Labor Market Regulations and Income Inequality: Evidence for a Panel of Countries*

César Calderón
Central Bank of Chile

Alberto Chong
Inter-American Development Bank

Rodrigo Valdés
Central Bank of Chile

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Abstract

This paper presents evidence on the impact of labor regulations on income inequality using two recently published databases on labor institutions and outcomes (Rama and Artecona, 2002; Botero et al. 2003) and different cross-section and panel data analysis techniques for a sample of 121 countries over the 1970-2000 period. When we consider the techniques most likely to be robust, we find that: (i) *de jure* regulations do not improve income distribution; (ii) relative compliance with existing regulations improves income distribution; (iii) *de facto* regulations are weakly associated with improving income inequality. This result partly reflects the fact that regulations are endogenous and, more interestingly, different regulations have quite distinct effects. In particular, we find that a higher minimum wage tends to worsen income distribution, whereas the extent of trade unions and maternity leave improve it, while the importance of government employment tends to improve income distribution, but with less effects in the bottom quintile income share.

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1. Introduction

The fact that labor regulation market regulations are at the cornerstone of the economic policy and political economy debate in many countries shows that changes in regulations may have not trivial effects. Because there are protected and unprotected groups, they have, at the very least, different consequences for particular groups. From a more general perspective, however, labor regulations may also face interesting tradeoffs, specifically regarding efficiency and equity. In this paper we empirically study one particular ingredient of this type of tradeoff, namely the effect of labor regulations on income distribution.

For that purpose, we present evidence on the impact of labor regulations on income inequality using two recently published databases on labor institutions or *de jure* regulations and outcomes or *de facto* regulations (Rama and Artecona, 2002; Botero et al. 2003). We consider other country characteristics that may affect income distribution, including income level and growth, education and the structure of the economy. Furthermore, we use a battery of cross-section and panel data analysis techniques in order to evaluate the robustness of the results. In particular, we use cross-section, pooled, country fixed effects, and time fixed-effects panel data, with instrumental variables and GMM estimators. The sample we consider has 121 countries over the 1970-2000 period and we focus in two groups: the total sample and the sample of developing countries.

This paper is closely related to Calderón and Chong (2003) and should, in certain dimensions, be taken as its complement. To begin with, it is based on the same datasets (except for inequality) and considers similar estimation techniques. More interestingly, perhaps, both papers taken together precisely allow the reader to evaluate whether the tradeoff mentioned above exists and its relative importance.

The main findings are the following:

(i) There is evidence that *de jure* regulations (what labor codes prescribe) do not improve income inequality. In fact, with the Rama and Artecona database, we do not find robust results, although in a few cases, the effect show that regulations worsen income distribution. When we consider the Botero et al. dataset, we find that regulations about employment and industrial relations (although not about social security) do have a negative effect on income distribution.

(ii) There is a positive effect of the compliance of labor regulations, measured as the ratio between a *de facto* index and a *de jure* index, on income distribution. Considering that the result cannot be explained by summing up the individual effects of each index separately, it may capture institutional development rather than labor market considerations.

(iii) *De facto* regulations are weakly associated to a better income distribution. This result could be due to endogeneity of labor regulations. When controlling for this problem, many times the effect is not different from zero, although there some cases in which the results show that these regulations improve income distribution.

(iv) Apart from the endogeneity problem, these mixed results are in part explained by the fact that once one considers specific *de facto* regulations, the results can differ markedly across regulations. In this regard, the most robust results are the following:

- Minimum wages, especially measured as a percentage of per capita income, worsens income inequality.
- Trade union membership (as percentage of labor force) has a positive effect on income distribution. Its effect on the poorest 20% is smaller and less robust than for the "middle class".
- Government employment at the general level (less so at the central level) has a positive effect on income distribution. Its effect on the poorest quintile is nil.
- Days of maternity leave have a positive effect on income distribution.
- ILO Convention 87 ratification and social security contributions do not have a robust effect of income inequality across estimation methods and samples.

The paper is organized as follows. Section 2, presents a brief literature review on the impact of labor market regulations on income inequality. Section 3 reviews the data sets and the methodology we use. Section 4 presents the results of the different estimation techniques. Section 5 discusses the overall results and concludes.

2. Literature Review

In a seminal paper, Kuznets (1955) argues that the relationship between income inequality and the level of development follows an inverted U-shaped curve. Inequality rises in the face of economic expansion during the initial stages of development, and it declines afterwards. The relationship stipulated by Kuznets has been recently simulated successfully within a general equilibrium framework (Galor and Tsiddon, 1996). In addition, recent evidence has shown that: (i) unemployment is one of the major sources of inequality (Jenkins, 1995, 1996), and (ii) labor market policies are a potential instrument to reduce inequality (Rama, 2001a).

Saint-Paul (1999) claims that labor markets institutions across the world usually consist of tax systems of other transfer mechanisms that deviate resources from the working to the non-working population. Among these institutions we have unemployment benefits, employment protection laws, and active employment policies by the government, among others. It has been argued that these institutions are necessary to protect workers from bad outcomes and unexpected shocks (Blanchard, 2002). In general, labor market institutions are supposed to help achieve socially desirable redistributive goals (Emerson and Dramais, 1988; Rama, 2001a, 2003). In this context, labor market policies may be an effective tool to reduce income inequality. However, there is increasing debate on the benefits of labor policies such as minimum wages, mandated benefits, collective bargaining, job security or public sector employment in developing countries (Rama, 2001a, 2003).

Regarding the imposition of minimum wages, Saint-Paul (1994) argues that they may have an adverse effect on the income distribution. Minimum wages redistribute income: (a) from skilled to unskilled labor, and (b) from the poorest to the lower-middle quintiles by generating unemployment.[1] Microeconomic studies suggest that the impact of minimum wages on income inequality is small in many developing countries (Maloney and Nuñez, 2001). On the other hand, Rama (2001b) analyzes the doubling of minimum wages (in real terms) in Indonesia in the early 1990s. He finds that the elasticity of average to minimum wages was approximately 10 percent over this period, and that the doubling of minimum wages was associated with a slight decline in total wage employment and a substantial increase in unemployment among small enterprises. On the other hand, the trade union membership seems to guarantee a higher wage for their members. However, the union wage premia in developing countries is smaller than among industrial countries. This finding may due to the role of trade unions in keeping wage rates invariant during periods of economic adjustment (Nelson, 1991).

Rama (2001a) finds a small amount of studies on the impact of public sector employment on income inequality. For example, public sector wages in countries with small formal sector, like in Sub-Saharan Africa, could have a significant effect on private sector wages (Rama, 2000). Finally, the impact of separation costs on employment and on income distribution depends on the tightness of job security regulations. Fallon and Lucas (1991) have found that very strict regulations on job security have depressed labor demand in India and Zimbabwe. Also, it has been shown that separation costs —

[1] Saint-Paul (1994) claims that minimum wages create unemployment among unskilled workers and reduces the income of skilled workers, thus reducing output. In addition, the impact of minimum wages on inequality is affected by other forms of labor rigidities. For example, income is shared equally among unskilled workers in a world with high job turnover, hence, minimum wages have a small impact on inequality among the unskilled.

in the form of mandatory severance payments— may reduce the level of employment (Heckman and Pagés, 2000).

Rama (2003) analyzes the impact of labor market interventions on indicators of income inequality after taking control for some of their determinants.[2] He shows that social security programs help reduce income inequality. Collective bargaining is less effective and improving the income distribution, with its impact being statistically significant only for the share of the second richest quintile of the population. On the other hand, the "core" ILO conventions seem ineffective to reduce inequality.[3] In summary, he finds that countries pushing to adopt ILO labor standards, higher minimum wages, or to expand government employment, may not generate any significant effect on inequality.

Finally, Vanhoudt (1997) analyzes the impact of labor market policies on income inequality in OECD countries. He finds that the Gini coefficient is not affected by labor market policies. However, they affect other measures of inequality. Specifically, he finds that active labor market policies —e.g. expenditures for public employment services, labor market training, subsidized employment, among others— improve the income share of the bottom quintiles of the population and reduce the income gap between top and bottom quintiles. On the other hand, passive labor markets —*i.e.* income compensation schemes— have only a negligible impact.

3. The Data and Methodology

In the present section we describe the database used in our regression analysis, as well as the estimation strategy. Since our discussion will draw heavily from Calderón and Chong (2003), we will present a brief description of both the data and the methodology used. For further detail, see the paper mentioned above.

3.1 The Data

To test whether labor regulations have been an effective tool to reduce income inequality, we use two recently developed databases on labor regulations: (a) the RA database (Rama and Artecona, 2002), and (b) the BDLLS (Botero, Djankov, La Porta, Lopez-de-Silanes and Shleifer, 2003).

[2] Rama (2003) includes as determinants of income inequality the educational attainment, civil liberties, and financial development, among others.
[3] According to Rama, the "core" ILO conventions are the ones that contemplate the abolition of forced labor, the effective elimination of child labor, nondiscrimination in the workplace, and freedom of association and the right to collective bargaining.

3.1.1 The RA Database

Rama and Artecona have collected data for 121 countries on labor market regulations and outcomes over the period 1945-49. The data is organized in 5-year period averages and distinguishes between regulation in paper and regulation in practice. Regulation in paper —or *de jure* regulation— is approximated by the number of ILO standards ratified by the national labor laws.[4] On the other hand, regulation in practice —or *de facto* regulation— is approximated by information on categories such as minimum wages, conditions of work and benefits, trade unions and collective bargaining, and public sector employment. The distinction between *de jure* and *de facto* regulations is very important since the ability of developing countries to enforce the regulations stipulated in the labor laws is quite limited (Squire and Suthiwart-Narueput, 1997).

In order to define the aggregate indices of the overall extent of labor regulations in the economy, we follow the strategy pursued by Rama (1995) and Forteza and Rama (2002). We define an index of regulation in paper, L_0, as the cumulative number of ILO conventions ratified by a country over time. This index reflects the ideal regulatory framework of the country from an *institutionalist* point of view (Freeman, 1993), but it also captures the *thickness* of the labor code (Rama and Forteza, 2002). The L_0 index includes the ratification of ILO conventions on minimum age of employment, compulsory labor, the abolition of forced labor, equal male-female remuneration, the right for collective bargaining, and the discrimination on equality of opportunity or conditions of employment on the basis of race, religion, sex, political opinion or social origin. However, the number of existing regulations does not give us information on the ability of the country to implement and enforce these regulations. For this reason, we require an index that reflects the extent of the labor regulations instead of their number.

Rama (1995) construct an aggregate index of regulations in practice using information on the following four categories: minimum wages (MW), mandated benefits (MB), trade unions (TU) and public sector employment (GE). Unfortunately, data on job separation costs is available for a quite limited sample of countries.[5] Following Rama (1995) and Forteza and Rama (2002), we construct two

[4] Among the conventions ratified and included in this index, we have universal legislation on issues such as child labor, compulsory labor, equal remuneration for male and female workers, equal opportunity, the right of collective bargaining, and organization in unions, among others.
[5] Heckman and Pagés (2000) constructed data on job separation costs for Latin America and found that these costs have a substantial impact on the level of employment in the region.

aggregate indices of labor regulations in practice, with both of them including different proxies for these four dimensions, as follows:[6]

Category	Aggregate Index L_1	Aggregate Index L_2
Minimum Wages (MW)	Ratio of minimum wages to labor costs per worker in the manufacturing sector.	Ratio of minimum wages to income per capita.
Mandated Benefits (MB)	Social security contributions as a percentage of salaries.	Number of days of maternity leave for a first child born without complications.
Trade Unions (TU)	Total trade union membership as a percentage of total labor force.	Dummy: Ratification of the ILO convention 87 that allows workers to establish organizations.
Government Employment (GE)	Ratio of General Government Employment to Total Employment	Ratio of Central Government Employment to Total Employment

Both aggregate indices, L_1 and L_2, are the simple averages of the proxies in the four dimensions. We should note that we normalized all the labor regulation indicators so that these variables are comparable across countries. We normalized these variables in such a way that their values fluctuate between 0 and 1, with higher values reflecting labor markets with a higher degree of regulations. Finally, we should also note that the aggregate indices L_1 and L_2 are computed for countries with information for at least 2 of the 4 dimensions involved in the analysis.

3.1.2 The BDLLS database

Based on the labor codes of 85 countries across the world, Botero et al. (2003) evaluated the degree of regulations in the labor markets. They specifically evaluated the extent of regulations stipulated in three types of labor laws: employment laws, industrial relations laws, and social security laws. We should note that we only have a cross-section of labor regulation indices for a broad sample of countries.

Employment laws contemplate the laws governing the employment contracts of individuals in the economy. This type of law specifically regulates the aspects of individual labor contracts, terms of reference and termination of contracts. It covers the restrictions placed on alternative employment contracts, conditions of the employment contract and job security.

[6] The higher degree of correlation between the different dimensions of the labor regulation index prevents us from including all of variables of the aggregate index in the same regression.

Industrial relations laws regulate on the adoption, bargaining, and enforcement of collective agreements, the unionization of workers, and industrial actions by workers and employers. These laws capture aspects of the worker-employer relationship such as collective bargaining, the participation of workers in the company's management, and the resolution of collective disputes —such as strikes and lockouts.

Finally, social security laws contemplate the social response to quality of life conditions and requirements. Specifically, social security laws protect workers against the risk of disability, sickness and unemployment. Note that since most of these measures are extracted from labor codes, they are more closely in spirit to *"de jure"* labor rigidities.

3.1.3 Income Inequality and its determinants

The dependent variable in our regression analysis is the Gini coefficient. Our main source of data is the information gathered by Deininger and Squire (1996). However, we only have information from this source until 1995. For the final 5 years we extrapolated data for income shares and the Gini coefficient for the countries present in the analysis of Milanovic (2002a, 2002b). In addition, for the countries absent in Milanovic's papers, we generated information on the Gini coefficient based on the coefficient of variation of income and the income's linear correlation with ranks as in Milanovic (1997). We also use the income shares of top, bottom and middle quintiles of the population. This will allow us to analyze the robustness of our results to changes in the dependent variable as well as to assess the impact of labor market policies on the income of the poor.

Following the empirical literature on income distribution (Milanovic, 2000; Gradstein et al. 2001; Chong, 2002; Clarke et al. 2003), we choose the set of determinants of income inequality. We include the (log) level of GDP per capita as well as its square value. This variable is obtained from the Penn World Tables 6.1 as gathered by Heston, Summers and Aten (2002). The squared specification of the GDP per capita will allow us to test for the presence of the Kuznets curve, that is, income inequality raises in the early stages of development and it declines in later stages. We also consider indicators of education like the level of secondary schooling from Barro and Lee (2000), and of financial depth such as the ratio of credit to the private sector to GDP (Beck, Demirguc-Kunt and Levine, 2000). The number of physicians (per 1000 people) is included as a proxy for improvements in the health

sector. Macroeconomic instability is proxied by the CPI inflation rate, and the size of the modern sector is calculated as the share of industry and services in the economy's total value added.

3.2 The Methodology

3.2.1 The Regression Framework

Our main goal is to assess the impact of labor regulations on income distribution by running the following regression:

$$y_{it} = \mu_i + \eta_t + X_{it}\beta + L_{it}\Gamma + \xi_{it} \quad (1)$$

According to equation (1), income inequality in country i during period t, y_{it}, depends upon a set of determinants described by the matrix X_{it}, as well as unobserved country and period-specific effects, μ_i and η_t, respectively. Our set of long-term growth determinants follows the work of Milanovic (2000), Gradstein et al. (2001) and Chong (2002). Among the determinants of income inequality we include: the initial level of output per capita (in logs) and output per capita squared, human capital, financial depth, health, inflation, and the size of the modern sector.

We also included in our income inequality regression framework a set of variables that captures the extent of regulations in the labor markets, as represented by the matrix L_{it} in equation (1). This matrix L include different indicators that focus on specific policy or institutions in the labor markets such as minimum wages, mandatory benefits, trade union membership, government employment, social security laws, collective bargaining, among others. The matrix L_{it} consists of a series of K labor regulations, $\{\ell^k_{it}\}_{k=1}^K$. The larger the values of these $\{\ell^k_{it}\}_{k=1}^K$ variables, the more regulated the labor markets are. We do not assume that labor regulations and outcomes are time-invariant. We expect them to change over longer horizons.

We normalize these variables in such a way that they are equal to one (zero) if labor markets are fully (de-) regulated.[7] If our dependent variable is the Gini coefficient, a negative estimate for the

[7] In order to aggregate the variables, we first need to normalize them since not all of them are expressed in comparable units. We have defined above our labor market rigidity indicator as ℓ^k_{it}, for $k=1,\ldots,K$. Next, we define $\{\ell^k_{\min}\}$ and $\{\ell^k_{\max}\}$ as the closest and farthest a country can get to perfect competition in the labor markets. Hence, we can define our normalized labor market rigidity indicator as $\tilde{\ell}^k_{it} = \frac{\ell^k_{it} - \ell^k_{\min}}{\ell^k_{\max} - \ell^k_{\min}}$.

parameters in the Γ matrix implies that de-regulating labor markets may enhance the distribution of income.

There are additional problems when we attempt to run a regression of equation (1), that is, we may find that some variables in the L_{it} may be highly correlated with each other. In fact, trade unions and public employment display the highest correlation (0.8), whereas mandated benefits and minimum wages have a correlation of 0.5. In this case, we may be unable to identify the parameters of the Γ matrix. To address this issue, we create aggregate indices of labor market regulations as in Rama (1995) and Forteza and Rama (2002). We compute a simple average of the normalize values of our labor regulation indicators as described above.[8] Hence, we use the aggregate index of regulations in the labor market, ℓ_{it}^{A}, to test the overall effects labor market regulation on income inequality. We reformulate our income inequality regression equation in (1) as:

$$y_{it} = \mu_i + \eta_t + X_{it}\beta + \gamma_A \ell_{it}^{A} + \xi_{it} \tag{2}$$

The nature and magnitude of the overall impact of labor market regulations on income inequality is captured by the sign and size of γ_A. However, individual regulations may have different consequences that may cancel each other to some extent in the aggregate. One of the shortcomings of a significant parameter estimate for γ_A is that its sign may not help identifying the specific regulations that need to be reformulated. Hence, we still need to estimate the individual effect of different regulations, as captured by the γ_j parameters.

If we replace the aggregate index ℓ_{it}^{A} in (2) by one of our individual measures of labor market regulations, the coefficient estimate will be biased due to omitted variables. That is, the coefficient of the individual regulation will capture the effects of the labor market rigidity *k*, but also (partly) those of all of the other missing rigidities. Since they are likely to be correlated with each other, the value obtained for γ_k might be reflecting the effects of these other rigidities. We can partially solve this problem by defining "complementary" labor market regulations $\tilde{\ell}_{it}^{-k}$ as the average of the indicators that are different from *k*. This complementary variable can be used to control for all other labor market features, apart from $\tilde{\ell}_{it}^{k}$, by using the following model:

[8] In principle, we compute the average of *J* out of the *K* relevant labor market ridigities (where $J \leq K$). Note that our aggregate index takes values between zero and one. But unless all of the labor market rigidities are perfectly

$$y_{it} = \mu_i + \eta_t + X_{it}\beta + \gamma_k \ell_{it}^k + \gamma_{-k} \ell_{it}^{-k} + \xi_{it} \quad (3)$$

where the coefficient γ_k captures the effect of labor market rigidity k on long-term growth.

3.2.2 The Estimation Strategy[9]

We estimator our regression equation in two dimensions: cross-section and panel data. Our cross-section regressions are estimated using least squares with robust standard errors (White, 1980). Then we use an IV estimator where we control for the endogeneity of labor market regulations using a set of instruments outlined by Botero et al. (2003). The outline of the IV strategy will be discussed when we analyze the panel data techniques.

For the panel estimation of equations (2) and (3), we first use a series of least-squares-based estimators: (i) the pooled OLS estimator, which is the simplest regression technique given that we do not account either for unobserved effects or endogeneity. (ii) The time-effects estimator —least squares with time dummies— where we can explain differences in income inequality across country due to differences in the extent of labor market regulations. (iii) The within-group or country-effects estimator —least squares with country dummies— where we analyze the movement of income inequality indicators in a country to changes in its labor market regulations.

To complement these least-squares-based estimation techniques, we control for endogenous regressors. Hence, we present several estimators from the family of the Instrumental Variables (IV). In general, because it is very likely that labor regulations are partly endogenous, we focus our final analysis on techniques that account for the endogeneity problems. We will tackle this issue using two different strategies.

Our first strategy will use IV techniques where we select "external instruments" for labor regulations, and we will present pooled IV estimates, IV with time effects, and IV with country effects. This set of instruments follows the literature on the choice of labor regulations as outlined by Botero et al. (2003). According to Botero and associates, the choice of labor regulations across countries is explained by efficiency considerations, political power theories, and legal theories.

