Migration and labour market precariousness in Latin America. A cross country comparative analysis[1]

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Abtract

The persistent economic development gap among countries in Latin America has led to structural conditions that explain, at least in part, the continuing inflow of regional migrants to countries such as Argentina, Chile and Costa Rica. However, the insertion of regional migrants in these labour markets is significantly more precarious than that of the natives, a situation that is expressed through a very high percentage of workers not covered by social security system, unprotected by human rights and obtaining very low wages.

The aim of this study is to analyse in depth the current working conditions of regional migrants living in Argentina, Chile and Costa Rica –which are among the most important recipient countries in Latin America-, compared to the insertion of native workers in these labour markets. Data used in this paper come from regular household surveys of each country considered: Encuesta Permanente de Hogares (Argentina), Encuesta de Caracterización Socioeconómica Nacional (Chile), and Encuesta de Hogares de Propósitos Múltiples (Costa Rica).

The results suggest the presence of a strong occupational segregation, where the majority of migrants carry out tasks in a reduced set of productive sectors. In the same way, regional migrants –men as well as women- suffer a higher level of job precariousness than natives, where between 30% and 40% of foreigners have jobs that are not registered in the social security system. In part, this situation is explained by the sector of activity in which migrants work, mainly in domestic service and construction. At the same time, the migratory condition is very relevant in explaining labour income gaps between natives and migrants.

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Introduction

International migration is a phenomenon of growing importance worldwide, given that movements of people produce significant economic, social, demographic and cultural effects in both sending and receiving countries. Sharp disparities in levels of economic development and unequal employment opportunities between countries, political instability and social violence are the most important expulsion and attraction factors influencing migration throughout the world.

Nevertheless, although the international mobility of skilled people who own large stock financial capital is currently high –a situation favoured by loose restrictions on migration for these groups-, the same cannot be said for poor, less educated workers who frequently face situations of exclusion and marginalization, often reinforced by the migration policies of certain countries.

In the analysis of international movements of people Argentina is a relevant case, not only because international migration has been a central component of Argentine nation-building and development, but also because the country switched from being a net receiving country of European migratory flows from the late 19th Century until the mid-1950s to becoming a net expeller –especially of skilled workers- in the last quarter of the 20th Century. This flow reversal was associated with the downturn in the Argentine economy following World War II –which set Argentina back in relation to other, better-performing economies- jointly with major political instability throughout the country's history. However, Argentina's development gaps when compared to other countries in the region have shaped structural conditions which explain the persistence of migrant inflows from Latin America, mainly from Bolivia, Paraguay and Peru, countries that are still in recessive phases similar to Argentina in the second half of the nineties. At present, faced with the disappearance of migrants from Europe –especially Italy and Spain- regional migrants constitute the vast majority of foreigners living in Argentina.

Chile is also an interesting country to analyse from an international migration standpoint. As in the case of Argentina, Chile has been through different stages of entries to and exits from the country. Particularly, a first migratory wave from Europe can be observed between the end of the 19th and beginning of the 20th century. However, in a similar way to Argentina,

after the Second World War, and thanks to the European recovery, these flows were drastically weakened at the same time as flows from other countries in the Latin America became more evident. This change in origin happened at the same time as migratory outflows of Chileans, who especially moved to developed countries such as the United States or some European countries. Currently, Argentina, Bolivia and Peru and to a lesser extent Ecuador and Colombia, are the most important sending countries –in quantative terms-.

International migratory flows are also of particular interest in Costa Rica as it has the highest percentages of international immigrants in the region. Costa Rica registers both temporary entries associated with harvest seasons –these are mainly people from neighbouring countries- and more stable international migratory inflows. The most numerous contingent comes from Nicaragua, although Colombia and Panama are also important sources of migrants. At the same time, as in the two previous cases, Costa Rica also registers exit flows of natives to the exterior, especially to the United States.

