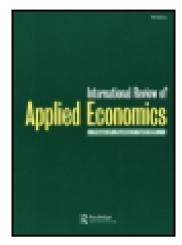
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Adriana Marshall Published online: 21 Jul 2010.

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## Wage Determination Regimes and Pay Inequality: a comparative study of Latin American countries

#### ADRIANA MARSHALL

The relationship between the degree of centralization of wage setting and labour market outcomes, generally discussed with reference to advanced OECD countries, is explored in this paper through the comparative analysis of eight Latin American countries, focusing on the effects of centralization on wage inequality. It is argued that the greater the decentralization of wage setting, the larger will be wage dispersion. The article starts with the presentation of the analytical model, and continues with the empirical study. This is divided into two parts. In the first, a number of institutional factors that contribute to define 'wage determination regimes' (collective bargaining structures; state intervention in wage setting; and union rights that determine union strength) are discussed, stressing the specific traits of centralization within Latin America, and the selected countries are scored in terms of those factors. In the second, the magnitude of wage dispersion across manufacturing industries is examined, and the resulting ranking of countries is contrasted with their ranking in terms of the institutional factors. It is concluded that, with some caveats, the degrees of centralization of bargaining structures and of wage inequality appear to be inversely associated, reproducing in the Latin American region the pattern found in OECD countries.

#### 1. Introduction

The labour market impact of the degree of centralization of wage setting has received considerable attention in OECD countries. The standard argument is that both centralized ('corporatist' or, more specifically, 'social corporatist') and decentralized bargaining structures, as opposed to intermediate negotiation, are conducive to a superior labour market and, ultimately, economic performance, because they restrain wage increases, thus checking inflation and stimulating employment growth (inter alia Calmfors & Driffil, 1988; Freeman, 1988). To identify the degree of centralization of wage setting, emphasis has been placed, separately or jointly, on collective bargaining level and coordination; trade unions and employer organizations and the power of central organizations over member units; and tripartite, consensus building institutions. Generally, labour market performance has been assessed on the basis of global employment, unemployment and wage trends. But some studies also discussed the effects of bargaining structures on wage inequality. In particular, Rowthorn (1992), who analysed the

A. Marshall, Consejo Nacional de Investigaciones Científicas y Técnicas, Beruti 2306, 9B, 1117 Buenos Aires, Argentina. E-mail: marshall@mail.retina.ar

impact of centralization on labour market performance, focused on wage dispersion and employment, and highlighted the role played by 'solidaristic' bargaining; he suggested that the degree of wage inequality has to be considered in evaluating performance. Others have concentrated on the relationship between the level of collective bargaining and the degree of wage dispersion: it was found that, in OECD countries, decentralized negotiation is associated with larger wage differentials (Zweimuller & Barth, 1994), that is, with poor performance in terms of inequality.

In this paper I explore the effects of wage determination regimes on wage inequality in Latin America through cross-national comparative analysis. The wage determination regime is a shorthand to describe the combination of a set of institutions: structures and degree of coordination of trade unions, employer associations and collective agreements; orientation of trade union policies; scope, nature and orientation of state wage intervention; and union rights, that strengthen or weaken labour organizations.<sup>3</sup> Some of these institutions determine the degree of centralization of wage setting, and others, such as union strength and orientation, can also exert an autonomous influence on wage differentials. The analysis is guided by the hypothesis that the degree of wage inequality is influenced by institutional regimes of wage determination, as characterized above. In particular, it is argued that, comparing across countries, the greater the decentralization of wage determination, the larger will be pay inequality.

Surprisingly, the relationship between labour market outcomes and the extent of centralization of wage setting has rarely been investigated with reference to Latin America<sup>4</sup> in spite of growing interest, during the 1990s, in the influence of labour market institutions on economic performance in this region. The impact of institutional regimes of wage determination, specifically on wage inequality received only occasional attention, and the few existing studies focused on trends over time in individual countries (Amadeo, 1993, 1994; Marshall, 1995; Allen & Labadie, 1994).

Categories such as 'centralization' and 'corporatism', questioned in their application even to OECD countries (Walsh, 1995), cannot be employed in relation to Latin American countries without further clarification and revision. In OECD countries 'corporatism' refers to ... 'strong, and relatively centralized, employers' and workers' organizations' (Rowthorn, 1992, p. 82),5 and 'social corporatism' to 'the tripartite (business, labour, and the state) institutionalized involvement in the formulation and execution of economic and social policies' (Landesmann, 1992, p. 242), often with a 'consensus building' and 'inequality reduction' connotation.6 Moreover, 'corporatism' usually means that trade unions exchange wage moderation for full (or a high level of) employment and social benefits, whereas 'corporatism' in Latin American countries, although still retaining the idea that wage growth moderation is exchanged for social benefits, if not always for a high employment level, customarily has implied trade union subordination to the political party in government (with Mexican 'corporatism' as the archetypal example). Besides, formal social accords through the workings of tripartite representative bodies have been short-lived, and their decisions seldom reached the stage of effective implementation. On the other hand, in Latin American countries the centralization of wage setting was often achieved by way of severe state wage control. State intervention went far beyond the 'income policies' usual in Europe, according to which wage control is part of explicit social pacts that include decisions on macro-economic objectives, to

directly fix wages following the varying economic and socio-political aims of the group in power.

The article is organized as follows. A brief presentation of the analytical framework is given, which is followed by the empirical analysis of the effects of wage determination regimes on wage inequality, through the comparison of eight Latin American countries (Argentina, Brazil, Chile, Colombia, Mexico, Peru, Uruguay and Venezuela). The comparative study is divided into two parts. In the first, I discuss a number of institutional factors that contribute to define wage determination regimes, stressing the specific traits of centralization within Latin America, and the selected countries are scored in terms of those factors. In the second, the magnitude of wage dispersion is examined, and the resulting ranking of countries is contrasted with their ranking in terms of institutional scores, concluding that, with some qualifications, the degrees of centralization of wagesetting and of pay inequality appear to be inversely associated.

#### 2. Analytical Model: determination of wage dispersion

The wage structure is the outcome of the interplay of economic factors and social institutions. It is moulded by trends in productivity and profitability differentials, and thus in the differential ability to pay, as well as by general labour market conditions. Relative pay also reflects the comparative employment structures—in terms of gender, age, seniority, skill or education—and the labour demand/supply relationship in each economic activity. Generally, there is considerable long-term stability in the ranking of the economic activities in terms of relative wages. The wage structure changes slowly, and responds to the gradual repositioning of economic activities that results from technological, regulatory and organizational change, and the ensuing shifts in dynamism and leadership. Intra-industry changes will not necessarily modify the industry's position in the inter-industry wage scale and, further, the size of inter- and intra-industry wage dispersion may vary without having any impact on the global ranking (Tarling & Wilkinson, 1982; Elliott & White, 1993). The institutional factors that define the wage determination regime also shape the wage structure, as they affect the degree of wage inequality.

