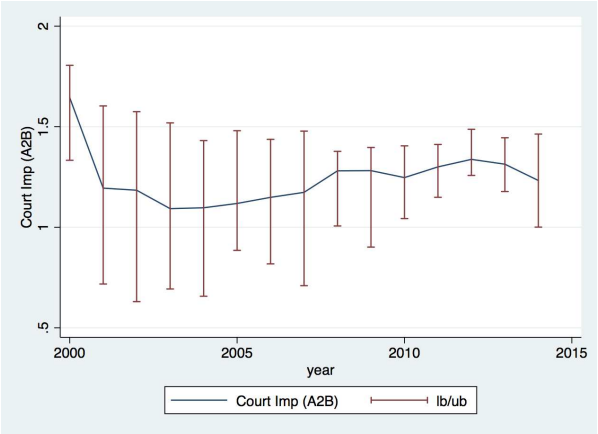


(d) Poverty Gap

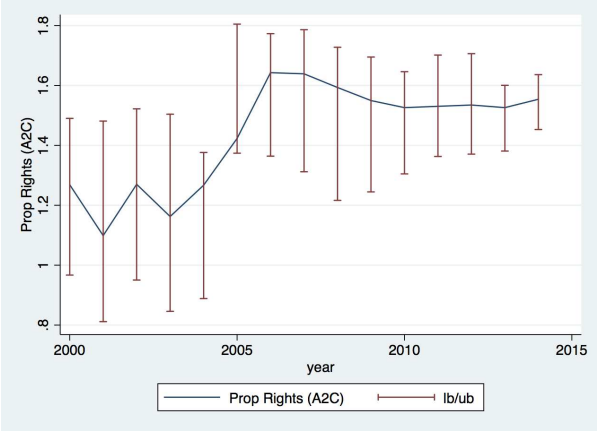
Figure 2: Latin America Rule of Law: Median and Upper/Lower Bounds