Argentina, Chile and Costa Rica, therefore, are receiving countries for a significant group of migrant flows from Latin American countries and the Caribbean. The working and economic conditions in these countries, which are relatively more favourable than in their countries of origin seem to be some of the factors that explain the persistence of these movements. However, the insertion of regional migrants in these labour markets seems to be more precarious than that of the natives, a situation that is expressed through a very high percentage of informal workers, not covered by a social security system, unprotected by human rights. Additionally, migrants usually take jobs that are not attractive to native workers, such as domestic services or construction. The informality situation also means the impossibility of accessing health services, unemployment benefits, paid holidays and the benefits of a pension in the future. For this reason, although the employment possibilities and income that the immigrants receive in these countries could be higher to those that they could access in their countries of origin, this does not mean that their labour insertion is satisfactory given the degree of job and income instability that they experience. The illegal situation in which a high percentage of immigrants are in tends to favour their acceptance of unprotected working conditions and payment below the established legal minimum.

The aim of this paper is to analyse in depth the working conditions of regional migrants living in Argentina, Chile and Costa Rica, compared to the insertion of native workers in these

labour markets. The degree of informality, job segregation and income discrimination will be especially studied from a comparative perspective among these countries.

The document is organized in six sections. Section 1 shows a brief overview of international migratory flows in the three countries under study. Section 2 describes the sources of information used. Section 3 details the different econometric methodologies used in the evaluation of the presence of occupational segregation and in the analysis of wage discrimination. Section 4 presents the descriptive and econometric results associated with the labour insertion of natives and migrants while section 5 presents the results associated with the existence of wage gaps between these two groups of workers. Finally, section 6 contains the main conclusions of the study.

1. An overview of the international migration flows in Argentina, Chile and Costa Rica

As mentioned, Argentina, Chile and Costa Rica are interesting cases from the perspective of migratory movements to and from these countries. In the case of Argentina, this is not only because international migration has been a central element in its nation-building and development, in the growth of the population and in the shaping of the Argentine workforce, but also because the country switched from being a net receiving country of migratory flows from the end of the 19th Century until the mid-1950s to becoming a net expeller of migrants, especially skilled workers, in the last quarter of the 20th Century.

The great migratory flows from Europe occurred between 1870 and 1929. The crisis of the 1930s and World War II had a negative impact on the volume of these flows. After the war ended, there was a second –and last– wave of European migration, but not as intense as the first. Lattes and Recchini de Lattes (1995) estimate that about 5.3 million people arrived in Argentina between the end of the 19th Century and 1970, representing almost 40% of the total net migration of Latin America and the Caribbean over that period.

Since the mid-20th Century, along with the decline in flows from abroad, the composition of the foreign resident population in Argentina also changed, with natives of neighbouring countries becoming the majority. While this process was turning Argentina into the *nucleus of a regional subsystem of Southern Cone migration* (INDEC, 1997), the flow of Argentines leaving the country –especially skilled workers- was also growing, the majority going to the

United States, Spain, Italy and Canada. This reversal of the migratory flows was associated with the downturn in the Argentine economy following World War II, which implied a setback in relation to other better-performing economies. These different stages of development were accompanied by severe political instability under alternating military and democratic governments, which also had a significant impact on the direction and intensity of the migratory flows.

In particular, since the mid-1950s a new process began in Argentina. This was characterized by an increase in the entry rates of immigrants from neighbouring countries, especially Paraguay, Chile and Bolivia. These flows, however, were not new; historically, contingents of these immigrants had settled in rural areas of the Argentine provinces bordering on their home countries and had taken on many of the jobs left by natives of these provinces who moved to the cities as part of the process of import substitution industrialization. In a second phase, these immigrants began to reorient their destination within Argentina, moving toward urban areas, especially toward the City of Buenos Aires and its metropolitan area.[3]

The migratory dynamic of these groups has been directly linked to the different stages of economic development and changing political situations in their countries of origin. These flows have also been affected by migration policy in Argentina. However, beyond certain socio-economic junctures that may favour or retract the flows entering Argentina, for some countries in the region, emigration to Argentina has been a recurring phenomenon at higher or lower rates depending on different phases of political, social and economic development. Income gaps between Argentina and other countries in the region have created structural conditions that explain the persistence of migrant flows from within the region, fundamentally from Bolivia and Paraguay, even during the recessive phase of the cycle, such as the second half of the 1990s. The consolidation of a regional labour market, the presence of networks set up during previous flows, development differentials favouring Argentina, reasonable network of basic social services (education and health), and the existence of sector niches in the labour market for the migrant population, seem to be the most important attraction factors that have made Argentina one of the major migrant receiving countries in Latin America (CELADE, 1998).

