

**Ties that bind:**  
Employment Protection and Labor Market Outcomes in  
Latin America

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## EXECUTIVE SUMMARY

This paper reviews the regulations governing hiring, firing, overtime work, social security contributions, minimum wages and collective bargaining in the region and examines their impact on labor market outcomes. Using data from Latin America, Caribbean and OECD countries, we reach the following conclusions:

- Though the region is very diverse in its labor regulations, two polar models can be detected. The first one is prevalent in the Caribbean, where collective agreements shape the bulk of labor relations. The second characterizes the rest of the region, where Labor Codes are much more encompassing in the scope of matters regulated. Labor Codes favor indefinite, full-time labor contracts through detailed regulation of probationary periods, benefits, and severance payments in case of separation.
- Employment stability protection (including mandated severance payments and other regulations that penalize employment termination) in Latin America is stricter than in most OECD countries.
- For the labor market as a whole, there is robust evidence that the protection of employment stability is associated with a higher incidence of self-employment, and somewhat weaker evidence that it is associated with lower employment rates.
- Evidence from Chile suggests that among different groups of workers, a reduction in employment protection may increase the employment of young workers and women, but at the cost of reducing the employment rates of pre-retirement age workers.
- Job security increases job duration in the region: Albeit the typical worker in Latin America experiences shorter employment spells than an average US worker, after controlling for differences in education and firm size a Latin American worker remains longer in her job than her US counterpart.
- Legally mandated benefits are unequally distributed: younger, poorer, less skilled, and female workers have a lower likelihood of being covered by legally mandated benefits than their more educated, prime-age, richer and male counterparts regardless of the size of the firm they are employed at.
- In some countries in the region, high minimum wages may be generating high levels of youth and female unemployment.
- In Latin America, union membership is falling and collective bargaining coverage is relatively low. Collective bargaining institutions are characterized by pervasive state intervention that weakens the incentives for workers to organize themselves in unions and actively bargain over wages and benefits.
- If the region is to evolve away from legally mandated protection towards contractual arrangements arising from workplace conditions, unions and collective bargaining will become the central actors in the determination of wages, benefits, and protection levels. The State will need to change its role, and center its actions in the active promotion and protection of freedom of organization and bargaining.



## 1- Introduction

Latin America is a region especially prone to large macroeconomic and policy shocks that generate a climate of uncertainty and instability. The Mexico and East Asia crisis are only two of the most recent examples. It is only natural that in the face of this uncertainty workers have demanded ways to increase income and consumption stability. In most countries of the region, this stability has been pursued by: (1) imposing large penalties on firms that dismiss workers; and (2) limiting the types of contracts that firms can offer to a restricted set of full-time, indefinite contracts.

These regulations have come under attack as Latin American economies progress in their aim of becoming more market oriented. Representatives of the private sector claim the need of reforming the institutions and policies that govern labor markets. The existing institutions, they say, constrain firms from adapting to and participating in the increasingly integrated world markets. In the other side of the debate, workers' representatives acknowledge the existence of new rules of the game, but fear that labor reforms are going to backfire in the form of lower wages, higher unemployment, and reduced social protection.

As each side of the debate makes their points across, one of the most surprising things is the lack of reliable information in which to base decision-making. At this point, the available evidence regarding whether labor institutions are affecting employment and unemployment rates, whether it contributes to increase non-regulated employment, how it affects wages, and whether indeed they protect workers and whom is protected, is quite limited. This paper is aimed at developing some of this evidence and making explicit some of the dilemmas policy-makers face.

The region is very diverse in its labor regulations. Two polar models can be detected: in the Caribbean collective agreements shape the bulk of labor relations, while in the rest of the region Labor Codes are much more encompassing in the scope of matters regulated. Labor Codes favor indefinite, full-time labor contracts through detailed regulation of probationary periods, benefits, and severance payments in case of separation. In almost all countries, temporary, fixed-term or part-time work contracts are strictly regulated and in some, they are prohibited. These constrains in the set of available contracts might be detrimental for workers that have a taste for working in a flexible manner and might be specially pervasive for women or young workers that would like to combine work with other activities.

Job security provisions, like notice periods, severance payments and narrow definitions of just causes for dismissal, are much stricter in Latin America than in most OECD countries. Chile, for example, a country considered as relatively "flexible" in the Latin American region, has similarly strict job security provisions than Greece, considered as 'rigid' among the OECD countries. Three consequences emanate from the strictness of employment protection.

First, there is robust evidence that the protection of employment stability is associated with a higher incidence of self-employment, and somewhat weaker evidence that it is associated with lower employment rates. These results hold true regardless of the sample of countries considered. In particular, similar results are encountered for the OECD, for Latin America and for the whole sample of countries.

Secondly, evidence from Chile suggest that a reduction in employment protection may increase the employment of young workers and women, but at the cost of reducing the employment rates of pre-retirement age workers. In the short-run, the negative effect on older workers is likely to dominate, whereas in the longer run, increased youth employment can increase overall employment rates. Yet, older workers are more likely to be represented by unions and the political process, and hence, they are more likely to veto any attempts of reform. These differences in the relative impact of a labor reform may help to explain the scarcity of labor reform experiences in the region.

And third, labor regulations have contributed to reduce turnover rates in the region, reducing workers' risk of facing unemployment spells. Thus, although the typical Latin American worker experiences shorter employment duration than the average US worker, after controlling for education and firm size, a Latin American worker remains longer in her job than her US counterpart.

Our evidence suggests that the cost of job protection regulations is the introduction of distortions in the composition of employment in the region. In particular, they seem to have increased employment for prime-age and older male workers, at the expense of reducing employment rates for younger and female workers. In addition, they seem to be increasing the number of workers that turn to self-employment. In some countries of the region, high minimum wages may be generating high levels of youth and female unemployment. Furthermore, in both large and small firms, poorer workers are less likely to benefit from the protection of the law, as indicated by the evasion of social security contributions. In summary, the current protection mechanisms are not adequate to reach those very workers that the law sought to protect.

In this context of encompassing and extensive legally mandated protection, workers have little incentive to organize themselves in unions and actively bargain over wages and benefits. Latin America is a region characterized by relatively low, and falling, levels of union density, and low coverage rates of collective bargaining. Furthermore, the whole collective bargaining system is tainted by pervasive State intervention that reduces even more the incentives workers may have to participate in unions.

If the region is to evolve from legally mandated protection and benefits, towards contractual arrangements arising from workplace conditions, the low level of unionization and the low coverage of collective bargaining will create an important obstacle. Such a transition would make unions and collective bargaining the central actors, and the State will need to change the focus of its activities towards actively promoting and protecting the freedom of organization and bargaining.

The rest of this paper is organized as follows: in Section 2, we review the regulation on dependent work in the region and examine its impact on the level, the composition, and the duration of employment. In addition, we examine who is more likely to be protected by existing regulation. In Section 3, we examine the impact of minimum wage laws in nine countries of the region. In Section 4, we review the nature and behavior of collective bargaining institutions. Finally, Section 5 poses some issues for discussion.

## **2-Regulations on Dependent Work**

Regulations on dependent work such as restrictions on the types of contracts available to hire workers, mandatory severance payments, surcharges for overtime and holiday work, and social security contributions were explicitly designed to increase the quality of work and the well-being of workers. However, at the same time, they are often blamed for generating “rigid” labor markets characterized by high levels of unemployment or “informal” work. Thus, for example, the high rates of unemployment in continental Europe with respect to the US or the UK are taken as a proof that the high levels of protection in Europe are detrimental for employment. In the same manner, the high degree of informal or unprotected work is often seen as a direct consequence of “over-regulation” of dependent work.

In this chapter, we examine the regulations governing hiring, firing, overtime work and social security contributions in the region and examine its effects on employment and job stability. In addition, we examine whether social security and other benefits mandated by law are distributed equitably among dependent workers or instead some workers are more likely to be protected than others.

### **2.1 The region is very diverse in its institutions**

A complete summary of dependent work regulations for all the countries of the Latin American and Caribbean region is beyond the scope of this paper<sup>2</sup>. Nevertheless, there are some similarities and differences across countries that should be taken into account when evaluating current labor codes and its effects.

Regarding contractual formulas, there are major differences between the legislation of Latin American countries and the English speaking Caribbean. In the former, legislation favors indefinite contracts and sets significant restrictions on temporary, fixed-term or probation contracts. In some countries, like Bolivia, El Salvador and Guatemala the legislation prohibits temporary contracts to perform “permanent activities proper to the company”. In others like in Brazil, Nicaragua and Venezuela their renewals are very much restricted and, in all cases, when the maximum number of renewals is reached the contract has to become indefinite. By contrast, in the Caribbean countries, there are virtually no restrictions on the renewal or applicability of these “atypical” contracts.

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<sup>2</sup> See IPES 96, Chapter 6 or Lora & Pages (1997) for a complete summary and discussion of dependent employment regulation in LAC.

Since 1990 some countries like Argentina, Ecuador and Peru have introduced new formulas making possible to extend the duration or applicability of such contracts.

Another characteristic of contractual formulas in the region is that they tend to favor full-time contracts. Consequently, the proportion of workers voluntarily employed on part-time bases is very small. This lack of flexibility on the number of hours worked can be very detrimental for workers that have a taste for working in a flexible manner or want to combine work with other activities.

Regarding the regulations governing the termination of a contract, there are again large differences between Latin American and the English Speaking Caribbean countries. In the first group, labor codes are based on the principle of labor stability. This principle implies that once a short probatory period is over, the worker acquires rights over his or her job. In the event of a company-initiated separation, the worker has the right to be compensated for the loss of the job, or in some cases, being reinstated if a just cause for dismissal cannot be proved. In the Caribbean countries things are pretty different. With the exception of Trinidad and Tobago, labor codes are not very specific about advance notification or compensation for dismissal with or without just cause. Instead, much leeway is left for contractual agreements between employers and employees.

In the Latin American countries, labor codes distinguish between two types of compensation in the event a contract is terminated. The first one is *the compensation for time of service*<sup>3</sup>, or amount paid by the firm to the worker regardless of the cause of separation or the party that initiated it. In general, this compensation amount is increasing in the workers' tenure with the firm. This compensation is available in Colombia, Ecuador, Peru and Venezuela (since 1997) where a certain fraction of a workers' wage is accumulated every year in an individual worker account. This amount augmented with normal market yields is available to the worker, if she or he is dismissed or quits voluntarily. In Brazil, a fraction of the wage is also deposited every year in an individual worker account but the final amount is only available to the worker in case of dismissal.

A second source of compensation is available to the worker when the firm initiates the separation. This payment is generally referred to as compensation for dismissal. Its amount depends on whether the separation is deemed justified in which case, might be zero or small, or unjustified, in which case the amount can be quite large. In principle, labor codes spell quite systematically the instances in which a dismissal is considered justified being among the common causes workers' misdemeanors or work absenteeism. Except in Chile, Argentina and Peru, firms' economic difficulties are not considered a just cause for dismissal. In the event of economic hardship or the need to rationalize the labor force, firms have to pay the worker an amount that ranges from a half month's pay per year worked in Paraguay, to two months pay in Nicaragua. In Colombia, Ecuador, Peru and Venezuela, in the event of dismissal, workers receive both compensation for

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<sup>3</sup> This compensation takes different names around Latin America. In Peru, its name is CTS (*Compensacion por Tiempo de Servicio*). In Colombia, is called Severance Fund, in Brazil FGTS (*Fundo de Garantia do Tempo de Servicio*) and in Venezuela *Prestacion de Antiguedad*.

time of service and compensation for dismissal. In Brazil, also, in the event of dismissal, workers receive the amount accumulated in their individual funds, plus an extra compensation of 40% of the accumulated funds.

Besides regulating hiring and firing procedures, the typical legislation in the region covers limits on working hours, overtime pay, night work and holidays. As a general rule, the maximum period work is 48 hours a week and eight hours a day<sup>4</sup>. Overtime pay ranges from an additional 25 % of normal wages in Colombia to 200% in Mexico after 9 extra hours.

Finally, social security systems in the region are mostly funded by taxes levied on labor income. These taxes are devoted to partly fund health care systems and partly to fund old-age pensions. Given the scarce coverage and quality of benefits, social security contributions are in most countries perceived as taxes that neither workers nor firms want to bear. Social Security contributions are regarded as high in Argentina, Brazil, Colombia and Uruguay, whereas Caribbean and Central American countries, with the exception of Costa Rica, enjoy relative low social security contributions<sup>5</sup>.

In the following sections we examine the effects of these institutions on labor market outcomes. We focus our attention on two particular sets of regulations; (1) Employment protection provisions and (2) Social security contributions.

## 2.2 – The impact of Employment Protection

Employment protection or employment security are commonly used as synonyms to denote the set of provisions devoted to increase employment stability. In discussing this topic emotions run high, partly because the impact of these regulations on labor market outcomes is unclear, and partly, because any changes are likely to benefit some workers at the expense of others. In this section we examine the effects of the regulations governing dismissals on employment rates and job stability. It must be mentioned at the outset that this is not an easy task and our results should be taken as indicative. In the first place, the lack of substantial labor market reforms yields very few instances in which we can properly analyze the effect of institutions. Therefore, we either recur to cross section analysis or examine countries for which enough variability is available. Secondly, the concept of “rigidity” itself has taken to mean very different things creating confusion in the media and in the public discussion on what labor market “flexibility” is supposed to mean. In this study we place special emphasis in defining measures of job “rigidity” that can be compared over time and across countries in and outside the region. This allows us to judge the institutions of one country in relation to those of other countries, in ways that were not possible up to now.

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<sup>4</sup> This standard work week is way longer than in most of the OECD countries, where standard weeks of 38 hours are the norm.

<sup>5</sup> See IPES, 96 , IADB



### 2.2.1- Measuring “Rigidity”

One of the most difficult questions when assessing the benefits or losses associated to labor legislation is the one associated with the measurement of protection. A compensation of 1 month of wage per year worked is high or low? Comparing legislation across countries gives a relative measure of protection, however restricting our comparisons to the context of the Latin American and Caribbean countries, might distort our views in that we take as normal, protection levels that are high compared to other regions.

One solution is to place Latin American and Caribbean legislation in reference to the one existing in the OECD countries. This comparison is useful in that protection levels in the OECD have been widely studied. Is Latin America closer to the relatively unprotected US labor market, or instead, the characteristics of dependent work regulation are more closely related to the more protected and supposedly rigid European labor markets?

One possible measure of job protection was computed by Márquez (1997) following a methodology developed by Grubb and Wells (1993) for the OECD countries. The index summarizes information on the following components of dependent work regulation: (1) length of probation periods; (2) advance notice periods; (3) the actual cost of dismissing a worker; (4) whether dismissals related to firms’ difficulties are likely to be deemed as just or unjust cause for dismissal; and (5) whether reinstating the worker in its job is mandatory once a dismissal is deemed unjust. All the institutional information used to elaborate this index dates back to 1990. Since there have been few labor reforms, most of the 1990 data is still valid today. In addition, for the few countries for which some reforms have been enacted, the full impact of reforms in the labor market is not likely to be felt until some time in the future.

It should be noticed that the index<sup>6</sup>, by construction, only gives an ordinal instead of a cardinal order. An index of 20 indicates that 19 countries in the sample have relatively lower job protection indices. In addition, the index is built by taking simple averages of each of the four elements described in the four first columns of Table 1. This means that the same importance is awarded to, say, the relative ranking regarding length of a probation period, than to actual dismissal costs.

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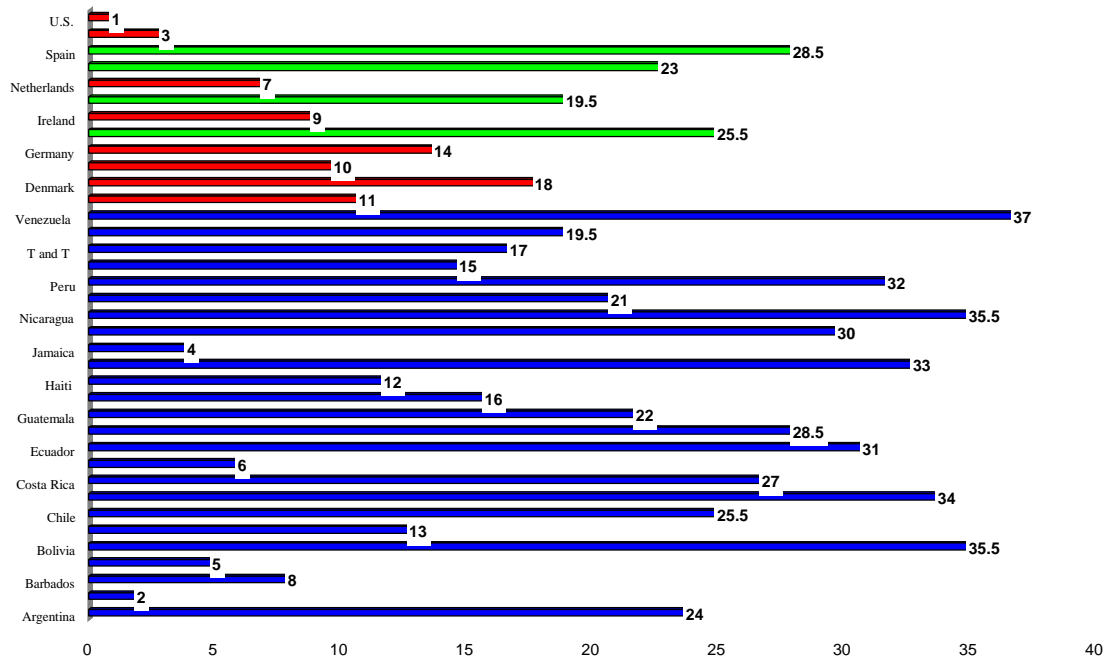
<sup>6</sup> To elaborate the index, pre-notice requirements are added to compensations for dismissals. However, one month of mandatory pre-notice counts only .75 towards the cost of dismissal. The difficulties to qualify an economic dismissal as just or unjust, and the requirement to reinstall a worker are classified in three levels ranging from 1 to 3, the higher for the countries in which economic difficulties of the firm are considered unjust cause and reinstalling the worker in his or her job is mandatory. After these manipulations of the initial institutional data, the four resulting components of dependent work regulation are ranked, from 1, for the less restrictive country, to the number that indicates the maximum number of countries for which information is available<sup>6</sup>. Table 1 summarizes the relative position of each country in each of the former five categories. The final index is obtained averaging across the five columns for each country and ranking the countries again, from 1, for the country with the lower average to the maximum number of countries.