Traditionally, it has been considered that wage differentials widen with the growth of the labour surplus, as the pressure of excess labour would be stronger in those activities and occupations where labour is more easily substitutable and trade unions weaker. It has also been argued that trade union intervention tends to narrow wage dispersion, not only due to the shared standards of reference for wage demands (such as the cost of living) but because trade unions can both increase, relatively, the lowest wages and check wage increases in leading sectors, particularly if collective bargaining is centralized—and wage agreements take into consideration the differential ability to pay across activities and firms—and unions are strong. But differences in productivity and profitability trends across economic activities make growing wage heterogeneity possible, as do the diverse industryspecific labour market situations, and in certain cases trade unions may contribute to maintain or increase, instead of moderate, such wage differentials. In practice, a continuous struggle to maintain the historical wage differentials across industries and firms may develop with union active participation. The orientation of union strategies (solidaristic policies or the opposite) is then an important determinant of wage outcomes.

Centralized bargaining is expected to be conducive to smaller wage differen-

tials. Studies of OECD countries found that the centralized Nordic countries typically show lower wage inequality than the 'intermediate' countries (France, Germany or the Netherlands), and that the decentralized countries such as the US and Canada have the highest dispersion coefficients. But pay inequality is high in centralized Austria, and this was what Rowthorn (1992) took into account to stress the determining role of the egalitarian aims guiding trade unions in the Nordic countries. Besides, in principle, industry-wide negotiation should only tend to reduce wage dispersion across firms within each individual economic activity, and therefore intermediate, industry-wide bargaining does not necessarily contribute to narrow inter-industry wage differentials unless a centralized body with solidaristic or other homogenizing objectives influences the separate trade unions, or mechanisms of bargaining coordination are in place. On the other hand, centralization has been considered to give more leverage to the labour organizations, while weak unions have been identified generally with decentralized bargaining,7 and, consequently, an inverse relationship between union strength and wage dispersion has usually been assumed. Still, centralized bargaining structures may coexist with powerless trade unions (and decentralization with strong unions), and thus union strength is an additional, independent determinant of wage inequality; unions may even be able to mitigate the detrimental impact of decentralized bargaining.

Finally, state wage policy, following macro-economic and socio-political objectives, also shapes pay inequality. The state may abstain from intervening in wage determination; permit, stimulate, eliminate, suspend or limit collective bargaining over wages; fix wage increases in absolute or percentage terms, either similar or diverse according to industry; orient collective bargaining by stipulating either similar or variable limitations; or set minimum wages. Therefore, wage dispersion is determined not only through wage bargaining between employers and trade unions, but also by state interventions, much more so if governments pervasively administer wages. The state, by imposing limitations or fixing uniform wage rises, tends to moderate the progress of pay inequality. However, during the periods of state wage control some kind of parallel negotiation always takes place at the level of the firm or establishment, and is likely to be expressed in 'wage drifts'. This form of decentralized negotiation fosters wage heterogeneity, partially counteracting the homogenizing influence of state wage administration. The final outcome of these two factors, acting in opposite directions, can only be identified empirically.

## 3. Empirical Analysis

In order to explore the hypothesis that the degree of centralization of wage setting (whether alone, or combined with other factors such as union strength) is inversely associated with the extent of pay inequality, I compare the selected eight Latin American countries, characterized by diverse wage determination regimes. The factors that define these regimes are discussed first, and on this basis countries are given scores; these institutional scores will be contrasted later with cross-national differences in the degree of wage dispersion *circa* 1990.

## 3.1. Comparative Wage Determination Regimes

To identify the wage determination regimes regulating private sector wages<sup>8</sup> in the countries studied, I review the collective bargaining structure (bargaining level and tripartite institutions), state intervention, and union rights. The resulting partial

	Unionization rate in mfg	Right to strike	Bargaining level	Tripartite bodies	State wage control	Total score (1)	Total score (2)
Argentina	3	3	3	1	1	8	8
Brazil	2	1 a	2	1	1	6	5
Chile	2	1	1	1	0	4	3
Colombia	. 1	1	1	1 °	0	3°	3°
Mexico	2	3	2	2	0	6	7
Peru	3	3	1	1	0	5	5
Uruguay	3	$3^{b}$	3	2	1	9	9
Venezuela	a 2	2	2	2	0	6	6

Table 1. Wage determination regimes. Selected Latin American countries, 1980s

Unionization: 1, low; 2, intermediate; 3, high.

Right to strike: 1, restrictive; 2, intermediate; 3, permissive.

Bargaining level: 1, decentralized; 2, hybrid (combination firm/industry-wide), with predominance of firm bargaining; 3, hybrid, with industry-wide predominance.

Tripartite bodies: 1, none or ephemeral; 2, more lasting (see text).

State wage control: 0, none or occasional; 1, pervasive (see text).

Total score: (1) considers unionization rate and not right to strike, both indicating union strength; (2) the opposite.

<sup>a</sup>considering that strike activity was on the rise during the 1980s, and that some have argued that the harshly restrictive strike legislation was somewhat ineffectual, the score here would be '2'.

bas from 1985; earlier it was restrictive (military regime).

cif tripartite minimum wage setting is considered, Colombia's scores would be 2, 4 and 4, respectively.

Source: own estimates (see text).

and total country scores are given in Table 1.9 While the focus is in the 1990s, some consideration is also given to earlier periods because, in contrast with OECD countries where wage setting institutions show substantial long-term stability, in many Latin American countries wage determination regimes experienced drastic fluctuations over time, including the recurrent banning of wage bargaining between workers and employers. Wage determination outcomes in countries where state intervention did not include the formal elimination or temporary suspension of collective negotiation—such as Colombia, Venezuela, Mexico or Peru—cannot be compared straightforwardly with those in Argentina, Brazil, Chile or Uruguay where, for a long time, wages were set by governments and collective bargaining proscribed. This means that cross-national comparisons for the 1990s, after a relatively long period of uninterrupted free wage bargaining in all eight countries, have to take into account the histories of wavering wage determination systems and their imprint on the size of pay differentials.