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[3] Includes the City of Buenos Aires and surrounding municipalities in Buenos Aires Province.

The Chilean migratory dynamic has several things in common with Argentine dynamic. The first migratory wave corresponds to the flows from Europe registered between the end of the 19th and beginning of the 20th Century (1870-1913). These movements were produced in the context of free mobility under the gold standard system and the high mobility of the labour force between countries (Solimano and Watts, 2005). As in Argentina, extensive uninhabited land together with the favourable economic conditions became important attraction factors for individuals living in European countries. However, Chile didn't experience the great numbers of migrant inflows from the old continent as Argentina did.

Over the second half of the 20th Century, Chile started to receive flows mainly from Latin America which were verified together with the deceleration and practical extinction of movements from Europe. Added to this was the exit of Chileans to other countries, mainly the United States, especially from the beginning of the eighties onwards (Solimano, 2003). Also in that decade Chile registered an acceleration of foreign flow entries into the country, reverting the process of reduction on the total number and the percentage of the total population that they represented between 1950 and 1980 (Solimano and Tockman, 2006). The change in the composition of the movement of people entering the country meant that in the 1960's those born in Europe represented around 60% of total immigrants, a value that lowered to 17% in 2002 at the same time that regional migrants accounted for 70% of the non-native population in Chile.

Chilean exit flows to other countries intensified toward the end of the seventies, to then slow down, especially in the nineties. This was associated with economic and political factors. Particularly, the majority of emigrants left the country in the seventies as a result, at least in part, of political events and, specifically the coup d'état in 1973. The intensity of the exits lessened in the eighties and especially in the nineties with the return of democracy in 1989 and the improvement of the macroeconomic context.

However, according to Solimano y Tockman (2006), in 2002 the number of Chilean emigrants was greater than the number of immigrants living in the country. While immigrants in Chile represented 1.2% of the population, Chileans living abroad reached 3%, resulting in a positive net emigration of around 2%. Chilean emigrants are mainly living in Argentina, with the United States as second in the list of receiving countries. Australia, Sweden, Brazil and Venezuela are other destinations for Chileans. Currently, immigrant contingents in Chile are

mainly from Argentina (26%), Peru (21%), Bolivia (6%) and Ecuador (5%). For this reason, migratory flows between Argentina and Chile are historically –and continue to be- very close given that the Argentines constitute the most numerous group of foreigners in Chile and for Chileans, Argentina is the most important receiving country.

Costa Rica, in the same way as Argentina, is a net international migrations receiving country. Moreover, of the three countries under study, it is the country that registers the highest percentage of foreign population residing in the country, where in the year 2000 these represented approximately 8% of the total population (Morales Gamboa, 2008). In the case of Argentina, whose long migratory history has already been mentioned, the percentage of foreigners living in the country is only 4%. In Chile, foreigners represent about 1.3% of the total population.

The importance of foreigners in Costa Rica is explained in part by the strong acceleration that the entry flows experienced in the nineties, as a result of the increase in Nicaraguan entries, especially in the second half of that decade. Economic and political conditions are more favourable in Costa Rica than in other Central American countries, and its geographical position which has turned the country into a passage for migratory flows, are reasons that seem to explain, at least in part, the growth of foreign entry flows to the country. According to Acuña González (2005), different processes converged in the nineties to generate greater employment opportunities for foreigners in the country. On the one hand, in rural areas, agricultural export activities require a labour force in the production sectors of coffee, banana, sugar and other non-traditional agricultural products. On the other hand, in urban areas, services associated with tourism, domestic service, security and construction seem to be sectors that have been energized since the nineties and employment opportunities have been opened up to the migrant population. In addition, some expulsion factors are important, such as the structural adjustment process in Nicaragua during the nineties in a complex political climate, together with natural disasters.