North (1981) claims that a set of regulations is usually chosen based on an *efficiency* criterion. The efficiency theory focuses on the distinction between regulation and social insurance. It has been

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correlated with each other, the actual range of variation across countries should be significantly narrower for the aggregate measures than for any of the individual indicators.

[9] Here, we heavily draw on Calderón and Chong (2003).

argued that social insurance may be an efficient way to deal with market failures in countries with lower social marginal cost of tax revenues —*i.e.* richer countries (Becker and Mulligan, 2000). Poor countries regulate to protect workers from being or mistreated by employers, while rich countries provide unemployment insurance, sick leave, early retirement since they can raise taxes more cheaply to finance such operations (Blanchard, 2000). On the other hand, the efficiency theory may argue the opposite. Government officials may use labor regulations to force firms to hire and keep excess labor or to empower unions friendly with the government. In this case, countries with better governance have a comparative advantage at regulation relative to other forms of social control of business.

According to *political power* theories, institutions are designed to transfer resources from those out of to those in political power (Olson, 1993). Hence, institutions would be inefficient and designed to be so by political leaders to help themselves and their favored groups. It is argued that regulations protecting workers are introduced by socialist, social-democratic, and more generally leftist governments to benefit their political constituencies (Hicks, 1999). In addition, labor regulations are a response to the pressure from trade unions, and the degree of regulations should be higher when unions are more powerful. Dictatorships are less constrained than democratically elected governments, and therefore will have more redistributive laws and institutions. Constitutions, legislative constraints, and other forms of checks and balances are all conducive to fewer regulations (Djankov et al. 2002). Likewise, open economies may find expensive to introduce regulations since competition makes it less lucrative for governments to raise firms' regulatory costs (Ades and Di Tella, 1999).

Finally, *legal theories* suggest that the legal tradition is at the root of the way countries control economic activities (Djankov et al., 2003). Common law countries tend to rely more on markets and contracts, civil law countries on regulation, and socialist countries on state ownership. [10] This implies that civil law countries and socialist law countries should regulate labor markets more extensively than common law countries. Common law countries may also have a less generous social security system since they rely on markets to provide insurance.

[10] Common law emerged in England and is mostly characterized by the importance of decision making by juries, independent judges, and the emphasis on judicial discretion as opposed to codes. Common law was transmitted to the British colonies, including US, Canada, Australia, New Zealand, India, Pakistan, and other countries in Southeast Asia, East Africa, and the Caribbean. On the other hand, civil law evolved from Roman law in Western Europe and was incorporated into civil codes in France and Germany in the 19th century. It is characterized by less independent judiciaries, the relative unimportance of juries and a greater role of both substantive and procedural codes as opposed to judicial discretion. French civil law was transplanted throughout Western Europe, including Spain, Portugal, Italy, Belgium, and Holland, and subsequently to the colonies in North and West Africa, Latin America, and parts in Asia. German codes became accepted in Germanic Western Europe, but also was transplanted to Japan and from there to China, Korea, and Taiwan. Socialist law was adopted in countries that came under the influence of the USSR, while an indigenous Scandinavian legal tradition developed in Sweden, Norway, Denmark, Iceland, and Finland (Botero et al. 2003).

After this brief description of the different theories explaining the choice of labor regulation, our set of instruments is the following: (a) For efficiency purposes, we use the (log of) GDP per capita. (b) Testing the political power theories implies testing the significance of the index of institutionalized autocracy from the Polity IV Codebook (Marshall and Jaggers, 2003), the political orientation of the government and congress to the left (Beck et al. 2001), and measures of trade openness. (c) We include the dummy variables for countries with British common law, and German civil code to test the legal theories (La Porta et al. 1999).

Our second way to tackle the endogeneity of labor rigidities is to use the GMM estimators developed by Arellano and Bover (1995) and Blundell and Bond (1998). This technique takes account of the following: First, the presence of unobserved period- and country-specific effects. Time effects are accounted for by the inclusion of period-specific dummy variables, whereas country-specific effects are dealt with via differencing given the dynamic nature of the regression. Second, we control for biases resulting from simultaneous or reverse causation. A more detailed reference to the GMM-IV techniques is presented in the Appendix II in Calderón and Chong (2003).

4. Empirical Assessment

In the present section, we present the empirical assessment of the link between income inequality and regulation in the labor market. We gather data for a sample of 121 countries over the 1970-2000 period (see list of countries in appendix I). We present some basic statistics on income inequality and labor regulations as well as the correlation analysis. Next, we perform the regression analysis. Our assessment will be undertaken in two dimensions: (i) a cross-section analysis over the 1970-2000 period, and (ii) a panel data of 5-year average non-overlapping observations over the same period.

4.1. Basic Statistics

In Table 1 we report simple averages of the income inequality and the indicators of labor regulation across the world for a *cross-section of countries* over the 1970-2000 period. First we find that the distribution of income is more egalitarian among industrial nations (as proxied by a Gini coefficient of 0.32) than among developing countries (with an average Gini of 0.41). Among developing countries, Latin America has especially unequal income distribution. Second, labor codes in industrial countries (as proxied by the index L0 in the RA dataset) contain more regulations (i.e. ILO standards) than developing countries (0.49 vs. 0.25, respectively). Latin American countries have more regulations that the typical developing country. Third, industrial countries have a higher ability to enforce regulations than developing countries (as displayed by indices L1 and L2 in the RA dataset). Latin

American countries have even less. Finally, we should note the following among the variables in the aggregate indices L1 and L2: (a) the ratio of minimum wages to income per capita is larger among developing than among industrial countries. (b) The contribution to social security as a percentage of the workers salary is larger among industrial than among developing countries. (c) Trade unions are larger among industrial than among developing nations. (d) Public sector employment (proxied by employment in the central or general government) is larger among industrial countries than among developing nations.

Using the BDLLS dataset, we find that labor codes in developing countries contain more regulations regarding employment laws and industrial (collective) relations laws than in industrial countries. Latin American countries, in particular, appear to have even more regulations. On the other hand, labor codes in industrial countries contain more benefits in their social security laws. If we look further into the components of the different aggregate indices of laws protecting workers, we find that: (a) regulations on the conditions of employment are significantly larger among developing nations than among industrial countries. (b) Industrial countries have more regulations regarding the participation of workers in management than developing countries, although the latter group has more regulations on collective bargaining and collective disputes. (c) Workers in industrial countries are more protected than in developing countries in terms of the benefits stipulated in their social security laws, especially in the area of unemployment benefits (for further details, see Table 1).

In Table 2, we present the evolution of the sample averages by decade over the 1970-2000 period. Our *panel statistics* are reported for the sample of all countries as well as for the sample of industrial and developing countries. We first find that income inequality has decreased over time regardless of the sample of countries evaluated. Gini coefficients have decreased (from 0.40 over the 1970s to 0.38 over the 1990s), income shares of top quintiles have decreased and income shares of middle and bottom quintiles have increased (see Table 2). Second, labor codes have incorporated more ILO standards over time. Specifically, the index L0 has increased from 0.27 in the 1970s to 0.32 in the 1990s for the full sample of countries. Third, the enforcement of labor regulations has also increased on average over time for the full sample of countries (whether we use the aggregate index L1 or L2 in the RA dataset). However, we observe that whereas labor markets have been slightly deregulated among industrial countries in the 1990s (relative to the 1980s), labor regulations have increased among developing countries. Finally, a closer look into the components of the aggregate indices L1 and L2 yields the following: (a) the decline in the aggregate indices L1 and L2 among developing countries is mainly attributed to the reduction in the public sector employment (as a percentage to total employment) and the reduction of the percentage of workers in labor unions. (b) Increase in aggregate indices L1 and L2 among developing nations is explained by upward trends in minimum wages and social security contributions (for additional details, see Table 2).

4.2. Correlation Analysis

Cross-Section Correlations. In Table 3, we present the correlation analysis of income inequality and labor regulation indicators for the full sample of countries as well as industrial and developing countries. [11] For the sake of robustness, we use not only different sets of labor market rigidity indicators but also different measures of income inequality, namely Gini coefficients and income shares. We first present the cross-section correlation between inequality and the labor regulation indicators in the RA dataset (see panel I of Table 3). In general, we find that labor regulation on paper and in practice (as proxied by the aggregate indices L0, L1 and L2) have a negative association with the Gini coefficient for the full sample of countries (see figures 1 through 3). We should also note that these labor regulation indices have a negative correlation with the income shares of the top quintiles of the population, and a positive association with the income shares of the middle and bottom quintiles (see Table 3). We specifically find that the aggregate index of "de facto" rigidities L1 has a larger negative correlation with the Gini coefficient than L2 (-0,46 vs. –0,12).

A further look in the correlation between income inequality (as proxied by the Gini coefficient) and the aggregate indices of labor regulation yields: (a) minimum wages and trade union membership in the L1 index display the largest correlation with the Gini coefficient (approximately -0.5). (b) Trade union membership and public sector employment in the L2 index exhibit the largest negative association with the Gini coefficient (with a correlation coefficient of approximately –0,1). This preliminary evidence suggests that the countries with more labor regulations (independently on whether they are *de jure* or *de facto*) usually display lower levels of income inequality.

Next we analyze the cross-section correlation between income inequality and the labor regulation indicators in the BDLLS dataset (see panel II of Table 3). We find that (the aggregate index of) employment laws (as well as their different sub-indices) are positively correlated with the Gini coefficient —with the largest positive correlation displayed by regulations on job security (see figure 4). Also, we find a negative association between the index of industrial relations laws and the Gini coefficient that is mainly driven by worker participation in management (see figure 5). On the other hand, the other two components of that aggregate index (collective bargaining and collective disputes) exhibit a positive correlation with income inequality. Finally, we find a negative degree of association between social security laws and the Gini coefficient —displaying the largest negative coefficient among aggregate indices, -0,38 (see figure 6). Among the different benefits covered by social security laws, unemployment benefits display the largest negative correlation with the Gini coefficient (-0,47),

while sickness and health benefits display the smallest correlation (-0,17). In summary, we observe that countries with more egalitarian distribution usually display a better social security environment (with a legal framework that entails more benefits on old age, sickness, and unemployment than in other countries).

Panel Data Correlations. In Table 4 we display the panel data correlation analysis between the Gini coefficient and the different indicators of labor market regulations from the RA database. We find that for most of our indicators (aggregate indices and individual categories) there is an unconditional negative correlation between income inequality and regulations in the labor market. The correlation coefficient between L0 and the Gini coefficient is –0,32. On the other hand, the correlation between L1 and income inequality is higher than the one with L2 (-0,47 vs. –0,20, respectively).[12]

Regarding the evolution of the correlation between these variables over decades, we first find that the correlation between income inequality and labor regulation in paper (L0) is negative in all decades although it decreases from –0.34 in the 1970s to –0.30 in the 1990s. In the case of regulations in practice (as proxied by the aggregate indices L1 and L2), we find that after decreasing in the 1980s with respect to the previous decade, the correlations have increased in the 1990s (although very slightly for L1). Finally, note that regulations on minimum wages (whether they are normalized by industrial wages or income per capita) are positively associated with income inequality for industrial countries. For developing countries, the positive correlation has been found only for minimum wages normalized by income per capita.

Of course, one needs to control for other determinants of inequality and the possible reverse causation in order to properly conclude whether labor regulations affect inequality.

4.3 Cross-Section Regression Analysis

We first analyze the impact of labor regulations on income inequality for our cross-section of 121 countries over the 1970-2000 period. We first analyze our cross-section OLS estimates and then we instrument for labor regulation in our simple IV estimates.

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[11] For reasons of space, we will comment the results for the full sample of countries. If necessary, we will point out some differences in the correlation analysis between industrial and developing countries.

[12] The largest negative correlation among the categories of the aggregate L1 index is the trade union membership (-0.5), followed by general government employment (-0.36) and social security contribution (-0.3). The smallest correlation is exhibited by minimum wages (-0.10). On the other hand, maternity days of leave and trade union membership (as proxied by the ratification of the ILO convention 87) show a negative correlation with the Gini coefficient among the L2 components (-0.31 and –0.18, respectively), while minimum wages and central government employment display a positive correlation (0.16 and 0.03, respectively).

In tables 5 and 6 we present the results of OLS and IV estimates, respectively, reporting the coefficient of all regressors, the two samples, and the three aggregate labor regulations variables constructed from each data set. In Table 6 we present both the OLS and IV estimates only of our coefficient of interest, namely the coefficient of the labor regulation indicator, for both samples. In this table, we report the coefficient, its standard error and the coefficient of determination (R squared) of the full regression.[13] Our dependent variable is the Gini coefficient and, for robustness, we also report regression results for the income shares of selected quintiles of the population. Our discussion of the OLS results will focus on the Gini coefficient as the dependent variable.

With OLS and the full sample of countries, we find that labor regulations on paper (as proxied by the number of ILO standards ratified by a country) are positively related to income inequality, but the estimated coefficient is not statistically significant. Regarding indices of labor regulations in practice (as approximated by the aggregate indices L1 and L2), we have mixed results. The aggregate index L1 of regulations *de facto* have a negative and significant relationship with income inequality, mainly attributed to the significant relationship between income inequality and social security contribution as well as general government employment (first column of Table 7). On the other hand, the aggregate index L2 has a positive although not statistically significant relationship with income inequality. Note that the only category of L2 that seems to have a robust positive relationship with income inequality is the ratio of minimum wages to income per capita (first column of table 7). These results do not change much if one considers the sample of developing countries. The coefficients of the rest of the regressors do not change much either across samples.

Using the indicators of labor market regulation on the BDLLS data set, we find that all aggregate indices of labor regulation have a positive association with income inequality (as proxied by the Gini coefficient). We find that employment laws have a positive and significant relationship with income inequality, which is mainly driven by the significance of regulations on alternative employment contracts (first column in table 7). On the other hand, regulations on collective disputes have a positive and significant relationship with inequality, although the coefficient for the aggregate index of industrial relations law is not significant. Finally, the aggregate index of social security laws has a positive and significant relationship with income inequality, which is mainly attributed to the significance of regulations on sickness and health benefits.

Given the likely reverse causation, we estimate the coefficient of our labor regulation indicators using IV techniques in order to control for the possible endogeneity of our variable of interest. Following the

[13] The income inequality regression includes the following explanatory variables: output per capita (in logs), output per capita squared, secondary schooling, liquid liabilities, inflation, size of the modern sector, physicians

strategy applied by Calderón and Chong (2003), we find instruments for the indicators of labor market rigidities according to the literature summarized by Botero, Djankov, La Porta, Lopez de Silanes and Shleifer (2003). Among our main findings, we have that find that labor markets are more regulated in richer countries, and in left-oriented governments. On the other hand, countries with common law (British legal tradition) are less regulated. In addition, labor regulation (proxied by employment laws, industrial relation laws and social security laws) are fewer in richer countries, in more open countries, and in countries with a British legal tradition.[14]

We first find that labor regulations on paper (as proxied by the normalized index of ILO conventions ratified by a country) have no significant relationship with income inequality. Aggregate indices of regulation in practice (L1 and L2 in the RA dataset) also have no significant relationship with income inequality, although some of their components do (column 4 to 6 in Table 7). For example, proxies to trade union membership and public employment in the index L1 have a negative and significant relationship with the Gini coefficient. However, the ratio of minimum wages to income per capita (part of the L2 index) has a positive and significant effect on income inequality. Using the estimated coefficients in Table 7, we proceed to compute some economic inferences that could be drawn from our regression analysis. A one standard deviation increase in trade unions and public sector employment will reduce the Gini coefficient (0-1) by 0.094 and 0.082 respectively. On the other hand, an increase in the ratio of minimum wages to income per capita will increase income inequality (as proxied by the Gini coefficient) by 0.15 over the 30-year period. Although the coefficient magnitudes do vary across samples, which variables are significant does not change. Th only exception is maternity leave that is statistically significant in the restricted sample.

Using the ratio between L1 (L2) and L0 as a measure of compliance we find that the first ratio significantly improves income inequality in both samples.

Using the BDLLS data set, we find results that are quite different. In particular, more regulations on employment laws increase income inequality for the full sample of countries, although the sub-categories of this index have no significant relationship with the Gini coefficient. Increasing regulations on industrial (collective) relations may also worsen the distribution of income. Within this category, regulations on collective bargaining and collective disputes have a positive and significant impact on the Gini coefficient. Note that more regulations regarding the participation of workers in management may drive a more egalitarian distribution of income, but the impact is not statistically significant. Finally, we find that the impact of regulations on social security on income inequality is

(per 1000 people), and the different indicators of labor regulation. Full report of the regression results are available from the authors upon request.

not statistically significant, however, regulations on sickness and health benefits have a positive and significant impact on income inequality. In general, statistical significance increases with the sample of developing countries.

Economically speaking, a one standard deviation increase in the aggregate index of employment laws and industrial relations laws will increase the Gini coefficient (0-1) by 0.02 over the 30-year period (that is, it moves from an average of 0.39 for the full sample of countries to 0.37). We should mention that an analogous increase in the regulations of both collective bargaining and disputes has a stronger negative impact on the distribution of income. That is, the Gini coefficient increases by 0.04 and 0.10 over the 30-year period.

4.4 Panel Data Regression Analysis

After performing our cross-section regression analysis, we evaluate the relationship between labor market regulations and income inequality using a panel data set of 5-year non-overlapping observations during the 1970-2000 period. We take advantage of the additional dimension (i.e., the time dimension) to draw some inferences on the impact of labor market regulations on income inequality with robust panel data estimation techniques.

4.4.1 Simple Techniques

We first characterize the relationship between labor market regulations and income inequality using simpler techniques such as pooled, time fixed-effects and country fixed effects OLS. While the pooled OLS does not take into account unobserved specific effects and endogeneity of the regressors, time fixed-effects and country fixed effects isolate these unobserved effects. Next, we account for the possible endogeneity of our labor regulation variable by using some exogenous instruments. Here we report estimates using IV and IV with time effects and with fixed country effects. In the next subsection, we will present estimates using the GMM-IV system estimator developed by Arellano and Bover (1995) and Blundell and Bond (1998), which takes into account for the unobserved effects and endogeneity by using both internal instruments and the exogenous instruments for the labor regulation indicators.

In Tables 8.1 to 8.3 we report our regression analysis for labor market regulations and income inequality for our panel data sample, using in turn the L0, L1 and L2 indicator of labor regulation together with the other regressors. Each table presents the two samples, OLS and IV estimates, pooled,

[14] For the sake of brevity, we do not report the first stage regression results. However, they are available from the

time fixed-effects and country-fixed effects. Our specification includes other explanatory variables such as output per capita (in logs), and output per capita squared, secondary schooling, liquid liabilities (as percentage to GDP), the number of physicians (per 1000 people), the CPI inflation rate, and the size of the modern sector. In general, we find that there is a non-linear relationship between income inequality and output per capita that is consistent with the Kuznets curve hypothesis (an U-inverted curve for the Gini coefficient).[15] We also find that countries with more equal income distribution seem to also have a higher stock of human capital, deeper financial systems, better health systems, lower macroeconomic instability, and a larger agricultural sector (see Table 8.1 to 8.3 for more details).

Table 9 presents the effects of different measures of labor regulations (we report the coefficient of interest only). Focusing on IV estimates —given that in principle they tackle the endogeneity problem— we find that labor regulations *de jure* generally have no significant relationship with income inequality. In the case of country fixed effects and the large sample, we find a positive effect on equality (a negative effect on the Gini coefficient). This result does not hold in the developing countries sample. According to the IV pooled and time fixed effects estimates, the aggregate indices of labor regulations "de facto" (or indices L1 and L2 in the RA dataset) have no effect on income distribution. In the case of IV fixed country effects, the results show that *de facto* regulations significantly worsen income distribution when one considers the full sample of countries. However, these conclusions disappear (and even reverse) when we consider the sample of developing countries.

If we closely look at the individual impact of the component of the L_1 index of *de facto* regulations, we have that a higher share of unionized labor and a higher share of public employment seem to drive the decline in the Gini coefficient if we use pooled IV and IV with time effects for both the full sample of countries and the sample of developing countries. When we control for unobserved country effects, the impact of these variables becomes not significant for the full sample of countries, although they remain negative and significant for the sample of developing countries. On the other hand, maternity leave and public employment have a negative and significant effect on the Gini coefficient when we analyze the pooled IV estimates with the components of the L_2 index. This result holds for the full sample and for developing countries. Our results are qualitatively invariant when we control for unobserved time effects. On the other hand, we accounting for country effects, the impact of this variable becomes positive for the full sample of countries, and it remains consistently negative and significant for maternity leave and public employment for the sample of developing countries (see Table 9).

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authors upon request.

[15] The GDP turning point that may change the impact of income per capita on income inequality from positive to negative fluctuates from 8.1 to 9.1 according to our estimates in Table 7.