Table 1: Employment protection index

Country	Definition of just-cause for dismissal	Tenure-related severance payment			Probationary period	Severance at 20 years	Reinstatement	Employment protection index
		1	3	10				
Argentina	27	33.5	28	30	13.5	9	14	24
Bahamas	6.5	7	4.5	2.5	13.5		14	2
Barbados	6.5	14.5	7	4	35	2	14	8
Belize	6.5	7	4.5	11	33	3	14	5
Bolivia	27	35.5	35	34	13.5	21.5	14	35.5
Brazil	27	21	12	15	13.5	6	14	13
Chile	27	26	33	33	13.5	11	14	25.5
Colombia	27	28	31	35	13.5	26	14	34
Costa Rica	27	25	28	30	13.5	21.5	14	27
Dom. Rep.	27	7	4.5	2.5	13.5		14	6
Ecuador	27	37	28	30	13.5	21.5	14	31
El Salvador	27	22.5	25	28	29.5	21.5	14	28.5
Guatemala	27	17	22	26	23	21.5	14	22
Guyana	27	14.5	13	19	35	12	14	16
Haiti	27	7	15.5	8				12
Honduras	27	22.5	34	32	23	21.5	14	33
Jamaica	6.5	7	15.5	8	13.5		14	4
Mexico	27	19	19	21	35	14	34.5	30
Nicaragua	27	33.5	36	36	3.5	30.5	14	35.5
Paraguay	27	24	22	20	29.5	5	14	21
Peru	27	17	22	26	13.5	32	34.5	32
Suriname	27	3	15.5	14	23		14	15
T and T	6.5	27	22	23	29.5	16	14	17
Uruguay	27	17	22	26	13.5	21.5	14	19.5
Venezuela	27	30	37	37	13.5	30.5	14	37
Belgium	6.5	31	15.5	8	6	13	14	11
Denmark	6.5	35.5	30	16.5	13.5	7.5	29	18
France	6.5	13	8	5	27	15	14	10
Germany	15.5	20	9.5	13	5	17	31.5	14
Greece	13.5	32	26	24	23	7.5	31.5	25.5
Ireland	6.5	3	4.5	10	3.5	27	29	9
Italy	6.5	10	18	12	32	28	34.5	19.5
Netherlands	13.5	3	2	6	23	4	29	7
Portugal	27	11.5	11	18	29.5	21.5	34.5	23
Spain	15.5	29	32	22	26	29	14	28.5
U K	6.5	11.5	9.5	16.5	2	10	14	3
U.S.	6.5	1	1	1	1	1	14	1

Table 1 and Graph 1 exhibit that most countries in Latin America have high levels of protection even when compared to the “rigid” Mediterranean countries. Chile, for example, a country considered as relatively flexible in the Latin American region, has the same index than Greece, considered as “rigid” among the OECD countries. In the sample as a whole, two groups emerge. The first group is formed with the high job security countries and comprises most of the Latin America and Mediterranean countries. The second group is formed with the low job security countries and comprises the Caribbean and the rest of developed countries in the sample.

**Graph 1: Employment Protection Index**



The former results suggest that job protection in Latin America is high. However, this statement per se, does not necessarily indicate that (1) labor markets are more rigid in Latin America, and (2) that Latin American firms face higher dismissal costs.

In first place, high dismissal costs might be combined with weak enforcement institutions leading to high levels of non-compliance. In such case, mandatory provisions might not affect average employment, although they would affect the composition of employment between covered or formal and uncovered or informal employment.

In second place, any mandated payment can, in principle, be undone through private transfers between firms and workers<sup>7</sup>. Thus, if workers agree to exchange higher future income, at the time of separation, for lower present wages, the expected cost of dismissal can be factored in lower wages. Obviously, the fact that wages have to be positive and presumably larger than a certain minimum wage places a limit to this mechanism; If mandated payments are too high, the discount on current wages needed to keep labor

<sup>7</sup> See Lazear (1990) for a discussion of this idea.

costs unchanged will be so large that wages will have to be lower than minimum wages. Notice that the schemes of *compensation for time of service* such like the ones in Colombia, Ecuador, Peru and Venezuela conform to the neutral exchange mentioned above. Since in every period a share of current wages is deposited in an individual account, and this amount is made available to the worker in the future regardless of the cause of break up, these systems are not likely to increase labor costs or affect employment levels. They are just a way to redistribute labor income in ways that provide sustenance to the worker when his regular income is over. By contrast, *compensations for dismissal* are not likely to function as the neutral mechanism described above. This is partly because workers take severance payments as an entitlement, and therefore are not willing to exchange them for lower wages, and partly, because the formula to compute the compensation does not establish a clear link between current wages and future income<sup>8</sup>.

In third place, high dismissal costs do not necessarily lead to lower employment levels even when mandated severance payments cannot be fully factored in lower wages. Its effects depend, among other things, on the market structure in which firms operate, how fast firms discount the future, and how persistent are micro and macro shocks perceived to be. To better understand the source of this indeterminacy it is useful to consider first the case of a firm that is deciding how many workers to hire. When demand for its product is high and the firm may consider hiring more workers, high dismissal costs act as a hiring deterrent. After all, demand might turn out to be low in the future and the firm will have to pay a high cost to dismiss redundant workers. By contrast, when demand is low and the firm may consider dismissing some workers, high dismissal costs act as a firing deterrent. Since firing workers is expensive, the firm will only dismiss a worker if the expected gains of having him or her employed at the firm are lower than the expected cost of adjusting the work force. Therefore, high dismissal costs lead to lower hiring and firing rates. In addition, the firm's profits are reduced because its set of optimal hiring and firing decisions is restricted by the legislation. However, whether long-run employment is larger or smaller than it would be in an environment without dismissal costs depends on whether the firing or the hiring effect dominates<sup>9 10</sup>. The overall effect on long-run employment is more likely to be negative if lower profits deter firms from entering into the market<sup>11</sup>.

Summarizing, the overall effects of employment protection on long-run employment cannot be clearly assessed from the theoretical standpoint. The answer to whether labor legislation reduces long-run employment or increases informal work in the region is

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<sup>8</sup> In all Latin American countries, but Brazil, compensations for dismissal are computed as X number of wages per year of work at the firm. To do this computation, the last wage earned at the firm is used. This break the link between wages during the life of the contract and final severance payments.

<sup>9</sup> See Bertola (1990) for a full discussion and formalization of this argument.

<sup>10</sup> If the discount rate is very large, hiring rates might be larger than firing rates and long-run employment might increase with the dismissal costs.

<sup>11</sup> Hopenhayn and Rogerson (1993) calibrate a general equilibrium model to the US economy and find a large negative impact of job protection on long-run employment. Most of this negative effect is due to the fact that lower profits deter firms' entrance into the market.

ultimately an empirical one. In the next two sections we examine the existing evidence for OECD countries and provide some new evidence for the LAC region.

### 2.2.2- Employment protection, Employment and Self-employment

In recent years, a substantial body of literature has examined the effects of employment protection provisions on employment and unemployment rates in the context of OECD countries. The evidence however is not conclusive. Bertola (1990) presents some simple correlations between an index of employment protection and labor market outcomes. His results suggest that countries with high dismissal costs tend to experience less variability of employment. However, he finds no clear relationship between his index of employment protection and unemployment rates. Lazear (1990) repeats this exercise using a panel of employment and unemployment data from OECD countries. He finds that a reduction in severance payments lead to an increase in employment to population rates and a reduction in unemployment rates. His estimates however rely mostly on the cross-section differences across countries. Once he corrects for possible differences across countries his employment estimates become non-significant, albeit his unemployment estimates remain negative. Grubb and Wells (1993) construct an index of dependent work regulation for the OECD. Their findings are the following: (1) Total employment to population rates do not seem to be affected by dependent employment regulation, however its composition it is. Thus, a reduction in dismissal costs leads to an increase in dependent employment and a reduction in self-employment.

Finally, Nickell (1997) also examines the correlation between labor market outcomes and a set of labor regulations and institutions. His findings suggest that employment protection provisions tend to reduce short run unemployment but increase long run rates. In addition, job security provisions tend to reduce overall employment but to increase 25-54 male employment rates. Finally, job protection measures are associated with lower participation rates.

Summarizing, results from OECD countries yield some evidence, albeit weak, that job security provisions might reduce employment rates. In addition, job security provisions might be also affecting the composition of employment increasing self-employment and prime-age employment at the expense of reducing dependent and youth employment rates.

To our knowledge there is no evidence on the impact of employment protection on developing countries. In this section we provide some new evidence for an expanded sample of OECD, Latin American and Caribbean Countries.

One possible way to measure the impact of job protection is to examine whether the institutional index described in section 2.2.1 is correlated with labor market indicators, such like total employment and self-employment. Unemployment rates are not a good performance indicator because they are likely to reflect the existence and generosity of unemployment insurance. Since institutional data on unemployment insurance, like

replacement ratios or duration of benefits, has not been incorporated into the index, inferences from the unemployment rates are inappropriate and will not be pursued in the cross-section analysis. Tables 2 and 3 in the appendix summarize the results of regressing various categories of employment to population rates on the protection index and other control variables. Labor indicators are averages from the 1985-1996 period. Data covers both Latin America and OECD countries.

The results for employment rates suggest that there is a negative relationship between employment protection and employment rates across the overall sample. However, one note of caution should be placed here. Since in our sample there is a negative correlation between employment protection and GDP per capita and poorer countries tend to have lower total employment to population rates, the negative sign on the job protection index might be capturing a lower relative level of development.

As a contrast, the results for self-employment rates suggest that there is a positive and highly significant correlation between employment protection and self-employment, even when GDP per capita is added as a control. This results are robust to the fact that poorer -and as we have seen, more protected-- countries tend to have larger informal and self-employment sectors<sup>12</sup>.

Summarizing, there is some evidence, albeit weak, that employment levels are negatively affected by job protection rates. In addition, these results yield a stronger positive relationship between job protection rates and self-employment suggesting that in highly protected labor markets, more workers turn to self-employment. Whether this is by choice —self-employment might be more attractive when dependent work is highly regulated—, or by necessity —workers turn to self-employment because their entrance into the wage employment is limited— cannot be inferred from this analysis.

The former results make use of the cross-country variance in the OECD and LAC sample. One alternative source of variability can be found in different legislation episodes within one country. Unfortunately, only a few countries have experienced sufficient reforms in their labor codes as to generate enough time series variability. One of these few countries is Chile.

### **2.2.3- Employment Protection and Composition of Employment by Age and Gender Groups**

Chile has experienced at least six different changes in labor legislation since 1960. This wide variability combined with the abundance of reliable data from household surveys make Chile an ideal candidate to study the impact of labor legislation on labor market outcomes.

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<sup>12</sup> Other regressions were run to examine the relationship between the protection index and formal and informal employment. See Márquez(1997) for a complete description of empirical results.

An additional reason to study Chile is that its labor codes, despite wide changes in the level of benefits, are similar to the rest of Latin American labor codes. This similarity suggests that results for Chile can be indicative of the impact of labor codes in other countries. Thus, for example, Chilean labor legislation has always relied on some form of compensation for dismissal to protect job stability. As in many other countries, their compensation is computed as one month's pay per year of work. Yet, across legislation episodes different upper limits have been imposed, restricting the maximum perception to larger or smaller amounts. During the period ranging from 1981 to 1989, for example, the maximum compensation amount was five months, whereas since 1990, this amount has been increased to eleven months. Another component of the labor codes that has changed widely over time, are the reasons for just dismissal. While during the period 1966-1975 was virtually impossible to dismiss a worker for economic reasons, from 1978 to 1984 firms' difficulties were considered just cause, freeing the firm from paying compensations in case of dismissal.

In this section we explore the variability in the Chilean labor codes to assess the impact of job protection on total employment, dependent employment, self-employment, unemployment and participation by age groups and gender<sup>13</sup>. To do so, an index of job protection is computed for the period 1960-1996, combining information on notice periods, compensations for dismissal and the likelihood that economic difficulties were considered a just cause for dismissal. This index attempts to measure the expected cost, at the time the worker is hired, of dismissing a worker in the future. Various factors determine the expected dismissal cost: (1) Worker's tenure at the firm matters since the longer a worker is kept at a job, the higher will be the dismissal costs in the event of a firm initiated separation. However, since real interest rates have been in average positive, costs that arise far in the future are relatively less important – since they are discounted— than costs that may arise soon after a worker is hired. (2) The probability that a dismissal originated by firm's difficulties is considered just or unjust matters, because it influences the compensation that the firm has to pay to the worker. When a firm hires a worker, the firm evaluates the dismissal cost and the probability that courts will rule in the future in its favor, based on information about current policy and current practices. Graph 2 plots the resulting index across the period for which we have household survey data. Higher values of the index indicate higher expected dismissal costs, whereas lower values of the index characterize periods in which dismissals were less expensive.

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<sup>13</sup> See Montenegro & Pages for a full description of the methodology and the results presented in this section. Data used correspond to longitudinal series obtained from yearly household surveys. The series cover the period between 1960 to 1996 and therefore range over both periods of intense macroeconomic volatility and periods of sustained economic growth.



Our results suggest that the effects of employment protection are felt differently by workers in different age groups. In particular, regressing participation, total employment, self-employment, dependent employment and unemployment on the index and other controls yield very different results for young workers than for more mature, pre-retirement age workers<sup>14</sup> (See Tables 4-8 in the appendix). Results from the 15 to 25 years old group set of regressions (Table 5) suggest that dismissal costs have a significant negative effect on young workers employment rates. Thus, an increase in the protection index equivalent to a one months' pay, leads to a 1% point fall in young employment rates. This is a large effect equivalent to a loss of 11,160 jobs per year. Results for dependent and self-employment confirm that the reduction in employment is mostly due to a reduction in dependent employment rates. Young self-employment rates do not vary significantly with changes in labor codes, indicating that young workers do not turn into self-employment when finding a wage employment is less likely. Indeed, lower employment rates seem to be compensated by lower participation and higher unemployment rates for this age group.

By contrast, results for the 51 to 65 years old suggest that a liberalization of firing restrictions is associated with a decrease in participation and employment of pre-retirement age workers. The estimates indicate that an increase in the index equivalent to one month's pay leads to a 3% fall in employment rates, 1% fall in participation rates and 4 % points increase in unemployment rates for the pre-retirement age group. Unlike the case of young workers, this is mostly a once and for all effect that happens at the time of liberalization<sup>15</sup>.

<sup>14</sup> All dependent variables are expressed in growth rates. The set of control variables includes, depending on the cases: the one period lagged endogenous variable, the growth of GDP, and the change in the index. In addition we include a cross term constructed as the product of GDP growth and the level of the index, to capture the fact that higher dismissal costs might reduce the variability of employment in the business cycle. Finally, we also add the level of the index, to make sure the cross term is well defined.

<sup>15</sup> It should be mentioned that the presence of a lagged endogenous variable indicates that some of the effects will be spilled over future periods at a diminishing rate. The main difference between young and



The legislation index does not seem to have a significant effect on employment rates, neither for prime age workers nor for the whole 15-65 years old population, suggesting that reduced hiring and firing rates are approximately netted out for these larger population groups. Combining estimates for the different age groups suggest that a reduction in dismissal costs would reduce employment rates in the short run, and increase them over the long-run. This effect can be better understood with a numerical example based on the parameters for the different age groups. According to these estimates, a reduction in expected dismissal costs equivalent to 1 month' pay, would immediately reduce employment rates for older workers, resulting in the destruction of 20,330 jobs. Yet, the reform would stimulate new hires. Net job creation among young workers will be positive with 11160 new jobs created every year. Net job creation among middle age workers would be approximately zero, because new hires would be outweighed by increased layoffs. Overall, the reforms would bring an immediate net loss of 9170 jobs. However, in the following years, net job creation would be positive, leading to higher employment to population rates over the long run.

Female workers might also suffer the consequences of slow job creation. Because female participation rates are still low in Chile a high percentage of potential workers are still out of the labor market. Their entrance, however, might be hindered by low hiring rates. To test whether labor market reforms that reduce the expected dismissal costs are associated to increases in female employment rates, the same set of regressions mentioned above were run for women aged 15-65. The results exhibit a negative sign on the index, suggesting that high dismissal costs might hinder women' s entrance in the labor market. The parameters however are not significant at conventional levels.

As shown in section 2.2.2 job protection seems to have a positive, albeit not significant, effect on self-employment. This effect is smaller for younger workers, who most likely do not have the skills or the capital to become self-employed, even when opportunities in the wage employment sector are scarce.

Finally, it was also examined whether higher dismissal costs are partially factored in lower wages. The evidence suggests that episodes of labor reform that increased dismissal costs were associated with wage reductions that compensated, at least partially, the increase in dismissal costs.

In conclusion, the cross-section and time-series analysis presented above suggest that in Chile, a reduction in dismissal costs might reduce employment in the short run but lead to an increase in participation and employment rates over the long run. They also suggest that certain groups of workers (like young workers or women) might benefit from a reduction in job protection whereas other groups (pre-retirement age workers) might block any attempts of reform. This differential impact of a labor reform helps to explain why, so far, it has been so difficult to modify the current form of the labor codes.

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pre-retirement workers results is that whereas for young workers what matter is the level of the index, for older workers what matter is the change.

### 2.3 - Employment Protection and Employment Stability

Latin American Labor codes were explicitly designed to encourage job stability. By imposing large dismissal costs, two objectives could be achieved at once: On the one hand, imposing penalties on dismissals would minimize employers' ability to arbitrarily fire workers in instances, in which the worker was not at fault. On the other hand, substantial turnover costs would insure workers against the risk of unemployment. Yet, has this objective been accomplished? Is job stability higher in Latin America than in other countries that enjoy relatively lower levels of job protection? In this section we examine this issue by comparing employment duration across countries in and outside the LAC region. Our findings suggest that, albeit the typical Latin American worker experiences shorter job duration than the average US worker, once we control for differences in education and typical size of a firm, a Latin American worker remains longer in the job than her US counterpart.

Despite the importance that labor codes assign to job stability, there are very few studies that attempt to measure employment duration in the region. As in other instances, the analysis of employment duration has been hindered by the lack of reliable data. Surprisingly, only a few household surveys include questions related to job duration. In addition, these questions are not regularly included, further limiting comparability across time and countries.

Using data on uncompleted employment spells various authors have concluded that employment duration in Latin America might be shorter than in the US<sup>16</sup>. Data on incomplete employment spells for Argentina, Brazil, Chile, Colombia, Peru, Venezuela and the US reveals that the typical worker in Latin America experiences higher turnover than the average US worker. The following table summarizes the % of 15-65 workers that report employment spells in the brackets, zero to two, more than two to five, and more than five years in the current job.

**% de trabajadores an cada rango de antigüedad**

<b>Años de antigüedad incompleta</b>	0-2	2.01 – 5	>5
Argentina, 1995			32.55%
Brasil, 1995	44.1%	18.4%	37.5%
Chile, 1987	48.8%	13.8%	37.5%
Colombia, 1994	44%	18%	38%
Perú, 1985	28.8%	11.7%	59.5%
Venezuela, 1995	54.3%	13.3%	32.5%
EUA, 1987	36%	19%	44%

Fuente: Los datos para Argentina, Brasil, Chile, Perú y Venezuela provienen de las Encuestas Nacionales de Hogares. Los datos para Colombia y EUA se obtuvieron de Schaffner (1996). Estos datos resumen periodos de desempleo incompletos para todos los trabajadores empleados.

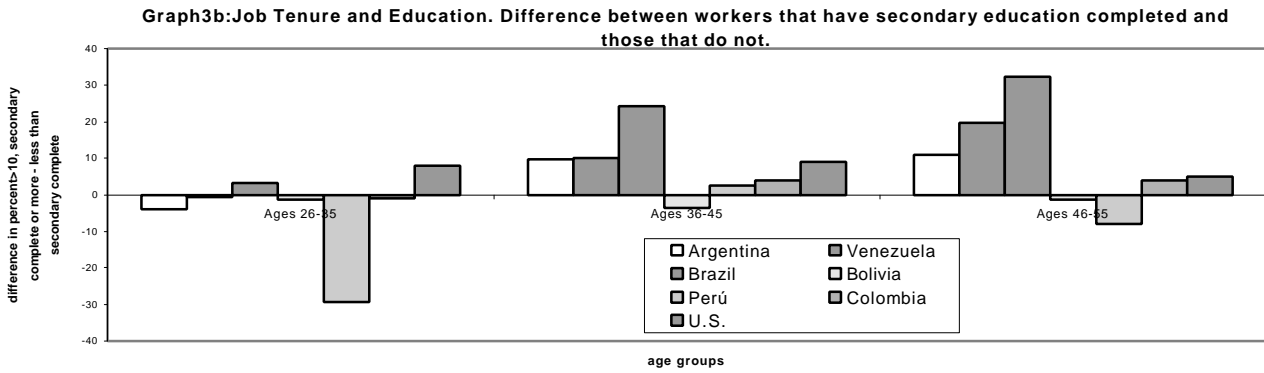
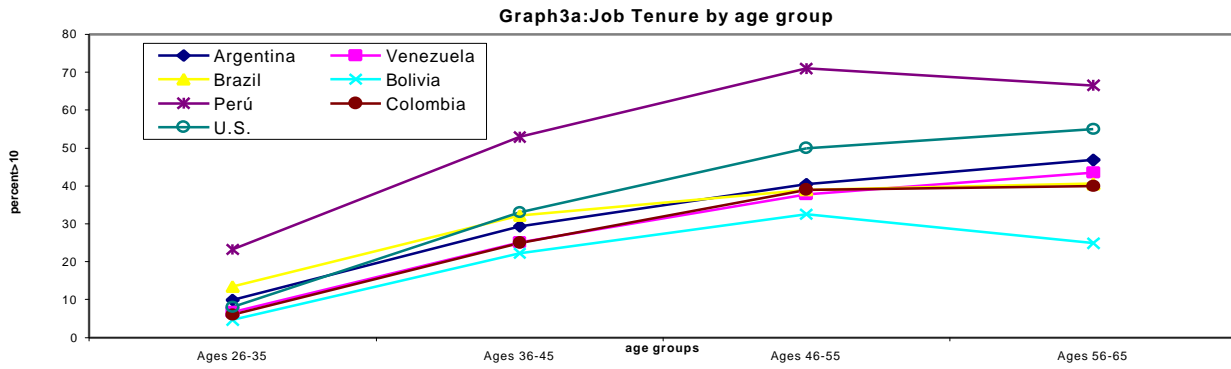
<sup>16</sup> See Gonzaga (1997) and Schaffner (1996) for an analysis of employment duration in Brazil and Colombia.