3.1.1. Structure of collective bargaining. One crucial determinant of the degree of centralization of wage setting is the structure of collective bargaining, which in turn depends on the legal regime regulating it, the actual mix of bargaining levels (centralized, intermediate or regional/industry-wide, multi-employer, one firm exclusively), and the degree of (explicit or implicit) coordination between bargaining units. These negotiation structures, per se, may however be insufficient to characterize wage setting, as the degree of centralization of worker and employer

organizations might have an influence as well. But, on the other hand, the existence of one single centralized trade union or employer association does not necessarily suffice to achieve centralized wage determination, since it may coexist with diverse combinations of negotiation levels, upon which central organizations may exert lesser or greater control. The analysis here centres on bargaining structure in terms of bargaining levels; evaluation of labour 10 and employer organizations, 11 and of coordination patterns, 12 showed that bargaining level may be used to proxy the negotiation structure in the broader sense and to score countries accordingly (Table 1). In addition, the nature and operation of tripartite institutions and social pacts, and whenever possible trade union policies, are taken into account on their own to give grades to the countries (Table 1).

In the 1990s, legislation of most Latin American countries admits simultaneous operation of different bargaining levels. This had been forbidden in Chile between 1979 and 1991 and, despite the fact that, in 1991, new legal rules opened up the possibility of multi-employer negotiation, one-firm bargaining continued to rule in 1993, when a mere 0.4% of all collective agreements were the result of inter-firm bargaining (Chile, 1995). All the countries other than Chile are characterized by hybrid models of collective bargaining. These mixed models differ nonetheless in that in Colombia, Venezuela and Mexico industry-wide negotiation requires a special procedure or permit, whereas in the rest the law grants similar status to the different bargaining levels. In both cases, however, only the actual structure of negotiation (i.e. the proportion of firm versus industry-wide agreements, and of workers covered by each one of them) makes it possible to identify which is the dominant bargaining level.<sup>13</sup>

Decentralized bargaining has long prevailed in Peru (Villavicencio Ríos, 1993) and even though, in 1990, trade union federations have been allowed to negotiate on an industry-wide basis, decentralization was exacerbated by two other legal pieces in 1991-92. Decentralized negotiation at the enterprise level has also been the prevalent model of collective relations in Colombia (Urrea, 1993; Dombois & Pries, 1995). By contrast, industry-wide agreements have predominated in Uruguay (Goldin & Feldman, 1995) and, until the end of the 1980s, in Argentina. In 1990 they accounted for 96.5% of the workers covered by collective bargaining in this country (Goldin & Feldman, 1995). However, once decentralization became the object of official promotion starting in 1991, the share of firm-level in total agreements rose markedly, from some 19% in 1990 to 73% in 1996 (MTSS, 1996). 14 In Brazil, Mexico and Venezuela the situation is less clear. Although the Brazilian 'hybrid' system combines two models, one with growing centralization of trade unions and participation of the central organization in collective negotiation, 15 and the other with decentralized and non-synchronized bargaining, it is closer to the second (Amadeo, 1993). In 1988, 65% of the agreements had been signed at firm level (Goldin & Feldman, 1995). In Venezuela, the importance of industry-wide negotiation varied sharply between years (encompassing as much as 77% of the workers covered by collective bargaining in 1988 but only 19% in 1990, for instance), accounting for the majority of the workers covered only when the Labour Ministry's estimates coincided with negotiations in leading economic sectors (oil, construction). Firm bargaining undoubtedly has been hegemonic in terms of the share in total agreements (OIT, 1995). In Mexico, while firm bargaining has tended to prevail over industry-wide agreements, the latter have also been of some importance (Bronstein, 1978) and, moreover, the vertical organization of trade unions entails some centralized control over individual firm

bargaining via the affiliated sectional unions. Bargaining is more centralized in those economic activities regulated by industry-wide agreements that define minimum conditions, but individual firms are still allowed to make upward adjustments (Bizberg et al., 1993). In summary, in terms of the predominant level of wage bargaining, we have Uruguay and Argentina at one extreme; Mexico, Venezuela and Brazil in the middle; and Peru, Colombia and Chile at the other extreme, approximately in that order (information is too sparse to rank countries accurately within each one of the three groups). In any case, Chile's situation—one-firm bargaining is almost the exclusive form—is outstanding.

Centralized tripartite bodies with the participation of autonomous trade unions, not subordinated to the state, are rare in Latin America, and the usual tripartite institutions are very far from the representative bodies à la européenne. Links between trade unions and the government have been particularly strong in Venezuela and Mexico (Zapata, 1989; Ellner, 1993).<sup>17</sup> In the 1980s and 1990s several attempts at the centralized tripartite determination of wages, together with other issues (so called 'social concertation') were made, among others, in Argentina, Brazil, Chile, Mexico, Uruguay and Venezuela. Some were purely symbolic, others met with little or ephemeral success; labour's influence was often negligible, or else trade unions in fact endorsed government wage guidelines, as in Mexico (Zapata, 1989).<sup>18</sup> On the other hand, tripartite bodies operate at different levels of wage determination: in Uruguay, industry-wide wage agreements are reached by wage councils, of tripartite composition (Informe RELASUR, 1995a), and in Colombia trade unions participate in the bodies that set minimum wages.

3.1.2. State intervention. In several of the Latin American countries considered here, instead of tripartite institutions, state centralization has been the historically hegemonic form of centralized wage determination. In Argentina, Brazil and Uruguay, wages were intermittently either directly fixed (collective bargaining being suppressed or suspended) or administered by the state. During the periods with wage control, collective bargaining was not always entirely absent but was sporadic and without much significance. State direct wage control was generally but not exclusively associated with military regimes. In Argentina, wages were controlled (not for the first time) during 1976–82 under the military, but also in 1984–88, a period with an elected government (Cortés & Marshall, 1993). In both Brazil from 1965 and until some time during the 1980s, and Uruguay from 1973 to 1985, 19 wage control took place under military rule; but in Brazil, government direct wage setting, under different guises, continued throughout the early 1990s, once civilians were in government (Sabóia, 1996).