4.4.2 The GMM-IV System Estimator

In section 4.4.1 we used simpler panel data techniques that allowed us to characterize the relationship between income inequality and labor market regulations. In this section, we will use the GMM-IV system estimator proposed by Arellano and Bover (1995) and Blundell and Bond (1998). The GMM-IV system estimator is our preferred estimator for the following reasons: First, it accounts for (unobserved) country-specific effects that may bias our estimates. Specifically, we eliminate the control for the presence of time effects with time dummies and we get rid of the country-specific effects by expressing our equation in differences. Second, it controls for the possibility of endogenous regressors. We use both internal instruments (i.e. lagged levels as instrument for the differences, and lagged differences as instruments for the levels) as well as other exogenous instruments for labor regulations suggested by the theory (i.e. legal and institutional variables). To confirm the validity of our income inequality regressions, we compute some specification tests: (a) Sargan test of over-identifying restrictions, which tests the validity of the moment conditions that we set up to perform the IV regressions, and, (b) tests of higher order serial correlation.[16] In general, the specification tests validate our regressions for statistical inference. That is, our instruments are valid according to the Sargan test and we reject the possibility of our errors displaying high-order serial correlation.

Before we discuss our results on the variable of interest (i.e. labor market regulations), we briefly comment on the coefficient estimates for the other explanatory variables. First, we find evidence in favor of the Kuznets hypothesis. That is, income inequality increases in the early stages of development, and then decreases in the later stages. On average, the turning point for the GDP (in logs) in the full sample of countries is 8.1 (approximately the initial level of GDP per capita in Morocco during the 1996-00 period), whereas the mean in the regression sample if 8.6 (Colombia during the same period). Second, a larger stock human capital (as proxied by a larger enrollment rate in secondary education or a larger number of physicians per 1000 people) may help reduce income inequality. Deeper financial systems also drive inequality down. On the other hand, income inequality will increase if the country has higher inflation or if the modern sector is larger, although we should note that the coefficient estimate of inflation is not robust (see Table 10 for more details).

Now we turn to the effect of labor market regulations on income inequality. First, we find that regulations in paper, as proxied by L_0, have a positive and significant impact on the Gini coefficient for the full sample of countries, as well as for the sample of developing countries. Hence, income inequality is worsened by the adoption of a larger number of ILO standards. A one standard increase

in L_0 (0.21 for the full sample of countries) would reduce the Gini coefficient by 0.01. ON the other hand, an analogous increase in L_0 for developing countries (0.18) would raise the Gini coefficient by 0.025. We should note that the standard deviation increase in L_0 —0.21 for the full sample of countries— is quite larger than the average observed in 1996-00 with respect to 1976-80 (0.06). Such a change over that period has only occurred in Spain, Finland, Brazil and Uruguay (i.e. an increase of approximately 0.21 in the normalized number of ILO standards in 1996-00 relative to 1976-80). However, we should take this result with caution. Reducing the number regulations contained in the labor codes does not guarantee that the enforcement abilities of the regulators will be enhanced.

In contrast to our results for regulations in paper, we find that our indices of labor regulations in practice —either L_1 or L_2— have a negative and significant coefficient estimate for the full sample of countries as well as among developing countries. Hence, labor market regulations in countries with better capabilities to enforce the law would reduce the income inequality. In effect, we find that a one standard deviation increase in L_1 (0.13) may reduce income inequality by 0.037. In addition, an analogous increase in L_2 (0.15) may reduce the Gini coefficient by 0.033. An analogous increase in the extent of de facto regulations would cause a decline of the Gini coefficient between 0.028 (when L_1 declines) and 0.032 (when L_2 declines).[17]

In Table 11 we report the sensitivity analysis of our coefficient estimates of labor regulations to changes in (i) the indicator of labor regulation used in the regression. Here we use the different components of the aggregate indices used in Table 10. (ii) The proxy of income inequality used as our dependent variable. Besides using the Gini coefficient, we use the income share of selected quintiles of the population.

We first analyze the impact of the different individual measures of labor market regulations on the Gini coefficient. The negative impact of L_1 on income inequality for the full sample of countries is mainly attributed to a negative and significant impact of social security contribution, trade unions, and government employment. We specifically find that a one standard deviation increase in the contribution to the social security reduces the Gini coefficient by 0.008, whereas analogous increases in trade union membership and public employment generate a decline in the Gini coefficient by 0.028 and 0.01, respectively. In the case of the negative impact of L_2, we find negative and significant effects on income inequality from maternity leave and trade unions —as proxied by the ratification of

[16] Recall that by construction, our error terms displays first order serial correlation. For more technical details on the estimation technique see Calderón y Chong (2003).

[17] The L_1 index in Jordan, South Africa and Bangladesh have increased more than one standard deviation, whereas the L1 index in Israel, Syria, United Kingdom, Australia and Bulgaria have decreased one standard deviation or more in 1996-00 relative to 1976-80. On the other hand, the L_2 index in Bangladesh, Venezuela,

the ILO convention on organized labor. We find that a one standard deviation increase in mandated benefits —as proxied by a one standard deviation increase in the days of maternity leave— may reduce the Gini coefficient by 0.01. When we restrict our regression analysis to developing countries, mandated benefits —i.e. social security contribution— drives the redistributive impact of L_1, whereas maternity leave and trade unions drive the redistributive effects of L_2. The impact of a one standard deviation increase in mandated benefits among developing nations generates a reduction in the Gini coefficient of 0.012 regardless of the proxy used.

Next we analyze the impact of the different aggregate indices on the incomes shares of top, middle, and bottom quintiles of the population. Our index of regulations in paper, L_0, has a positive but not significant impact on the income shares of the top quintiles. However, it has a negative and significant impact on the income share of the middle class —as proxied by the income share of the middle quintile— and the poor —as proxied by the share of the bottom quintile. A one standard deviation increase in the (normalized) number of ILO standards ratified would reduce the income share of the middle and bottom quintiles by 0.005 and 0.003, respectively. For the sample of developing countries, regulations in paper have a positive and significant relationship with the income share of the second largest quintile (Top 40), and a negative and significant relationship with the middle and bottom quintiles. A one standard deviation increase in L_0 will raise the income share of the Top 40 by 0.03, and reduce the income share of the middle and bottom quintiles by 0.015 and 0.008, respectively.

On the other hand, L_1 has a positive and significant impact on the top shares and a negative and significant effect on the middle and bottom shares. Social security contribution is the dimension that reduces the income share of the top quintiles and it increases the income share of the middle quintile. Specifically, we find that a one standard deviation increase in the contribution to the social security (0.22) may help reduce the income share of the top quintiles around 0.01, increase marginally the income share of the middle quintile by 0.003, and reduce the income share of the bottom quintiles between 0.008 and 0.04. Besides social security, active labor policies that raise the public employment also works as an effective tool in raising the income share of the bottom quintiles of the population (although the economic impact is negligible). When we analyze the sample of developing countries, we find that the redistributive impact of L1 across income shares is mainly attributed to mandated benefits —as proxied by the social security contribution as a percentage of salaries. The redistributive effects of higher contribution to the social security are larger than when we analyzed the full sample of countries. A one standard deviation increase in the social security contribution would reduce the shares of the top quintiles between 0.018 and 0.02, increase the middle quintile by 0.01, and raise the income share of the bottom quintiles between 0.004 and 0.011.

Romania, and Turkey has increase at least one standard deviation, while Niger, Bahrain, and New Zealand have

In addition, an increase in labor market regulations —approximated by a decline in the L_2 index— would reduce the income shares of the top quintiles of the population, and increase the income shares of the bottom quintiles. Its impact on the income share of the middle quintile is statistically negligible. The redistributive effects across income shares are basically attributed to mandated benefits —as proxied by the number of days of maternity leave. A one standard deviation increase in mandated benefits (i.e. maternity leave) would reduce the shares of the top quintiles between 0.013 and 0.0171, increase the middle quintile by 0.004, and raise the income share of the bottom quintiles between 0.005 and 0.01. Consistently with the impact of L_1 on developing countries, we find that the number of days of maternity leave (our proxy for mandated benefits) drives the redistributive effects of L_2 in developing nations. The quantitative effects of higher mandated benefits are similar to those found for the full sample of countries.

Finally, an increase in our measures of compliance —as proxied a lower gap between regulations in paper and in practice— will significantly improve income inequality. This proposition holds for the full sample of countries when the gap is measured with L_1, and for the sample of developing countries regarding the measure of regulations in practice used. If the compliance in the extent of regulations in the labor markets improves —as proxied by a decrease in the gap between the L_0 and L_1 indices— the Gini coefficient would decrease between 0.03 (when using the full sample regressions) and 0.05 (when using the developing country regressions).

5. Conclusions

We have analyzed the relationship between labor regulations and income inequality. Because there are alternative ways of measuring regulations, and perhaps more importantly, there are alternative estimation techniques to (imperfectly) deal with simultaneity and probable measurement errors, it is not straightforward to find robust results. After using alternative econometric approaches, considering two data sets and two alternative samples, there are some results that do appear to be more robust.

Table 12 presents a simple statistical accounting summary of results. It lists in columns alternative estimation techniques, all of which theoretically control for the endogeneity problem —provided instruments are well behaved— so they intend to measure the *effect* of regulations on inequality. Rows list different regulation measures. A 0 means that the effect is not statistically significantly different from zero. 1 means a positive effect on the Gini coefficient (a worsening of income distribution). A –1

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decreased one standard deviation or more.

means a statistically negative effect. By construction, the Table does not take into account the economic relevance of each coefficient, only its significance.

Results can be grouped in three types. First, we find that *de jure* regulations do not improve income distribution. The RA indicator does not have any consistent pattern and the Botero et al. indicators either have no effect or worsen income distribution. Second, relative compliance with existing regulations, particularly the ratio L1 to L0 of the RA data set seems to improve income distribution. It is not possible to rule out that this measure is proxying other factors such as institutional development. Third, *de facto* regulations are overall weakly associated with improving income inequality. In part, this result is due to the fact that different regulations have quite distinct effects. In particular, we find that a higher minimum wage tends to worsen income distribution, whereas the extent of trade unions, the importance of government employment and maternity leave improve it. As mentioned above, some of these positive results do not carry through the bottom quintile of the population.

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Appendix I
List of Countries

Industrial Countries (22): Australia, Austria, Belgium, Canada, Switzerland, Germany, Denmark, Spain, Finland, France, United Kingdom, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, Norway, New Zealand, Portugal, Sweden, United States.

Latin America and the Caribbean (21): Argentina, The Bahamas, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Peru, Paraguay, El Salvador, Trinidad and Tobago, Uruguay, Venezuela.

East Asia and the Pacific (12): China, Hong Kong, Indonesia, Republic of Korea, Mongolia, Malaysia, ,Philippines, Papua New Guinea, Singapore, Thailand, Taiwan, Vietnam.

Eastern Europe and Central Asia (17): Bulgaria, Belarus, Czech Republic, Estonia, Croatia, Hungary, Kazakhstan, Kyrgyz Republic, Lithuania, Latvia, Poland, Romania, Russian Federation, Slovak Republic, Slovenia, Ukraine, Yugoslavia.

Middle East and North Africa (21): United Arab Emirates, Bahrain, Cyprus, Algeria, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Malta, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, Tunisia, Turkey, Yemen.

South Asia (5): Bangladesh, India, Sri Lanka, Nepal, Pakistan

Sub-Saharan Africa (23): Burkina Faso, Botswana, Cote d'Ivoire, Ethiopia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Madagascar, Mali, Mauritania, Mauritius, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Tanzania, Uganda, South Africa, Zambia, Zimbabwe

Table 1
Income Inequality and Labor Market Regulations: Basic Statistics
Cross-Section Sample of 121 Countries, 1970-2000
Averages across Groups of Countries

Variable	All	Industrial	Developing	East Asia	LAC	Chile
0. Income Distribution (Deininger and Squire, 1996; Milanovic, 2000)						
Gini Coefficient (0-1)	0.39	0.32	0.41	0.39	0.48	0.53
Income Shares by:						
Top 20%	46.4%	39.3%	48.9%	46.8%	55.0%	61.6%
Top 40%	67.5%	62.6%	69.3%	68.3%	74.7%	77.4%
Middle 20%	15.5%	17.8%	14.8%	15.0%	13.0%	12.0%
Bottom 40%	16.9%	19.6%	16.0%	16.7%	12.2%	10.6%
Bottom 20%	6.3%	7.0%	6.0%	6.1%	4.2%	3.9%
I. Indicators of Labor Market Rigidity (Rama and Artecona, 2002)						
(0) "De Jure" Index	0.30	0.49	0.25	0.09	0.34	0.33
(1) "De Facto" Index 1	0.28	0.36	0.25	0.18	0.25	0.17
Minimum Wage 1/	0.23	0.24	0.22	0.22	0.21	0.14
Social Security Contribution	0.37	0.45	0.35	0.26	0.35	0.40
Trade Union Membership	0.24	0.39	0.20	0.15	0.18	0.11
General Govt. Employment	0.27	0.39	0.22	0.16	0.25	0.05
(2) "De Facto" Index 2	0.29	0.32	0.28	0.14	0.32	0.08
Minimum Wage 2/	0.14	0.09	0.16	0.10	0.10	0.06
Maternity Leave (# days)	0.16	0.19	0.15	0.13	0.13	0.18
Ratification of ILO Conv. 87	0.59	0.79	0.54	0.17	0.78	0.03
Central Govt. Employment	0.16	0.19	0.16	0.11	0.21	0.03
(3) De Jure vs. De Facto						
L1 relative to L0	-0.04	-0.12	-0.01	0.08	-0.09	-0.16
L2 relative to L0	-0.02	-0.17	0.03	0.06	-0.02	-0.26
II. Indicators of Labor Regulation (Botero, Djankov, La Porta, Lopez-de-Silanes and Shleifer, 2003)						
(1) Employment Laws	1.53	1.36	1.60	1.39	1.79	1.46
Alternative Employment Contracts	0.56	0.58	0.56	0.57	0.55	0.58
Conditions of Employment	0.62	0.49	0.67	0.52	0.73	0.58
Job Security	0.35	0.28	0.37	0.30	0.50	0.31
(2) Industrial (Collective) Relations Law	1.25	1.22	1.26	1.12	1.44	1.18
Collective Bargaining	0.51	0.46	0.53	0.37	0.68	0.78
Worker Participation in Management	0.23	0.32	0.20	0.27	0.15	0.00
Collective Disputes	0.51	0.44	0.53	0.49	0.60	0.40
(3) Social Security Laws	1.70	2.21	1.53	1.58	1.69	1.98
Old Age, Disability and Death Benefits	0.57	0.68	0.53	0.56	0.53	0.46
Sickness and Health Benefits	0.65	0.75	0.62	0.69	0.74	0.79
Unemployment Benefits	0.48	0.78	0.38	0.33	0.42	0.73

Notes: 1/ Minimum wage as a ratio to industrial wage. 2/ Minimum wage as a ratio of income per capita. All variables are normalized.

Table 2
Income Inequality and Labor Market Regulations: Basic Statistics over Decades
Panel Data Sample of 121 Countries, 5-year average observations, 1970-2000
Averages across Groups of Countries

	1970s				1980s				1990s			
Variable	**All**	**Developing**	**LAC**	**Chile**	**All**	**Developing**	**LAC**	**Chile**	**All**	**Developing**	**LAC**	**Chile**
0. Income Distribution (Deininger and Squire, 1996; Milanovic, 2000)												
Gini Coefficient (0-1)	0.40	0.43	0.49	0.49	0.39	0.41	0.48	0.56	0.38	0.40	0.47	0.56
Income Shares by:												
Top 20%	47.4%	50.4%	53.9%	59.7%	46.3%	48.8%	55.3%	64.5%	45.7%	47.9%	56.0%	60.6%
Top 40%	68.4%	70.4%	75.0%	75.0%	67.5%	69.2%	74.4%	78.3%	66.9%	68.4%	74.8%	78.9%
Middle 20%	15.2%	14.2%	12.3%	13.8%	15.6%	14.8%	13.4%	11.6%	15.8%	15.2%	13.3%	10.9%
Bottom 40%	16.4%	15.4%	12.7%	11.2%	16.9%	16.1%	12.1%	10.1%	17.3%	16.4%	11.9%	10.2%
Bottom 20%	6.1%	5.8%	4.4%	4.2%	6.3%	6.1%	4.2%	3.9%	6.5%	6.2%	4.1%	3.7%
I. Indicators of Labor Market Rigidity (Rama and Artecona, 2002)												
(0) "De Jure" Index	0.27	0.23	0.30	0.32	0.29	0.25	0.34	0.32	0.32	0.27	0.39	0.36
(1) "De Facto" Index 1	0.27	0.24	0.24	0.15	0.27	0.25	0.26	0.17	0.28	0.26	0.24	0.20
Minimum Wage 1/	0.23	0.22	0.22	0.12	0.22	0.21	0.20	0.12	0.23	0.23	0.21	0.19
Social Security Contribution	0.33	0.31	0.32	0.36	0.36	0.34	0.35	0.40	0.41	0.39	0.39	0.45
Trade Union Membership	0.24	0.19	0.18	0.09	0.25	0.21	0.20	0.09	0.23	0.19	0.15	0.13
General Govt. Employment	0.27	0.22	0.26	0.04	0.27	0.22	0.27	0.05	0.26	0.22	0.22	0.04
(2) "De Facto" Index 2	0.28	0.27	0.31	0.06	0.29	0.27	0.33	0.06	0.30	0.29	0.32	0.11
Minimum Wage 2/	0.14	0.17	0.11	0.05	0.14	0.16	0.10	0.06	0.13	0.15	0.09	0.08
Maternity Leave (# days)	0.14	0.13	0.12	0.15	0.15	0.14	0.13	0.15	0.17	0.16	0.13	0.23
Ratification of ILO Conv. 87	0.55	0.50	0.73	0.00	0.58	0.53	0.80	0.00	0.64	0.59	0.81	0.10
Central Govt. Employment	0.18	0.17	0.22	0.02	0.18	0.17	0.23	0.03	0.14	0.13	0.18	0.03
(3) De Jure vs. De Facto												
L1 relative to L0	0.00	0.01	-0.06	-0.16	-0.02	0.00	-0.08	-0.15	-0.06	-0.03	-0.14	-0.16
L2 relative to L0	0.01	0.05	0.01	-0.26	-0.01	0.03	-0.01	-0.26	-0.04	0.01	-0.07	-0.26

1/ 2/ See footnote in Table 1

Table 3
Labor Market Regulations and Income Inequality: Cross-Section Correlation Analysis
Cross-Section Sample of 121 countries, 1970-2000

	Full Sample of Countries						Developing Countries					
Variable	**Gini**	**Top 20**	**Top 40**	**Middle 20**	**Bottom 40**	**Bottom 20**	**Gini**	**Top 20**	**Top 40**	**Middle 20**	**Bottom 40**	**Bottom 20**
I. Indicators of Labor Market Rigidity (Rama and Artecona, 2002)												
(0) "De Jure" Index	-0.28	-0.23	-0.25	0.29	0.20	0.17	-0.08	0.02	-0.05	0.15	-0.02	0.02
(1) "De Facto" Index 1	-0.46	-0.44	-0.44	0.36	0.43	0.36	-0.44	-0.39	-0.43	0.34	0.42	0.37
Minimum Wage 1/	-0.49	-0.47	-0.43	0.34	0.44	0.36	-0.48	-0.42	-0.42	0.29	0.44	0.38
Social Security Contribution	-0.08	-0.15	-0.13	0.15	0.10	0.08	-0.17	-0.28	-0.27	0.25	0.26	0.28
Trade Union Membership	-0.48	-0.46	-0.43	0.32	0.44	0.37	-0.42	-0.36	-0.36	0.24	0.38	0.33
General Govt. Employment	-0.41	-0.40	-0.38	0.34	0.36	0.27	-0.40	-0.33	-0.35	0.28	0.35	0.30
(2) "De Facto" Index 2	-0.12	-0.14	-0.13	0.16	0.09	0.04	-0.08	-0.08	-0.08	0.13	0.04	0.00
Minimum Wage 2/	-0.06	-0.08	-0.05	0.09	0.02	-0.04	0.00	0.00	0.03	0.03	-0.06	-0.11
Maternity Leave (# days)	0.24	0.06	0.06	-0.06	-0.06	-0.02	0.18	-0.05	-0.05	0.04	0.06	0.11
Ratification of ILO Conv. 87	-0.10	-0.12	-0.10	0.16	0.05	0.00	0.01	0.00	0.00	0.09	-0.06	-0.10
Central Govt. Employment	-0.09	0.02	0.03	-0.06	-0.01	-0.07	-0.03	0.18	0.18	-0.17	-0.16	-0.18
(3) De Jure vs. De Facto												
L1 relative to L0	-0.09	-0.14	-0.11	0.01	0.16	0.12	-0.36	-0.43	-0.39	0.20	0.46	0.36
L2 relative to L0	0.15	0.09	0.12	-0.15	-0.08	-0.11	-0.06	-0.16	-0.10	0.03	0.14	0.05
II. Indicators of Labor Regulation (Botero, Djankov, La Porta, Lopez-de-Silanes and Shleifer, 2003)												
(1) Employment Laws	0.10	0.09	0.06	-0.08	-0.05	-0.03	0.07	-0.03	0.01	0.00	-0.01	-0.08
Alternative Employment Contracts	0.07	0.02	0.03	-0.02	-0.03	-0.05	0.17	0.09	0.12	-0.09	-0.12	-0.16
Conditions of Employment	0.05	0.06	0.01	-0.02	0.00	0.05	-0.10	-0.17	-0.16	0.16	0.14	0.13
Job Security	0.10	0.10	0.10	-0.13	-0.08	-0.09	0.10	0.03	0.07	-0.07	-0.07	-0.14
(2) Industrial (Collective) Relations Law	-0.01	0.03	0.01	0.03	-0.04	-0.01	0.03	0.03	0.02	0.08	-0.07	-0.05
Collective Bargaining	0.11	0.13	0.11	-0.07	-0.12	-0.10	0.13	0.12	0.11	-0.07	-0.13	-0.14
Worker Participation in Management	-0.23	-0.23	-0.17	0.12	0.18	0.16	-0.12	-0.17	-0.11	0.11	0.09	0.12
Collective Disputes	0.14	0.23	0.11	0.02	-0.19	-0.13	0.05	0.14	0.02	0.14	-0.12	-0.09
(3) Social Security Laws	-0.38	-0.36	-0.35	0.39	0.29	0.19	-0.27	-0.21	-0.24	0.27	0.20	0.14
Old Age, Disability and Death Benefits	-0.23	-0.31	-0.25	0.29	0.20	0.07	-0.10	-0.15	-0.12	0.12	0.11	0.02
Sickness and Health Benefits	-0.17	-0.11	-0.15	0.22	0.10	0.05	-0.10	-0.03	-0.10	0.17	0.05	0.02
Unemployment Benefits	-0.47	-0.45	-0.42	0.41	0.37	0.28	-0.36	-0.31	-0.31	0.29	0.28	0.22