The percentage of workers that report current tenures of more than five years are much lower in Argentina, Brazil, Chile, Colombia and Venezuela, than in the US. Within the region, Venezuela and Argentina are the countries in which workers report lower employment duration. By contrast, Peru experiences low relative levels of turnover, even when compared to the US. It could be stated that this is the result of reporting data relative to 1985, when dismissing a worker was virtually impossible. However, preliminary results by Saavaedra (1998) do not confirm this argument. Indeed, his findings suggest that there have not been significant changes in job duration since 1985, even when dismissal costs were drastically reduced after 1991.

Since in the US the law does not mandate severance payments in case of a firm-initiated dismissal, the former results might be interpreted as an indication that employment protection provisions have not been able to increase job stability in Latin America. Yet, this has not been the case.

To properly compare turnover rates across countries various factors should be taken into account: First, if tenure for young workers is shorter than for their older counterparts, countries with younger labor forces will exhibit lower average employment spells. Second, countries that experience faster employment or participation growth will also exhibit lower average duration because many workers are at the beginning of their employment spells. Third, if more skilled workers tend to have longer tenures, then countries with a higher proportion of skilled workers will exhibit lower average tenures. Fourth, if smaller are more unstable and therefore less likely to provide long employment spells, countries with a larger proportion of small firms will exhibit lower average employment duration. Graph 3 displays employment duration by age (3.a), education (3.b) and size of the firm (3.c) for male workers. Age groups are included to control for differences in labor force structure across countries. In addition, we only focus on male workers because differences in the rate at which female enter the labor force might affect overall tenure data.

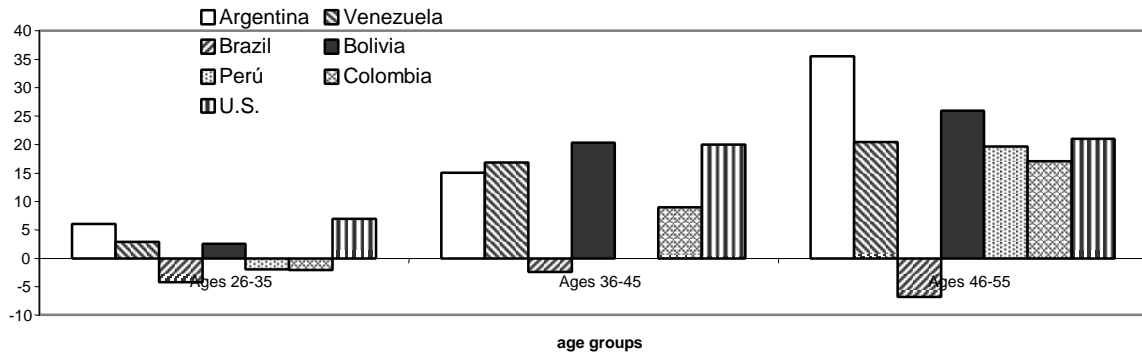
Graph 3

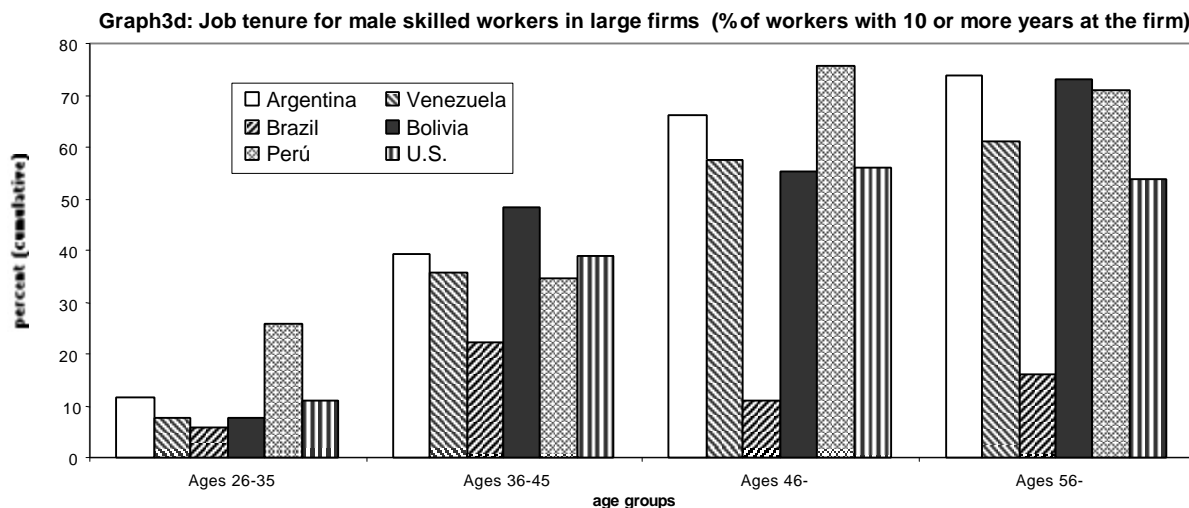


Notes:

\*Argentina and Bolivia are urban only.

**Graph3c: Job Tenure and Firm Size. Difference in % of workers with 10 or more years of tenure between large and small firms**





It is rather clear that the duration of employment increases with the age of a worker. Regarding the impact of skills, the duration of employment increases with education in Argentina, Brazil, Colombia, United States and Venezuela, whereas decreases with education in Bolivia and Peru. In the first group of countries, it is likely that workers with higher levels of formal education are more able to acquire specific skills, and therefore become harder for the firm to replace. In the event of a demand slowdown, firms prefer to keep their highly qualified workers and dismiss the less skilled ones. It is unclear why this is not the case in the second group of countries.

Finally, graph 3 exhibits that the size of the firm is a very important factor in determining the duration of employment. In all countries, but Brazil, workers employed at large firms tend to experience longer employment spells. Notice that in the United States tenure also increases with the size of the firm, suggesting important differences in the nature and behavior of small firms versus large ones. In particular, workers employed at small firms might have larger turnover rates because (1) small firms tend to attract younger and perhaps, less skilled workers, (2) small firms tend to be younger, (3) small firms are more exposed to macroeconomic shocks. (See Tables 9, 10 and 11 in the appendix for more detailed information on tenures by age, education and size of the firm)

Given these large differences in job duration by age, skills and size of the firm, the only manner to properly compare job duration across countries is to control for all these differences. Graph 3.d summarizes the results of comparing job duration, among the Latin American countries and the US once age, education and firm size have been taken into account<sup>17</sup>.

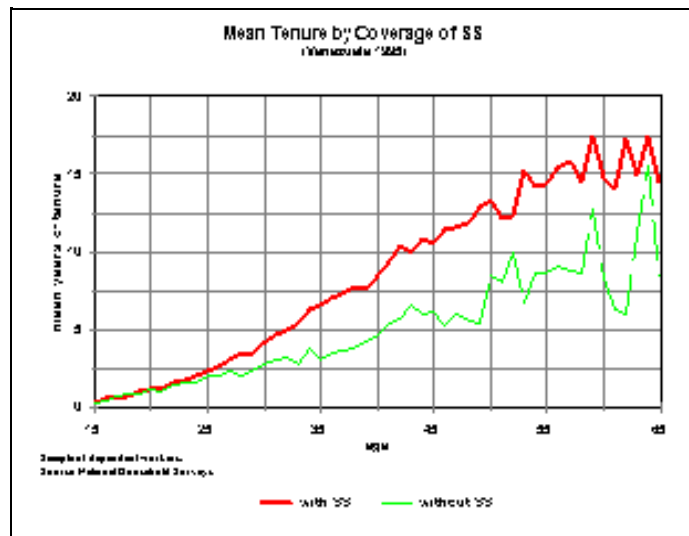
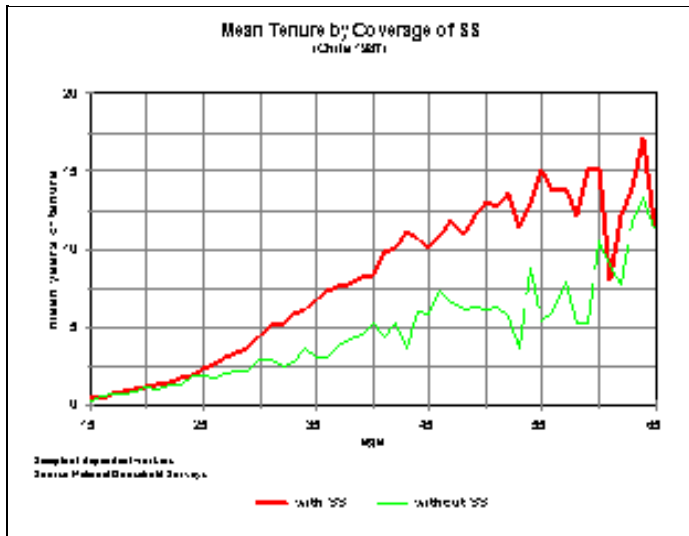
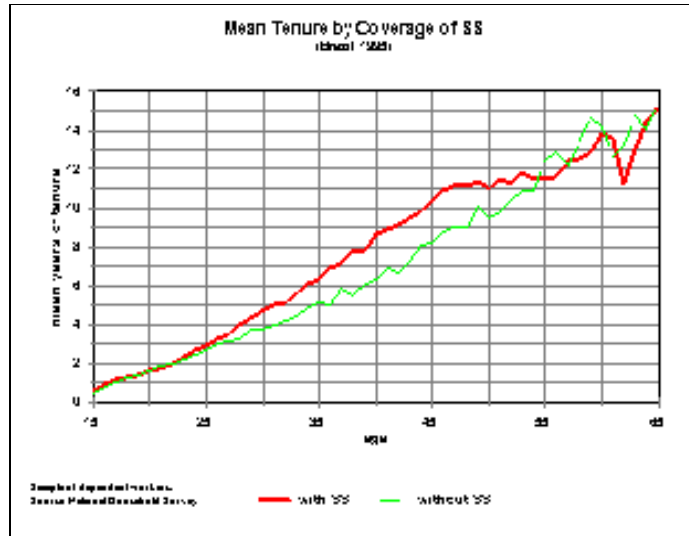
The results indicate that (1) Latin American workers exhibit lower *average* tenures than US workers because they are more likely to be low skilled and employed at a small firm, and (2) with the exception of Brazil, once we compare similarly skilled workers

<sup>17</sup> Information on tenure controlling for age, education and firm size was not available for Colombia and the US. To relate tenures in Latin America to tenures in the US, we compare the % of Latin American skilled workers with 10 or more years employed at a large firm with the % of US workers employed at a large firm. For Bolivia and Peru the comparison with the US is based on % of Bolivian and Peruvian unskilled workers with 10 or more years at a large firm respect to % of US workers with 10 or more years at a large firm.

employed at similar size firms, we find that Latin American workers remain longer at their jobs than their US counterparts.

Finally, are these lower turnover rates a product of employment protection provisions? Our evidence suggests so. First, if workers have a larger probability of being formal in large firms, then the differences in employment duration between large and small firms suggest that longer employment duration in large firms might be partly due to employment protection. Second, workers that are covered by legally mandated benefits, like social security, tend to experience longer tenures than workers who do not (See Graph 4). Third, despite that macroeconomic volatility is much larger in Latin America than in the US, (See IADB, 1995) similarly educated workers in similarly large firm have longer employment spells in Latin America than in the US.

Graph 4: Mean Tenure for workers covered by SS and workers that are not



That large output volatility does not lead to large employment volatility, suggest that employment protection provisions have prevented large employment adjustments when shocks arise. Yet firms might pay a high price for not adjusting, reducing their profits, their probabilities of survival and their incentives to participate in business activities. Alternatively, workers might pay a price for stability in the form of lower employment and more volatile wages. In economic contractions firms might resort to hoard labor and pay lower wages per employee. In expansions, they might hire few workers and demand more effort from their existing labor force. In fact, evidence from OECD countries, as well as for Chile, suggests that higher dismissal costs lead to more pro-cyclical real wages<sup>18</sup>. Yet, if wages are more difficult to adjust in low inflation periods, inflation stabilization might increase the share of dismissal costs borne by firms.

Summarizing, employment security provisions have successfully increased employment spells and reduced employment turnover for some workers. However, is job stability the right objective to pursue? We postpone the discussion of this question until the final section of this paper. We now investigate who is more likely to be protected by labor codes.

## 2. 4. Social Security Contributions and Equity

In the former section we have reported important inequities in job stability across workers. In this section we complete this analysis by examining whether the benefits mandated by law are evenly spread across individuals or instead, some workers are more likely to enjoy these benefits than others. In performing this analysis we go beyond the classical formal-informal sector division based on the size of the firm and find, that a substantial percentage of workers in larger firms do not enjoy the benefits associated with being “formal”. In addition, our results suggest that there are important inequities in the coverage of these benefits. These differences might reveal that (1) the cost of formalizing a worker differs across workers or (2) some workers value “formality” less than others.

To measure the extent and distribution of coverage, we need a measure of what it is to be subjected to the legislation. Whereas in some countries is clear who belongs to the protected sector and who does not, in others countries this distinction is less clear-cut. Unfortunately, very few Household Surveys in the region include questions on whether workers have access to the benefits specified by the labor codes. Instead most surveys and studies rely on the size of the firm to assess the degree of formality or informality of a worker. Our analysis indicates that firm size is not a good indicator of legislation coverage, since a substantial number of workers employed in large firms are not covered by dependent employment regulations. In addition, the appearance of new contractual forms, such like part-time or fixed-workers, introduces further divergences between size of the firm and benefits received by employees. In this section, we use available information on whether a worker has access to social security through his or her employer to classify him or her as covered or uncovered.

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<sup>18</sup> See Bertola (1990) and Montenegro & Pages (1998) for an analysis of wage behavior in the OECD countries and Chile.



**Table 12: % of Dependent Workers with Social Security**

		<b>Peru 85</b>	<b>Venezuela 95</b>	<b>Brazil 95</b>	<b>Chile 87</b>	<b>Argentina 96</b>	<b>Costa Rica 95</b>	<b>Chile 94</b>
<b>Total</b>		24.84%	54.88%		76.68%	67.02%	85.52%	78.21%
<b>Gender</b>								
	male	33.64%	52.30%	59.7%	78.8%	69.11%	83.43%	80.41%
	female	14.32%	62.22%	53.6%	72.1%	65.21%	89.26%	77.26%
<b>Education</b>								
	0	2.64%	17.43%	30.5%	66.4%	33.27%	73.58%	52.40%
	1-8	14.67%	43.38%	50.7%	67.8%	56.67%	80.60%	70.02%
	9-12	35.04%	68.97%	75.4%	80.2%	69.16%	90.78%	81.72%
	12+	57.99%	81.20%	87.8%	91.4%	73.31%	96.23%	90.92%
<b>Activity</b>								
	1	2.68%	4.48%	15.2%	63.4%	66.54%	76.13%	66.06%
	2	89.16%	68.70%	70.3%	95.4%		88.75%	92.91%
	3	42.07%	70.73%	77.8%	83.7%	70.03%	92.40%	85.08%
	4	91.37%	84.95%	ERR	92.6%	80.23%	99.31%	87.67%
	5	32.29%	40.05%	49.8%	84.2%	42.96%	62.86%	83.06%
	6	24.40%	45.13%	61.9%	79.6%	62.42%	86.67%	82.5%
	7	53.14%	42.90%	78.7%	81.8%	64.64%	87.45%	85.26%
	8	65.75%	77.05%	88.5%	78.9%	77.72%	93.19%	93.53%
	9	54.41%	67.68%	81.2%	76.5%	69.87%	88.88%	93.53%
<b>Age</b>								
	15-25	8.61%	38.90%	39.6%	60.5%	53.52%	79.76%	69.68%
	26-55	35.35%	63.02%	66.1%	82.2%	73.75%	88.25%	82.77%
	56-65	28.09%	63.51%	58.8%	79.7%	69.65%	89.12%	78.37%
<b>Sector</b>								
	urban	37.34%	60.78%	63.8%	80.6%	n.a.	89.37%	81.02%
	rural	5.88%	24.66%	24.9%	65.2%		81.77%	74.44%
<b>Family</b>								
	head	45.47%	63.61%	69.6%	84.8%	76.27%	89.59%	84.25%
	spouse	11.89%	64.84%	46.5%	76.2%	63.42%	92.68%	75.91%
	son, daughter	16.39%	47.78%	50.5%	66.0%	59.35%	78.73%	74.69%
	parents	9.94%	65.14%		68.0%		84.16%	23.81%
	son, daughter in law	28.27%	55.13%		81.1%		83.45%	73.20%
	grandchildren	8.20%	49.37%		56.4%		84.03%	66.17%
	domestic workers	0.0%	0.42%	28.8%		63.29%	65.39%	83.97%

		Peru 85	Venezuela 95	Brazil 95	Chile 87	Argentina 96	Costa Rica 95	Chile 94
<b>Firm Size</b>	<5	15.56%	8.82%	<=5 36.52		<=5 35.40	<5 66.41	<5 62.04
	5-20	37.66%	38.11%	6-10 62.17		6-25 69.05	5<=20 84.38	5-49 81.07
	20-100	67.62%	60.71%	11- 87.52		26-100 89.80	20- 96.43	50-199 85.34
	100-	81.99%	84.89%			101- 93.31		200- 95.83
<b>Multiples Of Minimum Wage</b>	0.91-1.2		44.49%			50.07%	77.99%	58.19%
	1.21-2		72.93%	62.48%		62.39%	90.06%	76.77%
	2-3		79.55%	74.33%		73.71%	94.30%	84.01%
	3+		73.85%	83.82%		79.66%	95.13%	94.16%
<b>Occupation*</b>	1	74.83%	80.29%	83.81%		86.83%	96.17%	94.12%
	2	79.05%	80.84%	81.98%		66.84%	97.87%	87.37%
	3	71.75%	80.84%	86.91%		85.91%	96.63%	89.36%
	4	14.08%	36.64%	53.44%		54.77%	85.36%	70.40%
	5	28.21%	53.24%	45.91%			82.98%	83.01%
	6	2.37%	4.79%	15.45%			72.26%	57.86%
	7	41.25%	50.26%	67.98%		62.39%	83.32%	75.93%

### Notes

\*Argentina 1996- People who have some kinds of benefits (e.x. combination with indemnification or combination without indemnification etc.) are considered as having social security.

\*Venezuela 1995-Both the labor income and the minimum wage include bonus.

\*Regarding the firm size, each country has its own category.