The most conspicuous form of state wage determination in Latin America has been direct wage control, and where state intervention is concerned countries are scored in this study on the basis of direct wage administration in the 1980s (Table 1). However, government intervention took many other forms, some of which were masked by the formal institutions operating at the time. First, limitations on wage increases were imposed often: in Colombia (Londoño Botero, 1989) and Mexico (Zapata, 1989), and in Argentina and Peru after 1991. Second, in Uruguay, the state continued to intervene in wage setting after full collective negotiation was reinstated in 1985 (Informe RELASUR, 1995a). Third, state validation of bilateral agreements is required in some countries, and governments may make use of this requisite according to their objectives (e.g. control of inflation) to administer

wages. This was the case in Uruguay, after 1985, when, if the wage increase agreed by employers and workers far exceeded what the government considered admissible, the agreement was not validated, and it acquired the status of just a private accord (Rodríguez, 1996); and also in Mexico, where this requisite has given leverage to the government in firm-level negotiation. Finally, government wage policies were instrumented through tripartite institutions, Mexico being one prominent example (Bizberg et al., 1993; de Buen Unna, 1993; Zapata, 1989).

3.1.3. Union rights. Legal union rights are devised and manipulated either to support or demobilize trade unions, and to affect the effectiveness of their actions. Legal rules may encourage or discourage affiliation; empower unions by facilitating formation, granting to one organization a monopoly of representation and ensuring sources of financing, or, else, fragment the labour organization, limit access to financial resources, and restrict union formation by imposing requisites such as minimum firm size. Arbitration, conciliation and strike regulations may bias conflict resolution in favour or against workers. Here, to indicate the strength of union rights I consider only strike regulations.

To classify countries in terms of the permissiveness of strike regulations prevailing as from the 1980s (Table 1) I examined the strictness of the requisites stipulated to declare that a strike is legal (regulations on procedure); limitations to (e.g. maximum duration permitted), and banning of, the right to strike in public or essential services, however defined; whether it is allowed to contract replacement workers or not; workers entitlement to wages during strikes; employment security of strikers; sanctions to workers involved in illegal strikes; and rules on solidarity strikes. While in the early 1990s the right to strike was admitted in all the countries studied, it had actually been restored in Uruguay in 1985, severely restricted in Brazil until the 1988 new Constitution, and also in Chile until constraints were slightly relaxed in 1991. At the turn of the 1980s, the right to strike in essential services was limited in Argentina, and in Peru and, to a minor extent, Colombia, legislation became more stringent in the 1990s. The most restrictive strike regulations are those of Chile, even after the reforms, followed by Colombia. For example, only in Chile is the substitution of strikers explicitly permitted (this is prohibited in Argentina, Brazil after 1989, and Colombia).

The nature of the right to strike contributes to defining union strength, but actual strength is difficult to gauge. Estimates of union density in manufacturing, 20 available but frail for the 1980s (Table A in the Appendix) and utilized to score countries in Table 1, are inaccessible for the 1990s. The very few existing figures cover total unionization rates, and they show diverging trends across countries. For example, union density changed little in Chile between 1990 and 1995 (staying about 19%), fell in Uruguay (from 29% in 1987 to 21% in 1993), and increased in Argentina from 44 to 47% between 1991 and 1994 (González, 1996: Supervielle & Gari, 1995; Feldman, 1995). 21 In any case, unionization rates provide only a partial view, since union power is not necessarily correlated with membership; in many Latin American countries it depends also on union-state intertwining, political influence and mobilization capacity. Besides, coverage of collective agreements is generally much more widespread than union membership, particularly in countries where wage rates agreed collectively are legally extensive to all workers in the firm or industry, irrespective of trade union membership (erga omnes clause). Such is the case of Argentina, Brazil, Uruguay, Mexico and, at least since 1990,

Venezuela, whereas in Colombia, Chile (since 1991) and Peru (since 1992), under certain conditions, terms agreed collectively may be extended to non-union members.22

#### 3.2. Comparative Wage Inequality

The analysis focuses on the degree of wage dispersion across manufacturing industries, since information for economic sectors other than manufacturing is very sparse.23 It seems reasonable to regard differentials across manufacturing industries as representative of other pay differentials, since it was found that in OECD countries 'cross-country wage differentials by industry display much the same pattern as cross-country differentials by skill, by sex or by age' (Freeman, 1988, p. 68). Data are on average earnings in over 20 manufacturing industries (sources are detailed in Table B in the Appendix), and in this way they capture any potential wage drift over state fixed or collectively agreed rates.

The ranking of manufacturing wages reflects the impact of economic determinants. Behind the wage ranking is the structure of manufacturing—which activities are leading, which are the most capital-intensive with the fastest productivity growth rates and the greatest ability to pay, the most skill-intensive, the most export-oriented. Inter-industry wage rankings are fairly similar across countries (Table C in the Appendix), particularly those with comparable industrial structures. Further, in each country, the ranking of manufacturing wages has been rather stable over time (Table D in the Appendix), conforming to the same pattern identified in OECD countries (e.g. Tarling & Wilkinson, 1982; Elliott & White, 1993).24 Given that the present comparative analysis intends to emulate an 'experiment' (regression analysis being precluded by the nature of available information), both the similarity across countries and the stability over time in the wage ranking (determined to an important extent by economic forces) help to control for the influence of economic determinants on the wage structure, facilitating the analysis of the potential impact of wage determination regimes on the size of pay differentials.

In the Latin American countries considered, the degree of wage dispersion (Tables 2 and B, Appendix) is typically larger than in European countries. Further, in comparatively centralized Latin American countries, such as Argentina and Mexico, the degree of wage dispersion is about Canada's (one example of decentralized bargaining within the OECD context), whereas in Chile, one of the most decentralized Latin American countries, it is far higher than in Canada.<sup>25</sup> To explain why is beyond the scope of this study, but one may speculate that both economic and institutional factors played a role. On the one hand, manufacturing is more heterogeneous, and intra-manufacturing productivity differentials higher, in Latin America than in OECD countries; on the other, probably state policies in the advanced countries, sometimes in conjunction with stronger trade unions, have been more effective in reducing pay inequality.

To examine whether the degree of wage dispersion and bargaining structure are associated across countries, it is best to focus on the early 1990s, when wage bargaining was permitted in all eight countries (from 1988 in Argentina, 1979 in Chile, 1985 in Uruguay, and gradually gaining momentum during the 1980s in Brazil). Bargaining structure is given by negotiation level (which, as we have seen, in this set of countries varies from fully decentralized to intermediate, this latter in turn differing in whether either industry-wide or firm agreements predominate)

	Score (1)	Score (2)	Wage dispersion c. 1990
Uruguay	9	5	33
Argentina	8	4	36
Mexico	7(6)	4	35
Venezuela	6	4	36
Brazil	5(6)	3	41
Colombia	3ª	$2^{a}$	30
Peru	5	2	38 <sup>1987</sup>
Chile	3(4)	2	30

Table 2. Wage determination regimes and wage dispersion

Score (1): score 2 in Table 1 (score 1, if different, in parenthesis).