1/ 2/ See footnote in Table 1

Table 4
Labor Market Regulations and Income Inequality: Panel Data Correlation Analysis
Income Inequality Indicator: Gini Coefficient (0-1)
Panel Data of 121 countries, 5-year average observations, 1970-2000

	Full Sample of Countries				Developing Countries			
Variable	**70-00**	**70s**	**80s**	**90s**	**70-00**	**70s**	**80s**	**90s**
I. Indicators of Labor Market Rigidity (Rama and Artecona, 2002)								
(0) "De Jure" Index	-0.3183	-0.3390	-0.3224	-0.2987	-0.1327	-0.1827	-0.1144	-0.1081
(1) "De Facto" Index 1	-0.4662	-0.5071	-0.4468	-0.4531	-0.4308	-0.4561	-0.3871	-0.4487
Minimum Wage 1/	-0.0988	-0.1308	-0.0635	-0.1121	-0.1813	-0.2068	-0.1002	-0.2450
Social Security Contribution	-0.2987	-0.2245	-0.2948	-0.3429	-0.2387	-0.1736	-0.2169	-0.2806
Trade Union Membership	-0.5001	-0.5959	-0.4957	-0.4419	-0.4577	-0.5549	-0.4483	-0.4038
General Govt. Employment	-0.3622	-0.3782	-0.3340	-0.3818	-0.2498	-0.2278	-0.1669	-0.3480
(2) "De Facto" Index 2	-0.2005	-0.2391	-0.1491	-0.2044	-0.1647	-0.1897	-0.0712	-0.2087
Minimum Wage 2/	0.1586	0.1716	0.1759	0.1558	0.0718	0.0869	0.1060	0.0620
Maternity Leave (# days)	-0.3120	-0.3581	-0.3248	-0.2881	-0.3373	-0.4083	-0.3426	-0.3272
Ratification of ILO Conv. 87	-0.1756	-0.1869	-0.1544	-0.1710	-0.0833	-0.0874	-0.0355	-0.0996
Central Govt. Employment	0.0280	0.0893	0.0682	-0.0882	0.1508	0.2841	0.1739	-0.0035
(3) De Jure vs. De Facto								
L1 relative to L0	-0.0183	0.0333	-0.0087	-0.0750	-0.2641	-0.1467	-0.2588	-0.3618
L2 relative to L0	0.1733	0.1869	0.2270	0.1216	-0.0451	-0.0075	0.0239	-0.1257

1/ 2/ See footnote in Table 1

Table 5
OLS Cross-Country Regression Analysis between Income Inequality and Labor Market Regulations
Dependent Variable: Gini Coefficient (0-1)

	Full Sample			Developing Countries			Full Sample			Developing Countries		
	[L0]	[L1]	[L2]	[L0]	[L1]	[L2]	[EL0]	[IR0]	[SS0]	[EL0]	[IR0]	[SS0]
Constant	0.362	-0.166	0.354	0.763	-0.375	0.700	0.235	0.460	0.188	0.534	0.866	0.373
	(0.88)	(0.85)	(0.94)	(1.08)	(1.05)	(1.16)	(1.04)	(1.05)	(0.86)	(1.23)	(1.25)	(1.02)
Output per capita (logs)	0.125 **	0.118 **	0.119 **	0.143 **	0.175 **	0.148 **	0.057 **	0.056 **	0.058 **	0.110 **	0.170 **	0.163 **
	(0.06)	(0.06)	(0.05)	(0.07)	(0.07)	(0.06)	(0.03)	(0.03)	(0.02)	(0.03)	(0.03)	(0.03)
Output per capita squared	-0.008 **	-0.007 **	-0.007 **	-0.009 **	-0.010 **	-0.009 **	-0.003 **	-0.003 **	-0.003 **	-0.008 **	-0.011 **	-0.010 **
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Economic Growth	-0.958 *	-0.911 *	-1.016 *	-0.766 *	-0.771 *	-0.779 *	-1.692 **	-1.694 **	-1.741 **	-0.911 **	-0.804 **	-1.482 **
	(0.62)	(0.60)	(0.62)	(0.47)	(0.48)	(0.48)	(0.79)	(0.83)	(0.71)	(0.45)	(0.39)	(0.71)
Secondary Schooling	-0.020 *	-0.020 *	-0.021 *	-0.028 *	-0.034 *	-0.027 *	-0.016 *	-0.020 *	-0.019 *	-0.018	-0.035	-0.047
	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.04)	(0.04)	(0.04)
Liquid Liabilities	-0.015	-0.023	-0.019	-0.007	-0.013	-0.010	-0.002	-0.013	-0.001	0.033	0.001	0.010
	(0.03)	(0.03)	(0.02)	(0.04)	(0.04)	(0.04)	(0.03)	(0.03)	(0.02)	(0.04)	(0.05)	(0.04)
Inflation Rate	0.079 **	0.076 **	0.080 **	0.069 *	0.072 *	0.085 **	0.055 *	0.064 *	0.078 *	0.049 *	0.058 *	0.088 **
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.03)	(0.04)	(0.03)	(0.03)	(0.04)
Modern Sector	0.294 *	0.274 *	0.295 *	0.285 *	0.279 *	0.289 *	0.265 *	0.299 *	0.262 *	0.261	0.312 *	0.216
	(0.16)	(0.15)	(0.16)	(0.16)	(0.16)	(0.16)	(0.17)	(0.19)	(0.17)	(0.18)	(0.19)	(0.17)
Physicians per 1000 people	-6.117 **	-4.222 **	-5.461 **	-6.550 **	-5.486 **	-5.887 **	-6.722 **	-6.569 **	-7.964 **	-7.704 **	-6.712 **	-9.537 **
	(2.17)	(1.55)	(2.00)	(2.68)	(2.43)	(2.53)	(1.99)	(1.91)	(2.06)	(2.40)	(2.49)	(2.50)
Labor Regulation	0.040	-0.123 *	0.026	0.084	-0.215 *	0.047	0.054 **	0.022	0.043 **	0.084 **	0.031	0.058 **
	(0.07)	(0.07)	(0.08)	(0.10)	(0.11)	(0.09)	(0.02)	(0.02)	(0.02)	(0.03)	(0.03)	(0.03)
No. Observations	68	67	68	53	52	53	53	53	53	38	38	38
R**2	0.407	0.417	0.405	0.227	0.241	0.221	0.480	0.452	0.482	0.349	0.264	0.341
Turning Point	8.0	8.6	8.1	8.4	8.6	8.5	8.5	8.3	8.6	7.2	7.8	8.0

Note: Numbers in parenthesis below the coefficients are standard errors.
** (**) indicates that the explanatory variable is statistically significant at the 10 (5) percent level.*

Table 6

IV Cross-Country Regression Analysis between Income Inequality and Labor Market Regulations 1/

Dependent Variable: Gini Coefficient (0-1)

	Full Sample			Developing Countries			Full Sample			Developing Countries		
	[L0]	[L1]	[L2]	[L0]	[L1]	[L2]	[EL0]	[IR0]	[SS0]	[EL0]	[IR0]	[SS0]
Constant	0.409	-0.039	0.495	0.609	0.062	0.863	0.372	0.402	0.354	1.170	0.890	0.863
	(0.87)	(0.86)	(0.92)	(1.08)	(1.05)	(1.18)	(1.08)	(1.08)	(1.06)	(1.26)	(1.22)	(1.25)
Output per capita (logs)	0.077 **	0.079 **	0.059 **	0.049 *	0.052 *	0.063 *	0.068 **	0.052 **	0.060 **	0.317 **	0.295 **	0.304 **
	(0.02)	(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)
Output per capita squared	-0.004 **	-0.004 **	-0.003 **	-0.003 **	-0.002 **	-0.003 **	-0.004 *	-0.003 *	-0.004 *	-0.018 *	-0.017 *	-0.018 *
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)
Economic Growth	-1.001 **	-1.048 **	-0.966 **	-0.779 **	-0.905 **	-0.719 **	-1.159 **	-1.188 **	-1.096 **	-1.154 **	-1.552 **	-1.060 **
	(0.17)	(0.17)	(0.18)	(0.09)	(0.08)	(0.09)	(0.09)	(0.09)	(0.09)	(0.21)	(0.27)	(0.22)
Secondary Schooling	-0.021 *	-0.023 *	-0.022 *	-0.028 *	-0.027 *	-0.024 *	-0.012 *	-0.017 *	-0.018 *	-0.027 *	-0.037 *	-0.029 *
	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)
Liquid Liabilities	-0.033	-0.035	-0.028	-0.030	-0.018	-0.030	-0.002	-0.013	-0.010	-0.072	-0.103 *	-0.052
	(0.04)	(0.04)	(0.03)	(0.06)	(0.06)	(0.06)	(0.03)	(0.03)	(0.03)	(0.06)	(0.06)	(0.06)
Inflation Rate	0.078 **	0.074 *	0.079 **	0.077 **	0.077 **	0.078 **	0.060	0.045	0.058	0.065 *	0.051	0.061
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Modern Sector	0.300 *	0.251 *	0.298 *	0.304 *	0.302 *	0.305 *	0.275 *	0.302 *	0.276 *	0.278 *	0.302 *	0.255 *
	(0.16)	(0.16)	(0.16)	(0.16)	(0.17)	(0.16)	(0.18)	(0.18)	(0.18)	(0.16)	(0.17)	(0.17)
Physicians per 1000 people	-5.332 **	-4.734 **	-5.768 **	-5.675 **	-4.788 **	-6.428 **	-7.813 **	-7.463 **	-6.840 **	-9.743 **	-9.468 **	-8.566 **
	(1.93)	(1.76)	(2.12)	(2.56)	(2.41)	(2.76)	(2.14)	(2.11)	(2.22)	(2.44)	(2.36)	(2.80)
Labor Regulation	-0.008	-0.125	0.128	0.047	-0.055	0.258	0.092 *	0.058 *	0.062	0.151 **	0.096 **	0.107
	(0.18)	(0.23)	(0.28)	(0.21)	(0.30)	(0.36)	(0.05)	(0.03)	(0.06)	(0.06)	(0.04)	(0.08)
No. Observations	66	65	66	51	50	51	51	51	51	36	36	36
R**2	0.407	0.409	0.409	0.216	0.210	0.225	0.482	0.479	0.456	0.359	0.342	0.285
Turning Point	9.6	9.4	9.4	9.7	10.8	10.6	8.6	8.3	8.4	8.8	8.5	8.6

1/ Our set of instruments for the labor indicators consists of: the level of development, trade openness adjusted by geographic variables, political orientation of the government to the left, British legal origin, German legal origin, and institutionalized autocracy. The set of instruments was chosen from the existing literature, following Botero et al. (2003).

*Note: Numbers in parenthesis below the coefficients are standard errors. * (**) indicates that the explanatory variable in statistically significant at the 10 (5) percent level.*

Table 7
Cross-Country Regression Analysis between Income Inequality and Labor Market Regulations 1/
Dependent Variable: Gini Coefficient (0-1)

	Full Sample of Countries						Developing Countries					
	Least Squares 2/			Instrumental Variables 3/			Least Squares 2/			Instrumental Variables 3/		
Labor Regulation Indicators	**Coeff.**	**Std. Dev.**	**R**2**	**Coeff.**	**Std. Dev.**	**R**2**	**Coeff.**	**Std. Dev.**	**R**2**	**Coeff.**	**Std. Dev.**	**R**2**
I. Rama and Artecona (2002) Indicators												
(0) "De Jure" Index	0.040	(0.07)	0.41	-0.008	(0.18)	0.41	0.084	(0.10)	0.23	0.047	(0.21)	0.22
(1) "De Facto" Index 1	-0.123	(0.07) *	0.42	-0.125	(0.23)	0.41	-0.215	(0.11) *	0.24	-0.055	(0.30)	0.21
Minimum Wage 1/	0.059	(0.05)	0.53	0.265	(0.24)	0.54	0.018	(0.06)	0.38	0.351	(0.28)	0.40
Social Security	-0.071	(0.04) *	0.42	0.107	(0.16)	0.42	-0.038	(0.07)	0.23	0.176	(0.19)	0.22
Trade Union	-0.077	(0.06)	0.42	-0.421	(0.21) **	0.44	-0.144	(0.09) *	0.25	-0.399	(0.26) *	0.25
General Govt. Employment	-0.083	(0.05) *	0.44	-0.444	(0.25) *	0.44	-0.186	(0.08) **	0.30	-0.787	(0.38) **	0.29
(2) "De Facto" Index 2	0.026	(0.08)	0.41	0.128	(0.28)	0.41	0.047	(0.09)	0.22	0.258	(0.36)	0.23
Minimum Wage 2/	0.130	(0.10)	0.51	1.011	(0.33) **	0.54	0.118	(0.11)	0.36	1.623	(0.49) **	0.42
Maternity Leave (# days)	-0.023	(0.08)	0.41	-0.466	(0.36)	0.43	-0.138	(0.09) *	0.24	-1.372	(0.71) *	0.28
Ratification of ILO Conv. 87	-0.004	(0.02)	0.41	0.031	(0.10)	0.41	0.011	(0.03)	0.22	0.066	(0.13)	0.22
Central Govt. Employment	-0.069	(0.09)	0.39	-0.120	(0.22)	0.39	-0.109	(0.10)	0.20	0.078	(0.37)	0.21
(3) De Jure vs. De Facto												
L1 relative to L0	-0.077	(0.05) *	0.42	-0.495	(0.23) **	0.44	-0.152	(0.08) *	0.25	-0.582	(0.29) **	0.26
L2 relative to L0	-0.013	(0.08)	0.40	0.134	(0.33)	0.41	-0.014	(0.11)	0.22	0.107	(0.41)	0.22
II. Botero et al. (2002) Indicators												
(1) Employment Laws	0.054	(0.02) **	0.480	0.092	(0.05) *	0.482	0.084	(0.03) **	0.349	0.151	(0.06) **	0.359
Alternative Employment Contracts	0.105	(0.06) *	0.490	0.239	(0.22)	0.473	0.175	(0.08) **	0.375	0.479	(0.34)	0.339
Conditions of Employment	0.046	(0.06)	0.480	0.185	(0.13)	0.497	0.062	(0.10)	0.350	0.282	(0.16) *	0.379
Job Security	0.001	(0.05)	0.492	0.098	(0.12)	0.503	0.022	(0.05)	0.372	0.181	(0.15)	0.386
(2) Industrial (Collective) Relations Law	0.022	(0.02)	0.452	0.058	(0.03) *	0.479	0.031	(0.03)	0.264	0.096	(0.04) **	0.342
Collective Bargaining	0.049	(0.04)	0.459	0.152	(0.08) *	0.491	0.071	(0.05)	0.278	0.234	(0.11) **	0.360
Worker Participation in Management	-0.021	(0.03)	0.476	-0.173	(0.15)	0.515	-0.012	(0.04)	0.291	0.064	(0.15)	0.293
Collective Disputes	0.098	(0.06) *	0.469	0.602	(0.25) **	0.537	0.075	(0.10)	0.270	0.342	(0.15) **	0.382
(3) Social Security Laws	0.043	(0.02) **	0.482	0.062	(0.06)	0.456	0.058	(0.03) **	0.341	0.107	(0.08)	0.285
Old Age, Disability and Death Benefits	0.052	(0.07)	0.482	0.208	(0.49)	0.481	0.023	(0.10)	0.343	0.639	(0.63)	0.358
Sickness and Health Benefits	0.077	(0.04) **	0.498	0.277	(0.17) *	0.470	0.094	(0.04) **	0.368	0.208	(0.12) *	0.299
Unemployment Benefits	-0.005	(0.04)	0.501	-0.103	(0.20)	0.465	0.014	(0.04)	0.363	0.014	(0.21)	0.365

1/ We report the regression coefficient for the indicator of labor rigidity according to the equations (2) and (3) in the text. Our control variables are: output per capita (in logs), output per capita squared, secondary schooling, liquid liabilities, inflation, size of the modern sector, physicians (per 1000 people), and the labor regulation indicator.

2/ We report standard errors robust to autocorrelation and heteroskedasticity (White, 1980)

3/ Our set of instruments for the labor indicators consists of: the level of development, trade openness adjusted by geographic variables, political orientation of the government to the left, British legal origin, German legal origin, and institutionalized autocracy. The set of instruments was chosen from the existing literature, following Botero et al. (2003).

Full regression results and standard errors of the coefficients of the labor regulation variables are not reported for reasons of space, although they are available from the authors upon request.