Currently, Nicaraguans represent approximately 75% of the total of foreigners living in Costa Rica. Other groups have also begun to grow, for example, Panamanians and Colombians. However, in parallel with this process of receiving foreigners, Costa Rica has also sent natives towards countries in the north, specifically the United States and Canada.

To summarise, the three countries under study are interesting cases to analyse from the perspective of international migration because they are important "poles of attraction" of exit flows in other countries in the region. In Argentina and Chile, these are mainly from South America while in Costa Rica they are mainly from Central America.[4] In all cases, these migratory flows are mainly made up of individuals of working age, which indicates that employment is the most important motive when making the decision to migrate. The comparative analysis of opportunities and restrictions that regional migrants face in the destination countries is therefore relevant in the evaluation of the existence of significant gaps in social and working conditions between foreigners and natives. This is the main objective of this study.

2. Source of information

Data used in this paper come from regular household surveys of each country considered. In particular, the following household surveys were used:

- Argentina. Encuesta Permanente de Hogares (EPH). IV quarter 2010.
- Chile. Encuesta de Caracterización Socioeconómica Nacional (CASEN). 2009.
- Costa Rica. Encuesta de Hogares de Propósitos Múltiples (EHPM). 2008

One of the most significant characteristics in the Latin American labour market is informality, associated with the lack of registration of wage-earners in the social security system. In particular, non- registered employees are those wage earners not covered by labour legislation. The empirical identification of the wage earners' registration condition in each of these countries was based on the availability of information derived from these data-bases. In Argentina, a wage earner is considered as registered in the social security system if his/her employer pays social security contributions. In Chile a wage earner is considered as registered if he/she has signed a labour contract. In Costa Rica, registered workers are those who are affiliated to a social security system.
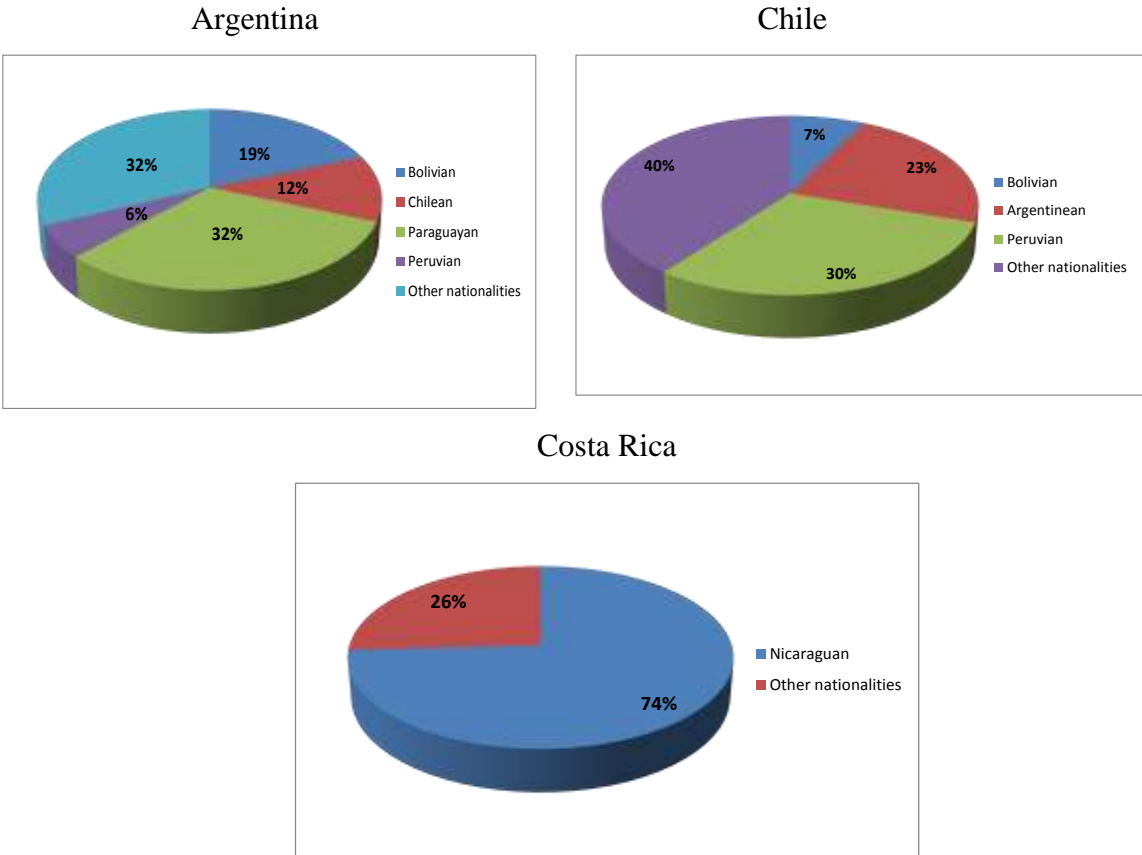
Taking into account the relative importance of certain groups of immigrants in each of these countries, the study will focus on evaluating the similarities and differences in insertion into