\*Perú 1996- A question about social security is asked only for the people who went to the hospital in the last 15 days. This group of people is too small to analyze.

\*Occupation

Table 12 reports the percentage of dependent workers in each socio-economic group that are covered by employment regulation. All percentages are measured with respect to the total number of dependent workers in each sub-group. This table exhibits that there are important differences in coverage across countries. Costa Rica and Chile are the countries in our sample that exhibit a larger percentage of covered workers. Argentina and Venezuela stand at intermediate levels, whereas Peru registers an extremely low degree of coverage in the dependent workers sample.

There are important differences in coverage associated to the individual characteristics of workers. In particular, age and education are two important factors determining the probability of being covered by dependent employment regulation. Regarding age; prime age workers tend to have the largest coverage ratios, whereas young workers stand at the lower end. In reference to education, our tabulated results exhibit a large and positive correlation between education levels and social security coverage. In Venezuela, for example, only 17.5 % of dependent workers without an education, have access to the

system, whereas more than 81% of dependent workers with 12 or more years of education have access to social benefits. Finally, gender seems to somewhat affect the probability of obtaining social security, albeit gender differences are not consistent across countries. Whereas male dependent workers are more likely to have social security benefits in Peru, Brazil, Chile and Argentina, female workers have a higher probability of being covered in Costa Rica and Venezuela.

Another important determinant of coverage is whether workers live in rural or urban areas. Urban workers have a larger probability of being covered than rural ones. In Brazil and Venezuela these differences are very large, whereas in Costa Rica and Chile, these differences are less important.

Coverage rates also depend on the status that workers have in their families. Household heads are much more likely to enjoy social security benefits compared to spouses, and other relatives in the family.

Regarding job related variables, coverage rates tend to be larger in those sectors of activity in which the public sector is more important, while they tend to be lower in agriculture, construction and retail. In the same manner, coverage rates tend to be higher among professional workers, managers and administrative staff and lower among salesmen, service, agriculture, and blue collar workers. Finally, the probability of being covered by social security increases with the wage that a worker makes and the size of the firm in which he or she is employed.

The percentages shown in Table 12 do not control for correlations among variables that can be important in explaining who gets social security. For instance, low skilled workers are more likely to be employed in small firms, which in turn, are less likely to comply with social security regulations. Low skilled workers are then, less likely to have social security because their lack of skills or because the type of job they have?. In order to properly assess this question, we run some probit regressions for Argentina and Venezuela to examine the determinants of social security coverage<sup>19</sup>.

The results (see table 13 in the appendix) are very similar to the raw probabilities reported in Table 12. In particular, in both countries the probability of having social security increases with education, level of income, age, and urbanity. The probability of being covered also depends on the sector of activity: Agriculture, construction, transports and communications are the sectors in which, other things constant, workers are less likely to have social security. In addition, blue-collar workers are less likely to be covered than white-collar workers. Finally, being female reduces the probability of obtaining social security in Argentina, but not so in Venezuela.

These results are disturbing. As it turns out, less advantaged workers are less likely to be enjoy the benefits mandated by law. Notice that these results hold true even when we

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<sup>19</sup>. The variables included in the regressions are: Level of education, Income level, age group, gender, sector of activity, size of the firm and occupation

control for the size of the firm. This means, that less skilled workers employed at large firms are also less likely to be protected by labor codes. It remains unclear whether this pattern results from a relatively lower preference for protection by part of lower income workers, or instead, to a higher relative cost for the firm to insure these workers. Indeed, the empirical evidence on relative labor demand elasticities suggest that labor demand for unskilled workers is more elastic than for skilled ones. In absence of other differences in their relative labor supply or their relative taste for protection, lower skilled workers should be bearing a higher share of the tax incidence than high skilled workers do. This in turn, suggests that firms should be more, not less, willing to nominally pay social security for low skilled workers since these payments can be easily transferred to workers.

If this theory is correct, then the relatively lower incidence of “formality” among less advantaged workers could be explained by:

- (1) Given current tax rates, these workers choose to remain informal. In this scenario, workers lose benefits but gain in exchange a higher wage. For poorer workers, this extra income may very well help them to bridge some cash or credit constraints. This argument is similar to the ones put forth to explain the low incidence of savings among less advantaged workers.
- (2) “Formalize” less-skilled, lower income workers, is more expensive for the firm. Thus, when a worker is awarded a “formality” status, he is entitled to both social security benefits and severance payments in the case of firm-initiated dismissal. Yet, firms might find that is relatively more expensive to provide job stability to less skilled workers. To understand why, let us consider the case of a firm that produces with low and high skilled workers and faces a demand contraction. In absence of mandated severance payments, the firm will dismiss unskilled workers first, since they can be easily replaced in the future, and their dismissal would not bring a loss of specific skills. Thus, in the presence of mandated severance payments, the expected cost of hiring a low skilled worker ‘by the rules’ is higher than for more inherently stable high skilled workers.

Summarizing, the very same people that labor codes seek to protect, are the ones that are less likely to enjoy the benefits of protection. Future research should be oriented to explain these relative differences albeit some explanations have been already laid out in this section. If lower skill workers prefer higher wages than in-kind benefits, social security as we know it might not do much to provide future pensions and health benefits to these workers. In addition, if providing job stability is more expensive for low skill workers, then dismissal costs might be only biasing the relative demand for these two groups towards high skills. It is then clear that increasing enforcement levels is not the solution to this dilemma.

One alternative is to lower social security payments for the less advantaged workers as means to bring them into the system. Another is to increase the link between benefits and payments, such that social security contributions are perceived as the real price of health benefits and future pensions.

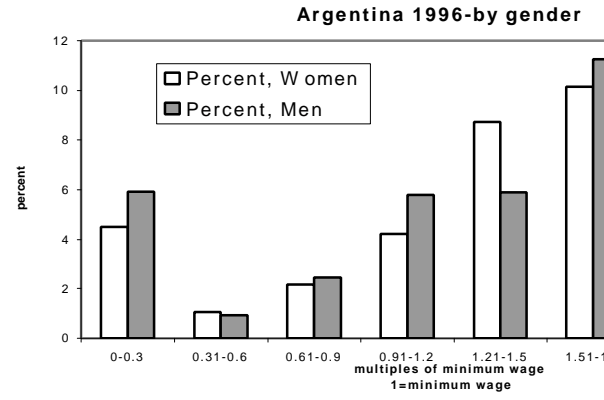
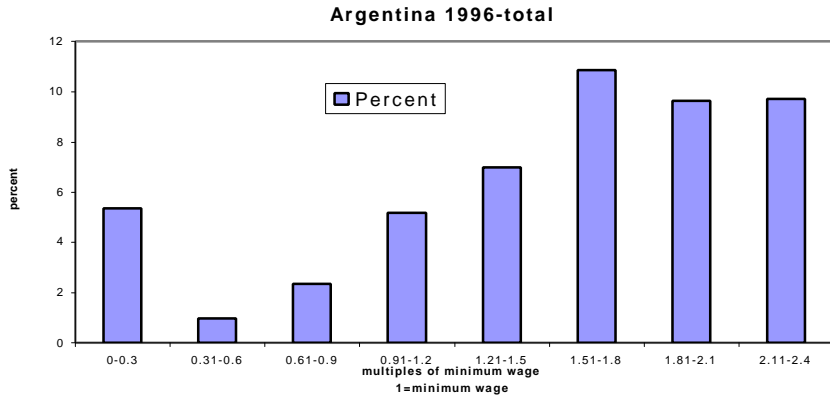
### 3- Minimum Wages

Most countries in the region set the minimum wage that a worker must receive. The existence and setting of minimum wages remains a very controversial issue. On the one hand, it has been claimed that minimum wages are a classical example of intervention, in which the policy increases the unemployment rates of the very people it seeks to protect. On the other hand, it has been argued that minimum wages are redistribution tools whose effectiveness depends on whether the benefits of rising income for the poor, compensate the costs of increased unemployment rates.

In most countries, real minimum wages are now lower than they were at the beginning of the 80's and they are less likely to be used actively and aggressively as a policy tool. In this section we examine whether minimum wages affect the wage distribution in ways that are conducive to increase unemployment rates. To do so, we use the wage information contained in household surveys for the following countries: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Honduras, Peru and Venezuela. As in former sections, we only look at wages for dependent workers, since minimum wage regulations do not apply to the self-employed. Besides analyzing wage distributions for total dependent workers, we study three additional sub-groups of this sample. First, we divide the sample between male and female on the grounds that minimum wages might be more important for female workers. Second, we partition the total sample in age groups. Again, the motivation behind this partition is that the wage distribution of certain age groups, like younger workers, might be more affected by minimum wage setting. Finally, we partition the sample between urban and rural workers based on the presumption that minimum wages might be more relevant in the rural areas. All wages are measured in wages/hour. In addition labor income hour for formal, blue-collar workers has been corrected to include over-time compensations.

Graphs 5 to 13 plot wage distributions for the sample of total dependent workers, male/female dependent workers, dependent employment by age groups and rural/urban workers. These graphs exhibit large differences across countries in the way the minimum wage affects wage distributions. Two groups of countries can be distinguished: In the first groups, formed by Argentina, Bolivia, Chile, and Peru, there is no evidence that minimum wages affect the wage distributions in ways that might lead to higher unemployment rates for workers in the minimum wage bracket. In these four countries the percentage of people that receive wages around the minimum wage is low (10% or less). In addition, there is no evidence of a spike at the minimum wages bracket either in the total wage distribution, or in the other three sub-distributions.

Graph 5  
Argentina 1996

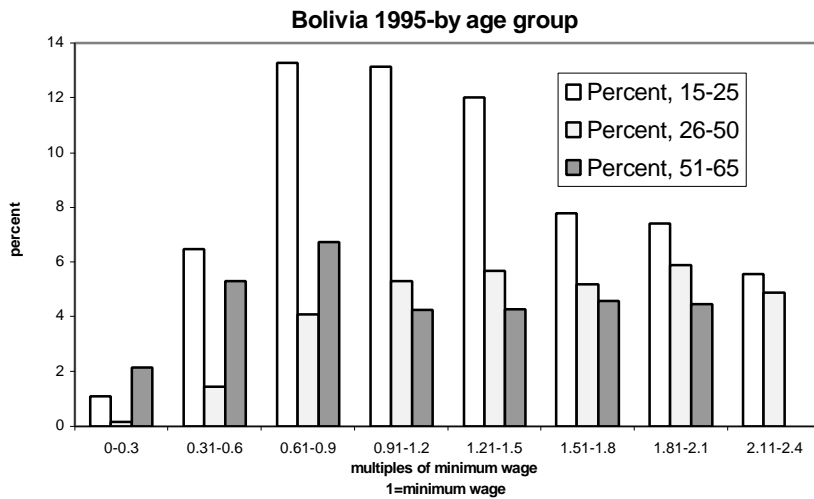
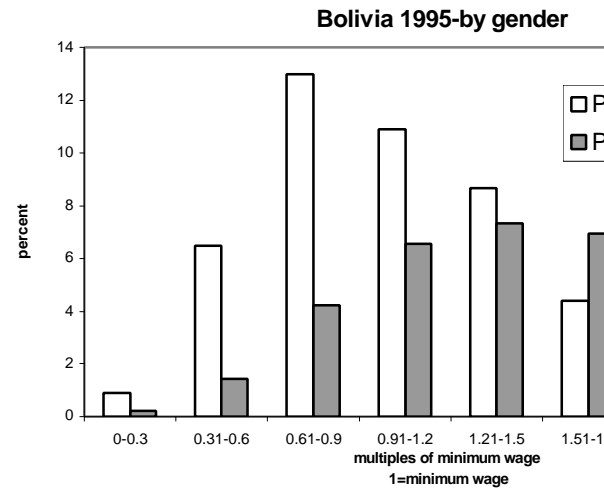
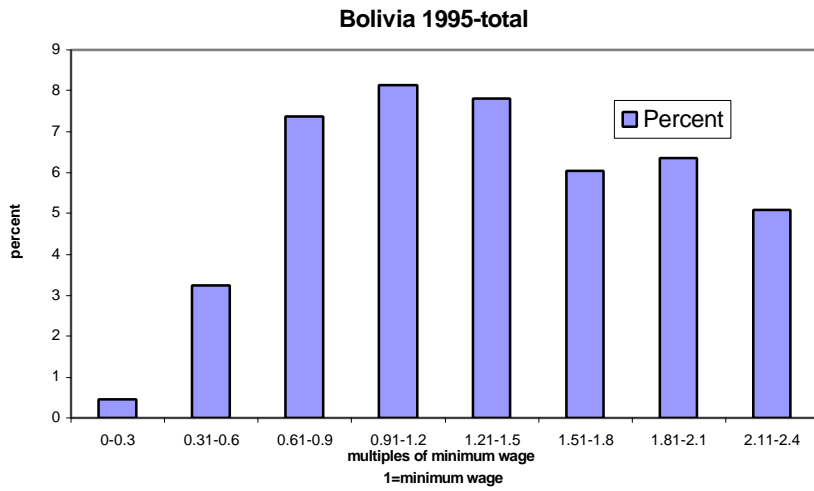


\*Labor income only from a primary job per hour is used.

\*Gran Buenos Aires area only

\*Labor income per hour is corrected for overtime work for formal, operational workers who work overtime.  
(94% of people used for calculation have only one job.)

**Graph 6  
Bolivia 1995**



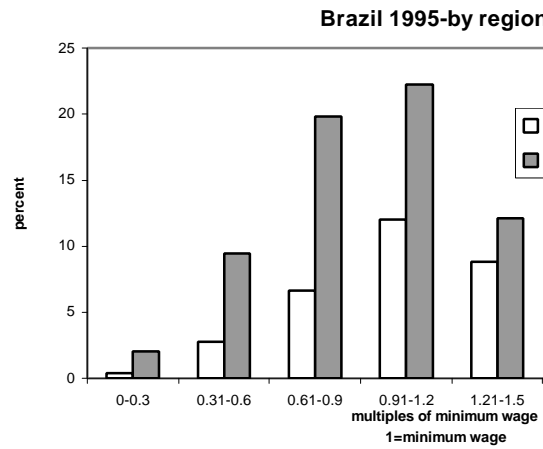
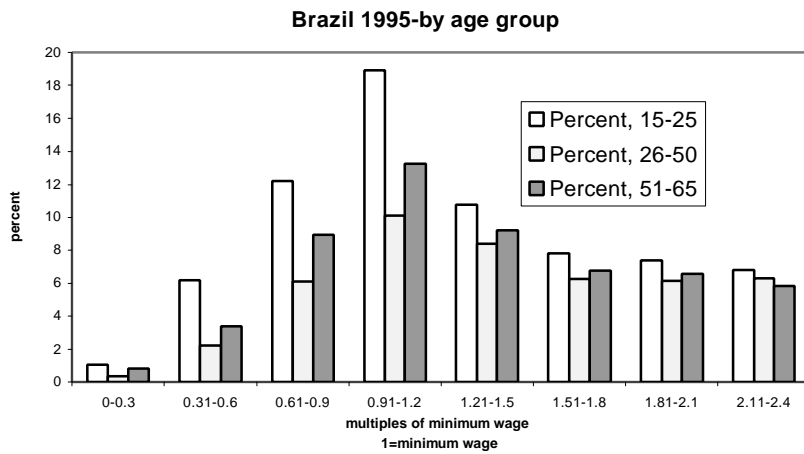
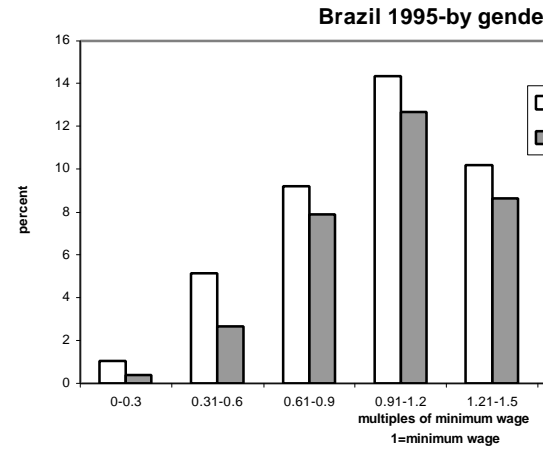
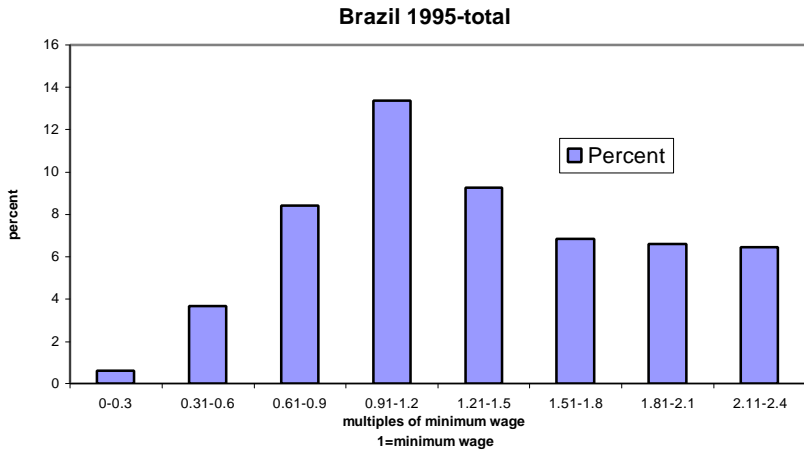
\*Total labor income divided by total working hours is used.

\*Total labor income includes both an income from a primary job and an income from a secondary job (92% of people used for calculation have only one job).

\*Hourly minimum wage=(monthly minimum wage)/(standard working hours per week\*4.3).

\*Urban only

**Graph 7  
Brazil 1995**



\*Total labor income divided by total working hours is used.

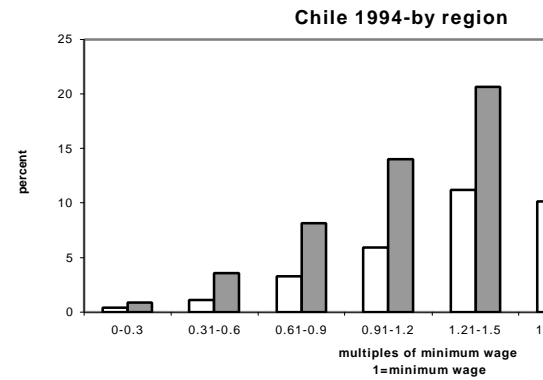
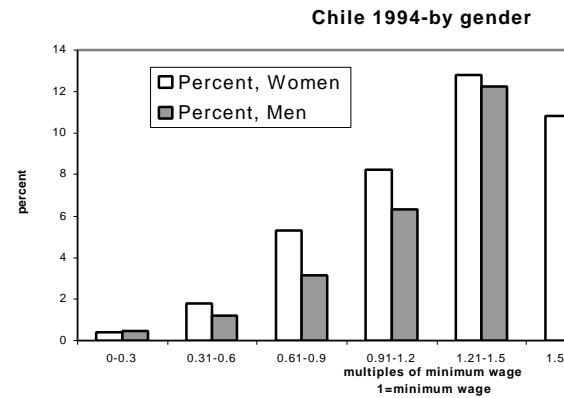
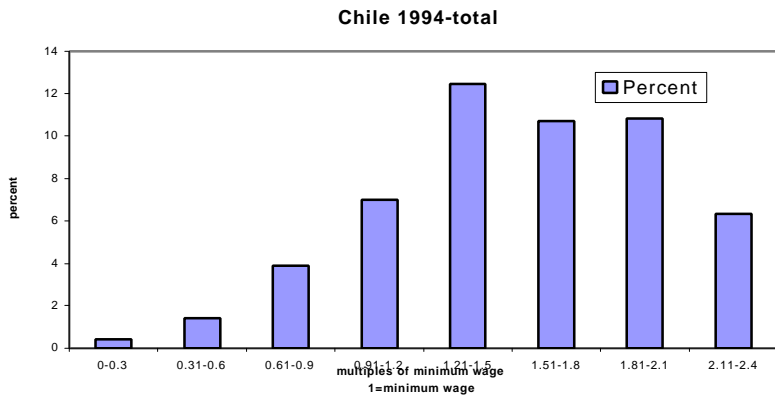
\*Labor income per hour is corrected for overtime work for formal, operational workers who work overtime.