*Finally, * (**) indicates that the indicator of labor regulation is significant at the 10 (5) percent level.*

Table 8.1
Panel Data Regression Analysis between Income Inequality and Labor Market Regulations
The Impact of Regulations in Paper ("De Jure" Regulations)
Dependent Variable: Gini Coefficient (0-1)

	Full Sample of Countries						Sample of Developing Countries					
	Least Squares			Instrumental Variables			Least Squares			Instrumental Variables		
Variable	**Pooled**	**F-E (Time)**	**F-E (Country)**	**Pooled**	**F-E (Time)**	**F-E (Country)**	**Pooled**	**F-E (Time)**	**F-E (Country)**	**Pooled**	**F-E (Time)**	**F-E (Country)**
Constant	-0.459	…	…	-0.611 *	...	…	-0.583	…	…	-1.214 **	…	…
	(0.32)			(0.33)			(0.40)			(0.47)		
Output per capita	0.180 **	0.181 **	0.068	0.221 **	0.214 **	0.112	0.200 **	0.255 **	0.138	0.372 **	0.455 **	0.232
(in logs)	(0.08)	(0.09)	(0.12)	(0.08)	(0.09)	(0.14)	(0.10)	(0.11)	(0.15)	(0.12)	(0.14)	(0.19)
Output per capita	-0.011 **	-0.010 **	-0.004	-0.014 **	-0.013 **	-0.007	-0.012 *	-0.014 **	-0.008	-0.024 **	-0.028 **	-0.014
squared	(0.00)	(0.01)	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Economic Growth	-0.229	-0.164	0.135	-0.338 **	-0.282 *	0.116	-0.143	-0.060	0.172	-0.247	-0.158	0.143
	(0.16)	(0.15)	(0.10)	(0.17)	(0.16)	(0.11)	(0.17)	(0.17)	(0.13)	(0.17)	(0.18)	(0.14)
Secondary Schooling	-0.021 **	-0.027 **	-0.018 **	-0.019 **	-0.025 **	-0.020 **	-0.027 **	-0.039 **	-0.031 **	-0.025 **	-0.039 **	-0.033 **
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Liquid Liabilities	-0.040 **	-0.050 **	0.026	-0.048 **	-0.056 **	0.025	-0.047 **	-0.048 **	0.026	-0.067 **	-0.074 **	0.026
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.02)	(0.02)	(0.03)
Physicians	-3.773 **	-4.521 **	1.260 *	-3.117 **	-3.785 **	0.741	-5.565 **	-6.157 **	2.331 *	-4.359 **	-4.832 **	1.145
(per 1000 people)	(0.84)	(0.90)	(0.76)	(0.82)	(0.85)	(0.72)	(1.02)	(1.12)	(1.29)	(1.04)	(1.07)	(1.23)
Inflation	0.022	0.026 *	-0.011	0.018	0.022	-0.010	0.022	0.034 *	-0.013	0.022	0.033 *	-0.011
	(0.02)	(0.02)	(0.01)	(0.02)	(0.02)	(0.01)	(0.02)	(0.02)	(0.01)	(0.02)	(0.02)	(0.01)
Size of the Modern	0.294 **	0.257 **	-0.088	0.303 **	0.268 **	-0.090	0.294 **	0.263 **	-0.075	0.316 **	0.278 **	-0.065
Sector	(0.06)	(0.07)	(0.08)	(0.06)	(0.07)	(0.08)	(0.06)	(0.07)	(0.09)	(0.06)	(0.07)	(0.10)
Labor Ridigity	0.022	0.024	-0.110 *	0.033	0.015	-0.030	0.067 *	0.055	-0.154 *	0.102	0.055	0.007
Indicator	(0.03)	(0.03)	(0.06)	(0.07)	(0.07)	(0.15)	(0.04)	(0.04)	(0.09)	(0.09)	(0.08)	(0.19)
Nobs.	327	327	327	312	312	312	263	263	263	248	248	248
R**2	0.378	0.410	0.908	0.396	0.425	0.906	0.267	0.303	0.892	0.296	0.332	0.889
Adjusted R**2	0.361	0.383	0.847	0.378	0.398	0.840	0.241	0.263	0.787	0.269	0.292	0.769
GDP Turning Point	7.97	8.68	8.08	7.78	8.40	8.23	8.52	8.87	8.46	7.84	8.20	8.25

Note: Numbers in parenthesis below the coefficients are standard errors robust to autocorrelation and heteroskedasticity (White, 1980). For the set of instruments see footnote 3 in Table 7.
** (**) indicates that the explanatory variable is statistically significant at the 10 (5) percent level.*

Table 8.2
Panel Data Regression Analysis between Income Inequality and Labor Market Regulations
The Impact of Regulations in Practice using the L1 aggregate index of "De Facto" Regulations
Dependent Variable: Gini Coefficient (0-1)

	Full Sample of Countries						Sample of Developing Countries					
	Least Squares			Instrumental Variables			Least Squares			Instrumental Variables		
	Pooled	F-E (Time)	F-E (Country)	Pooled	F-E (Time)	F-E (Country)	Pooled	F-E (Time)	F-E (Country)	Pooled	F-E (Time)	F-E (Country)
Constant	-0.560 *	…	…	-0.825 **	...	…	-0.819 **	…	…	-1.411 **	…	…
	(0.31)			(0.32)			(0.38)			(0.44)		
Output per capita	0.217 **	0.213 **	0.049	0.277 **	0.262 **	0.161	0.279 **	0.311 **	0.071	0.423 **	0.474 **	0.252
(in logs)	(0.08)	(0.08)	(0.11)	(0.08)	(0.09)	(0.12)	(0.09)	(0.11)	(0.15)	(0.11)	(0.14)	(0.17)
Output per capita	-0.013 **	-0.012 **	-0.003	-0.017 **	-0.015 **	-0.008	-0.016 **	-0.017 **	-0.004	-0.026 **	-0.028 **	-0.013
squared	(0.00)	(0.01)	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Economic Growth	-0.159	-0.116	0.129	-0.284 *	-0.234 *	0.068	-0.072	-0.034	0.170	-0.165	-0.111	0.077
	(0.16)	(0.14)	(0.10)	(0.16)	(0.16)	(0.10)	(0.16)	(0.16)	(0.12)	(0.17)	(0.18)	(0.13)
Secondary Schooling	-0.025 **	-0.029 **	-0.023 **	-0.024 **	-0.030 **	-0.017 **	-0.034 **	-0.043 **	-0.035 **	-0.030 **	-0.042 **	-0.031 **
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Liquid Liabilities	-0.058 **	-0.065 **	0.035 *	-0.060 **	-0.069 **	0.025	-0.064 **	-0.062 **	0.031	-0.079 **	-0.081 **	0.026
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.02)	(0.02)	(0.03)
Physicians	-1.883 **	-2.590 **	0.780	-2.503 **	-3.147 **	0.780	-1.852 **	-2.582 **	1.473	-3.765 **	-4.253 **	1.297
(per 1000 people)	(0.55)	(0.80)	(0.66)	(0.73)	(0.81)	(0.68)	(0.83)	(1.11)	(1.11)	(0.96)	(1.03)	(1.15)
Inflation	0.018	0.022	-0.015	0.018	0.022	-0.013	0.019	0.029 *	-0.015	0.022	0.033 *	-0.012
	(0.02)	(0.02)	(0.01)	(0.02)	(0.02)	(0.01)	(0.02)	(0.02)	(0.01)	(0.02)	(0.02)	(0.01)
Size of the Modern	0.219 **	0.191 **	-0.156 **	0.253 **	0.222 **	-0.174 **	0.205 **	0.187 **	-0.144 *	0.253 **	0.231 **	-0.155 *
Sector	(0.06)	(0.06)	(0.07)	(0.06)	(0.07)	(0.08)	(0.06)	(0.07)	(0.08)	(0.06)	(0.07)	(0.09)
Labor Regulation	-0.174 **	-0.159 **	0.162 **	-0.103	-0.130	-0.360 **	-0.248 **	-0.231 **	0.160 *	0.023	-0.028	-0.498 **
Indicator	(0.03)	(0.04)	(0.06)	(0.08)	(0.10)	(0.14)	(0.05)	(0.06)	(0.09)	(0.12)	(0.13)	(0.20)
Nobs.	341	341	341	326	326	326	269	269	269	254	254	254
R**2	0.409	0.430	0.910	0.395	0.419	0.910	0.299	0.323	0.893	0.280	0.308	0.896
Adjusted R**2	0.393	0.405	0.855	0.378	0.392	0.851	0.275	0.286	0.794	0.253	0.268	0.787
GDP Turning Point	8.54	9.07	8.61	8.36	8.94	9.93	8.85	9.03	9.66	8.21	8.44	9.95

See footnotes in Table 8.1

Table 8.3
Panel Data Regression Analysis between Income Inequality and Labor Market Regulations
The Impact of Regulations in Practice using the L2 aggregate index of "De Facto" Regulations
Dependent Variable: Gini Coefficient (0-1)

	Full Sample of Countries						Sample of Developing Countries					
	Least Squares			Instrumental Variables			Least Squares			Instrumental Variables		
	Pooled	F-E (Time)	F-E (Country)	Pooled	F-E (Time)	F-E (Country)	Pooled	F-E (Time)	F-E (Country)	Pooled	F-E (Time)	F-E (Country)
Constant	-0.427	…	…	-0.575 *	...	...	-0.589	…	…	-1.079 **	…	…
	(0.32)			(0.33)			(0.40)			(0.46)		
Output per capita	0.185 **	0.182 **	0.101	0.215 **	0.210 **	0.158	0.217 **	0.261 **	0.154	0.330 **	0.403 **	0.269
(in logs)	(0.08)	(0.09)	(0.12)	(0.09)	(0.09)	(0.13)	(0.10)	(0.12)	(0.15)	(0.12)	(0.15)	(0.18)
Output per capita	-0.012 **	-0.011 **	-0.005	-0.014 **	-0.012 **	-0.010	-0.013 **	-0.015 **	-0.008	-0.020 **	-0.024 **	-0.016
squared	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Economic Growth	-0.281 *	-0.238 *	0.125	-0.302 *	-0.262 *	0.073	-0.203	-0.162	0.172	-0.201	-0.158	0.104
	(0.16)	(0.15)	(0.10)	(0.17)	(0.16)	(0.11)	(0.17)	(0.17)	(0.12)	(0.17)	(0.18)	(0.14)
Secondary Schooling	-0.024 **	-0.029 **	-0.022	-0.021 **	-0.027 **	-0.017 **	-0.032 **	-0.043 **	-0.034 **	-0.032 **	-0.043 **	-0.033 **
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Liquid Liabilities	-0.051 **	-0.058 **	0.025	-0.048 **	-0.055 **	0.027	-0.064 **	-0.062 **	0.022	-0.065 **	-0.069 **	0.022
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.02)	(0.02)	(0.03)
Physicians	-2.753 **	-3.398 **	0.806	-3.121 **	-3.664 **	0.994	-3.963 **	-4.574 **	1.295	-4.463 **	-4.760 **	1.521
(per 1000 people)	(0.72)	(0.80)	(0.70)	(0.85)	(0.86)	(0.73)	(0.97)	(1.01)	(1.16)	(1.06)	(1.08)	(1.26)
Inflation	0.013	0.018	-0.018	0.016	0.020	-0.016	0.017	0.028 *	-0.017	0.021	0.031 *	-0.017
	(0.02)	(0.02)	(0.01)	(0.02)	(0.02)	(0.01)	(0.02)	(0.02)	(0.01)	(0.02)	(0.02)	(0.01)
Size of the Modern	0.265 **	0.230 **	-0.175	0.257 **	0.224 **	-0.130 *	0.261 **	0.232 **	-0.168 **	0.265 **	0.234 **	-0.122
Sector	(0.06)	(0.06)	(0.07)	(0.07)	(0.07)	(0.08)	(0.06)	(0.07)	(0.08)	(0.07)	(0.07)	(0.10)
Labor Regulation	-0.065 **	-0.061 **	0.126	0.091	0.059	-0.364	-0.053	-0.054 *	0.159 **	0.181	0.109	-0.144
Indicator	(0.03)	(0.03)	(0.05)	(0.10)	(0.10)	(0.31)	(0.04)	(0.03)	(0.06)	(0.13)	(0.13)	(0.39)
Nobs.	344	344	344	330	330	330	272	272	272	258	258	258
R**2	0.385	0.409	0.904	0.394	0.414	0.902	0.258	0.290	0.887	0.286	0.311	0.882
Adjusted R**2	0.368	0.383	0.846	0.377	0.388	0.838	0.233	0.251	0.785	0.260	0.271	0.763
GDP Turning Point	7.98	8.60	9.34	7.90	8.44	8.30	8.53	8.82	9.49	8.15	8.37	8.54

See footnotes in Table 8.1

Table 9
Panel Data Regression Analysis between Income Inequality and Labor Market Regulations 1/
Dependent Variable: Gini Coefficient (0-1)

	Full Sample of Countries						Developing Countries					
	Least Squares 2/			Instrumental Variables 3/			Least Squares 2/			Instrumental Variables 3/		
Labor Regulation Indicators	Coeff.	Std. Dev.	R**2	Coeff.	Std. Dev.	R**2	Coeff.	Std. Dev.	R**2	Coeff.	Std. Dev.	R**2
I. Pooled Estimator												
(0) "De Jure" Index	0.022	(0.03)	0.38	0.033	(0.07)	0.40	0.067	(0.04) *	0.27	0.102	(0.09)	0.30
(1) "De Facto" Index 1	-0.174	(0.03) **	0.41	-0.103	(0.08)	0.39	-0.248	(0.05) **	0.30	0.023	(0.12)	0.28
Minimum Wage 1/	-0.014	(0.02)	0.48	0.075	(0.10)	0.49	-0.063	(0.03) **	0.36	0.105	(0.12)	0.38
Social Security	-0.038	(0.02) **	0.39	0.122	(0.06) **	0.39	-0.030	(0.03)	0.29	0.151	(0.08) **	0.29
Trade Union	-0.087	(0.03) **	0.42	-0.547	(0.14) **	0.42	-0.112	(0.04) **	0.31	-0.534	(0.17) **	0.31
General Govt. Employment	-0.049	(0.02) **	0.45	-0.368	(0.13) **	0.44	-0.076	(0.03) **	0.36	-0.681	(0.21) **	0.35
(2) "De Facto" Index 2	-0.065	(0.03) **	0.38	0.091	(0.10)	0.39	-0.053	(0.04)	0.26	0.181	(0.13)	0.29
Minimum Wage 2/	0.041	(0.05)	0.44	0.282	(0.16) *	0.47	0.027	(0.05)	0.31	0.465	(0.21) **	0.37
Maternity Leave (# days)	-0.090	(0.03) **	0.39	-0.841	(0.29) **	0.41	-0.121	(0.03) **	0.26	-0.645	(0.36) *	0.30
Ratification of ILO Conv. 87	-0.015	(0.01) *	0.38	0.087	(0.05) *	0.40	-0.008	(0.01)	0.26	0.051	(0.05)	0.29
Central Govt. Employment	-0.024	(0.03)	0.43	-0.297	(0.13) **	0.43	-0.014	(0.04)	0.32	-0.352	(0.21) *	0.33
(3) De Jure vs. De Facto												
L1 relative to L0	-0.084	(0.02) **	0.39	-0.347	(0.11) **	0.41	-0.142	(0.03) **	0.29	-0.513	(0.14) **	0.32
L2 relative to L0	-0.059	(0.03) *	0.39	0.051	(0.12)	0.40	-0.083	(0.04) **	0.28	-0.010	(0.16)	0.29
II. Time-Effects Estimator												
(0) "De Jure" Index	0.024	(0.03)	0.41	0.015	(0.07)	0.42	0.055	(0.04)	0.30	0.055	(0.08)	0.33
(1) "De Facto" Index 1	-0.159	(0.04) **	0.43	-0.130	(0.10)	0.42	-0.231	(0.06) **	0.32	-0.028	(0.13)	0.31
Minimum Wage 1/	-0.017	(0.02)	0.49	0.045	(0.11)	0.51	-0.063	(0.03) **	0.37	0.137	(0.27)	0.38
Social Security	-0.043	(0.02) *	0.41	0.108	(0.06) *	0.42	-0.037	(0.03)	0.32	0.119	(0.07) *	0.32
Trade Union	-0.064	(0.03) **	0.44	-0.557	(0.15) **	0.45	-0.084	(0.04) **	0.34	-0.539	(0.18) **	0.35
General Govt. Employment	-0.032	(0.03)	0.48	-0.443	(0.13) **	0.48	-0.055	(0.03) *	0.40	-0.661	(0.21) **	0.39
(2) "De Facto" Index 2	-0.061	(0.03) **	0.41	0.059	(0.10)	0.41	-0.054	(0.03) *	0.29	0.109	(0.13)	0.31
Minimum Wage 2/	0.023	(0.04)	0.47	0.323	(0.17) *	0.49	0.011	(0.05)	0.33	0.430	(0.23) *	0.39
Maternity Leave (# days)	-0.089	(0.04) **	0.41	-0.880	(0.29) **	0.43	-0.126	(0.06) **	0.30	-0.761	(0.36) **	0.33
Ratification of ILO Conv. 87	-0.014	(0.01) *	0.41	0.106	(0.06) *	0.42	-0.010	(0.01)	0.29	0.066	(0.11)	0.31
Central Govt. Employment	-0.012	(0.03)	0.45	-0.391	(0.15) **	0.46	0.002	(0.04)	0.35	-0.400	(0.24) *	0.35
(3) De Jure vs. De Facto												
L1 relative to L0	-0.076	(0.03) **	0.42	-0.352	(0.11) **	0.44	-0.124	(0.04) **	0.32	-0.440	(0.15) **	0.35
L2 relative to L0	-0.055	0.03 **	0.42	0.050	(0.12)	0.43	-0.074	(0.03) **	0.32	0.028	(0.16)	0.34
II. Country-Effects Estimator												
(0) "De Jure" Index	-0.110	(0.06) *	0.91	-0.154	(0.07) **	0.89	-0.030	(0.13)	0.91	0.007	(0.15)	0.89
(1) "De Facto" Index 1	0.162	(0.06) **	0.91	0.160	(0.07) **	0.89	-0.360	(0.12) **	0.91	-0.498	(0.16) **	0.90
Minimum Wage 1/	0.043	(0.03)	0.90	0.054	(0.04)	0.88	-0.269	(0.13) **	0.90	-0.434	(0.18) **	0.88
Social Security	0.083	(0.04) **	0.91	0.100	(0.05) **	0.89	-0.357	(0.13) **	0.91	-0.417	(0.15) **	0.89
Trade Union	0.071	(0.03) **	0.91	0.047	(0.04)	0.89	-0.318	(0.09) **	0.91	-0.449	(0.12) **	0.90
General Govt. Employment	-0.032	(0.03)	0.91	-0.031	(0.04)	0.89	-0.462	(0.14) **	0.92	-0.738	(0.20) **	0.90
(2) "De Facto" Index 2	0.126	(0.05) **	0.90	0.159	(0.05) **	0.89	-0.364	(0.27)	0.90	-0.143	(0.31)	0.88
Minimum Wage 2/	-0.075	(0.07)	0.90	-0.087	(0.08)	0.88	0.706	(0.32) **	0.91	0.719	(0.39) *	0.88
Maternity Leave (# days)	0.128	(0.04) **	0.91	0.158	(0.05) **	0.90	-0.677	(0.26) **	0.91	-0.826	(0.31) **	0.89
Ratification of ILO Conv. 87	0.039	(0.02) **	0.90	0.043	(0.02) **	0.89	-0.056	(0.07)	0.90	0.336	(0.13) **	0.89
Central Govt. Employment	-0.003	(0.04)	0.91	0.125	(0.07) *	0.89	0.125	(0.05) **	0.91	-0.895	(0.24) **	0.90
(3) De Jure vs. De Facto												
L1 relative to L0	0.190	(0.04) **	0.91	0.198	(0.05) **	0.90	-0.489	(0.18) **	0.91	-0.576	(0.20) **	0.90
L2 relative to L0	0.149	(0.04) **	0.91	0.170	(0.04) **	0.90	-0.083	(0.17)	0.91	-0.077	(0.20)	0.89

See footnotes in Table 7.

Table 10

GMM-IV Panel Data Regression Analysis between Income Inequality and Labor Market Regulations

Panel Data of 121 countries over 1970-2000 (5-year observations)

Dependent Variable: Gini Coefficient (0-1)

Estimation Method: GMM-IV System Estimator (Arellano and Bover, 1995)

	Full Sample			Developing Countries		
	[L0]	[L1]	[L2]	[L0]	[L1]	[L2]
Constant	-0.54792 **	-0.86464 **	-1.11522 **	-0.57990	-1.13006 *	-2.13406 **
	(0.279)	(0.153)	(0.211)	(0.656)	(0.709)	(0.633)
Output per capita (logs)	0.21379 **	0.33337 **	0.36383 **	0.19348	0.37726 **	0.60374 **
	(0.072)	(0.039)	(0.054)	(0.172)	(0.185)	(0.162)
Output per capita squared	-0.01342 **	-0.02026 **	-0.02252 **	-0.01185	-0.02207 **	-0.03586 **
	(0.004)	(0.002)	(0.003)	(0.010)	(0.011)	(0.010)
Economic Growth	-0.45007 **	-0.51518 **	-0.61235 **	-0.43762 **	-0.48180 **	-0.61839 **
	(0.063)	(0.046)	(0.044)	(0.071)	(0.076)	(0.108)
Secondary Schooling	-0.01813 **	-0.00754 **	-0.01933 **	-0.03518 **	-0.05820 **	-0.04012 **
	(0.003)	(0.003)	(0.003)	(0.007)	(0.010)	(0.011)
Liquid Liabilities	-0.01496 **	-0.03890 **	-0.05673 **	-0.04522 **	-0.02379	-0.07726 **
	(0.007)	(0.007)	(0.007)	(0.018)	(0.017)	(0.013)
Physicians per 1000 people	-2.86656 **	0.55577	-0.90757 **	-4.73321 **	0.45144	-1.10078
	(0.384)	(0.538)	(0.383)	(0.846)	(1.248)	(1.196)
Inflation Rate	-0.00213	-0.01125 **	-0.00801	-0.00549	-0.01563 *	-0.01457 *
	(0.003)	(0.004)	(0.005)	(0.006)	(0.008)	(0.009)
Modern Sector	0.20053 **	0.04739	0.25711 **	0.35136 **	0.13603	0.23976 **
	(0.045)	(0.038)	(0.048)	(0.139)	(0.127)	(0.115)
Labor Rigidity	0.04569 **	-0.28914 **	-0.22156 **	0.10311 **	-0.29065 **	-0.20472 **
	(0.022)	(0.022)	(0.021)	(0.047)	(0.075)	(0.056)
No. Countries	65	65	65	52	51	51
No. Observations	182	199	200	146	156	157
R**2	0.419	0.378	0.421	0.340	0.314	0.293
Turning Point	7.96	8.23	8.08	8.16	8.55	8.42
Specification Tests (p-values)						
- Sargan Test	0.846	0.700	0.855	0.849	0.797	0.862
- 2nd Order Correlation	0.709	0.994	0.913	0.625	0.957	0.912

Note: Numbers in parenthesis below the coefficients are standard errors.