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[4] For further details about the regional migration in Latin America, see, for instance, Martinez and Villa (2005), Martinez (2003).

the labour market, and the generation of income between natives and regional migratory groups that have significant quantitative importance in each of these receiving countries. For this reason, in Argentina the analysis will be focused on individuals that come from Bolivia, Chile, Paraguay and Peru[5]; in the case of Chile, immigrants from Argentina, Bolivia and Peru will be considered while in Costa Rica the comparison will be made only with those who emigrate from Nicaragua. In the graphs below the significant importance of each of the regional immigrant groups in the receiving countries can be observed.

Graph 1

Percentage distribution of immigrants according to country of origin

Argentina

Chile

Costa Rica

Source: Own elaboration based on data from Household Surveys

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[5] Although the relative importance of Uruguayans in Argentina is similar to that of Peruvians, around 6% of total immigrants in the country, Peruvians account for a strong growth of entry flows in the nineties.

3. Methodology

The analysis conducted in this paper is structured in two major parts. In the first, the objective is to analyse the labour insertion of regional migrants in countries under study in comparison with natives. For this, as well as carrying out labour insertion analysis in terms of occupational category –the difference between registered wage earners (formal workers), non-registered wage earners (informal workers), own-account workers, employers and unpaid family workers-, the degree of occupational segregation will be studied, measured through the concentration of workers in certain activity sectors. This analysis will at the same time be complemented with econometric estimations that allow for evaluation of whether the nationality of workers has a significant role in different employment possibilities. In particular, different Multinomial Logit regression will be carried out.

In the second part, the aim is to estimate income gaps associated with migration. To do this, several parametric and non-parametric methods will be applied in order to give greater robustness to the results. Each of these methods is described in detail below.

1. First, average wage gaps between migrants and natives are estimated by using Mincer Equations by OLS regression. This is the most common approach when analysing the effect of one independent variable on labour income, while controlling for the rest of the covariates. In the case that matters in this study, the coefficient of the variable that identifies migration quantifies its independent impact on wage determination. The estimates are corrected for the sample selection bias using Heckman Two Step Estimator.

2. OLS estimates the effects of covariates only at the centre of the conditional distribution. However, it is relevant to identify the impact of the covariates along the entire conditional distribution of income. To do that, Quantile Regression Model (QR) [6] is applied from which it is possible to evaluate whether wage gaps remain constant, grow or decrease along the conditional distribution. These estimates are also corrected by the sample selection bias.

3. From the estimates of wage equations, the Oaxaca-Blinder Decomposition Method allows for the decomposition of average income gaps between migrant and native workers into three

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[6] Koenker and Bassett (1978).

effects: the "Endowments effect", which is the part of the differential derived from the differences in the vector of characteristics of each group; the "Coefficient effect", which corresponds to the differences in the returns to those attributes; and the "Interaction effect". The discrimination hypothesis is verified if the second effect is statistically significant and negative, thus indicating that, given equal attributes, a migrant worker gets a lower wage than a native worker. These estimates are also corrected by the sample selection bias.