(95% of people used for calculation have only one job.)

\*Minimum wage is hourly. Hourly minimum wage=Monthly minimum wage/(standard working hours per week\*4.3)



Graph 8  
Chile 1994



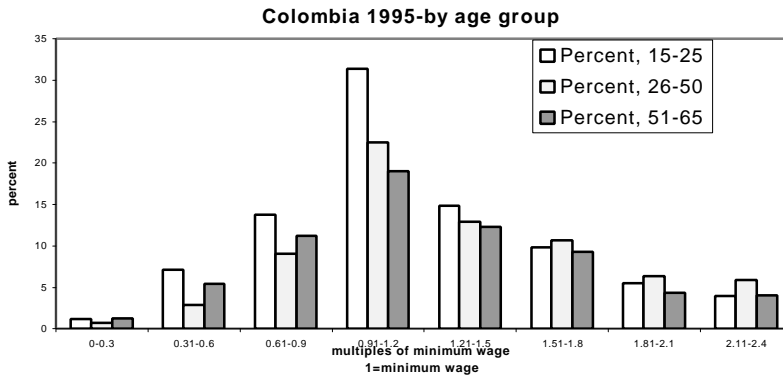
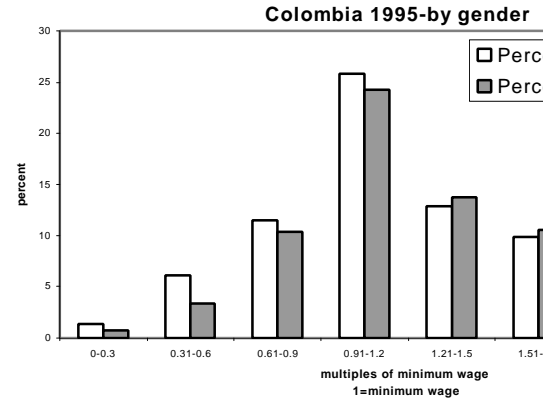
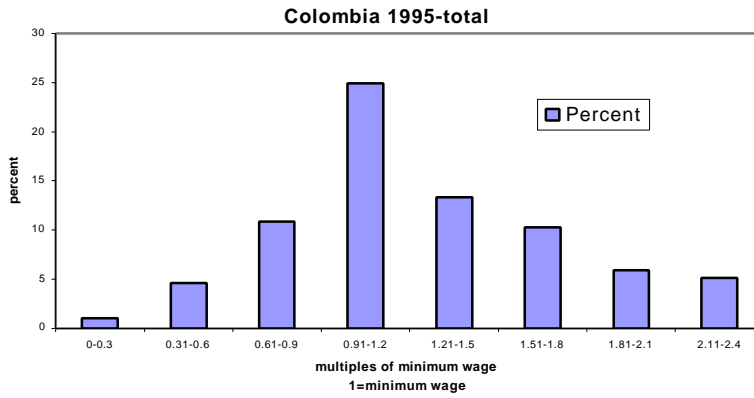
\*Total labor income divided by total working hours is used.

\*Total labor income includes both an income from a primary job and an income from a secondary job (98% of people used for calculation have only one job).

\*Labor income per hour is corrected for overtime work for formal, operational workers who work overtime.

\*Minimum wage is hourly. Hourly minimum wage=Monthly minimum wage/(standard working hours per week\*4.3)

Graph 9  
Colombia 1995



\*Total labor income divided by total working hours is used.

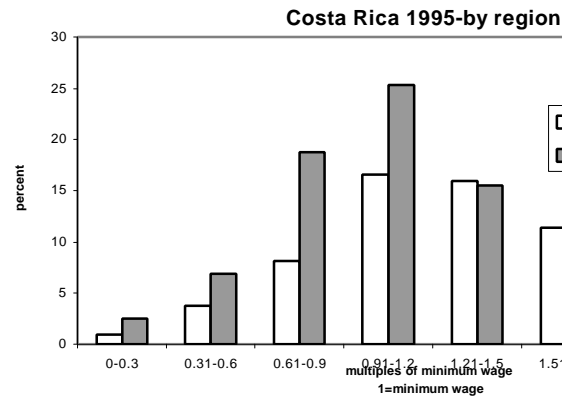
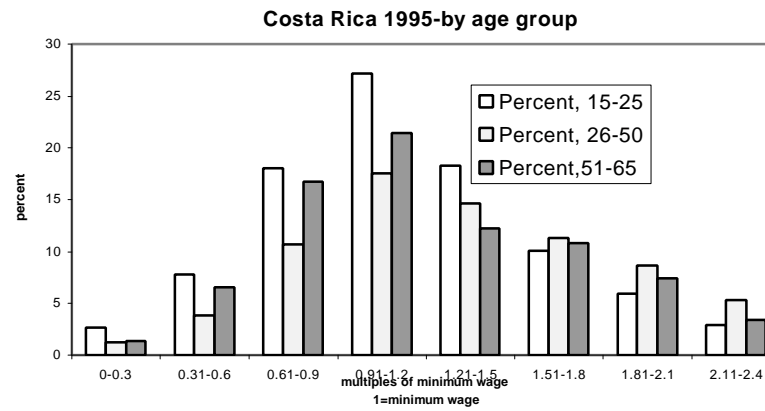
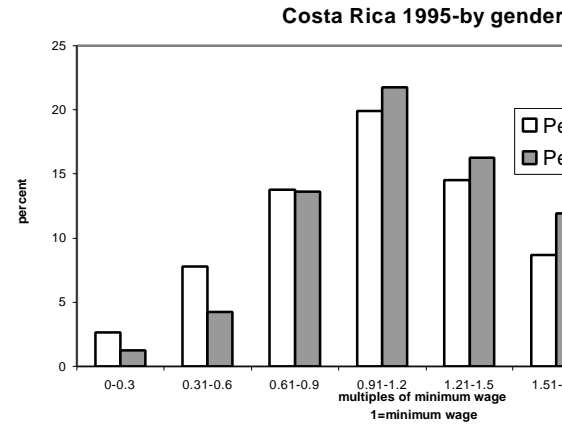
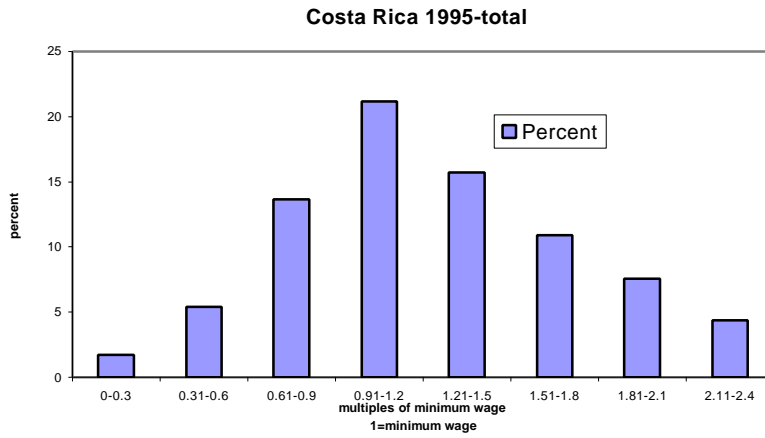
\*Total labor income includes both an income from a primary job and an income from a secondary job.

(a percentage of people who have only one job is not available in this survey.)

\*Hourly minimum wage=(monthly minimum wage including bonus)/(standard working hours per week\*4.3).

\*Urban only

Graph 10  
Costa Rica 1995

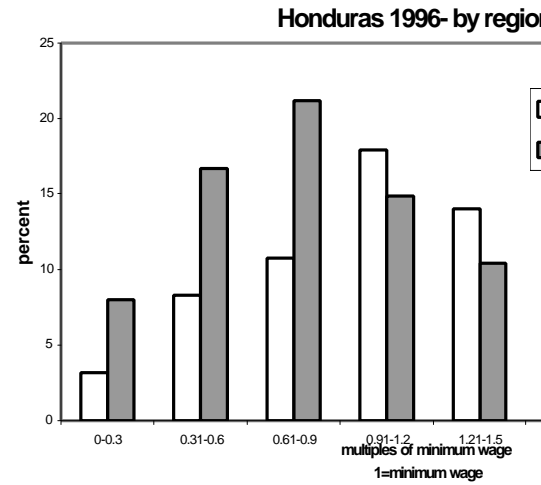
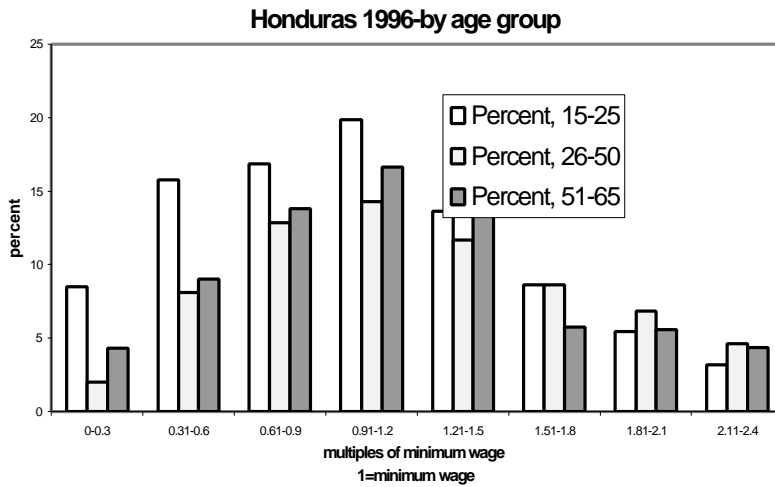
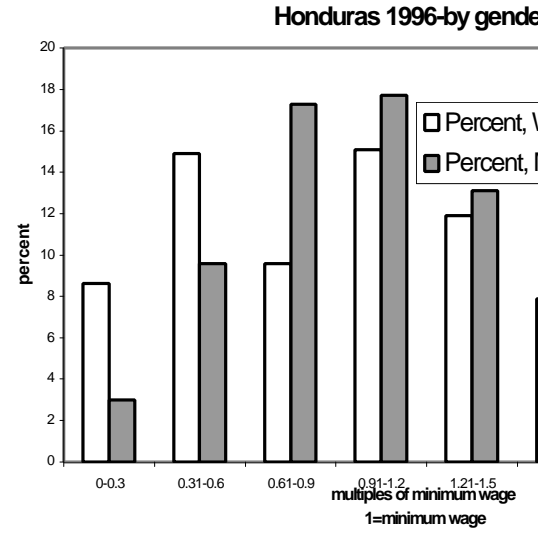
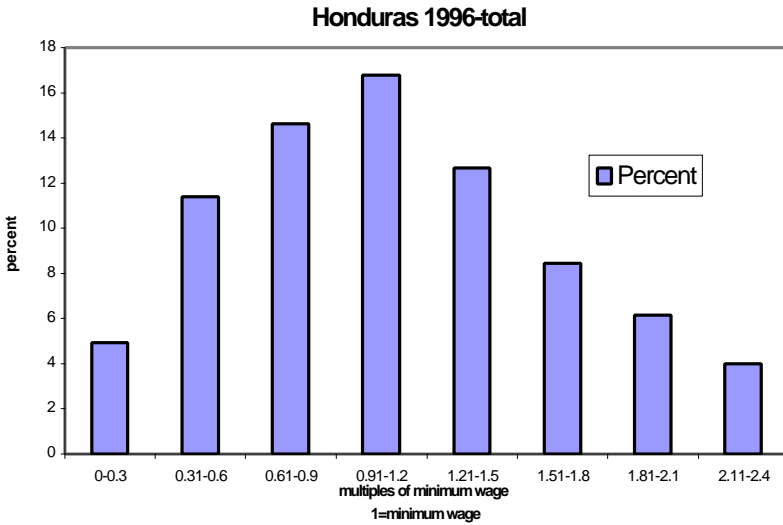


\*Total labor income divided by total working hours is used.

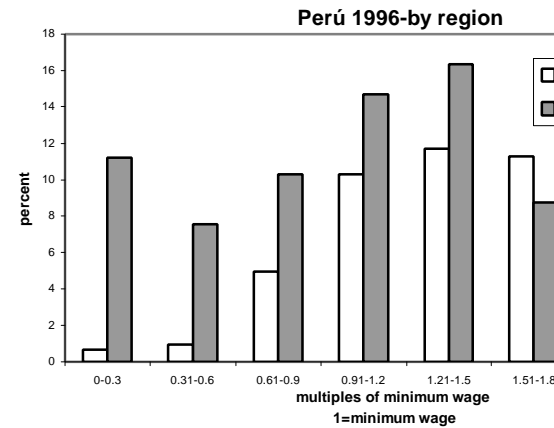
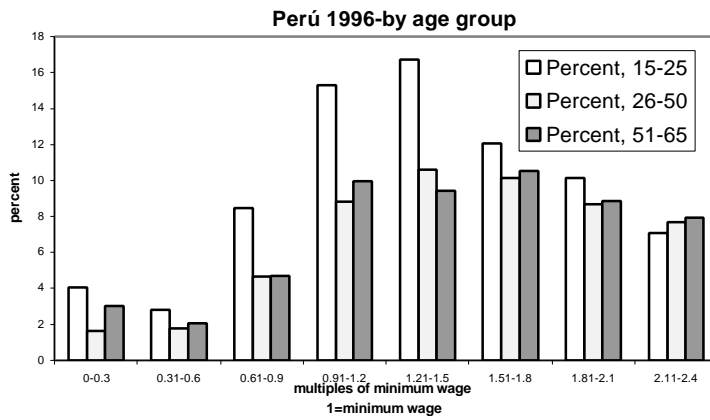
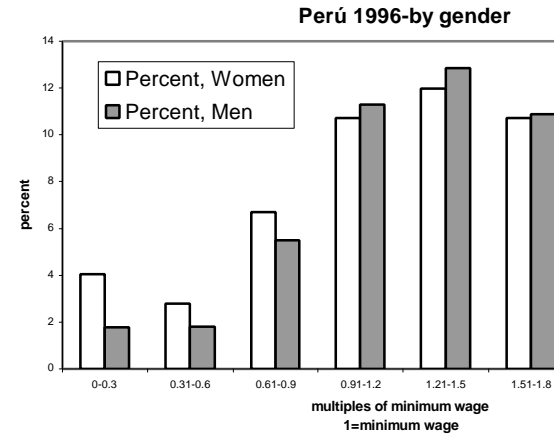
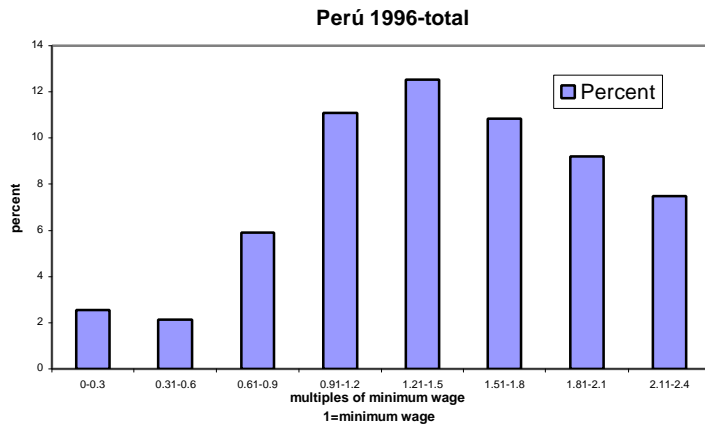
\*Total labor income includes both an income from a primary job and an income from a secondary job.  
(a percentage of people who have only one job is not available in this survey.)

\*Hourly minimum wage=(monthly minimum wage including bonus)/(standard working hours per week\*4.3).

Graph 11  
Honduras 1996



Graph 12  
Perú 1996



\*Total labor income divided by total working hours is used.

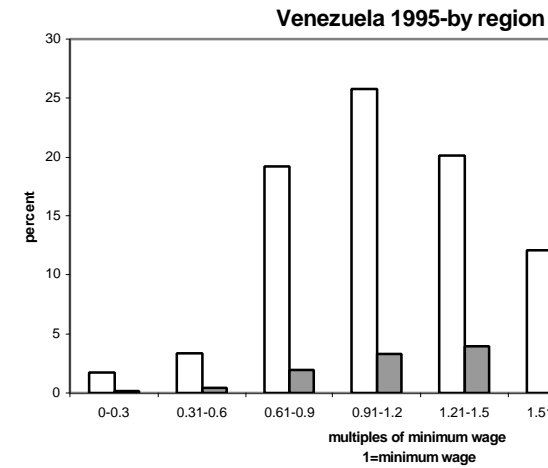
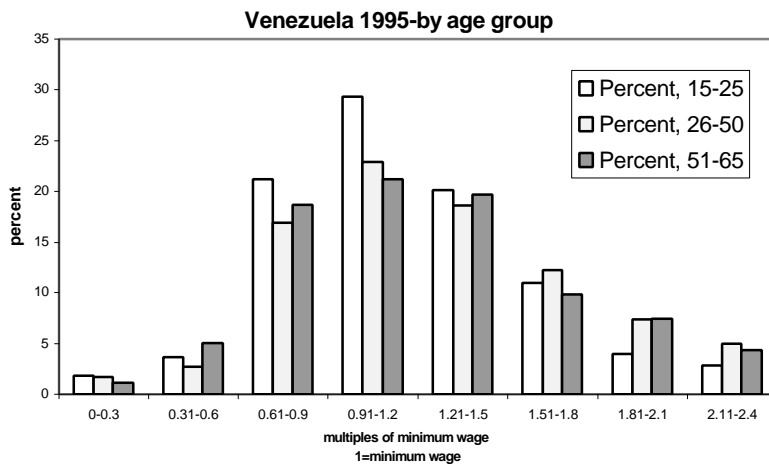
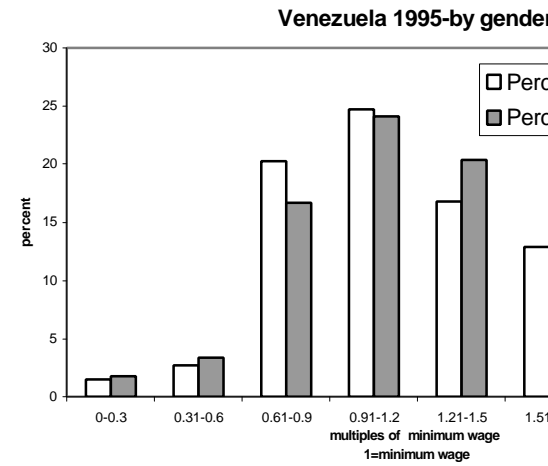
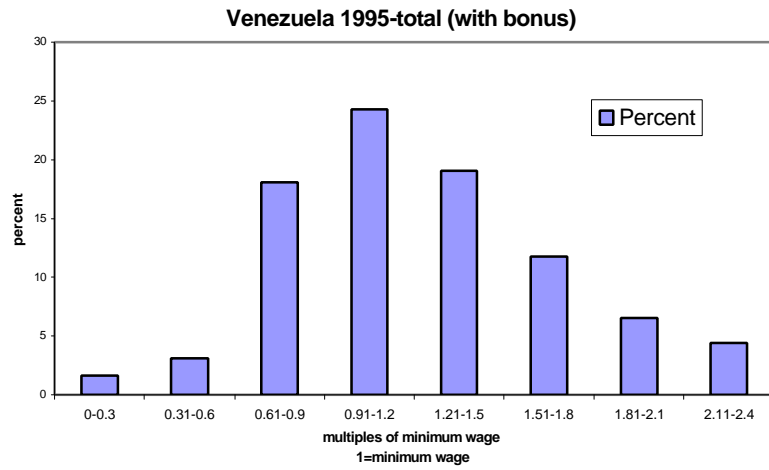
\*Total labor income includes both an income from a primary job and an income from a secondary job. ( 83% of people used for calculation have only one job.)