** (**) indicates that the explanatory variable is statistically significant at the 10 (5) percent level.*

Table 11
GMM-IV Panel Data Regression Analysis between Income Inequality and Labor Market Regulations
Sensitivity Analysis on Panel Regressions for Different Measures of Labor Regulations
Sample of All Countries, 1970-2000, Panel data of 5-year non-overlapping observations
Dependent Variable: Gini Coefficient (0-1)

	Gini			Top 20			Top 40			Middle 20			Bottom 40			Bottom 20			
Labor Indicator	**Coeff.**	**Std. Dev.**	**R**2**	**Coeff.**	**Std. Dev.**	**R**2**	**Coeff.**	**Std. Dev.**	**R**2**	**Coeff.**	**Std. Dev.**	**R**2**	**Coeff.**	**Std. Dev.**	**R**2**	**Coeff.**	**Std. Dev.**	**R**2**	**Nobs.**
I. Full Sample of Countries																			
(0) "De Jure" Index	0.0457	(0.022) **	0.419	0.0068	(0.097)	0.433	0.0598	(0.042)	0.444	-0.0260	(0.012) **	0.421	0.0107	(0.025)	0.356	-0.0167	(0.010) *	0.262	182
(1) "De Facto" Index 1	-0.2891	(0.022) **	0.378	-0.2832	(0.040) **	0.398	-0.1575	(0.034) **	0.410	0.0412	(0.018) **	0.415	0.0995	(0.017) **	0.307	0.0365	(0.010) **	0.219	199
Minimum Wage 1/	0.0302	(0.020)	0.492	0.0262	(0.028)	0.466	0.0200	(0.035)	0.488	0.0066	(0.012)	0.436	-0.0317	(0.021)	0.412	-0.0163	(0.009) *	0.318	198
Social Security Contribution	-0.0384	(0.020) *	0.345	-0.0342	(0.026)	0.384	-0.0382	(0.017) **	0.380	0.0135	(0.005) **	0.385	0.0343	(0.010) **	0.290	0.0192	(0.013) *	0.228	171
Trade Union Membership	-0.1396	(0.024) **	0.425	0.0369	(0.028)	0.374	0.0272	(0.031)	0.372	-0.0146	(0.030)	0.413	-0.0339	(0.014) **	0.250	-0.0214	(0.007) **	0.159	194
General Govt. Employment	-0.0919	(0.017) **	0.478	-0.0503	(0.026) *	0.434	-0.0969	(0.039) **	0.431	0.0116	(0.010)	0.459	0.0562	(0.015) **	0.321	0.0227	(0.025)	0.206	174
(2) "De Facto" Index 2	-0.2216	(0.021) **	0.421	-0.1700	(0.031) **	0.415	-0.0705	(0.027) **	0.415	0.0158	(0.031)	0.413	0.0402	(0.021) *	0.324	0.0185	(0.009) **	0.207	200
Minimum Wage 2/	-0.0410	(0.084)	0.499	-0.0237	(0.118)	0.523	-0.0335	(0.041)	0.497	-0.0065	(0.031)	0.427	0.0008	(0.050)	0.441	-0.0228	(0.040)	0.331	199
Maternity Leave (# days)	-0.0485	(0.022) **	0.409	-0.1214	(0.042) **	0.408	-0.0847	(0.035) **	0.423	0.0250	(0.005) **	0.428	0.0614	(0.026) **	0.325	0.0290	(0.011) **	0.225	175
Ratification of ILO Conv. 87	-0.0180	(0.012) *	0.409	-0.0167	(0.010) *	0.363	0.0032	(0.008)	0.384	0.0014	(0.003)	0.396	0.0008	(0.012)	0.300	-0.0046	(0.002) **	0.195	200
Central Govt. Employment	-0.0478	(0.085)	0.450	-0.0626	(0.047)	0.449	-0.0068	(0.032)	0.449	0.0046	(0.014)	0.449	0.0128	(0.017)	0.338	-0.0076	(0.020)	0.237	174
(3) De Jure vs. De Facto																			
L1 relative to L0	-0.1750	(0.024) **	0.354	-0.1691	(0.033) **	0.427	-0.1324	(0.033) **	0.410	0.0738	(0.011) **	0.397	0.0720	(0.018) **	0.331	0.0371	(0.009) **	0.243	180
L2 relative to L0	-0.0645	(0.024) **	0.459	-0.1142	(0.039) **	0.453	-0.0854	(0.062)	0.456	0.0014	(0.013)	0.459	0.0478	(0.027) *	0.355	0.0184	(0.010) *	0.238	181
II. Sample of Developing Countries																			
(0) "De Jure" Index	0.1031	(0.047) **	0.340	0.1404	(0.096)	0.211	0.1698	(0.050) **	0.334	-0.0829	(0.022) **	0.301	-0.0995	(0.035) **	0.284	-0.0433	(0.016) **	0.304	146
(1) "De Facto" Index 1	-0.2906	(0.075) **	0.314	-0.4153	(0.118) **	0.233	-0.2350	(0.061) **	0.271	0.1012	(0.040) **	0.178	0.1520	(0.053) **	0.242	0.0774	(0.022) **	0.227	156
Minimum Wage 1/	-0.0709	(0.057)	0.340	-0.0927	(0.063)	0.298	-0.0567	(0.047)	0.362	-0.0618	(0.031) **	0.204	0.0477	(0.037)	0.375	0.0174	(0.016)	0.352	128
Social Security Contribution	-0.0534	(0.032) *	0.289	-0.0937	(0.047) **	0.196	-0.0840	(0.047) *	0.263	0.0289	(0.019)	0.210	0.0472	(0.026) *	0.232	0.0220	(0.011) **	0.236	149
Trade Union Membership	-0.0584	(0.040)	0.344	0.1398	(0.063) **	0.156	0.0965	(0.043) **	0.214	-0.0368	(0.023) *	0.181	-0.0880	(0.091)	0.159	-0.0232	(0.018)	0.172	151
General Govt. Employment	-0.0628	(0.045)	0.354	-0.0471	(0.071)	0.250	-0.0216	(0.053)	0.331	0.0275	(0.019)	0.337	-0.0164	(0.036)	0.276	-0.0056	(0.011)	0.269	131
(2) "De Facto" Index 2	-0.2047	(0.056) **	0.293	-0.0635	(0.054)	0.184	-0.0286	(0.038)	0.287	0.0398	(0.013) **	0.242	0.0174	(0.052)	0.240	0.0051	(0.014)	0.240	157
Minimum Wage 2/	0.0383	(0.193)	0.338	0.2389	(0.215)	0.260	0.1848	(0.152)	0.374	-0.1266	(0.084) *	0.186	-0.1147	(0.101)	0.365	-0.1033	(0.044) **	0.370	132
Maternity Leave (# days)	-0.1036	(0.031) **	0.292	-0.1437	(0.044) **	0.235	-0.1099	(0.035) **	0.333	0.0351	(0.010) **	0.263	0.0898	(0.024) **	0.290	0.0326	(0.014) **	0.297	147
Ratification of ILO Conv. 87	-0.0280	(0.012) **	0.336	0.0144	(0.017)	0.167	0.0170	(0.012)	0.293	0.0032	(0.008)	0.254	-0.0074	(0.006)	0.246	-0.0073	(0.003) **	0.244	157
Central Govt. Employment	0.0532	(0.093)	0.334	-0.0353	(0.069)	0.167	-0.0403	(0.053)	0.312	0.0044	(0.029)	0.296	0.0234	(0.035)	0.215	-0.0170	(0.028)	0.255	131
(3) De Jure vs. De Facto																			
L1 relative to L0	-0.3225	(0.049) **	0.301	-0.2437	(0.062) **	0.257	-0.2422	(0.036) **	0.355	0.0594	(0.013) **	0.321	0.1274	(0.039) **	0.291	0.0595	(0.015) **	0.304	144
L2 relative to L0	-0.1631	(0.025) **	0.376	-0.2488	(0.046) **	0.230	-0.1782	(0.025) **	0.319	0.0483	(0.012) **	0.291	0.1005	(0.020) **	0.256	0.0439	(0.011) **	0.250	145

** (**) indicates that the explanatory variable is statistically significant at the 10 (5) percent level. See footnote in Table 1*

Table 12
Labor Regulations and Income Inequality IV Estimates: Findings Summary (*)
Dependent Variable: Gini Coefficient

	Full Sample of Countries					Sample of Developing Countries				
	Cross	Panel Data				Cross	Panel Data			
Labor Regulation Indicators	**Section**	**Pooled**	**Time Effects**	**Country Effects**	**GMM-IV**	**Section**	**Pooled**	**Time Effects**	**Country Effects**	**GMM-IV**
I. Rama and Artecona (2002) Indicators										
(0) "De Jure" Index	0	0	0	-1	1	0	0	0	0	1
(1) "De Facto" Index 1	0	0	0	1	-1	0	0	0	-1	-1
Minimum Wage 1/	0	0	0	0	0	0	0	0	-1	0
Social Security	0	1	1	1	-1	0	1	1	-1	-1
Trade Union	-1	-1	-1	0	-1	-1	-1	-1	-1	0
General Govt. Employment	-1	-1	-1	0	-1	-1	-1	-1	-1	0
(2) "De Facto" Index 2	0	0	0	1	-1	0	0	0	0	-1
Minimum Wage 2/	1	1	1	0	0	1	1	1	1	0
Maternity Leave (# days)	0	-1	-1	1	-1	-1	-1	-1	-1	-1
Ratification of ILO Conv. 87	0	1	1	1	-1	0	0	0	1	-1
Central Govt. Employment	0	-1	-1	1	0	0	-1	-1	-1	0
(3) De Jure vs. De Facto										
L1 relative to L0	-1	-1	-1	1	-1	-1	-1	-1	-1	-1
L2 relative to L0	0	0	0	1	-1	0	0	0	0	-1
II. Botero et al. (2002) Indicators										
(1) Employment Laws	1	...	...	...	...	1	...	...	...	...
Alternative Employment Contracts	0	...	...	...	...	0	...	...	...	...
Conditions of Employment	0	...	...	...	...	1	...	...	...	...
Job Security	0	...	...	...	...	0	...	...	...	...
(2) Industrial (Collective) Relations Law	1	...	...	...	...	1	...	...	...	...
Collective Bargaining	1	...	...	...	...	1	...	...	...	...
Worker Participation in Management	0	...	...	...	...	0	...	...	...	...
Collective Disputes	1	...	...	...	...	1	...	...	...	...
(3) Social Security Laws	0	...	...	...	...	0	...	...	...	...
Old Age, Disability and Death Benefits	0	...	...	...	...	0	...	...	...	...
Sickness and Health Benefits	1	...	...	...	...	1	...	...	...	...
Unemployment Benefits	0	...	...	...	...	0	...	...	...	...

Notes: A value of 0 implies that the effect is not statistically different from zero. A value of 1 means a (+) and significant effect on the Gini coefficient (a worsening of income distribution). Values of -1 imply a statistically significant negative impact (reducing inequality). Finally (...) implies unavailability of data and results for the dimension considered.

Table A.1
Cross-Country Regression Analysis between Income Inequality and Labor Market Regulations 1/
Indicators of Labor Market Rigidity from Rama and Artecona (2002)
Using Income Shares as proxy for our dependent variable

Labor Indicator	Top 20 Coeff.	Top 20 R**2	Top 40 Coeff.	Top 40 R**2	Middle 20 Coeff.	Middle 20 R**2	Bottom 40 Coeff.	Bottom 40 R**2	Bottom 20 Coeff.	Bottom 20 R**2	Nobs.
I. Full Sample of Countries											
I.1 Least Squares 2/											
(0) "De Jure" Index	0.026	0.47	0.050	0.48	-0.030	0.51	-0.020	0.43	-0.018	0.35	68
(1) "De Facto" Index 1	-0.176 **	0.50	-0.109 *	0.50	0.030	0.50	0.079 *	0.45	0.026	0.36	67
Minimum Wage 1/	0.006	0.62	0.029	0.62	-0.001	0.55	-0.028	0.61	-0.022 *	0.57	56
Social Security	-0.065 *	0.50	-0.077 **	0.50	0.017	0.50	0.060 **	0.46	0.030 **	0.40	61
Trade Union	-0.106	0.51	-0.042	0.50	-0.003	0.50	0.044	0.45	0.014	0.36	67
General Govt. Employment	-0.035	0.53	-0.002	0.52	0.009	0.51	-0.007	0.47	-0.001	0.36	58
(2) "De Facto" Index 2	0.008	0.47	0.018	0.48	0.008	0.49	-0.026	0.43	-0.013	0.35	68
Minimum Wage 2/	0.018	0.59	0.026	0.59	-0.012	0.55	-0.014	0.56	-0.014	0.52	57
Maternity Leave (# days)	-0.056	0.48	-0.017	0.48	-0.012	0.49	0.029	0.44	0.008	0.35	67
Ratification of ILO Conv. 87	-0.012	0.48	-0.006	0.48	0.008	0.50	-0.002	0.43	0.000	0.35	68
Central Govt. Employment	0.039	0.45	0.020	0.46	0.004	0.50	-0.024	0.41	-0.015	0.34	59
(3) De Jure vs. De Facto											
L1 relative to L0	-0.094 *	0.50	-0.085 **	0.50	0.036 **	0.52	0.049 *	0.45	0.025 *	0.37	67
L2 relative to L0	-0.016	0.47	-0.028	0.48	0.031	0.51	-0.003	0.43	0.005	0.34	68
I.2 Instrumental Variables 3/											
(0) "De Jure" Index	-0.131	0.48	-0.010	0.49	-0.009	0.51	0.018	0.44	-0.014	0.36	66
(1) "De Facto" Index 1	-0.292	0.50	-0.037	0.49	-0.031	0.51	0.068	0.44	0.004	0.36	65
Minimum Wage 1/	0.274	0.61	0.468 *	0.62	-0.243 **	0.59	-0.225	0.60	-0.173 **	0.56	60
Social Security	0.043	0.51	0.042	0.48	-0.012	0.50	-0.042	0.44	-0.028	0.37	64
Trade Union	-0.317 *	0.52	-0.281	0.51	0.035	0.51	0.246 *	0.48	0.120 *	0.40	65
General Govt. Employment	-0.231	0.54	-0.080	0.50	-0.061	0.52	0.106	0.46	0.052	0.35	57
(2) "De Facto" Index 2	0.038	0.47	0.101	0.49	-0.038	0.51	-0.064	0.44	-0.054	0.36	66
Minimum Wage 2/	0.991 **	0.62	0.835 **	0.65	-0.252 **	0.62	-0.576 **	0.62	-0.312 **	0.60	65
Maternity Leave (# days)	-0.607 *	0.51	-0.833 *	0.52	0.153	0.51	0.680 **	0.49	0.284 *	0.40	66
Ratification of ILO Conv. 87	0.026	0.47	-0.059	0.49	0.043	0.52	0.016	0.44	0.014	0.36	66
Central Govt. Employment	-0.102	0.45	0.092	0.47	-0.096	0.51	0.024	0.41	-0.017	0.35	58
(3) De Jure vs. De Facto											
L1 relative to L0	-0.405 *	0.50	-0.251	0.50	0.034	0.50	0.217	0.46	0.121 *	0.39	65
L2 relative to L0	0.414	0.49	0.121	0.49	-0.011	0.51	-0.110	0.44	-0.005	0.36	66
II. Sample of Developing Countries											
I.1 Least Squares 2/											
(0) "De Jure" Index	0.083	0.32	0.072	0.322	-0.023	0.31	-0.032	0.29	-0.049	0.316	53
(1) "De Facto" Index 1	-0.281 *	0.36	-0.222 *	0.361	0.054	0.32	0.078 **	0.34	0.168 **	0.370	52
Minimum Wage 1/	-0.095	0.53	-0.038	0.560	0.007	0.40	0.009	0.63	0.031	0.606	41
Social Security	-0.064	0.37	-0.088 *	0.358	0.036 *	0.33	0.027 *	0.33	0.052	0.364	49
Trade Union	-0.148	0.366	-0.067	0.358	-0.016	0.324	0.027	0.335	0.083	0.373	52
General Govt. Employment	-0.107	0.400	-0.088	0.389	0.039	0.344	0.040	0.336	0.050	0.394	43
(2) "De Facto" Index 2	0.037	0.314	0.038	0.316	-0.001	0.304	-0.021	0.284	-0.037	0.314	53
Minimum Wage 2/	0.002	0.476	-0.001	0.500	-0.004	0.388	0.002	0.549	0.005	0.528	42
Maternity Leave (# days)	-0.140 *	0.343	-0.069	0.334	-0.021	0.309	0.035	0.309	0.090 *	0.352	52
Ratification of ILO Conv. 87	-0.002	0.312	0.002	0.312	0.006	0.310	-0.005	0.278	-0.008	0.309	53
Central Govt. Employment	0.074	0.289	0.050	0.292	0.006	0.308	-0.025	0.271	-0.057	0.296	44
(3) De Jure vs. De Facto											
L1 relative to L0	-0.208 *	0.377	-0.171 **	0.380	0.048 *	0.332	0.067 **	0.375	0.123 **	0.387	52
L2 relative to L0	-0.022	0.312	-0.012	0.312	0.016	0.308	0.001	0.271	-0.004	0.305	53
I.2 Instrumental Variables 3/											
(0) "De Jure" Index	-0.106	0.32	0.002	0.32	-0.014	0.32	0.013	0.31	-0.013	0.28	51
(1) "De Facto" Index 1	-0.222	0.34	0.001	0.34	-0.035	0.32	0.034	0.33	-0.002	0.30	50
Minimum Wage 1/	0.668 *	0.52	0.702 **	0.57	-0.227 **	0.50	-0.358 **	0.61	-0.180 **	0.63	39
Social Security	-0.102	0.37	0.082	0.32	-0.014	0.31	-0.068	0.33	-0.055	0.31	48
Trade Union	-0.473 *	0.37	-0.232	0.35	0.041	0.33	0.191	0.36	0.093	0.33	50
General Govt. Employment	-0.330	0.37	-0.222	0.36	-0.047	0.35	0.207	0.35	0.152	0.32	42
(2) "De Facto" Index 2	0.097	0.31	0.153	0.33	-0.055	0.33	-0.098	0.32	-0.078	0.30	51
Minimum Wage 2/	1.765 **	0.56	1.437 **	0.62	-0.520 **	0.48	-0.917 **	0.65	-0.448 **	0.68	40
Maternity Leave (# days)	-1.599 **	0.40	-0.813	0.37	0.176	0.33	0.637 *	0.37	0.296 *	0.34	50
Ratification of ILO Conv. 87	-0.116	0.32	-0.128	0.34	0.070	0.35	0.058	0.32	-0.018	0.29	51
Central Govt. Employment	0.219	0.29	0.267	0.32	-0.154	0.35	-0.114	0.31	-0.073	0.31	43
(3) De Jure vs. De Facto											
L1 relative to L0	-0.408	0.35	-0.271	0.35	0.064	0.33	0.207	0.351	0.127	0.333	50
L2 relative to L0	0.409	0.33	0.144	0.33	-0.010	0.32	-0.134	0.322	-0.036	0.285	51

See footnote in Table 7

Table A.2
Cross-Country Regression Analysis between Income Inequality and Labor Market Regulations 1/
Indicators of Labor Market Regulation from Botero, Djankov, La Porta, Lopez de Silanes y Shleifer (2003)
Using Income Shares as proxy for our dependent variable