Score (2): bargaining structure (bargaining level and tripartite institutions).

Sources: Tables 1 and B, Appendix.

and tripartite institutions. The comparison across countries, circa 1990, suggests that, in effect, there is an inverse association between the degree of centralization of bargaining structures and the size of wage differentials (columns two and three in Table 2), which persists if bargaining structure is combined with union strength,26 and with (previous) state direct wage control—as discussed earlier, a form of centralization of wage setting that influences wage dispersion (columns one and three in Table 2). In other words, countries with more decentralized wage setting-Brazil, Chile and Peru-show larger dispersion coefficients than Argentina, Uruguay, Mexico and Venezuela, where intermediate centralization is prevalent (Table 2).27 However, within each group, the values of the coefficients are not always consistent with the institutional differences. The case of Colombia, in particular, stands out in that its low coefficient of dispersion does not fit with its decentralized bargaining structure. But the fact that, in Colombia, the proportion of firms paying near to the minimum wage is relatively high, and minimum and average wages are relatively close (Bell, 1995), and therefore that minimum wage policy (enacted by centralized, tripartite bodies) repeatedly affected the wage structure, might contribute to explaining the anomaly. Such influence of minimum wage policy on manufacturing wage differentials would not be present or would be negligible in the other seven countries, with the exception, perhaps, of Chile in the 1990s.<sup>28</sup> In Colombia, the combination between a kind of solidaristic trade union attitude (implicit in the struggle for minimum wage increases) and weak, atomized labour organizations, unable to match minimum wage increases with pay rises in the leading industries, may explain this 'downward' case of wage homogenization. In this way (successful) trade union claims for minimum wage rises could have contributed to reduce wage inequality in this country.

Comparative wage dispersion might also have been influenced by cross-country differences in the size of inter-industry productivity gaps and in the (gender, skill, etc) composition of employment in each industry, neither of which was possible to examine at this stage. The dissimilar global labour market situations might have had some impact as well, but at first sight relative unemployment levels (Table A, Appendix) and wage dispersion do not appear to be related.

<sup>&</sup>lt;sup>a</sup>4 and 3, respectively, if tripartite minimum wage setting is considered.

## 4. Concluding Comments

The evidence suggests that in the Latin American countries considered, at times of unconstrained or relatively free collective negotiation, the degrees of wage inequality and of centralization of bargaining structures are inversely—but loosely—associated, reproducing the pattern found to characterize OECD countries. Intra-manufacturing wage inequality is stronger in countries where decentralized negotiation is prevalent (Chile and Peru, as well as Brazil if we agree that decentralization prevails in this country too), with the exception of Colombia, a case that we tried to account for earlier.

This notwithstanding, some caveats are necessary. First, that in the countries where bargaining has normally been decentralized, it generally coexisted with extreme weakness if not outright repression of trade unions and their activities. Second, that differences in the degree of wage inequality between countries with diverse types of hybrid bargaining structures (in terms of which type of agreements, either firm or industry-wide, predominate) are slight. Third, that only the contrast between trends in wage and in productivity differentials, not feasible as vet, could provide the basis for discussing the mechanisms by way of which trade unions and more centralized negotiation contributed to reduce wage inequality (e.g. is it by checking wage increases in leading firms and industries, or by rising the wages of backward sectors and enterprises?). Last, that really centralized bargaining structures have no illustration in Latin America. Centralized bargaining of the 'Nordic' type, where wage increases are balanced against other macroeconomic objectives including employment growth, is simply not present in Latin American history, in the sense that, as we have seen, social pacts tended not only to be short-lived but to play merely a formal role, recurrently serving to channel state wage directives. Centralization, however, was not entirely absent, but ensued from strict state wage control, in turn part of broader economic strategies. And, even though the aim of lessening wage disparities only rarely guided government policies, often state wage administration contributed to reducing inequality, as compared with periods of free bilateral wage negotiation.

#### Notes

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- 1. For a review of the evidence and some of its weaknesses, see Pohjola (1992).
- 2. For Freeman (1988), wage dispersion is a 'hard' indicator of labour market structure, that can substitute for institutional variables in testing the standard argument.
- Naturally, this selective list does not exhaust the institutions capable of influencing the wage structure.
- 4. One exception is Banuri & Amadeo (1991).
- 5. On the diverse meanings of 'corporatism' see Calmfors & Driffil (1988).
- 6. A thorough discussion on this topic is in Teague (1995).
- 7. Such association is not necessarily applicable to all situations. On the relationships between bargaining structures and the distribution of bargaining power, see for example Katz (1993).
- 8. Wage determination in the public sector, often having distinct rules, is not examined in this paper.
- 9. Total scores (two alternatives) consist of simple sums of partial scores. More weight has implicitly been assigned to 'bargaining level' and 'union strength' (range of variation 1 to 3) than to 'tripartite bodies' (values 1 and 2), and more to the latter than to 'state wage control' (0 and 1). As we will see, these differential weights seem to describe adequately the situation prevailing at the end of the 1980s, with free wage bargaining in all eight countries and little influence of tripartite negotiation.
- 10. I will not examine the structure, generally vertical, of trade unions in the countries selected. There

are too many and complex differences in structure and functioning to deal with them just superficially; the formal similarities may hide substantial diversity in real operation, and in power relations.