4. Finally, the Matching Estimator Method is used as a non-parametric way to estimate the impact of the migrant condition on labour income. The parameter of interest is the Average Treatment Effect on the Treated (ATT), which is defined as:

$$\theta_{ATT} = E(\tau \mid D = 1) = E[Y(1) \mid D = 1] - E[Y(0) \mid D = 1] \quad [2]$$

where $E[Y(1) \mid D = 1]$ is the expected value for the treated group given that it was under treatment, and $E[Y(0) \mid D = 1]$ is the expected value for the treated group had it not been treated.

Given that this counterfactual situation is not observed, it is necessary to resort to an alternative method in order to estimate the ATT. The most accurate way to identify what would have happened to the group under treatment had it not been treated, is by considering the situation of the non-treated individuals with equal (or similar) characteristics (control group). One of the methods used to build the control group is the Propensity Score Matching Estimator,[7] in which the propensity score of participation for the whole sample is estimated and the individuals of the treated group and the control group with similar scores are matched. In the case we are analysing, migrant workers are considered to be the treated group, whereas natives are the control group.

There are different ways to determine which individuals in the control group will be the counterpart of the group under treatment. One of them, used here, is the Kernel Estimator in which the outcome of the treated individual is associated with a matched outcome given by a kernel-weighted average of the outcome of all non-treated individuals. The ATT is estimated as follows:

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[7] Developed by Rosenbaum and Rubin (1983).

$$ATT = \frac{1}{N_n} \sum_{i \in n} \left(w_i - \sum_{j \in f} \kappa_{ij} w_j \right) \quad [3]$$

where w_i and w_j indicate the wage of each formal and informal worker, respectively, κ_{ij} is the Kernel and N_n is the quantity of informal workers.

4. Labour conditions of migrants in Argentina, Chile and Costa Rica: informality and labour segregation

A first dimension to analyse native and immigrant labour insertion is the employment and unemployment rates that each of these groups register. In this regard, it is interesting to note that the migrants as a whole do not face greater difficulties than natives when finding employment given that the unemployment rates for migrants are the same (Argentina and Costa Rica) or, in fact lower (Chile) than for the natives (Graph 2).

Graph 2

Unemployment rates for natives and migrants

Argentina, Chile and Costa Rica
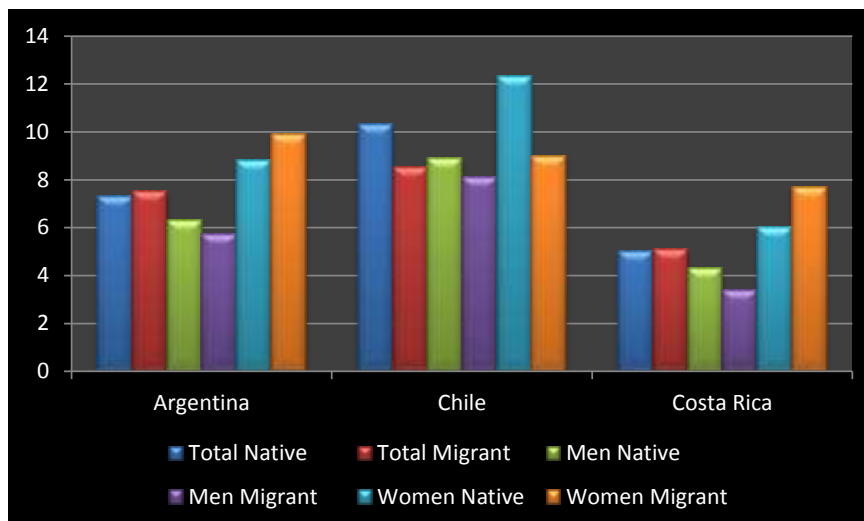
Source: Own elaboration based on data from Household Surveys

However, this general outlook averages out different situations between men and women. Particularly, in the men's case, it replicates the fact that migrants experience lower unemployment rates in the three countries. This is not the case for women, where, except for

Chile, unemployment is higher among migrants than among natives. In all cases, women experience greater difficulties than men when getting a job. This gap is clearly higher in the case of migrants than in that of natives: while native women register an unemployment rate that is approximately 30% higher than with men, this percentage rise to 70% (Argentina) or more than double for migrants (Costa Rica). In short, in Argentina and Costa Rica, foreign women constitute the group with the greatest incidence of unemployment while in Chile it is made up of native women (Graph 2).