	Top 20		Top 40		Middle 20		Bottom 40		Bottom 20		
Labor Indicator	**Coeff.**	**R**2**	**Coeff.**	**R**2**	**Coeff.**	**R**2**	**Coeff.**	**R**2**	**Coeff.**	**R**2**	**Nobs.**
I. Full Sample of Countries											
I.1 Least Squares 2/											
(1) Employment Laws	0.038	0.565	0.033 *	0.542	-0.012 *	0.542	-0.021	0.505	-0.012 *	0.398	53
Alternative Employment Contracts	0.055	0.566	0.054	0.545	-0.024	0.547	-0.030	0.506	-0.015	0.398	53
Conditions of Employment	0.043	0.565	0.032	0.542	-0.006	0.543	-0.026	0.505	-0.011	0.398	53
Job Security	0.011	0.567	0.008	0.546	-0.004	0.544	-0.004	0.509	-0.009	0.398	53
(2) Industrial (Collective) Relations Law	0.022	0.554	0.026 *	0.540	-0.008	0.536	-0.018 *	0.505	-0.010 *	0.394	53
Collective Bargaining	0.043	0.559	0.033	0.540	-0.008	0.536	-0.025	0.507	-0.011	0.395	53
Worker Participation in Management	-0.021	0.579	0.010	0.545	-0.009	0.536	-0.002	0.518	-0.003	0.404	53
Collective Disputes	0.116 *	0.580	0.062	0.545	-0.009	0.536	-0.053	0.518	-0.030 *	0.414	53
(3) Social Security Laws	0.023	0.558	0.027 *	0.546	-0.005	0.529	-0.022 **	0.524	-0.012 **	0.424	53
Old Age, Disability and Death Benefits	-0.131 **	0.591	-0.037	0.555	0.020	0.537	0.018	0.533	-0.017	0.424	53
Sickness and Health Benefits	0.067 **	0.585	0.047 *	0.555	-0.013	0.537	-0.034 *	0.532	-0.017 *	0.429	53
Unemployment Benefits	0.003	0.562	0.017	0.548	-0.001	0.530	-0.016	0.526	-0.005	0.431	53
I.2 Instrumental Variables 3/											
(1) Employment Laws	0.038	0.551	0.041	0.546	-0.012	0.548	-0.030	0.507	-0.021 *	0.407	51
Alternative Employment Contracts	0.151	0.553	0.219	0.555	-0.068	0.554	-0.151 *	0.517	-0.087 *	0.424	51
Conditions of Employment	0.196	0.554	0.049	0.552	0.020	0.549	-0.047	0.510	-0.036	0.412	51
Job Security	-0.016	0.579	0.017	0.556	0.092	0.559	0.279 *	0.544	0.134 *	0.450	51
(2) Industrial (Collective) Relations Law	0.023	0.550	0.017	0.539	-0.004	0.544	-0.013	0.500	-0.010	0.392	51
Collective Bargaining	0.309 *	0.595	0.104	0.545	-0.003	0.544	-0.101	0.516	-0.021	0.403	51
Worker Participation in Management	-0.276 **	0.614	-0.119	0.559	0.018	0.547	0.101	0.535	0.040	0.423	51
Collective Disputes	0.573 **	0.612	0.359 **	0.577	-0.089	0.558	-0.270 **	0.551	-0.143 **	0.454	51
(3) Social Security Laws	-0.009	0.545	0.009	0.535	-0.002	0.542	-0.007	0.494	-0.011	0.381	51
Old Age, Disability and Death Benefits	-0.277	0.573	0.112	0.535	-0.099	0.547	-0.013	0.494	-0.054	0.382	51
Sickness and Health Benefits	0.071	0.547	0.094	0.538	-0.045	0.548	-0.049	0.496	-0.046	0.387	51
Unemployment Benefits	-0.073	0.566	-0.059	0.563	0.048	0.551	0.034	0.535	0.021	0.387	51
II. Sample of Developing Countries											
II.1 Least Squares 2/											
(1) Employment Laws	0.046	0.416	0.060 **	0.441	-0.024 **	0.423	-0.036 **	0.438	-0.026 **	0.454	38
Alternative Employment Contracts	0.089	0.422	0.089	0.445	-0.032	0.425	-0.057	0.443	-0.032	0.456	38
Conditions of Employment	0.037	0.416	0.074	0.442	-0.034	0.426	-0.039	0.439	-0.023	0.454	38
Job Security	0.015	0.421	0.025	0.450	-0.010	0.433	-0.015	0.446	-0.023 **	0.455	38
(2) Industrial (Collective) Relations Law	0.005	0.386	0.023	0.375	-0.007	0.351	-0.017	0.388	-0.012 *	0.339	38
Collective Bargaining	0.024	0.389	0.042	0.381	-0.015	0.356	-0.028	0.392	-0.020	0.348	38
Worker Participation in Management	-0.022	0.399	0.005	0.384	0.000	0.358	-0.005	0.395	-0.002	0.364	38
Collective Disputes	0.057	0.394	0.039	0.377	-0.011	0.351	-0.028	0.390	-0.029	0.351	38
(3) Social Security Laws	0.033	0.419	0.037 *	0.428	-0.011	0.382	-0.026 **	0.445	-0.014 **	0.395	38
Old Age, Disability and Death Benefits	-0.173 **	0.476	-0.087	0.459	0.028	0.403	0.059	0.479	0.002	0.400	38
Sickness and Health Benefits	0.072 *	0.452	0.057 *	0.439	-0.019 *	0.394	-0.038 *	0.455	-0.020 **	0.405	38
Unemployment Benefits	0.014	0.423	0.032	0.428	-0.008	0.384	-0.024	0.445	-0.009	0.400	38
II.2 Instrumental Variables 3/											
(1) Employment Laws	0.060	0.414	0.069	0.426	-0.022	0.394	-0.047	0.434	-0.034 **	0.401	36
Alternative Employment Contracts	0.334	0.430	0.250	0.442	-0.046	0.411	-0.204	0.451	-0.083	0.432	36
Conditions of Employment	0.065	0.423	0.061	0.443	-0.011	0.417	-0.050	0.444	-0.032	0.446	36
Job Security	-0.774 *	0.428	0.028	0.457	0.000	0.437	-0.028	0.453	-0.035	0.432	36
(2) Industrial (Collective) Relations Law	0.029	0.405	0.036	0.411	-0.012	0.386	-0.024	0.418	-0.020 *	0.382	36
Collective Bargaining	0.254	0.443	0.088	0.415	-0.026	0.385	-0.063	0.425	-0.047 *	0.389	36
Worker Participation in Management	-0.236 *	0.471	0.012	0.411	-0.013	0.386	0.048	0.435	-0.019	0.376	36
Collective Disputes	0.673 **	0.499	0.147	0.426	-0.050	0.398	-0.097	0.432	-0.069 *	0.397	36
(3) Social Security Laws	-0.010	0.398	0.035	0.398	-0.014	0.378	-0.022	0.403	-0.024	0.349	36
Old Age, Disability and Death Benefits	0.093	0.398	0.286	0.404	-0.119	0.385	-0.113	0.480	-0.121	0.357	36
Sickness and Health Benefits	0.095	0.401	0.124	0.402	-0.079	0.393	-0.028	0.408	-0.038	0.354	36
Unemployment Benefits	-0.123	0.455	-0.057	0.405	0.040	0.393	0.017	0.460	-0.011	0.407	36

See footnote in Table 7

Table A.3
Panel Data Regression Analysis between Income Inequality and Labor Market Regulations 1/
Sensitivity Analysis on Panel Regressions for Different Measures of Labor Regulations
Sample of ALL Countries, 1970-2000, Panel data of 5-year non-overlapping observations
Dependent Variable: Gini Coefficient (0-1)

	Top 20		Top 40		Middle 20		Bottom 40		Bottom 20		
Labor Indicator	**Coeff.**	**R**2**	**Coeff.**	**R**2**	**Coeff.**	**R**2**	**Coeff.**	**R**2**	**Coeff.**	**R**2**	**Nobs.**
I. Pooled Estimators											
I.1 Least Squares 2/											
(0) "De Jure" Index	-0.019	0.37	0.014	0.39	-0.022 *	0.31	0.008	0.33	-0.005	0.29	327
(1) "De Facto" Index 1	-0.193 **	0.41	-0.134 **	0.42	0.057 **	0.32	0.077 **	0.33	0.028 **	0.28	341
Minimum Wage 1/	-0.030	0.47	-0.018	0.49	0.014 *	0.37	0.004	0.41	-0.001	0.34	286
Social Security	-0.040 *	0.39	-0.040 **	0.40	0.000	0.30	0.039 **	0.34	0.016 **	0.30	312
Trade Union	-0.075 **	0.42	-0.037 *	0.43	0.003	0.33	0.034 **	0.34	0.013 *	0.28	334
General Govt. Employment	-0.077 **	0.43	-0.039 **	0.44	0.030 **	0.37	0.009	0.36	0.001	0.30	295
(2) "De Facto" Index 2	-0.083 **	0.38	-0.038	0.39	0.020 *	0.31	0.018	0.31	-0.003	0.26	344
Minimum Wage 2/	0.056	0.44	0.032	0.45	0.002	0.34	-0.034 *	0.38	-0.015	0.33	292
Maternity Leave (# days)	-0.115 **	0.38	-0.084 **	0.39	0.014	0.30	0.070 **	0.33	0.033 **	0.29	331
Ratification of ILO Conv. 87	-0.021 **	0.38	-0.009	0.39	0.004	0.31	0.005	0.32	-0.001	0.27	344
Central Govt. Employment	-0.043	0.41	-0.012	0.41	0.002	0.33	0.010	0.32	-0.004	0.26	298
(3) De Jure vs. De Facto											
L1 relative to L0	-0.061 **	0.38	-0.061 **	0.40	0.039 **	0.33	0.023	0.32	0.014 **	0.29	321
L2 relative to L0	-0.035	0.37	-0.031	0.39	0.029 **	0.32	0.002	0.32	-0.001	0.29	323
I.2 Instrumental Variables 3/											
(0) "De Jure" Index	-0.067	0.40	-0.017	0.41	0.005	0.308	0.013	0.348	0.001	0.315	312
(1) "De Facto" Index 1	-0.177 **	0.40	-0.078	0.40	0.029	0.304	0.049	0.327	0.022	0.282	326
Minimum Wage 1/	0.078	0.50	0.094	0.51	-0.025	0.378	-0.068	0.443	-0.024	0.369	273
Social Security	0.044	0.39	0.055	0.39	-0.037 *	0.297	-0.018	0.322	-0.010	0.295	301
Trade Union	-0.512 **	0.42	-0.386 **	0.42	0.195 **	0.328	0.192 **	0.339	0.081 **	0.294	321
General Govt. Employment	-0.241 *	0.42	-0.131	0.42	0.042	0.347	0.089	0.343	0.043 *	0.297	283
(2) "De Facto" Index 2	0.016	0.39	0.020	0.40	0.005	0.311	-0.024	0.324	-0.011	0.279	330
Minimum Wage 2/	0.314 *	0.48	0.176	0.48	-0.092	0.359	-0.084	0.408	-0.024	0.355	279
Maternity Leave (# days)	-1.075 **	0.42	-0.697 **	0.42	0.298 **	0.321	0.400 **	0.339	0.174 **	0.295	319
Ratification of ILO Conv. 87	-0.011	0.40	-0.010	0.41	0.008	0.314	0.003	0.324	-0.004	0.279	330
Central Govt. Employment	-0.147	0.43	-0.060	0.42	0.051	0.330	0.009	0.334	0.014	0.273	286
(3) De Jure vs. De Facto											
L1 relative to L0	-0.120	0.40	-0.134 *	0.41	0.060	0.305	0.074	0.344	0.050	0.316	306
L2 relative to L0	0.190 *	0.40	0.080	0.41	-0.026	0.312	-0.054	0.346	-0.019	0.315	309
II. Time-Effects Estimators											
I.1 Least Squares 2/											
(0) "De Jure" Index	-0.024	0.41	0.011	0.42	-0.022 *	0.32	0.011	0.361	-0.004	0.307	327
(1) "De Facto" Index 1	-0.183 **	0.43	-0.128 **	0.44	0.056 **	0.33	0.072 **	0.360	0.026 **	0.289	341
Minimum Wages	-0.036 *	0.49	-0.022	0.51	0.015 *	0.38	0.007	0.439	0.000	0.351	286
Social Security	-0.049 **	0.42	-0.044 **	0.42	0.001	0.30	0.044 **	0.374	0.017 **	0.315	312
Trade Union	-0.050 *	0.45	-0.020	0.46	-0.002	0.35	0.022	0.370	0.010	0.298	334
General Govt. Employment	-0.056 *	0.47	-0.025	0.47	0.026 **	0.39	-0.001	0.391	-0.001	0.314	295
(2) "De Facto" Index 2	-0.081 **	0.41	-0.038 *	0.41	0.020 *	0.32	0.018	0.338	-0.003	0.272	344
Minimum Wages	0.035	0.48	0.018	0.48	0.006	0.36	-0.024	0.412	-0.013	0.340	292
Maternity Leave (# days)	-0.111 **	0.42	-0.081 **	0.42	0.013	0.31	0.068 **	0.360	0.033 **	0.307	331
Ratification of ILO Conv. 87	-0.021 **	0.41	-0.009	0.41	0.004	0.32	0.005	0.345	-0.001	0.278	344
Central Govt. Employment	-0.026	0.44	-0.001	0.43	0.000	0.34	0.001	0.351	-0.006	0.271	298
(3) De Jure vs. De Facto											
L1 relative to L0	-0.051 *	0.41	-0.055 **	0.43	0.037 **	0.34	0.018	0.357	0.013 **	0.310	321
L2 relative to L0	-0.029	0.41	-0.027	0.42	0.028 **	0.336	0.000	0.360	-0.001	0.306	323
I.2 Instrumental Variables 3/											
(0) "De Jure" Index	-0.076	0.43	-0.024	0.44	0.006	0.319	0.018	0.379	0.002	0.329	312
(1) "De Facto" Index 1	-0.198 **	0.43	-0.093	0.42	0.033	0.312	0.060	0.355	0.025	0.293	326
Minimum Wage 1/	-0.083	0.49	0.065	0.53	-0.019	0.384	-0.046	0.465	-0.018	0.377	273
Social Security	-0.037	0.42	0.050	0.41	-0.036	0.304	0.012	0.351	-0.009	0.306	301
Trade Union	-0.515 **	0.45	-0.389 **	0.45	0.196 **	0.338	0.193 **	0.370	0.083 **	0.308	321
General Govt. Employment	-0.346 **	0.47	-0.207 **	0.46	0.069	0.370	0.137 *	0.381	0.056 *	0.312	283
(2) "De Facto" Index 2	-0.005	0.41	0.006	0.42	0.007	0.318	-0.014	0.350	-0.008	0.290	330
Minimum Wages	0.364 **	0.51	0.213 *	0.50	-0.103	0.369	-0.110	0.438	-0.030	0.367	279
Maternity Leave (# days)	-1.095 **	0.44	-0.709 **	0.44	0.299 **	0.327	0.410 **	0.365	0.179 **	0.306	319
Ratification of ILO Conv. 87	0.042	0.42	-0.008	0.43	0.007	0.321	-0.010	0.351	-0.007	0.291	330
Central Govt. Employment	-0.264 *	0.46	-0.140	0.44	0.075	0.342	0.065	0.364	0.028	0.280	286
(3) De Jure vs. De Facto											
L1 relative to L0	-0.142	0.43	-0.153 *	0.99	0.068	0.318	0.086	0.377	0.054 *	0.331	306
L2 relative to L0	0.177	0.43	0.070	0.44	-0.022	0.325	-0.047	0.379	-0.018	0.330	309

See footnotes in Table 7.

Table A.4
Panel Data Regression Analysis between Income Inequality and Labor Market Regulations 1/
Sensitivity Analysis on Panel Regressions for Different Measures of Labor Regulations
Sample of DEVELOPING Countries, 1970-2000, Panel data of 5-year non-overlapping observations
Dependent Variable: Gini Coefficient (0-1)

Labor Indicator	Top 20 Coeff.	Top 20 R**2	Top 40 Coeff.	Top 40 R**2	Middle 20 Coeff.	Middle 20 R**2	Bottom 40 Coeff.	Bottom 40 R**2	Bottom 20 Coeff.	Bottom 20 R**2	Nobs.
I. Pooled Estimators											
I.1 Least Squares 2/											
(0) "De Jure" Index	0.050	0.20	0.054 *	0.26	-0.028 **	0.16	-0.026	0.254	-0.018 *	0.287	263
(1) "De Facto" Index 1	-0.333 **	0.26	-0.218 **	0.30	0.082 **	0.18	0.136 **	0.277	0.047 **	0.272	269
Minimum Wage 1/	-0.109 **	0.35	-0.064 **	0.42	0.026 **	0.26	0.038 **	0.414	0.009	0.382	214
Social Security	-0.051 *	0.24	-0.048 **	0.29	0.010	0.16	0.039 **	0.268	0.015 **	0.283	256
Trade Union	-0.090 *	0.28	-0.033	0.32	-0.022	0.24	0.055 **	0.285	0.021 *	0.282	262
General Govt. Employment	-0.130 **	0.29	-0.078 **	0.34	0.042 **	0.24	0.037 *	0.322	0.011	0.326	223
(2) "De Facto" Index 2	-0.058	0.18	-0.021	0.24	0.015	0.15	0.006	0.224	-0.007	0.246	272
Minimum Wage 2/	0.046	0.26	0.025	0.35	0.004	0.21	-0.029	0.344	-0.014	0.361	220
Maternity Leave (# days)	-0.149 **	0.20	-0.113 **	0.26	0.025 *	0.15	0.088 **	0.256	0.041 **	0.284	260
Ratification of ILO Conv. 87	-0.010	0.19	0.000	0.25	0.001	0.16	-0.001	0.237	-0.004	0.259	272
Central Govt. Employment	-0.034	0.20	-0.008	0.27	0.004	0.19	0.004	0.236	-0.005	0.262	226
(3) De Jure vs. De Facto											
L1 relative to L0	-0.156 **	0.24	-0.117 **	0.30	0.049 **	0.19	0.069 **	0.281	0.032 **	0.307	257
L2 relative to L0	-0.070 *	0.20	-0.044 *	0.26	0.028 **	0.174	0.017	0.250	0.002	0.276	259
I.2 Instrumental Variables 3/											
(0) "De Jure" Index	-0.016	0.21	0.044	0.27	-0.023	0.15	-0.021	0.27	-0.015	0.31	248
(1) "De Facto" Index 1	-0.154	0.20	-0.015	0.25	-0.018	0.14	0.033	0.25	0.010	0.27	254
Minimum Wage 1/	0.260	0.31	0.113	0.45	-0.049	0.27	-0.065	0.46	-0.020	0.45	201
Social Security	-0.076	0.25	0.097 *	0.26	-0.047 *	0.14	-0.051	0.25	-0.027	0.28	245
Trade Union	-0.664 **	0.24	-0.491 **	0.31	0.221 **	0.20	0.270 **	0.28	0.109 **	0.30	249
General Govt. Employment	-0.583 **	0.23	-0.437 **	0.29	0.105	0.19	0.333 **	0.29	0.151 **	0.32	211
(2) "De Facto" Index 2	0.080	0.19	0.117	0.26	-0.029	0.15	-0.087	0.25	-0.044	0.28	258
Minimum Wage 2/	0.446 **	0.33	0.343 **	0.43	-0.170 **	0.27	-0.172 *	0.41	-0.059	0.44	207
Maternity Leave (# days)	-1.050 **	0.22	-0.643 **	0.28	0.248 *	0.17	0.395 **	0.26	0.179 **	0.30	248
Ratification of ILO Conv. 87	-0.005	0.21	0.017	0.28	0.038	0.15	-0.018	0.27	-0.010	0.29	258
Central Govt. Employment	-0.256	0.21	-0.113	0.28	0.038	0.18	0.076	0.25	0.020	0.29	214
(3) De Jure vs. De Facto											
L1 relative to L0	-0.309 **	0.22	-0.333 **	0.29	0.128 **	0.16	0.206 **	0.29	0.105 **	0.33	242
L2 relative to L0	0.105	0.21	0.007	0.27	0.005	0.16	-0.012	0.27	-0.008	0.31	245
II. Time-Effects Estimators											
I.1 Least Squares 2/											
(0) "De Jure" Index	0.030	0.23	0.040	0.29	-0.027 *	0.17	-0.013	0.288	-0.014	0.309	263
(1) "De Facto" Index 1	-0.324 **	0.28	-0.209 **	0.32	0.080 **	0.19	0.129 **	0.304	0.044 **	0.292	269
Minimum Wage 1/	-0.113 **	0.37	-0.064 **	0.44	0.024 **	0.27	0.040 **	0.444	0.009	0.404	214
Social Security	-0.057 *	0.26	-0.053 **	0.31	0.010	0.16	0.043 **	0.304	0.017 **	0.310	256
Trade Union	-0.065	0.31	-0.014	0.35	-0.027	0.25	0.041 *	0.315	0.016	0.303	262
General Govt. Employment	-0.109 **	0.32	-0.062 **	0.37	0.037 **	0.26	0.025	0.353	0.007	0.346	223
(2) "De Facto" Index 2	-0.068 *	0.21	-0.028	0.27	0.016	0.16	0.012	0.258	-0.006	0.269	272
Minimum Wage 2/	0.026	0.29	0.015	0.38	0.004	0.22	-0.019	0.375	-0.012	0.383	220
Maternity Leave (# days)	-0.149 **	0.23	-0.113 **	0.29	0.024	0.16	0.088 **	0.288	0.041 **	0.304	260
Ratification of ILO Conv. 87	-0.014	0.21	-0.002	0.28	0.002	0.17	0.001	0.269	-0.003	0.280	272
Central Govt. Employment	-0.019	0.23	0.003	0.30	0.002	0.20	-0.005	0.278	-0.008	0.290	226
(3) De Jure vs. De Facto											
L1 relative to L0	-0.142 **	0.26	-0.107 **	0.32	0.049 **	0.19	0.059 **	0.304	0.029	0.323	257
L2 relative to L0	-0.064 *	0.23	-0.039 *	0.30	0.027 **	0.18	0.013	0.287	0.001	0.301	259
I.2 Instrumental Variables 3/											
(0) "De Jure" Index	-0.036	0.24	0.029	0.30	-0.021	0.17	-0.008	0.30	-0.011	0.33	248
(1) "De Facto" Index 1	-0.176	0.22	-0.031	0.28	-0.015	0.15	0.047	0.27	0.015	0.29	254
Minimum Wage 1/	0.205	0.33	0.080	0.48	-0.045	0.29	-0.035	0.48	0.028	0.45	201
Social Security	-0.085	0.27	0.087	0.28	-0.046	0.15	-0.041	0.28	-0.023	0.30	245
Trade Union	-0.668 **	0.27	-0.495 **	0.33	0.225 **	0.21	0.270 **	0.31	0.110 **	0.32	249
General Govt. Employment	-0.602 **	0.27	-0.455 **	0.34	0.110	0.22	0.345 **	0.32	0.156 **	0.34	211
(2) "De Facto" Index 2	0.039	0.21	0.089	0.28	-0.026	0.16	-0.063	0.27	-0.036	0.30	258
Minimum Wage 2/	0.416 *	0.36	0.325 *	0.46	-0.169 *	0.28	-0.157	0.44	-0.055	0.46	207
Maternity Leave (# days)	-1.117 **	0.24	-0.688 **	0.30	0.256 *	0.17	0.432 **	0.29	0.193 **	0.32	248
Ratification of ILO Conv. 87	-0.019	0.23	0.008	0.30	0.039	0.16	-0.024	0.27	-0.019	0.29	258
Central Govt. Employment	-0.287	0.23	-0.140	0.30	0.042	0.20	0.099	0.28	0.028	0.30	214
(3) De Jure vs. De Facto											
L1 relative to L0	-0.272 *	0.24	-0.308 **	0.32	0.123 **	0.17	0.185 **	0.313	0.098 **	0.344	242
L2 relative to L0	0.110	0.24	0.012	0.30	0.004	0.17	-0.017	0.304	-0.011	0.331	245

See footnotes in Table 7.