- 11. Employer organizations in these Latin American countries tend to be relatively fragmented. According to Ermida Uriarte (1989), employer associations in Argentina, Brazil, Colombia and Uruguay are divided in terms of economic sectors, but often consult with each other and act in coordination. Normally, small and medium enterprises are not represented by the main employer associations (this was noted even in the case of Venezuela, where employer organization is more centralized; Iturraspe, 1993; OIT, 1995). In Peru, two independent central employer organizations, with little role in collective bargaining, coexist (Villavicencio Ríos, 1993), and in Mexico, apart from the main central association, there are several other associations, with little involvement in industrial relations (de Buen Unna, 1993). See also Informe RELASUR (1995b).
- 12. In many Latin American countries the law regulates the articulation between bargaining levels (e.g. stipulating the prevalence of industry-wide over firm agreements, or that of the 'most favourable [to the workers]' norm; or instead that industry-wide agreements should set minimum standards, and firm agreements introduce modifications), but information on actual coordination (pattern bargaining, and implicit or 'hidden' coordination) is scanty. Who represents trade unions (and employers) in decentralized bargaining might also be important, as this could be the source of potential coordination. In Argentina, Brazil and Uruguay, trade union representation in decentralized bargaining sometimes falls on unions placed higher in the hierarchical structure, or at least the latter participate in negotiation; it is not uncommon for one single trade union to sign agreements with several firms (the case of, for example, the mechanics in Argentina; Goldin & Feldman, 1995); in Brazil there is evidence of higher-placed employer associations participating in decentralized bargaining (Goldin & Feldman, 1995). In Mexico, some centralized trade union control over decentralized bargaining (Bizberg et al., 1993) could also favour coordination.
- 13. The distribution of collective agreements according to bargaining level might be misleading as it could automatically 'inflate' the share of firm agreements (simply because there are more firms than industries). In any case, the comparative share of firm agreements is useful information for a cross-national analysis of bargaining structures, and the growing or decreasing share of firm negotiation helps to highlight changes over time in individual countries.
- 14. No data are available on workers covered by agreements reached at different bargaining levels.
- 15. The active intervention of central labour organizations in the discussion of working conditions and workers' rights in the 1988 Constitution has been interpreted as a sign that, in part, collective bargaining takes place at national level (Amadeo, 1993).
- Minimum conditions are discussed centrally while firm bargaining establishes actual conditions (Amadeo, 1993).
- 17. In Venezuela, trade union subordination to the state was not of the same nature as in Mexico, and the interpretation stressing that labour organizations were not autonomous was questioned (see Ellner, 1993).
- 18. See Informe RELASUR (1995b) on historical precedents and more recent social pacts in the Southern Cone of Latin America. In Venezuela, social accords are of earlier origin but with little effectiveness (OIT, 1995; Iturraspe, 1993); tripartite commissions became discredited after some 15 years of existence, and labour and management played an insignificant role (Ellner (1993). In Mexico, workers' and employers' influence within the tripartite bodies has been weak (de Buen Unna, 1993).
- 19. In Uruguay, there were a few isolated agreements. and late in 1983 the government confined its intervention to the minimum wage and the wages of rural workers, but collective bargaining did not flourish as trade unions had been partially dismantled and restrictions on individual and union rights continued (Informe RELASUR, 1995a). In Brazil, collective bargaining was permitted in theory but was negligible in practice.
- 20. I examine unionization rates in manufacturing because, below, the analysis of wage inequality focuses on this sector.
- 20. The estimates are not strictly comparable across countries.
- 20. Naturally, as with other aspects of labour protection, legal coverage may differ from coverage in practice, depending on how effective is enforcement. The distance between legal and real coverage should be wider in countries or industries with more centralized negotiation: it would he more difficult to evade, and less motives to do so, rates agreed at enterprise level, that apply exclusively to the firm.
- In the countries selected, manufacturing accounts for 20% or more of GDP (data for 1970-93 in CEPAL, 1994).

- 24. In Tables C and D (Appendix) I present the Spearman (rank) correlation coefficients. Pearson correlation coefficients, as it could be expected, are generally lower, although the values tend to be rather similar.
- 25. The un-weighted coefficients of wage dispersion across manufacturing industries are about 0.16 in the Netherlands and Germany, 0.24 in Canada, 0.24 in Mexico, 0.26 in Argentina and 0.35 in Chile (own estimates for 1993–94, based on ILO, 1995). According to coefficients of variation (weighted by employment, not done here) in Rowthorn (1992), wage dispersion in the US and Canada is exceeded only in Japan; in France and Norway it is similar to Germany's and the Netherlands', and in Sweden, Denmark and Italy it is even lower than in Germany.
- 26. There is also indication of an inverse association between union strength and wage dispersion.
- 27. If, instead of the (un-weighted) coefficients of variation presented in Tables 2 and B (Appendix), we compare the standard deviations of log wages, Argentina, Mexico, Uruguay and Venezuela are repositioned slightly vis-à-vis each other.
- 28. The higher the proportion of industries or firms paying about the minimum wage (either because the minimum wage was set relatively high or because the average wage is low), the more important would be the narrowing effect of a rise in the minimum wage (not matched by other wage increases) on wage inequality. If the manufacturing average wage/minimum wage ratio is high, one may reasonably suspect that the proportion of firms/industries paying the minimum wage is low. In most countries, this ratio has fluctuated over time, sometimes sharply. Sparse data suggest that the minimum wage has had the lowest impact in Argentina.

#### References

- Amadeo, E. J. (1993) Restricciones institucionales a la política económica: negociación salarial y estabilización en el Brasil, *Desarrollo Económico*, 33(129), pp. 29-47.
- Amadeo, E. J. (1994) Bargaining power, mark-up power, and wage differentials in Brazil, Cambridge Journal of Economics, 18(3), pp. 313-322.
- Allen, S. G. & Labadie, G. J. (1994) Labor market flexibility and economic performance in Uruguay and Chile, Final report to the Tinker Foundation (mimeo).
- Banuri, T. & Amadeo, E. J. (1991) Worlds within the Third World: Labour market institutions in Asia and Latin America, in: T. Banuri (Ed.) Economic Liberalization: no panacea, pp. 171-219 (Oxford, Clarendon Press).
- Bell, L. A. (1995) The impact of minimum wages in Mexico and Colombia, The World Bank, Policy Research Working Paper 1514, Washington, DC.
- Bizberg, I., de la Garza, E. & Montiel, Y. (1993) Modernización empresarial y relaciones industriales en México, in: R. Dombois & L. Pries (Eds), Modernización Empresarial: Tendencias en América Latina y Europa, pp. 82-110 (Caracas, FESCOL/Editorial Nueva Sociedad).
- Bronstein, A. S. (1978) La negociación colectiva en América latina: Problemas y tendencias, *Revista Internacional del Trabajo*, 97(2), pp. 199-213.
- Calmfors, L. & Driffil, J. (1988) Bargaining structure, corporatism and macroeconomic performance, Economic Policy, 6, pp. 14-61.
- Camargo, J. M. & Amadeo, E. J. (1993) Labour legislation and institutional aspects of the Brazilian labour market, in: Reestructuración y Regulación Institucional del Mercado de Trabajo en América Latina, Research Series 98 (Geneva, IILS).
- Cassoni, A., Labadie, G. & Allen, S. (1994) Reformas del mercado laboral ante la liberalización de la economía. El caso de Uruguay, Banco Interamericano de Desarrollo. *Documentos de Trabajo*, 177, Washington DC.
- Chile (1995) Informe final. Investigación de normas laborales, negociación colectiva y organizaciones sindicales, Revista de RELASUR, 6, pp. 157-195.
- Comisión Económica para América Latina y el Caribe (CEPAL) (1994) Statistical Yearbook for Latin America and the Caribbean (Santiago, CEPAL).
- Cortés, R. & Marshall, A. (1993) State social intervention and labour regulation: the Argentine case, Cambridge Journal of Economics, 17(4), pp. 391-408.
- de Buen Unna, C. (1993) Intervención y autonomía en las relaciones colectivas de trabajo en México, in: O. Ermida Uriarte (Coord.) *Intervención y Autonomía en las Relaciones Colectivas de Trabajo* (Montevideo, Fundación de Cultura Universitaria).
- Dombois, R. & Pries, L. (1995) Structural change and trends in the evolution of industrial relations in Latin America, AVANCES de Investigación, 1.