\*Labor income per hour is corrected for overtime work for formal, operational workers who work overtime.

\*Hourly minimum wage=(monthly minimum wage)/48\*4.3 assuming 48 hours is the standard working hours per week.

\*The sample of people who are not self-employed.

Graph 13  
Venezuela 1995



\*Total labor income divided by total working hours is used. The labor income includes bonus.

\*Total labor income includes both an income from a primary job and an income from a secondary job (98% of people used for calculation have only one job).

\*Labor income per hour is corrected for overtime work for formal, operational workers who work overtime.

\*Hourly minimum wage=(monthly minimum wage including bonus)/44\*4.3.



Instead, in a second group of countries formed by Brazil Colombia, Costa Rica, and Venezuela, minimum wages are binding the wage distribution. In all these countries the percentage of people that fall in the minimum wage bracket is high (15 % in Brazil, 22% in Costa Rica, 25% in Colombia and 24% in Venezuela). In addition, in all these four countries there exists a large spike at the minimum wage bracket, indicating a bunching of workers at the minimum wage. When splitting the sample between male and female dependent workers we find that minimum wages tend to be slightly more binding for female workers in Brazil, Colombia and Venezuela, whereas in Costa Rica, minimum wages seem to be more binding for men. In this group of countries, the % of workers below the minimum wage is lower for female workers than for men, suggesting higher levels of non-compliance for female workers.

When splitting the sample across age groups, we find that minimum wages tend to more binding for young workers than for workers in other age groups. This difference is especially large in Colombia and Costa Rica, where around 30% of the workers in the 15-25 age group receive wages in the minimum wage bracket.

Finally, when looking at the differences between urban and rural areas we find that non-compliance is much larger in rural areas suggesting a lower enforcement capability. Despite low levels of enforcement, in both Brazil and Costa Rica minimum wages seem to be more binding in the rural areas. As a contrast, in Venezuela minimum wages are more binding in the urban areas.

Our results suggest that minimum wages are significantly affecting wage distributions in Brazil, Colombia, Costa Rica and Venezuela. Yet, are minimum wages affecting unemployment rates in any way? We have seen that minimum wages are specially binding for some groups of workers. Using this information, we examine whether unemployment rates for these groups are high with respect to total unemployment rates<sup>20</sup>. Graph 14 plots relative female to total and, young workers to total unemployment rates. Unemployment rates for young workers are specially high in Brazil, Costa Rica, Colombia and Venezuela, and lower in Bolivia, Chile and Peru suggesting that minimum wages might be causing high unemployment rates among these groups. Graph 14 also reveals some correlation between binding minimum wages and higher female unemployment rates. In particular, Costa Rica, Colombia and Venezuela experience relatively high female unemployment rates. Yet, this evidence is weakened by the fact that Argentina and Chile experience respectively high youth and female unemployment despite that minimum wages do not significantly alter their wage distributions.

Summarizing, our results suggest that minimum wages are altering wage distributions in Brazil, Colombia, Costa Rica, and Venezuela. In addition, we cannot reject a causality link between minimum wages and higher unemployment rates for women and young workers.

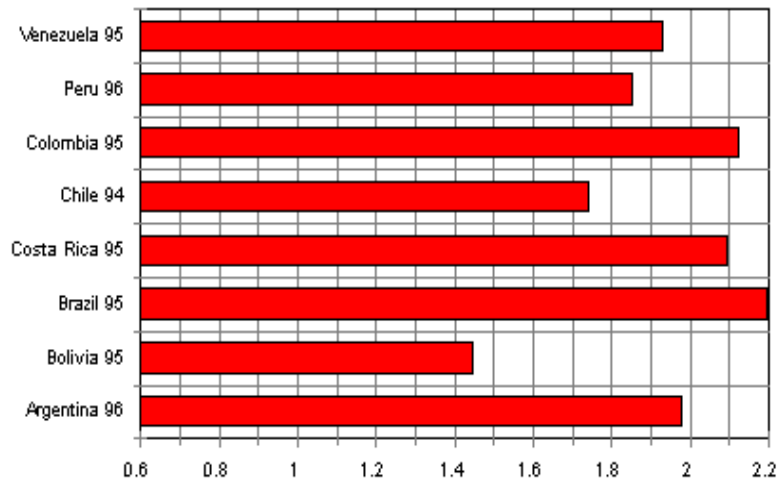
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<sup>20</sup> The use of relative instead of absolute unemployment rates allows us to control, at least partially, for other cyclical and structural effects that might be affecting absolute unemployment rates.



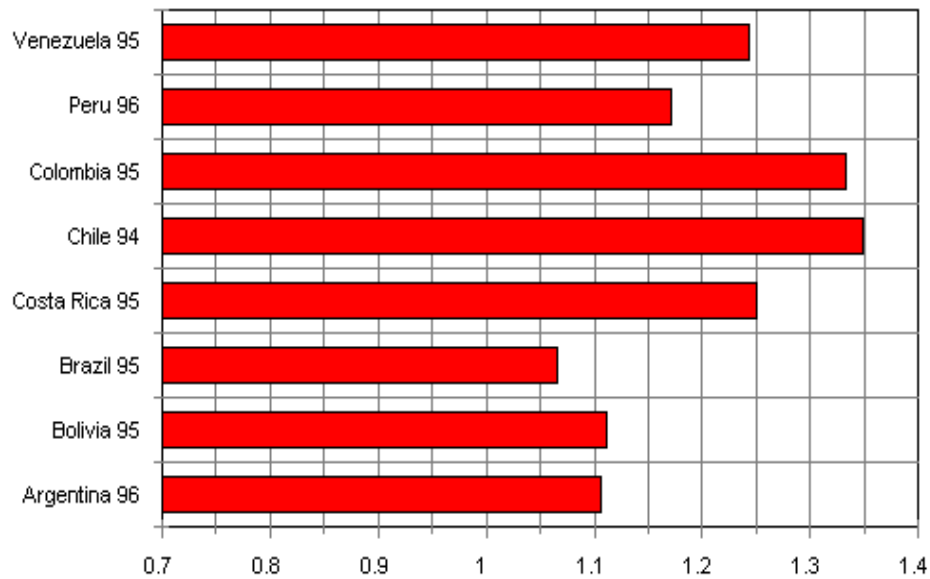
Graph 14

### Young Workers/Total Unemployment Rate



Source: ILO data "Panorama Laboral 94"  
The classification of Young workers varies across countries, but in general refers to workers 15-24 years old.

### Female/Total Unemployment Rate



Source: ILO data "Panorama Laboral 96"

#### 4 Collective bargaining and union activities in Latin America.

This section will deal with the problems raised by the contrast between the changes in the economic and political environment in the region and the relative lack of change in the structure of the industrial relation systems. We purport that the crux of the problem lies in the need to re-orient State intervention in the labor market from a role of mandating benefits and protection, and towards a role of promoter and protector of union organization and bargaining activities. For unions the challenge is how to expand membership and organize workers in a much more fragmented labor market dominated by smaller and more competitive production units.

Industrial relations systems are the nexus of countries social, political and economic environments. Each of these arenas has changed dramatically as the region has reoriented itself from the state-led ISI model to market-led development, transferring responsibility for allocating resources, including labor, and stimulating production from the state to the market. Most countries in the region adopted stabilization policies and major economic restructuring, including varying degrees of commercial and financial liberalization. These reforms have affected labor relations by changing the way in which competitiveness is measured, increasing employers pressures to manage the workforce at less cost. Opening markets has also changed the scale of production from large, vertically integrated oligopolies protected by tariffs, to smaller, nuclear production units.<sup>21</sup> Competitiveness strategies, once based on volume and prices, are now driven by comparative advantage and advances in technology and innovation.

Governments have redefined their role as economic agents, privatizing state industries, downsizing government structures, and shedding government employment, thus giving the markets a more crucial role in generating employment and clearing labor supply and demand. To facilitate this role some countries have adopted reforms to ease labor code regulations that are perceived as obstacles to employment generation<sup>22</sup>. Meanwhile, the return from authoritarian to democratic regimes in many of the countries has brought with it expanded political freedoms, including the freedom of association and collective bargaining and strike. The growth of democracy in the face of structural reforms has increased the impetus for social consultation and tri-partite bargaining, as governments seek to maintain their presence in labor relations and encourage social cohesion and acceptance of reform.

Just as government and businesses have redefined their *modus operandi* to complement market-led strategies, so must unions and the underlying industrial relations systems adapt to complement and motivate the new economic structures and production

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<sup>21</sup> For example, in Latin America the proportion of non-agricultural employment in the formal sector provided by large businesses fell from 44.1% in 1980 to 30.8% in 1992, and increased in small businesses from 14.6% to 22.5%. See Víctor E. Tokman, *Informalidad y Pobreza: Progreso Social y Modernización Productiva*, @ *El Trimestre Económico*, México, Vol. LXI, Núm. 241, Enero-Marzo 1994, p. 178.

<sup>22</sup> Including the promotion of temporary and fiscally-exempted labor contracts that exempt employers from social security contributions, severance payments, and other indirect labor costs mandated in the legislation.

strategies. The traditional union strategy in Latin America has been to improve workers welfare through legislative protections and macroeconomic policies to redistribute income, that can only be attained through strong links to the state and the political process. In the new economic and political environment unions face a triple challenge. First, in an environment where workers welfare is seen as emanating from the producing unit in which they associate, they need to redefine their relationship with the government and the private sector.<sup>23</sup> Secondly, unions are facing a transition from large to small firms, the ascension of new key industries, the redesign of production strategies, and the decentralization of production (whether through the production process via outsourcing or *maquila* industries, or geographically through the development of outlying areas, the expansion of MNCs, etc.). And thirdly, unions must accommodate a changing labor market characterized by a growing informal economy, the feminization of the labor force, and high levels of unemployment (Zapata 1995, pp. 38-41) Therefore, the main challenge of unions has evolved from one of protecting their civil and political liberties, to the defense of their member's economic interests. (Bronstein 1995, p. 166.)

#### 4.1 Industrial relation systems

Industrial relation systems in the region are characterized by pervasive State intervention, weakening the incentives for workers to organize unions and actively bargain. Union density in the region is relatively low, and falling, and collective bargaining coverage rates are low.

The industrial relations systems in Latin America are as diverse as the historical, political and economic conditions in each country. Nonetheless, with the exception of Uruguay, the region systems can be characterized by one common trait: pervasive state intervention. State intervention has been used to both centralize collective bargaining systems, as in Argentina, Brazil and Mexico, as well as to decentralize them as in Peru and Chile. Several arguments have been advanced in the literature to explain the tendency for state intervention in collective labor relations in Latin America. They include: the atomization of unions and dependence on the State to provide legal protections; *legalismo* or the cultural acceptance that rights are only conferred by laws; and the historically predominant role of the State in Latin America economies and its obsession to repress or coopt union power<sup>24</sup>.

The State presence in the system both protects and weakens the industrial relations system. An oft-cited justification for intervention is the predominantly weak collective bargaining structure in the region. It is argued that intervention is and has been necessary

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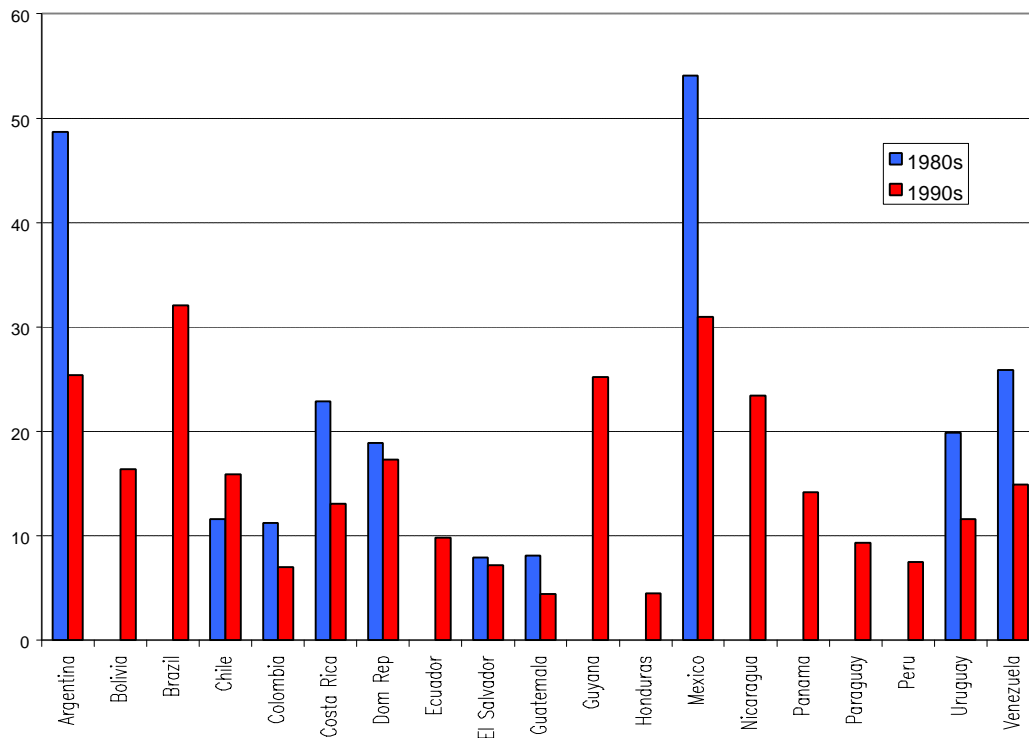
<sup>23</sup> See John Pencavel, *Labor Unions in Latin America*, @ *Conferencia Sobre Mercados de Trabajo en América Latina*, by The World Bank, The Brookings Institution, and the Instituto Torcuato Di Tella, in Buenos Aires, July 6-7, 1995, p.9.

<sup>24</sup> For further discussion, see Oscar Ermida Uriarte, "Orígen, Características y Perspectivas", in Antonio Ojeda Avilés and Óscar Ermida Uriarte, eds., Parte III, *La Intervención Administrativa*, of *La Negociación Colectiva en América Latina*, (Madrid, Spain: Instituto Europeo de Relaciones Industriales, 1993), pp. 107-117.

to ensure that unions are given credibility and that employers engage in collective bargaining. The down side of that strategy is that workers lose incentive to affiliate to unions and participate in collective bargaining when the protections and benefits are mandated.

It is not surprising then that the region experienced a decrease in union affiliation measured as a percentage of the non-agricultural labor force (Graph 15). In all countries for which we have data for the two periods, with the only exception of Chile, union density (measured as a percentage of total non-agricultural labor force) fell in the nineties relative to the eighties. This is likely to be the result of changes in the composition of employment (reduction in the highly unionized public sector employment and increase in the share of the informal sector).

**Gráfico 15: Densidad sindical como porcentaje de la fuerza laboral no-agrícola, *circa* 1980 and *circa* 1990**



Fuente: *Industrial Relations: Democracy and Social Stability, World Labour Report 1997-1998*, págs. 237, 246, 248. Véase tabla 14.

Union density as a percentage of non-agricultural labor force in the region varies substantially among countries, ranging from 32% in Brazil to 4.4% in Guatemala (Table 14). The bigger countries in the region (Argentina, Brazil, and Mexico) all have union densities around or above 25%, and most of the rest of the countries (with the exception of low-income Central American countries) have union density rates around 15%. These rates are below those predominant in the Nordic European countries characterized by centralized wage bargaining structures (above 50%), but well above that in the US (12.7%). Surprisingly, the range of union density rates in the region is similar to that of

the East Asian ex-miracle countries (Taiwan 27.9%, Malaysia 11.7%, Korea 9%, and Singapore 13.5%), belying the attribution of low-union density as an explanation of their strong economic performance.

**Tabla 14: Diferentes medidas de densidad sindical en la región, 1980s y 1990s.**

País	Como % de fuerza laboral no agrícola				Como % de sueldos y salarios de los perceptores				Como % de perceptores en sector formal	
	Fecha Ref.	%	Fecha Ref.	%	Fecha Ref.	%	Fecha Ref.	%	Fecha Ref.	%
Argentina	1986	48.7	1995	25.4	1986	67.4	1995	38.7	1995	65.6
Bolivia			1994	16.4					1994	59.7
Brasil			1991	32.1			1991	43.5	1991	66
Chile	1985	11.6	1993	15.9					1993	33
Colombia	1985	11.2	1995	7					1995	17
Costa Rica	1985	22.9	1995	13.1	1985	29.1	1995	16.6	1995	27.3
Rep. Dom.	1989	18.9	1995	17.3						
Ecuador			1995	9.8					1995	22.4
El Salvador	1985	7.9	1995	7.2	1985	8.3			1995	10.7
Guatemala	1985	8.1	1994	4.4	1985	8.2			1994	7.7
Guyana			1995	25.2						
Honduras			1994	4.5					1994	20.8
México	1989	54.1	1991	31	1989	59.6	1991	42.8	1991	72.9
Nicaragua			1995	23.4					1995	48.2
Panamá			1991	14.2			1991	20.1	1991	29
Paraguay			1995	9.3					1995	50.1
Perú			1991	7.5					1991	18.3
Uruguay	1990	19.9	1993	11.6					1993	20.2
Venezuela	1988	25.9	1995	14.9	1988	29.8	1995	17.1	1995	32.6

Fuente: *Relaciones Industriales: Democracia y Estabilidad Social*, Reporte de Empleo Mundial 1997-1998, pp. 237, 246, 248

Enterprise unions and firm level bargaining predominate in the region, with the important exceptions (in terms of population and economic power) of Argentina, Brazil, Mexico, and Uruguay whose systems are highly centralized. Coverage rates in the region (Table 15) oscillate from more than 70% in Argentina (with a sector-centered bargaining structure) to slightly above 10% in Bolivia and Chile (the first with a highly centralized wage-setting system not based in collective bargaining, and the second with a very decentralized bargaining structure). Collective bargaining coverage rates in the region are quite lower than in Europe (between 80 and 90% of formal sector workers in most countries), but higher than those in East Asian countries (18.8% in Singapore, 3.4% in Taiwan, and 2.6% in Malaysia) in spite of similar levels of unionization.

**Tabla 15: Proporción de empleados cubiertos por un contrato colectivo.**

País	Año	% cobertura
Argentina	1995	72.9
Bolivia	1995	11.1
Chile	1995	12.7
El Salvador	1995	13.2
Guyana	1995	27.0
Honduras	1995	12.7
Nicaragua	1995	38.3
Panamá	1995	16.0
Uruguay	1993	21.6

Fuente: *Relaciones Industriales: Democracia y Estabilidad Social*, OIT Reporte de Empleo Mundial 1997-1998, pp. 237, 246, 248. Estimaciones de la Oficina Regional de la OIT para Latinoamérica y el Caribe, excepto para Chile, Secretaría del Trabajo.

A study of six countries reveals the diversity of the collective bargaining systems in the region. Of these, four countries are centralized: Argentina, Brazil, Uruguay and Mexico. Argentina and Brazil systems are corporatist, highly interventionist systems, while Uruguay is unique for its “unregulated” system originated with the repeal in 1985 of the restrictive union legislation enacted by the military government. Mexico is a special case because it is categorized as centralized even though firm-level unions predominate. The Mexican system is highly corporatist and concentrates bargaining through coordination, a disciplined union hierarchy, and strong-handed state intervention. Chile and Peru have very decentralized systems. While Chile system is highly regulated, it allows considerable autonomy in direct negotiations. In contrast, the atomization of the union movement in Peru is exacerbated by high state intervention. Table 16 summarizes the main characteristics of these collective bargaining regimes, focusing on the dimensions of centralization and state intervention.