Figure 1
"De Jure" Labor Regulations and Income Inequality

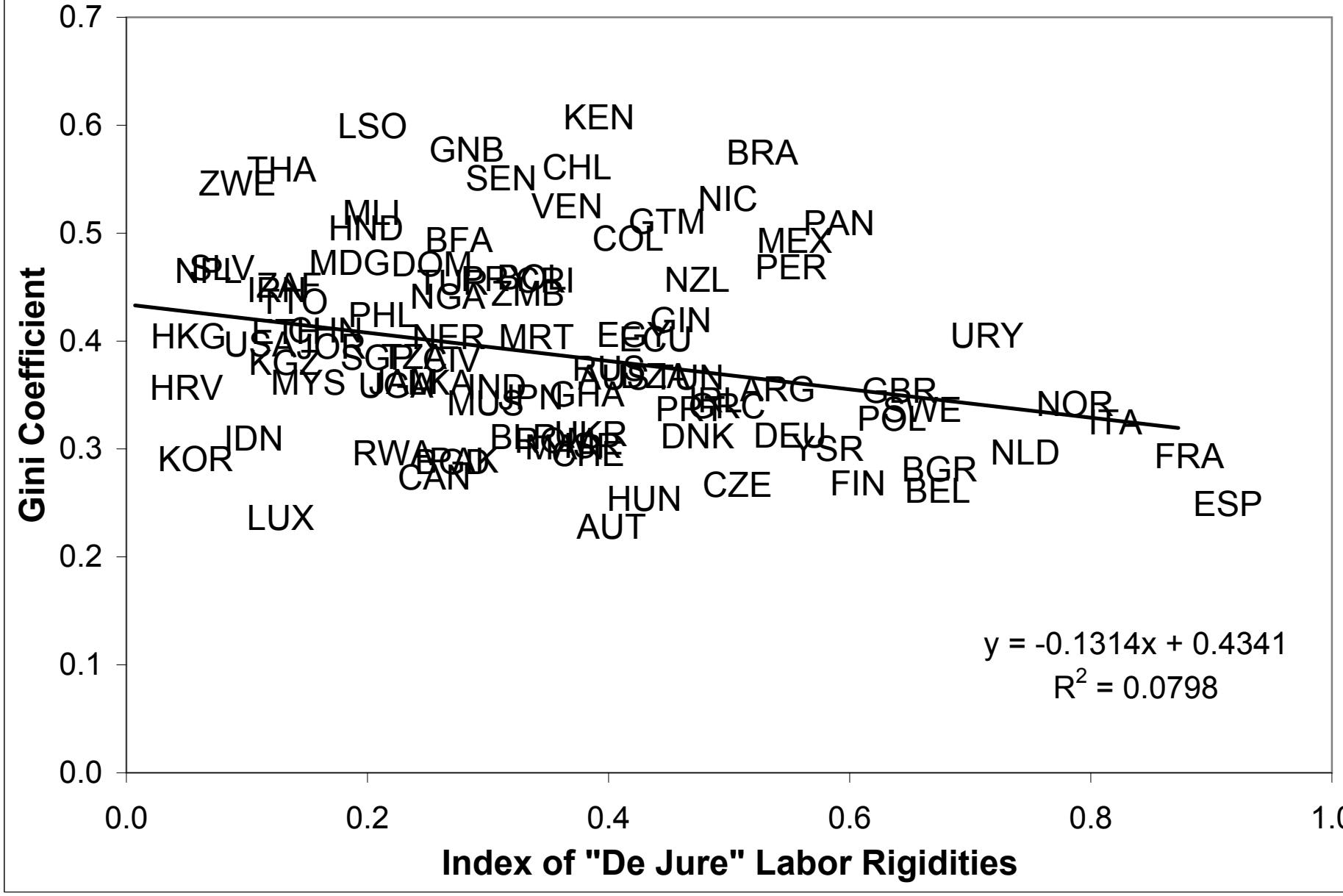

Figure 2
"De Facto" Labor Regulations and Income Inequality, I

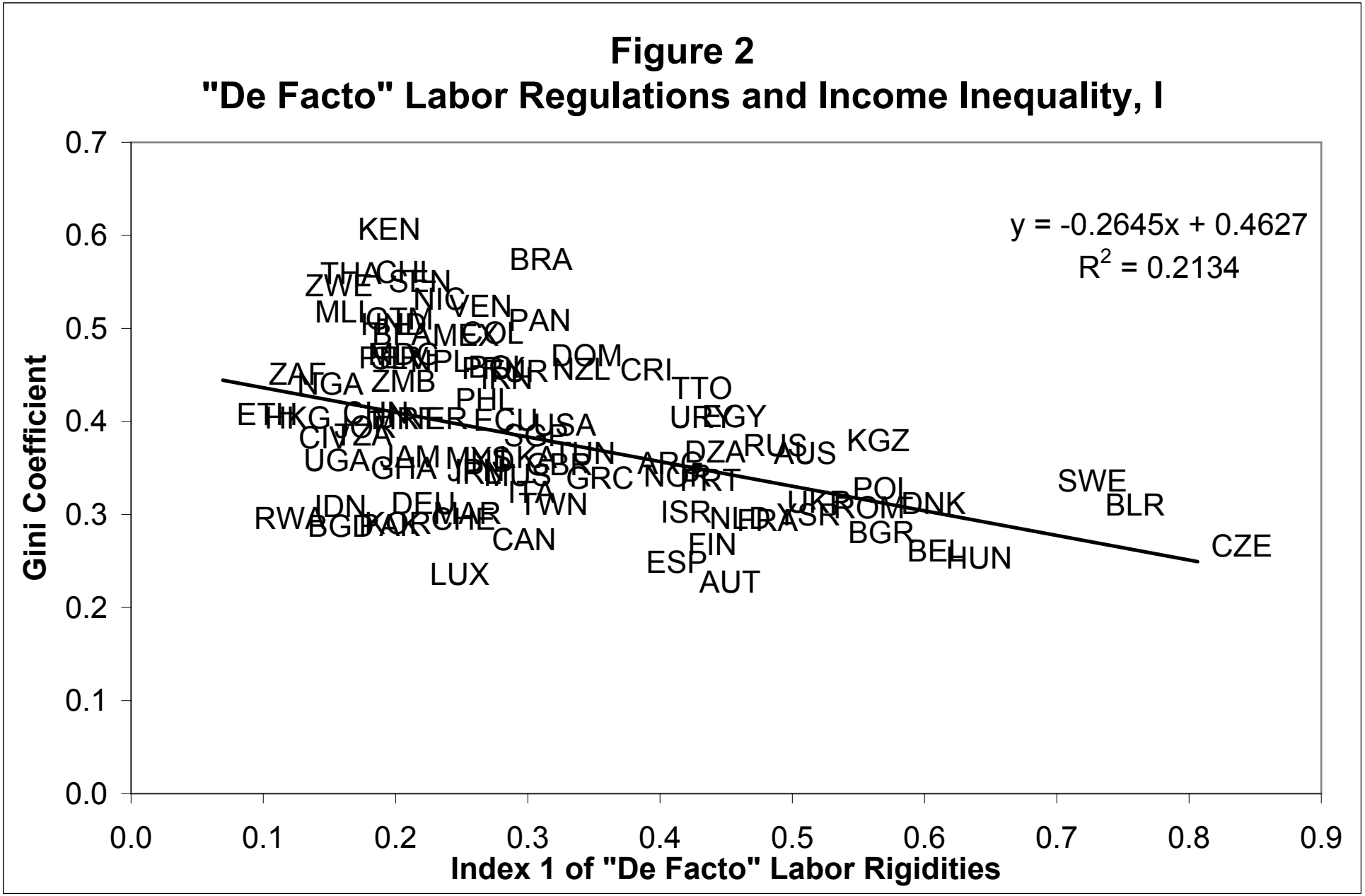

Figure 3
"De Facto" Labor Regulations and Income Inequality, II

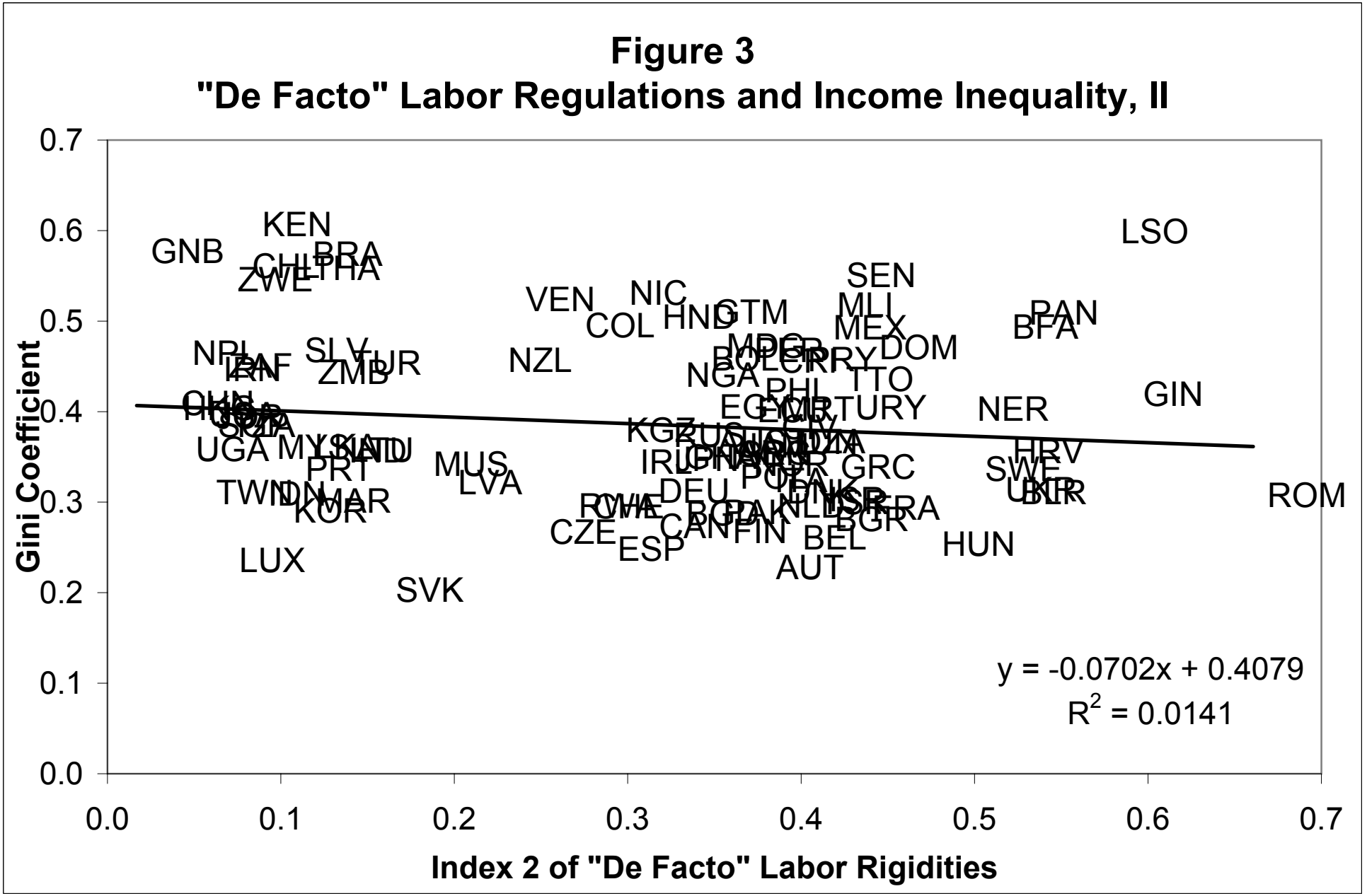

Figure 4
Employment Laws vs. Income Inequality

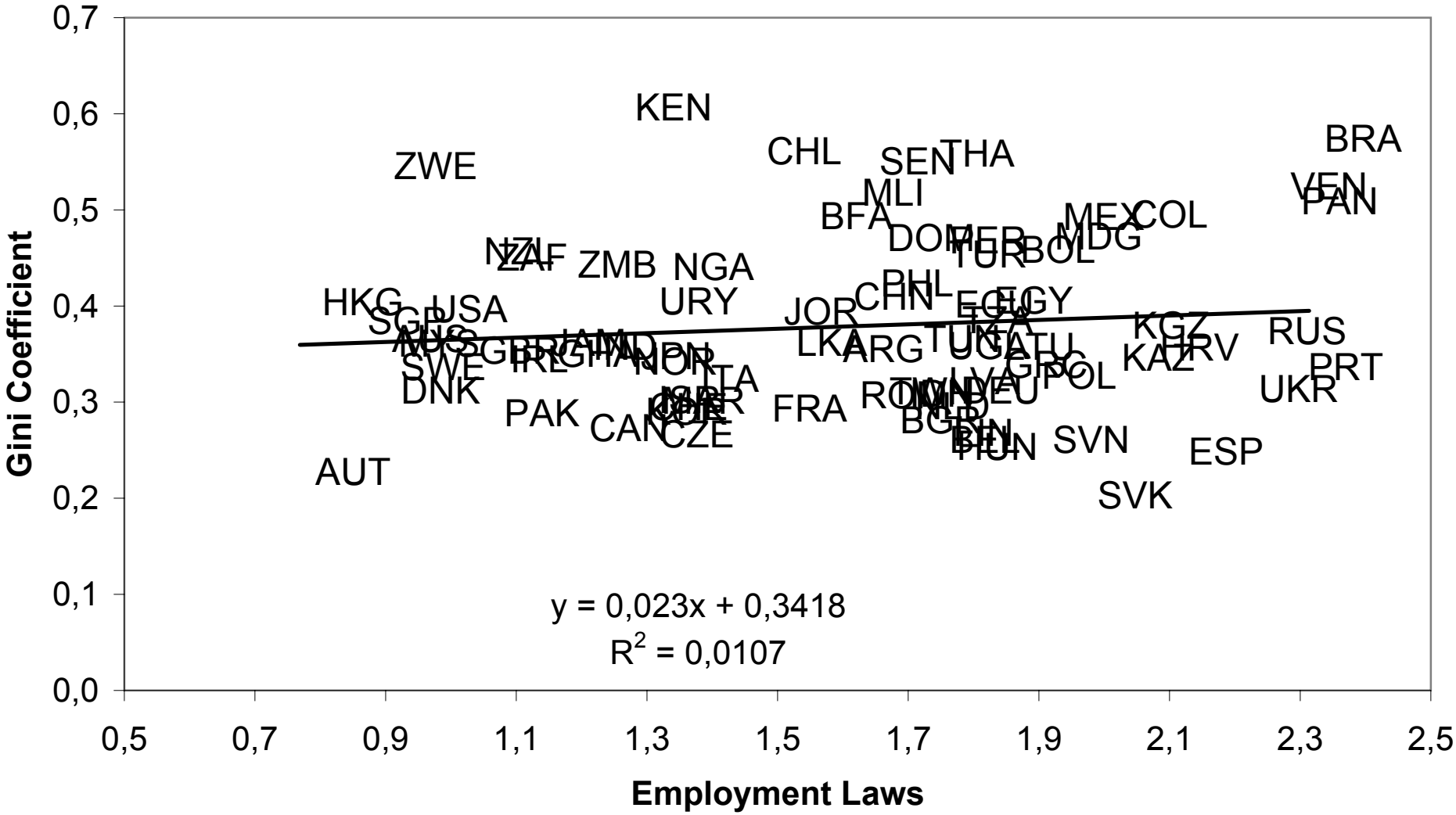

Figure 5
Industrial Relations Laws vs. Income Inequality

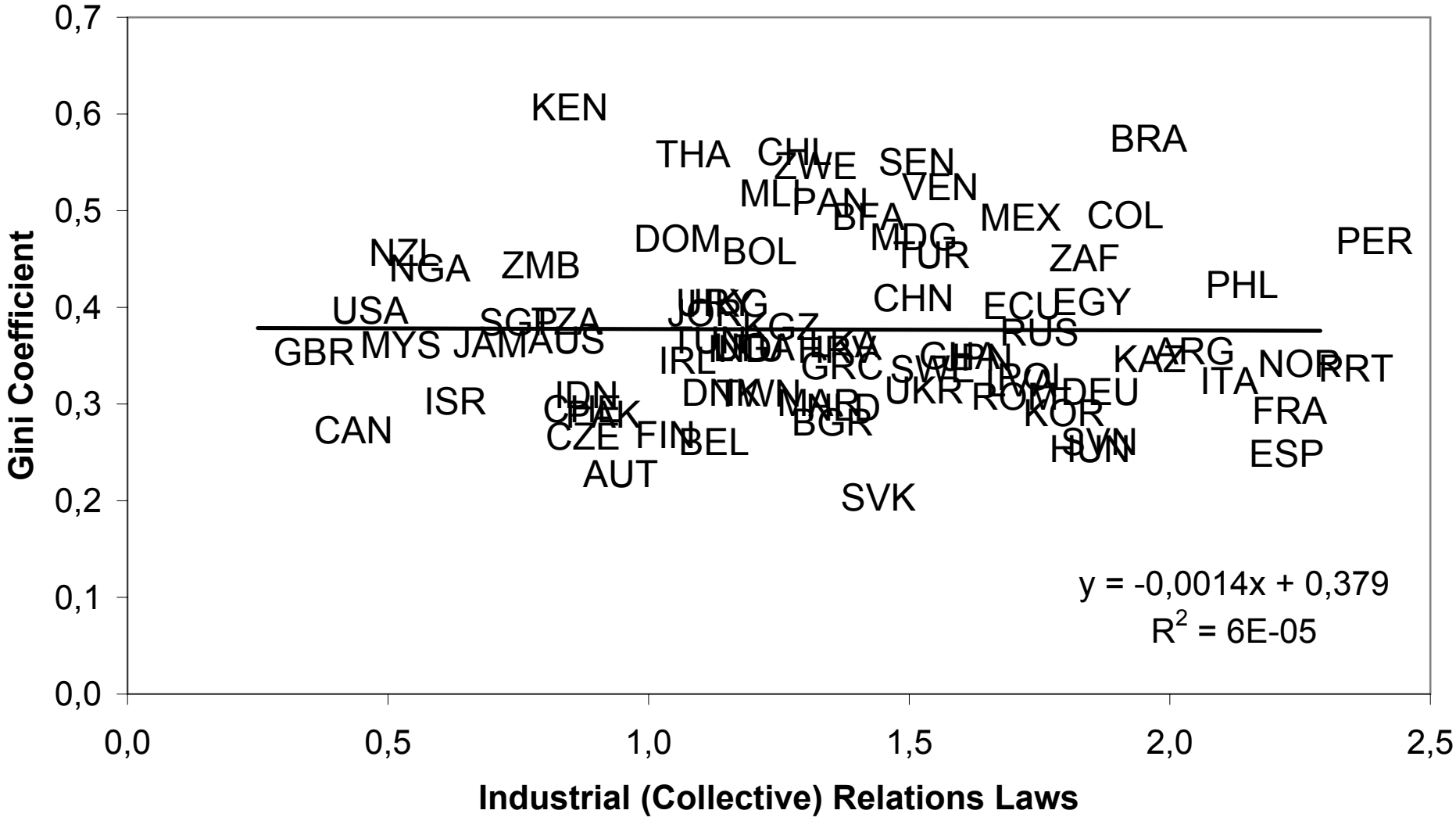

Figure 6
Social Security Laws vs. Income Inequality