- Elliott, R. F. & White, M. J. (1993) Recent developments in the industrial wage structure of the UK, Cambridge Journal of Economics, 17(1), pp. 109-129.
- Ellner, S. (1993) Organized Labor in Venezuela 1958-1991 (Wilmington, Delaware, SR Books).
- Ermida Uriarte, O. (1989) Las relaciones de trabajo en América Latina, *Derecho del Trabajo*, 49(8), pp. 1265-1288.
- Feldman, S. (1991) Tendencias de la sindicalización en Argentina, Estudios del Trabajo, (2), pp. 79-109.
- Feldman, S. (1995) Informe sobre las regulaciones laborales y performance económica en Argentina, Buenos Aires (draft mimeo).
- Freeman, R. B. (1988) Labour market institutions and economic performance, *Economic Policy*, 6, pp. 64-78
- Goldin, A. O. & Feldman, S. (1995) Relaciones colectivas del trabajo en el MERCOSUR, Revista de RELASUR, 7.
- González, P. (1996) Normativa y política laboral en Chile, Colección de Estudios CIEPLAN, 43, pp. 49-99.
- International Labour Office (ILO) (several years) Yearbook of Labour Statistics (Geneva, ILO).
- Informe RELASUR (1995a) Las relaciones laborales en Uruguay, Colección Informes OIT 42 (Madrid, Ministerio de Trabajo y Seguridad Social).
- Informe RELASUR (1995b) Las relaciones laborales en el Cono Sur. Estudio comparado, Colección Informes OIT 44 (Madrid: Ministerio de Trabajo y Seguridad Social).
- Iturraspe, F. J. (1993) Intervención del Estado y autonomía en las relaciones colectivas de trabajo en Venezuela, in: O. Ermida Uriarte (Coord.) Intervención y Autonomía en las Relaciones Colectivas de Trabajo (Montevideo, Fundación de Cultura Universitaria).
- Katz, H. C. (1993) The decentralization of collective bargaining: a literature review and comparative analysis, *Industrial and Labor Relations Review*, 47(1), pp. 3-22.
- Landesmann, M. (1992) Industrial policies and social corporatism, in: J. Pekkarinen, M. Pohjola & B. Rowthorn (Eds), *Social Corporatism: a superior economic system?*, pp. 242-279 (Oxford, Clarendon Press).
- Londoño Botero, R. (1989) Trade unions and labour policy in Colombia, 1974-1987, in: E. C. Epstein (Ed.), Labour Autonomy and the State in Latin America, pp. 101-132 (Boston, Unwin Hyman).
- Marshall, A. (1995) Regímenes institucionales de determinación salarial y estructura de los salarios, Argentina (1976-1993), *Desarrollo Económico*, 35(138), pp. 275-288.
- Ministerio de Trabajo y Seguridad Social (MTSS) (1996) Boletín de Estadísticas Laborales, Buenos Aires, II Semester.
- Organización Internacional del Trabajo (OIT) (1995) Relaciones de trabajo en Venezuela, Serie Relaciones de Trabajo, 79 (Geneva, ILO).
- OIT (1996) OIT INFORMA, Panorama Laboral '96, 3 (Lima, OIT).
- Pohjola, M. (1992) Corporatism and wage bargaining, in: J. Pekkarinen, M. Pohjola & B. Rowthorn (Eds), Social Corporatism: a superior economic system?, pp. 44-81 (Oxford, Clarendon Press).
- Rodríguez, J. M. (1996) Efectos de la desregulación, la apertura y la reconversión en las relaciones laborales en Uruguay, in: J. B. Figueiredo (Comp.) Las Instituciones Laborales frente a los Cambios en América Latina, pp. 141-154 (Geneva, ILO).
- Rowthorn, B. (1992) Corporatism and labour market performance, in: J. Pekkarinen, M. Pohjola & B. Rowthorn (Eds), *Social Corporatism: A Superior Economic System?*, pp. 82–131 (Oxford, Clarendon Press).
- Sabóia, J. (1996) Política salarial no Brasil: o Estado e os agentes sociais, in: J. B. Figueiredo (Comp.), Las Instituciones Laborales frente a los Cambios en América Latina, pp. 287-298 (Geneva, ILO).
- Supervielle, M. & Gari, G. (1995) El Sindicalismo Uruguayo. Estructura y Acción (Montevideo, Fundación de Cultura Universitaria).
- Tarling, R. & Wilkinson, F. (1982) Changes in the inter-industry structure of earnings in the post-war period, *Cambridge Journal of Economics*, 6(3), pp. 231-248.
- Teague, P. (1995) Pay determination in the Republic of Ireland: towards social corporatism?, British Journal of Industrial Relations, 33(2), pp. 253-273.
- Urrea, F. (1993) Nuevas tecnologías, modernización empresarial y estilos de relaciones industriales, in: R. Dombois & L. Pries (Eds) *Modernización Empresarial: Tendencias en América Latina y Europa*, pp. 114-128 (Caracas, FESCOL/Editorial Nueva Sociedad).
- Villavicencio Ríos, A. (1993) Intervención y autonomía en las relaciones colectivas del trabajo en Perú, in: O. Ermida Uriarte (Coord.) *Intervención y Autonomía en las Relaciones Colectivas de Trabajo* (Montevideo, Fundación de Cultura Universitaria).

Walsh, J. (1995) Convergence or divergence? Corporatism and the dynamics of European wage bargaining, *International Review or Applied Economics*, (2), pp. 169-189.

Yépez del Castillo, I. & Bernedo Alvarez, J. (nd) La Sindicalización en el Perú (Lima, Fundación F. Ebert/Pontificia Universidad Católica).

Zapata, F. (1989) Labor and politics: the Mexican paradox, in: E. C. Epstein (Ed.), Labour Autonomy and the State in Latin America, pp. 173-193 (Boston, Unwin Hyman).