#### *Trends and convergence*

Despite the variance in industrial relations systems across the region, some experts see a pattern of convergence in both the centralization/decentralization and autonomous/interventionist dimension of industrial relations regimes. For example, Argentina is now discussing reforms that would allow parties to move negotiations to the firm level. In contrast, Chile, a highly decentralized regime, reformed its system to allow multi-enterprise bargaining for the first time since 1973 (although the Constitution only protects firm-level bargaining). This reform aimed at increasing the low coverage of collective agreements.<sup>25</sup> In El Salvador, the 1994 reform gave federations and confederations the right to exercise collective bargaining and right to strike.

There is similar convergence along the lines of state intervention, though it is less apparent since all countries except Uruguay and to some extent Chile have interventionist systems. There is currently support for minimal regulation of the Uruguay system. In contrast, countries with acute intervention have adopted reforms promoting collective

<sup>25</sup>In 1993, 9.7% of employed workers and 15.5% of salaried employees were covered in a collective contract or agreement. 36.1% of workers in small businesses of at least 50 workers, and 1.3% of smaller businesses were covered by collective agreements.

autonomy. In Brazil, the 1988 Constitution prohibits state intervention in union approval or administration. It also provides for private voluntary arbitration as an alternative to the *dissidio* process, and upheld collective bargaining as the only mechanism to worsen employment conditions<sup>26</sup>. Peru also expanded its collective autonomy by encouraging private voluntary conciliation and making the conciliation process more flexible. In Colombia, the 1990 reform states that unions would be automatically registered if registration not explicitly denied within 15 days, and that they could only be dissolved by judicial decision. It also established a list of anti-union activities subject to sanction. The 1994 reform in El Salvador and the 1992 reform in the Dominican Republic included reforms to reduce the control of the Labor Ministry over trade unions, and increased the promotion of collective union activities.

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<sup>26</sup> Despite these reforms, much of the intervention by the State has been replaced through judicial enforcement

**Cuadro 16: Estructura de las relaciones laborales en seis países de América Latina**

	<b>Características Generales</b>	<b>Intervención gubernamental</b>	<b>Centralización/Descentralización</b>
<b>Argentina</b>	Estructura centralizada, fuerte intervención gubernamental. Recientemente se han adoptado medidas para descentralizar el sistema.	El Estado confiere <i>Personería Gremial</i> , que determina quiénes son los interlocutores; todos los acuerdos deben ser homologados por la Autoridad Administrativa. A efectos de homologación, un poderoso instrumento de que dispone el Estado para influir en la negociación, se tienen en cuenta las repercusiones del convenio en la economía y los consumidores. La Constitución de 1994 autoriza al poder ejecutivo a rescindir total o parcialmente un convenio colectivo por motivos de emergencia económica; el Estado determina la legalidad de las huelgas y preside los laudos de conciliación de obligado cumplimiento; también puede imponer arbitraje obligatorio.	Los sindicatos tienen representación a través de sindicatos de empresa o personería si no existe el 7% de los sindicatos trabajadores. La reciente descentralización permite el nivel de las negociaciones que el Estado resuelve el conflicto inferior. Los sindicatos no a los trabajadores no a
<b>Brasil</b>	Estructura centralizada. La Constitución de 1988 atempera la intervención del Estado. Se sigue considerando corporativista, aunque ahora lo es a través de la intervención judicial. Situación de monopolio en transición: Movimientos en pro de la autonomía en la negociación colectiva y medidas de sindicatos y patronos en favor de la descentralización.	La Constitución de 1988 ampara la autonomía de los sindicatos; el Estado ya no puede intervenir en la creación ni la administración de los sindicatos. Sin embargo, sigue existiendo la intervención a través de las sentencias de los tribunales. El proceso de negociación no está reglamentado, pero sí los convenios. El Estado puede recurrir a la antigua legislación laboral para invalidar cualquier cláusula de un convenio colectivo por motivos económicos. También puede iniciar arbitraje obligatorio a través del proceso de <i>dissido</i> en el caso de los servicios esenciales. El <i>dissido</i> pone en marcha un proceso de conciliación y arbitraje obligatorios con la intervención de tribunales tripartitos.	La Constitución de 1988 corporativista. Sólo las categoría de <i>sindicato</i> profesión por ramas de geográfico. La ley no a empresa. Los sindicatos negociar a nivel de empresa frecuencia adoptando u para evitar las limitaciones política del gobierno. La estipula que los trabajadores más de 200 empleados representantes que pro directa con el patrono.
<b>Chile</b>	Estructura descentralizada; desigual intervención estatal; recuperación de la autonomía en la negociación con la vuelta al sistema democrático, aunque el gobierno sigue interviniendo en la resolución de conflictos.	No es necesaria la aprobación del Estado para crear sindicatos, pero el proceso está reglamentado, al igual que la administración interna. Los sindicatos rinden cuentas anualmente al Estado. El proceso de negociación está muy reglamentado, pero permite autonomía en las negociaciones. También existe un proceso de "negociación no reglamentada", pero excluye la posibilidad de la huelga. Los convenios pueden limitar la capacidad de los patronos "para organizar, controlar y administrar la empresa". Las	La Constitución sólo a de empresa. Desde 1991 multiempresarial (a me subvencionada por el E de aumentar la cobertura asociaciones sindicales. En cada empresa puede que puede firmar su pr reforma de 1991 establ



	<b>Características Generales</b>	<b>Intervención gubernamental</b>	<b>Centralización/Desce</b>
		partes pueden elegir la mediación o el arbitraje voluntarios en cualquier momento de la negociación. El Estado puede imponer arbitraje obligatorio para poner fin a una huelga salvaje. La huelga está reglamentada con todo detalle.	centrales sindicales nac
<b>México</b>	Estructura descentralizada por ramas de actividad. No obstante, está centralizada en el sentido en que la mayoría de los sindicatos se enmarcan en la estructura corporativista del Estado. Alto grado de intervención estatal.	La principal forma de intervención es el reconocimiento de los sindicatos y la intervención en caso de huelga. Con frecuencia, los sindicatos ajenos a la estructura corporativista no están reconocidos y se les niega el derecho de huelga. Los sindicatos se sustraen a la autonomía de las negociaciones y cumplen con la obligación de negociar mediante la firma de acuerdos mínimos. El Estado interviene en la resolución de los conflictos a través de juntas de conciliación y arbitraje y declarando las huelgas como inexistentes. El proceso de negociación no está muy reglamentado, pero está integrado en el de resolución de conflictos (generalmente se produce en la conciliación), en el que sí existe una fuerte intervención estatal.	Están autorizados difer aunque la mayoría son embargo, el movimiento de disciplina, alcanza u coordinación en la nega colectivos que afectan aprobación del Estado,
<b>Perú</b>	Estructura descentralizada; fuerte intervención estatal. El sistema se reformó en 1992 en un esfuerzo por potenciar la negociación directa y la resolución de conflictos, y reducir la intervención del Estado.	El Estado interviene en el reconocimiento de los sindicatos y la resolución de conflictos. Sin embargo, tras la reforma de 1992 se prohíbe la desestimación de las autorizaciones, salvo en los casos de incumplimiento de los requisitos legales. También se ha ampliado el margen para la negociación directa. El sistema de negociación colectiva anterior a la reforma de 1992 era rígido, procesal y semejante a un juicio, diseñado por el Estado para resolver los conflictos si no se llegaba a un acuerdo al cabo de ocho días de conciliación. Ahora, el proceso de conciliación es por tiempo indefinido. El Estado todavía puede intervenir para examinar las demandas y la documentación económica, y puede imponer una solución de conciliación y arbitraje si la huelga se prolonga demasiado y representa una amenaza para la empresa o el sector. Los convenios firmados después de la reforma de 1992 no requieren la	Estructura descentraliz sindicatos de amplia ba empresa; sólo el 2,4% reforma de 1992 permiti sindicato por empresa; monopolio de la negoc nivel del convenio; si r por defecto a nivel de e mayoría, predominan l de empresa.

	<b>Características Generales</b>	<b>Intervención gubernamental</b>	<b>Centralización/Desce</b>
		aprobación del Estado, pero conforme a un decreto de 1991 se prohíbe que en los convenios colectivos se incluya la indización de los salarios en las empresas estatales, y se sustituyen las cláusulas vigentes por mecanismos en los que se tienen en cuenta los aumentos de productividad.	
<b>Uruguay</b>	Estructura centralizada; escasa intervención estatal.	Desde que en 1985 se derogó la legislación sindical vigente, la negociación colectiva ha dejado de estar reglamentada. La ley no define ni exige la autorización de los sindicatos ni regula la negociación colectiva ni la resolución de conflictos. Los sindicatos se rigen por las cláusulas de sus propios estatutos y por los convenios colectivos en caso de conflicto.	Algunas asociaciones s pero la mayoría son de surgido dentro del anti Salariales tripartitas. La su mayoría, a nivel sec sindicato y no se poner conjuntamente, negocia representativo".

Fuente: O'Connell, Lesley: "Industrial Labor Relations Systems in Latin America", Banco Interamericano de Desarrollo; de próxima publicación.

## 4.2 From legally mandated protection and benefits towards contractual arrangements

A transition from legally mandated protection and benefits towards contractual arrangements arising from workplace conditions would make unions and collective bargaining the central actors, with the State actively promoting and protecting union organization and bargaining

In the post-reform political and economic setting, industrial relations institutions that enhance competitiveness economy-wide and at the firm level, gain new significance. The nature and design of these systems impact the firm's (and, at an aggregated level, the economy's) ability to move resources and adopt productive strategies in areas in which they have a competitive advantage. The low union membership and low coverage rates of collective bargaining reflect the fact that incentives to actively participate in unions and to bargain decline when protections are mandated. Furthermore, collective relations at the firm level are unimportant where unions have monopoly representation and, therefore, the leverage to impulse either economy-wide wage increases and/or legal measures to protect workers from unemployment. The reason is that individual firms and their workers do not have the leeway needed to attain an agreement better suited to their particular situation.

A reduction in the government intervention in the arena of industrial relations means that union's main task becomes to obtain benefits and protections through better contracts at firm level, i.e. through bargaining, not legislation and political lobbying. The main problem this raises is that the removal of the state from the traditional role of mandating protections and benefits has not brought commiserate increase in the state's protection and promotion of collective activities. The political equation is complicated even more by the fact that unions have oftentimes, in defense of legitimate though short-term interest of their constituencies, opposed government's stabilization and/or privatization efforts aimed at benefiting wider segments of the population.

To promote a more productivity-oriented industrial relations environment, governments face two main challenges. First, they must increase their efforts and investments in the protection and promotion of collective activities through active enforcement of rights to organize and bargain, already enshrined in most Labor Codes. Second, they need to redefine their role in conflict management and resolution by giving the parties more incentives to meaningfully bargain, most likely by reducing the ability of the labor authority to intervene at will. To this end, two dimensions of industrial relations are particularly important: the degree of collective autonomy vs. state intervention of the system, and the degree of centralization vs. decentralization of bargaining.

### *Autonomy vs. Intervention*

The scope of autonomy that social parties have in organizing, bargaining, and resolving conflicts frames the impact of industrial relations on economic performance. State intervention can occur at any one of these stages. It is important to note that intervention at one stage distorts autonomy through the entire system, because the arenas of collective bargaining are interrelated. Who bargains, what provisions can be negotiated, what happens when bargaining strikes a dead end are all important in determining the

consequences of a given bargaining structure. Who bargains is not only determined by the legal structure of bargaining, but also by the structure of unions (who has the right to represent whom, and if there is a monopoly of representation). Autonomy in negotiations is important in bargaining and conflict resolution. When bargaining fails, strike and conflict resolution procedures are generally triggered. If parties can drop the consequences of bargaining failure on the labor authority, their calculations will include not only economic gains and losses, but also their degree of influence on the government's political agenda.

In both bargaining and conflict resolution, the potential for direct negotiations and the extent to which the contracting parties internalize the consequences of their actions are key. Most legislation in Latin America sets the labor authority (either the Ministry or the special judiciary) as facilitator, mediator, and arbitrator of last resort, with little or no rules regarding the scope of intervention or the parameters of the arbitration resolution. This reduces enormously the cost of inflexible and/or disruptive position for both firms and unions, thus increasing the need for the arbitration of labor authority in a vicious circle.

The introduction of new methods for negotiation management and conflict resolution, based on mediation provided by professional third parties, has been successful in reducing the level of conflict in industrial relations<sup>27</sup>. Also, legislation reform aimed at establishing clear and transparent rules for arbitration can create incentives towards more productive negotiation conducts. One example is the introduction of final offer arbitration methods, where arbitrators are limited to choosing between the last parties' offers, that induce parties to more carefully advance their proposals in the negotiation process. Paradoxically, the most important action that governments can adopt to increase the autonomy of the parts is to actively intervene to enforce and promote freedom of organization and negotiation. To the extent that workers' benefits and protections are to be connected with the evolution of workplace productivity, unions are needed to act as collective voice in the bargaining process. This requires changes in the labor authority procedures and regulations for union creation and registration aimed at simplifying requirements and protecting unions from political interference.

#### *Centralization vs. Decentralization*

The policy discussion has largely centered on the issue of decentralization and centralization of collective bargaining. The belief that intermediate levels of centralization of collective bargaining (at the sector level) are inferior in terms of economic performance than completely decentralized (firm level) or centralized (at the national level) systems has been a tenet of the economic literature since the seminal Calmfors and Driffill 1988 paper<sup>28</sup>. Recent evidence and new studies summarized in the 1997 OECD Employment Outlook<sup>29</sup> suggest that there is very little robust evidence to

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<sup>27</sup> Argentina, Mexico, and a number of Central American countries are beginning to implement mediation programs with the assistance of the Federal Mediation Agency of the USA.

<sup>28</sup> Calmfors, L. and J. Driffill, "Bargaining structure, corporatism, and economic performance", *Economic Policy*, April 1988, 14-61

<sup>29</sup> "Employment Outlook", OECD, July 1997

conclude that intermediate levels of centralization worsen economic and labor market performance<sup>30</sup>.

In terms of the policy debate it is reasoned that decentralized bargaining better connects collective contract provisions to firm conditions and internalizes the consequences of the wage/employment trade-off. On the other hand, extreme decentralization may produce wage drift if there is total absence of coordination. Both the level at which bargaining occur and the degree of coordination between different bargaining units is crucial. Germany and some Nordic countries have sector-level bargaining but high coordination among both firms and unions negotiation units that effectively produce the coordination necessary to avoid leap-frogging between contracts. The experiments with *Pactos Sociales* that generate guidelines for wage increases implemented through the bargaining units have been applied both in Mexico (a highly coordinated structure) and in Chile (a completely decentralized one) with some success.

## 5-Issues for Debate

The evidence presented in this paper suggests that current institutions and regulations have been partially successful in reducing the risk of unemployment at the expense of increasing self-employment and reducing employment rates for young and female workers. In addition, our evidence uncovers disturbing inequalities in the coverage of legally mandated benefits.

These results pose the following questions:

- (1) *Should current employment protection mechanisms be substituted by alternative mechanisms of protection?* Inequities in the distribution of benefits and distortions in the behavior of the labor market are compelling reasons for reform. However, recent events, like the South-East crisis, confirm that the demand for protection against large macroeconomic shocks is likely to remain a fundamental issue in the region. Future reform programs must devise new mechanisms that respond to this demand for protection in ways that minimize labor market distortions and expand coverage to less advantaged workers.
- (2) *Should the region develop unemployment insurance programs that insure unemployed workers against temporary income shortfalls? And if so, how should these programs be designed and implemented?* An alternative to the current employment protection mechanisms based on large dismissal penalties and a bias towards indefinite contracts is to insure workers' income while they are looking for an alternative job. This goal can be attained in various ways. Compulsory savings mechanisms or Fondos de Cesantía, like the ones existing in Colombia, Ecuador or Peru, are good examples of mechanisms that provide supplemental income to an unemployed worker without distorting the labor market. Under these mechanisms workers are forced to save part of their monthly income in a personal account that accrues market interest rates. The amount accumulated becomes available to the

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<sup>30</sup> The OECD study, however, finds fairly solid evidence of a decrease in earnings inequality related to more centralized/coordinated bargaining structures.

worker when the labor relationship is terminated, regardless of which party has initiated the separation. This mechanism has the advantage of being fully transparent. However, unemployment risk is not pooled across workers since each worker saves for her own possible unemployment spell. Another alternative is to develop an unemployment insurance system, in which workers and firms contribute to the system paying a premium to the insurance administrators. In the event of unemployment, the worker receives a benefit during a certain number of periods. This system has the advantage that unemployment risk is pooled across workers. However, it may be more difficult to administer than a Fondo de Cesantia.

- (3) *Should Latin American countries expand the set of contracts available to workers?* The current protection system biases employment towards more mature and male workers. This is partly the result of a system that was designed to protect the head of the family. As demands change and workers with a higher need for flexibility enter the labor market, new contracts that allow part-time employment but still ensure some form of protection should be devised.
- (4) *Should social security taxes and payroll deductions be reduced for less advantaged workers?* Our results suggest that in small and large firms, poorer, less skilled workers are less likely to benefit from the protection of the law, as indicated by the evasion of social security contributions. At this stage we cannot identify whether the law is evaded because workers choose not to participate, or because firms choose not to award them protection. Yet, both explanations suggest that social security contributions might be too high for certain groups of workers. Coverage to less advantaged workers might be increased through the reduction of social security contributions for groups that are more likely to be cash constrained and, therefore, place lower value in in-kind benefits.
- (5) *Should minimum wage policy be reexamined? Should minimum wages for young workers be lower than the general minimum wage?* Our evidence suggests that minimum wages might be contributing to higher youth unemployment rates. In setting minimum wages for the youngest workers it should be taken into account that wages tend to increase with age and experience and hence youth wages tend to be lower than the average. However, in answering these questions the costs and benefits of keeping wages artificially high should be carefully balanced. For example, it has been suggested that high unemployment rates keep young people in school, increasing their future chances to find a good job. If this effect is important, lowering minimum wages might prompt too many young workers to abandon school. Yet, it might be argued that this is not the best policy to encourage schooling; Part time arrangements or targeted subsidies to the most able students can be superior ways to keep young people in school.

Similarly, some authors have stressed the redistribution properties of minimum wages. There is evidence for both Latin America and other countries suggesting that higher minimum wages are associated with lower poverty levels<sup>31</sup>. However, even if

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<sup>31</sup> Lustig and McLeod (1996).

minimum wages are an effective way to reduce poverty, they are not necessarily an efficient tool for pursuing this objective. Other policies, like negative income tax schemes might be more appropriated tools to reduce poverty.

- (6) *Would it be convenient and feasible to evolve from legally mandated benefits towards agreements arising from collective bargaining?* To the extent that legally mandated benefits and protection both distortion employment and have adverse equity implications, the case may be argued for giving a wider role to collective bargaining in order to attain a level of protection more amenable to the post-reform economic environment. However, given the weakness of the union movement, this evolution may lead to a worsening of wages and working conditions. Therefore, one of the necessary conditions for this process to take place is an active participation of the State in the protection and promotion of the freedom of organization and bargaining.
- (7) *Should collective bargaining be decentralized at the firm level? If so, how to avoid weakening and fragmentation of union's bargaining power?* It is often argued that the highly centralized systems of collective bargaining in the region need to be decentralized in order to achieve better labor market outcomes (both in terms of efficiency and equity). Unions, in turn, counter-argue that the abandonment of the current bargaining structure would weaken their bargaining power and, therefore, worsen wages and working conditions. It has been argued that the combination of decentralization of collective bargaining and establishment of a tripartite national agreement on wage guidelines could create the coordination necessary to avoid weakening the bargaining position of workers.