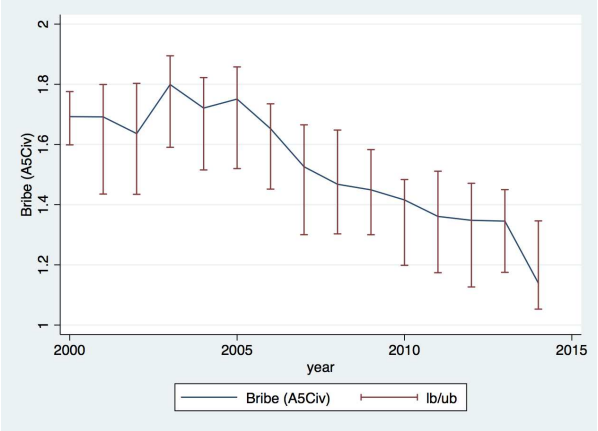
(a) Legal System



(b) Impartial Court

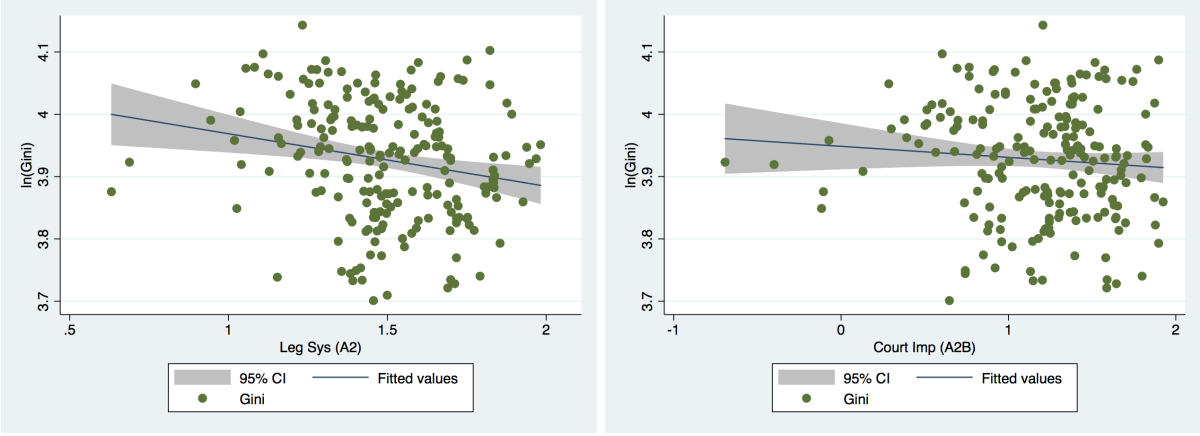


(c) Property Rights



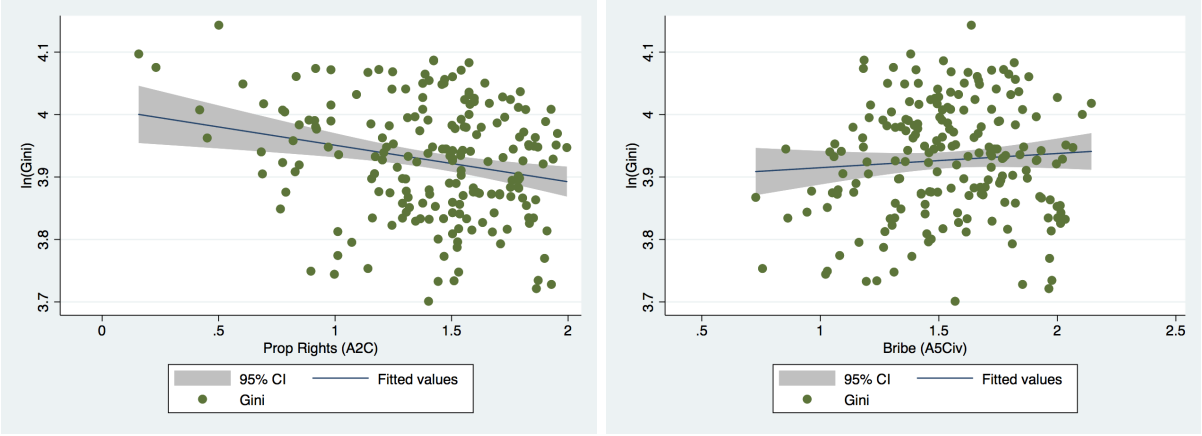
(d) Bribe

Figure 3: Latin American Bivariate Relationship: Gini and Rule of Law



(a) Legal System

(b) Impartial Court

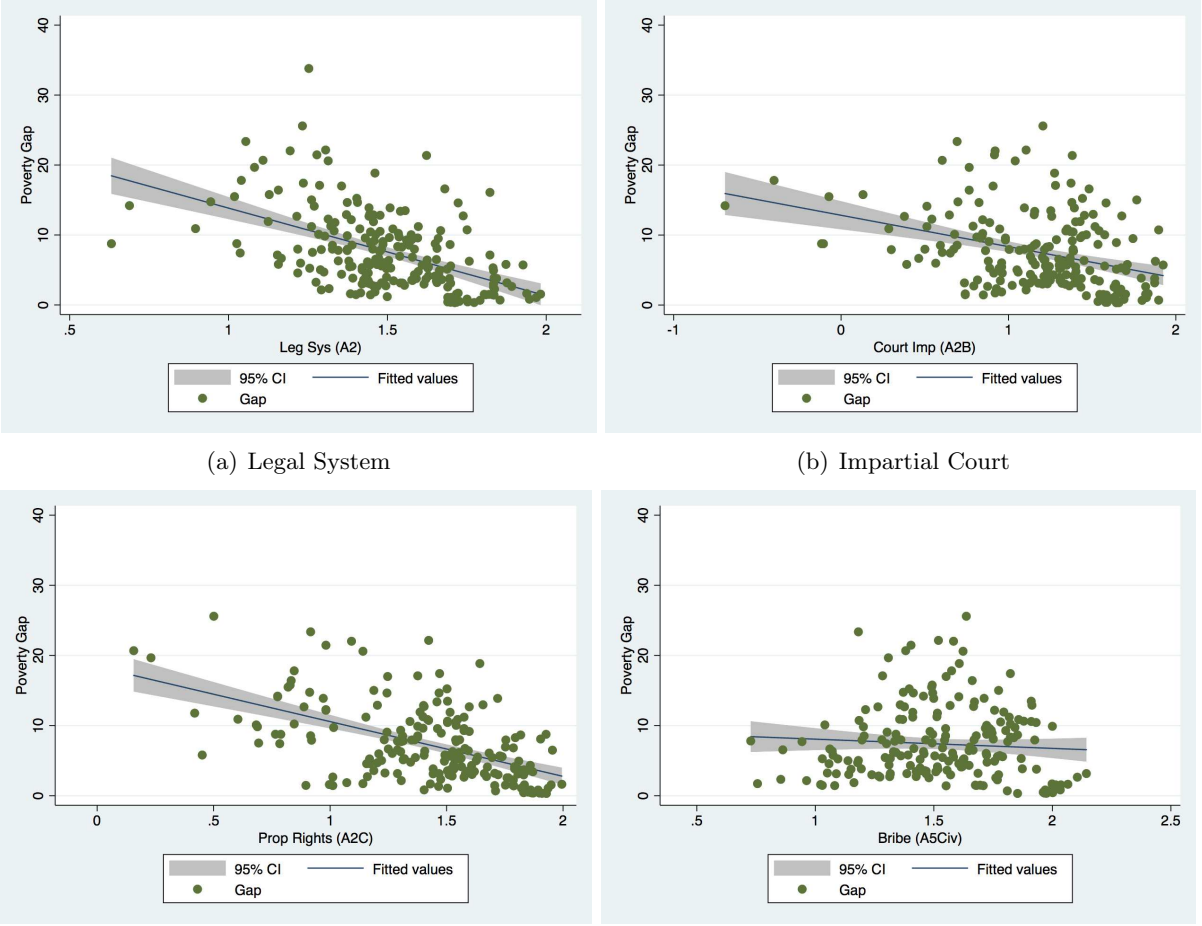


(c) Property Rights

(d) Bribe

Note: Shaded areas are 95% confidence intervals

Figure 4: Latin American Bivariate Relationship: Poverty Gap and Rule of Law



(a) Legal System

(b) Impartial Court

(c) Property Rights

(d) Bribe

Note: Shaded areas are 95% confidence intervals