Zazueta, C. & de la Peña, R. (1984) La Estructura del Congreso del Trabajo: Estado, Trabajo y Capital en Mexico (Mexico, Fondo de Cultura Económica).

Zweimuller, J. & Barth, E. (1994) Bargaining structure, wage determination, and wage dispersion in 6 OECD countries, KYKLOS, 47(1), pp. 81-93.

## Appendix

Table A. Unionization rates and the labour market (percent). Selected Latin American countries

	Unionization	Informal sector,* 1990	Urban unemployment rate**			
	rate manufacturing		1985	1990	1995	
Argentina	$66^{1982-86}$	32.6	6.1	7.5	17.5	
Brazil	34 <sup>1986</sup>	28.0	5.3	4.3	4.6	
Chile	22 <sup>1985</sup>	31.7	17.0	7.4	6.6	
Colombia	8 <sup>1984</sup>	31.3	13.8	10.5	8.8	
Mexico	$34^{1978}$	36.0	4.4	2.8	6.3	
Peru	54 <sup>1982a</sup>	40.4 <sup>a</sup>	10.1	8.3	7.9	
Uruguay	$31 - 72^{1987b}$	nd	13.1	9.2	10.8	
Venezuela	20 or over <sup>c</sup>	26.2	14.3	10.5	10.9	

<sup>\*</sup>Non agricultural self employed and unpaid family workers (excluding technical, administrative and professional workers), plus domestic service, in non agricultural employment.

Sources: Allen & Labadie (1994); Camargo & Amadeo (1993); Cassoni et al. (1994); Feldman (1991); Londoño Botero (1989); OIT (1995); OIT (1996); Yépez del Castillo & Bernedo Alvarez (nd); Zazueta & de la Peña (1984).

<sup>\*\*</sup>The number of cities on which unemployment surveys are based varies across countries. In Chile non-urban unemployment is included.

aLima.

<sup>&</sup>lt;sup>b</sup>Varies according to industry (100 percent in the oil sector); no average is available (Cassoni et al., 1994, p. 56).

<sup>&</sup>lt;sup>c</sup>Details in OIT (1995).

Table B. Wage dispersion across manufacturing industries. Selected Latin American countries. Coefficient of dispersion (standard deviation/average)

	ILO 1986–87	ILO 1993–94	UNIDO 1973	UNIDO 1979/80	UN 1980	UN 1990–91
Argentina	0.26	0.26	(41)° 26° ab	(45)° 21°	(0.42)° 0.21°	0.36 0.29ª
Brazil	nd	nd	31	29	0.35	0.41
Chile	0.38	0.35	20	30	0.31	0.39
Colombia	nd	nd	27	24	0.25	0.30
Mexico	0.20	0.24	34	37	0.33	0.35
Peru	0.34	0.50	nd	nd	0.28	0.38 <sup>d</sup>
Uruguay	nd	nd	nd	29	0.29	0.33
Venezuela	nd	nd	23	25	0.23	0.36 <sup>e</sup>

Note: The coefficients of dispersion provided by UNIDO for 1973 and 1979/80 are estimated in a slightly different manner, and cannot be compared with my own estimates in the other columns.

ILO: earnings per hour except Peru (per day) and Chile (per month), current prices; between 22 and 28 manufacturing industries, depending on the country

UN/UNIDO: earnings per employee (current prices, in dollars); 22 manufacturing industries.

Sources: Own estimates on the basis of ILO (several years) Yearbook of Labour Statistics (Geneva, ILO); UNIDO (1988) and (1992) Handbook of Labour Statistics (Vienna, UNIDO); UN (1995) International Yearbook of Industrial Statistics. For 1973 and 1979, UNIDO (1984) Handbook of Industrial Statistics.

Table C. Comparative wage rankings in manufacturing, 1980 and c. 1990-91. Selected Latin American countries, average earnings across 22 manufacturing industries. Spearman (rank) correlation coefficients (top, 1980; bottom, c. 1990-91)

	Argentina <sup>a</sup>	Brazil	Chile	Colombia	Mexico	Peru	Uruguay	Venezuela
Argentina	1.00	0.77	0.72	0.66	0.62	0.69	0.48	0.79
Aigentina	1.00						0.48	
		0.91	0.80	0.78	0.88	0.82		0.80
Brazil		1.00	0.75	0.70	0.90	0.83	0.54	0.72
			0.79	0.79	0.92	0.79	0.83	0.74
Chile			1.00	0.73	0.68	0.83	0.58	0.74
				0.68	0.69	0.70	0.70	0.72
Colombia				1.00	0.79	0.81	0.66	0.82
					0.75	0.88	0.89	0.84
Mexico					1.00	0.80	0.60	0.73
						0.75	0.75	0.67
Peru						1.00	0.44	0.78
							0.83	0.82
Uruguay							1.00	0.67
								0.84
Venezuela								1.00

<sup>&</sup>lt;sup>a</sup>See note c in Table B.

Source: own estimates based on UNIDO (1992) Handbook of Industrial Statistics (Vienna, UNIDO); UN (1995) International Yearbook of Industrial Statistics (wages per employee, current dollars).

<sup>&</sup>lt;sup>a</sup>Estimates based on data from national sources (earnings), INDEC, Encuesta Industrial. <sup>b</sup>1975.

<sup>&</sup>lt;sup>c</sup>UN data on Argentina for 1980 and earlier might be not accurate, as they ceased to be published by UNIDO after 1988.

<sup>&</sup>lt;sup>d</sup>1987. e1992.

Table D. Wage rankings in manufacturing: comparison over time in each country. Selected Latin American countries, average earnings across industries. Spearman (rank) correlation coefficients

	1986/7-1993/4*	1980-c.1990/1**
Argentina	0.75	0.79 <sup>a</sup>
Brazil	nd	0.96
Chile	0.92	0.92
Colombia	nd	0.96
Mexico	0.57	0.93
Peru	0.64	0.94
Uruguay	nd	0.63
Venezuela	nd	0.89

asee note c in Table B.

Sources: Own estimates on the basis of ILO (several years) Yearbook of Labour Statistics (Geneva, ILO); UNIDO (1988) and (1992) Handbook of Labour Statistics (Vienna, UNIDO); UN (1995) International Yearbook of Industrial Statistics.

<sup>\*</sup>Data from ILO, for 22 to 28 manufacturing industries, depending on the country.

<sup>\*\*</sup>Data from UN/UNIDO, for 22 manufacturing industries.