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## Appendix

**Table 2: The effects of employment protection on employment rates**

(Student's t in parenthesis under coefficients)

Dependent variable is:	Employment rate					
Protection index	-0.77 (-3.4)	-0.67 (-2.7)	-0.56 (-2.2)	-0.39 (-0.9)	-0.68 (-2.6)	-0.50 (-1.8)
Change in annual inflation rate		-0.01 (-0.9)	-0.01 (-0.8)			
GDP per capita				0.0002 (0.3)		
GDP growth rate					-1.54 (-0.8)	-2.49 (-1.2)
Dummy region			-7.64 (-1.4)	-6.11 (-0.5)		-10.27 (-1.7)
Nr. obs.	34	34	34	27	29	29
Adj. R <sup>2</sup>	0.243	0.24	0.263	0.152	0.159	0.214

**Table 3: The effects of employment protection on self-employment**

Dependent variable is:	Share of self-employment on total			
Protection index	0.63 (5.2)	0.57 (5.0)	0.38 (2.4)	0.56 (3.3)
Change in annual inflation rate		0.02 (2.2)		
GDP per capita			-0.0005 (-2.5)	
GDP growth rate				-0.43 (-0.3)
Dummy region				1.96 (0.6)
Nr. obs.	24	24	23	22
Adj. R <sup>2</sup>	0.531	0.601	0.659	0.502

Time-Series estimates for Chile

**Table 4: Results for population 15-65 years old. Sample:1960-1996 (\*)**

Individuals 15-65 years old	Participation	Total Employment	Self-employment	Dependent Employment	Unemployment
Constant	.0017 (.0036)	-.004 (.004)	-.002 (.002)	-.002 (.004)	.006 (.006)
ENDO(t-1)	-.487 (.161)	-.305 (.103)	-.411 (.120)	-.301 (.123)	-
GDP Growth	.030 (.043)	.394 (.054)	.122 (.025)	.272 (.052)	-.611 (.082)
Index Growth	-.005 (.007)	.012 (.009)	.002 (.004)	.010 (.009)	-.027 (.014)
Log Index	-.004 (.004)	-.001 (.005)	.002 (.002)	-.003 (.005)	.0004 (.007)
GDPG*log Index	.081 (.056)	-.181 (.068)	-.092 (.031)	-.088 (.066)	.438 (.10)
Adj. R2	.22	.66	.48	.52	.645
AIC	-9.03	-8.54	-10.08	-8.60	-7.72
DW	1.91	2.14	2.12	2.44	2.23
Q(16)	18.72 (.28)	17.9 (.32)		14.84 (.53)	
T*R2	9.14 (.33)	9.51 (.30)		13.19 (.10)	

(\*) All dependent variables are measured as % of working age population and in growth rates. Standard errors in the parenthesis

**Table 5: Results for population 15-25 years old. Sample:1960-1996**

Individuals 15-25 years old	Participation	Total Employment	Self-employment	Dependent Employment	Unemployment
Constant	.002 (.005)	-.003 (.004)	-.001 (.001)	-.002 (.004)	.014 (.011)
ENDO(t-1)	-.216 (.191)	-.322 (.110)	-.471 (.152)	-.254 (.123)	-.295 (.12)
GDP Growth	-.004 (.065)	.368 (.056)	.003 (.020)	.328 (.057)	-.875 (.135)
Index Growth	-.004 (.010)	.011 (.009)	.004 (.003)	.006 (.009)	-.035 (.022)
Log Index	-.009 (.006)	-.010 (.005)	.0008 (.0018)	-.011 (.005)	.003 (.012)
GDPG*LogIndex	.085 (.080)	-.118 (.072)	-.023 (.025)	-.094 (.072)	.463 (.165)
Adj. R2	-.02	.63	.30	.55	.58
AIC	-8.30	-8.45	-10.54	-8.44	-6.75
DW	1.80	2.08	2.38	1.88	2.11
Q(16)	13.72 (.61)	17.9 (.33)		13.72 (.61)	18.08 (.31)
T*R2	9.72 (.28)	6.87 (.55)		9.47 (.36)	12.43 (.13)

(\*) All dependent variables are measured as % of working age population and in growth rates. Standard errors in the parenthesis

Time-Series estimates for Chile

**Table 6: Results for population 26-50 years old. Sample:1960-1996**

Individuals 26-50 years old	Participation	Total Employment	Self-employment	Dependent Employment	Unemployment
Constant	.001 (.003)	-.005 (.004)	-.004 (.003)	-.002 (.005)	.006 (.005)
ENDO(t-1)	-.562 (.155)	-.296 (.107)	-.455 (.121)	-.277 (.143)	-
GDP Growth	.085 (.044)	.445 (.058)	0.182 (.038)	.265 (.065)	-.528 (.066)
Index Growth	-.012 (.007)	.008 (.010)	-.0009 (.006)	.008 (.011)	-.021 (.011)
Log Index	-.001 (.004)	.002 (.005)	.004 (.003)	-.0009 (.0061)	.0008 (.006)
GDPG*LogIndex	.029 (.056)	-.262 (.072)	-.169 (.047)	-.095 (.081)	.396 (.081)
Adj. R2	.27	.65	.47	.36	.67
AIC	-8.93	-8.40	-9.25	-8.17	-8.17
DW	1.94	1.75	2.24	2.20	2.07
Q(16)	20.51 (.19)	20.98 (.17)		11.81 (.75)	7.62 (.95)
T*R2	12.55 (.12)	12.97 (.11)		10.3 (.24)	5.46 (.70)

(\*) All dependent variables are measured as % of working age population and in growth rates. Standard errors in the parenthesis

**Table 7: Results for population 51-65 years old. Sample:1960-1996**

Individuals 51-65 years old	Participation	Total Employment	Self-employment	Dependent Employment	Unemployment
Constant	-.008 (.007)	-.012 (.007)	-.004 (.003)	-.008 (.005)	.006 (.007)
ENDO(t-1)	-.479 (.162)	-.354 (.144)	-.434 (.161)	-.415 (.157)	-
GDP Growth	-.062 (.086)	.182 (.082)	.135 (.042)	.044 (.071)	-.505 (.087)
Index Growth	.010 (.015)	.030 (.014)	.006 (.007)	.022 (.012)	-.039 (.014)
Log Index	.006 (.008)	-.009 (.007)	.001 (.003)	.008 (.006)	.004 (.008)
GDPG*LogIndex	.227 (.112)	.006 (.106)	-.044 (.051)	.063 (.093)	.442 (.108)
Adj. R2	.24	.41	.28	.34	.56
AIC	-7.64	-7.71	-9.09	-8.05	-7.61
DW	2.26	2.38 14.8	1.99	2.47	2.50
Q(16)	16.75 (.42)	(.53) 11.73		16.05 (.44)	4.16 (.99)
T*R2	11.94 (.15)	(.16)		16.58 (.034)	4.41 (.81)

(\*) All dependent variables are measured as % of working age population and in growth rates. Standard errors in the parenthesis

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**Table 8: Results for female population 15-65 years old. Sample:1960-1996**

Females 15-65 years old	Participation	Total Employment	Self-employment	Dependent Employment	Unemployment
Constant	.002 (.005)	-.002 (.005)	-.0035 (.0018)	.001 (.005)	.009 (.008)
ENDO(t-1)	-.349 (.177)	-.447 (.156)	-.356 (.106)	-.322 (.200)	-.201 (.141)
GDP Growth	-.028 (.059)	.197 (.059)	.075 (.022)	.115 (.066)	-.442 (.095)
Index Growth	-.006 (.010)	-4.85E-06 (.010)	.003 (.003)	-.003 (.010)	-.017 (.015)
Log Index	-.007 (.005)	-.006 (.005)	.001 (.002)	-.007 (.006)	.001 (.008)
GDPG*LogIndex	.155 (.077)	-.094 (.077)	-.013 (.027)	-.086 (.083)	.196 (.116)
Adj. R2	.13	.40	.52	.096	.41
AIC	-8.38	-8.37	-10.34	-8.21	-7.46
DW	1.86	1.97	2.40	2.01	2.36
Q(16)		17.55 (.35)		13.11 (.66)	12.24 (.14)
T*R2		8.91 (.34)		8.41 (.39)	17.25 (.37)

(\*) All dependent variables are measured as % of working age population and in growth rates. Standard errors in the parenthesis

<b>Table 9: Job Tenure by Age and Gender</b>					
country	year	Dependent Workers			
		Female		Male	
		Percent <1 year	Percent >10 year	Percent <1 year	Percent >10 year
<b>Argentina</b>	<b>1996</b>				
Ages 15-20		73.41	0	66.76	1.05
Ages 21-25		51.43	0.93	43.49	0.35
Ages 26-35		32.87	5.75	27.13	9.8
Ages 36-45		22.26	25.38	19.76	29.3
Ages 46-55		20.35	40.45	17.64	40.47
Ages 56-65		15.35	38.87	13.77	46.76
<b>Venezuela</b>	<b>1995</b>				
Ages 15-20		56.01	0.09	52.63	0.45
Ages 21-25		34.5	0.17	38.23	0.83
Ages 26-35		20.04	9.74	26.75	6.72
Ages 36-45		10.33	33.99	19.42	25.13
Ages 46-55		7.64	47.78	14.37	37.72
Ages 56-65		6.1	58.32	16.81	43.52
<b>Brazil</b>	<b>1995</b>				
Ages 15-20		44.03	0.53	35.18	1.26
Ages 21-25		31.22	3.07	30.31	5.36
Ages 26-35		20.52	12.24	21.48	13.41
Ages 36-45		14.6	33.12	16.9	32.21
Ages 46-55		10.91	45.86	14.82	39.09
Ages 56-65		8.65	55.91	12.20	40.59
<b>Bolivia</b>	<b>1995</b>				
Ages 15-20		60.53	0	60.04	0
Ages 21-25		44.49	0	41.38	0.5
Ages 26-35		25.74	2.1	28.24	4.65
Ages 36-45		12.82	20.67	20.99	22.23
Ages 46-55		8.77	35.75	19.89	32.46
Ages 56-65		39.53	28.65	19.17	24.82
<b>Perú</b>	<b>1985</b>				
Ages 15-20		22.11	3.27	24.91	2.75
Ages 21-25		25.65	13.71	31.29	8.91
Ages 26-35		16.16	28.41	18.45	23.21
Ages 36-45		7.83	60.57	10.84	52.88
Ages 46-55		9.21	70.33	5.55	70.96
Ages 56-65		3.6	74.03	6.81	66.55

**Table 9 (Cont.)**

<b>Colombia</b>	<b>1994</b>				
Ages 15-20				53	0
Ages 21-25				38	0
Ages 26-35				27	6
Ages 36-45				18	25
Ages 46-55				18	39
Ages 56-65				17	40
<b>U.S.</b>	<b>1987</b>				
Ages 15-20				59	0
Ages 21-25				38	0
Ages 26-35				20	8
Ages 36-45				13	33
Ages 46-55				10	50
Ages 56-65				8	55

*\*Bolivia 1995-only around 50% of employed people reported job tenure.*

*Therefore, these are the ratios within employed people with job tenure variable.*

*\* Argentina and Bolivia are urban only.*

*\*Colombia and U.S. do not include public sector employees.*



**Table 10: Job Tenure by Size of the Firm and Education**

Country	year	Dependent Workers, Male				Dependent Workers, Male		
		Small Firm		Large Firm		Less Than Secondary Complete		Secondary M
		Percent <1	Percent >10	Percent <1	Percent >10	Percent <1	Percent >10	Percent <1
<b>Argentina</b>	<b>1996</b>							
Ages 15-20		67.35	0.7	65.48	0	65.78	1.85	68.04
Ages 21-25		47.97	0.61	33.09	0	45.2	0	41.77
Ages 26-35		33.26	6.78	20.12	12.84	32.12	11.59	21.84
Ages 36-45		25.89	21.17	13.49	36.25	22.7	25.54	14.96
Ages 46-55		29.23	23.04	8.15	58.59	19.55	37.18	12.57
Ages 56-65		18.74	31.37	5.47	69.88	15.74	43.26	8.05
<b>Venezuela</b>	<b>1995</b>							
Ages 15-20		52.73	0.6	52.58	0	52.73	0.52	52.13
Ages 21-25		41.74	1.36	35.46	0.34	40.85	1.08	32.29
Ages 26-35		35.56	5.09	20.54	7.93	31.55	6.97	17.81
Ages 36-45		28.03	13.38	15.74	30.25	25.36	21.58	8.52
Ages 46-55		22.89	24.44	9.64	44.88	16.73	32.75	7.23
Ages 56-65		29.85	24.87	8.11	55.84	19.52	40.97	3.91
<b>Brazil</b>	<b>1995</b>							
Ages 15-20		73.65	0.32	67.98	0	69.03	1.02	61.56
Ages 21-25		61.03	1.39	67.85	0	59.59	5.21	59.08
Ages 26-35		59.1	8.08	57.76	3.82	51.07	13.22	50.58
Ages 36-45		52.14	13.79	51.14	11.4	42.8	19.9	30.24
Ages 46-55		55.68	16.05	60.27	9.23	45.66	25.38	32.1
Ages 56-65		46.78	28.43	53.55	8.23	31.67	38.01	34.99
<b>Bolivia</b>	<b>1995</b>							
Ages 15-20		60.98	0	57.42	0	64.24	0	41.35
Ages 21-25		43.01	0	36.39	0	42.39	0	40.16
Ages 26-35		35.08	2.5	15.66	5.06	27.83	4.49	20.28
Ages 36-45		39.77	9.93	7.77	30.28	25.93	25.2	14.09
Ages 46-55		28.38	16.64	10.58	42.57	23.99	35.96	11.85
Ages 56-65		0*	7.64*	22.72	29.87		32.24	25.4



<b>Perú</b>	<b>1985</b>							
Ages 15-20		49.81	0.83	49.02	0	18.35	2.82	29.54
Ages 21-25		34.17	4.4	37.75	0.66	24.59	14.9	29.95
Ages 26-35		24.49	17.8	21.8	15.91	17.21	40.54	19.61
Ages 36-45		15.92	39.56	15.89	39.51	11.99	52.21	8.92
Ages 46-55		12.24	51.23	2.58	70.8	5.01	73.58	6.94
Ages 56-65		19.52	29.06	0	70.57	7.25	71.18	6.51*
<b>Colombia</b>	<b>1994</b>							
Ages 15-20		51	0	57	0	53	0	54
Ages 21-25		39	1	37	0	42	0	34
Ages 26-35		31	8	24	6	31	7	21
Ages 36-45		25	19	15	28	22	24	12
Ages 46-55		27	28	14	45	21	38	11
Ages 56-65		21	22	15	49	18	40	14
<b>U.S.</b>	<b>1987</b>							
Ages 15-20		64	0	60	0	67	0	52
Ages 21-25		44	0	35	0	44	0	37
Ages 26-35		30	4	18	11	26	0	19
Ages 36-45		24	19	12	39	17	25	13
Ages 46-55		22	35	9	56	11	46	10
Ages 56-65		20	33	10	54	9	50	7

### Notes:

\*Bolivia 1995-only around 50% of employed people reported job tenure.

Therefore, these are the ratios within employed people with job tenure variable.

\* Argentina and Bolivia are urban only.

\*Colombia and U.S. do not include public sector employees.

\*The figures with '\*' mean that there are not many observations in those categories.

\*The firm size differs by country.

Argentina-small: 1-25 people, large: 26 people or more

Venezuela-small: 1-20 people, large: 21 people or more

Brazil, Bolivia, Perú, Colombia, U.S.-small: 1-10 people, large 11 people or more

\*Brazil 1995-only around 52% of dependent workers, male, age 15-65 reported the size of firms.

\*Perú 1985-only around 38% of dependent workers, male, age 15-65 reported the size of firms.

**Table 11: Comparing Tenures for equally skilled workers in similar size firms**

Country	Dependent Workers, Male-Small Firm				Dependent Workers, Male-Large Firm			
	Less Than Secondary Complete		Secondary Complete or More		Less Than Secondary Complete		Sec	
	Percent <1	Percent >10	Percent <1	Percent >10	Percent <1	Percent >10	Perce	
<b>Argentina1996</b>								
Ages 15-20	66.84	1.19	68.08	0	66.29	0	6	
Ages 21-25	46.9	0	49.35	1.38	37.81	0	29	
Ages 26-35	34.77	9.14	30.52	3.56	28.11	14.67	14	
Ages 36-45	28.47	19.72	19.65	24.96	13.3	33.61	13	
Ages 46-55	30.19	22.81	26.58	23.69	9.24	54.86	4	
Ages 56-65	21.61	27.63	6.79	46.94	5.27	67.62	5	
<b>Venezuela1995</b>								
Ages 15-20	52.57	0.66	54.52	0	54.06	0	49	
Ages 21-25	43.52	1.71	34.76	0	38.77	0.32	3	
Ages 26-35	38.8	5.77	21.23	2.1	23.93	8.35	16	
Ages 36-45	30.81	14.05	15.19	9.95	22.12	26.36	7	
Ages 46-55	24.07	23.87	14.09	28.56	11.61	38.95	5	
Ages 56-65	31.2	24.55	12.45	28.92	9.97	54.23	2	
<b>Brazil1995</b>								
Ages 15-20	73.67	0.33	72.83	0	70.99	0	33	
Ages 21-25	59.27	1.59	73.1	0	65.82	0	77	
Ages 26-35	57.6	8.67	67.94	4.6	56.71	3.03	60	
Ages 36-45	53.96	13.2	40.15	17.68	51.99	8.31	48	
Ages 46-55	56.98	13.19	31.94	68.06	54.79	8.21	89	
Ages 56-65	46.94	30.74	44.74*	0*	53.72	7.35	52	
<b>Bolivia 1995</b>								
Ages 15-20	62.6	0	49.24*	0*	67.58	0	34	
Ages 21-25	41.07	0	45.12	0	40.34	0	37	
Ages 26-35	41.21	2.42	25.29	2.62	7.77	7.61	18	
Ages 36-45	40.01	8.64	40.51	13.23	5.23	48.5	8	
Ages 46-55	36.4	11.38	0*	40.55*	8.89	55.1	11	
Ages 56-65	0*	0*	0*	22.06*	0*	72.94*	33	

<b>Perú 1985</b>							
Ages 15-20	47.98	1.01	58.42	0	39.53*	0*	62
Ages 21-25	23.65	6.68	43.53	2.37	48.78	1.74	3
Ages 26-35	20.86	25.94	28.4	9.67	22.45	25.74	2
Ages 36-45	18.35	45.7	8.89	21.76	20.66	34.72	9
Ages 46-55	10.36	55.62	19.08	35.35	2.49	75.6	2
Ages 56-65	25.42*	33.13*	0*	15.62*	0*	70.94*	

\* Argentina and Bolivia are urban only.

\*The figures with "\*" mean that there are not many observations in those categories.

<b>Table 13: Probit Estimation. Social Security (1= Have; 0= Do not have)</b>					
	<b>Argentina 1995</b>			<b>Venezuela 1996</b>	
	dF/dx	z		dF/dx	z
Education level	0.018855	3.86		0.019254	5.48
Ocupation	-0.01886	-3.9		-.01055	-3.62
Labor income	0.03806	9.75		0.050959	22.07
Age	0.08376	5.85		0.08947	9.49
Gender (1=male)	0.052306	2.49		0.01769	1.64
Agriculture	0.04753	0.21		0.46692	-18.5
Mining				0.35529	-9.34
Electricity	-0.22036	-1.95		-.105617	-2.42
Construction	-0.26552	-5.12		-0.2683	-13.71
Retail	0.04456	1.57		-0.55456	-3.4
Transports	-0.07588	-1.95		-.35527	-17.56
Financial serv.	0.045153	1.3		-0.0126	-0.58
Special serv.	0.00126	-0.04		-.19193	-12.72
Size2	0.261655	12.05		0.26651	18.3
Size3	0.270261	11.03		0.32064	19.6
Size4	0.273459	8.73		0.55273	53.23
N		1654			2624
* For these variables, dF/dx is for discrete change from 0 to 1.					