Nevertheless, it is the quality of jobs that migrants get the dimension that establishes a greater gap in relation to natives. In particular, occupations that foreigners obtain in the three countries –men as well as women- present a significantly higher degree of precariousness than in the case of natives. Whilst around 50% of employed natives in Argentina have jobs registered in the social security system (formal jobs) this value is reduced to 35% in the case of migrants (Table A.1). On the other hand, these are over-represented among the non-registered wage earning jobs (informal jobs) –where the gap between both groups is approximately 10 p.p. (37% vs. 26%)– and in the own account occupations. In Chile the outlook is similar, although the magnitude of the gap is significantly lower than in Argentina: 59% of natives are registered wage earners (17% as non-registered), while 54% of migrant workers are registered (26% as non-registered). Lastly, in Costa Rica, 53% of natives and 42% of migrants are formal wage earners while 20% and 37%, respectively, are informal workers.

Therefore, these data show that in these countries between 30% and 40% of migrant workers are neither covered by the social security system nor by labour legislation and institutions such as the minimum wage or collective bargaining. If we add to this value the percentage of own account workers –who in the vast majority are non-professionals-, approximately 60% of migrant workers living in Argentina are not in the social security system while this value is 42% in Chile and 53% in Costa Rica, suggesting a very high level of job precariousness among migrant workers in these three receiving countries.

This situation could be linked, at least in part, to the sector of activity that migrants are involved in, which could have a greater degree of informality. In relation to this, immigrants are concentrated in a reduced group of productive sectors. In Argentina, for example, male

immigrants are over-represented in construction activities which accounts for a quarter of total employment, clearly exceeding the 14% registered for natives; 25% work in retail and around 29% in manufacturing activities, particularly textile and confection sectors (Table A.2). This structure reflects historic patterns of labour market insertion that these groups have experiences in the country.[8] The degree of occupational segregation is even greater for women, given that approximately 42% of migrants work in domestic service –compared to 16% of natives-, 24% in retail and around 10% in textile activities (Table A.2). As with the men, these three activities account for around 80% of non-native women's jobs.[9]

In Chile, labour market insertion of migrant males is mainly in commercial activities (24% versus 17% of natives), transport (23% versus 11%), construction (13% versus 14%) and other sectors which include agricultural activities (17% versus 26%). While these sectors account for 80% of total male migrant employment, only 68% of native workers are included in these sectors. As in Argentina, domestic service represents the main source of work for migrant women concentrating around 40% of total employment (14% among natives), followed by retail which accounts for 20% (28% for natives). On the other hand, migrants, in relation to natives, are under-represented in the public sector (similar to the situation in Argentina) and in personal services (including education and health activities). Lastly, in Costa Rica, 80% of migrant males work in construction (30%), and in retail (15%) or in other activities, including agriculture (34%). Nicaraguan women mainly work in two activities: domestic service (39%) and retail (31%).[10]

This could indicate, therefore, that in all cases, in addition to labour segregation that the group of women experiences, there is another factor associated to their migrant status, a combination that derives in a great reduction in the spectrum of possibilities that they have in these destination countries.

In the same way, as much in Argentina as in Chile, this general outlook averages out dissimilar situations according to the worker's country of origin. In the case of men living in Argentina, construction concentrates a high percentage of employment in almost all cases. However, this is even more so for Paraguayans. Bolivians also work in textile and retail

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[8] Marshall (1977), Marshall and Orlansky (1983).
[9] A detailed analysis of labour conditions of migrants according to their nationality is presented in Cerrutti (2009); Cerrutti and Maguid (2007).
[10] The results for Costa Rica are consistent with those found by Marquette (2006).

activities. Peruvians mainly work in retail. Women are concentrated in domestic services, a scenario that is verified in all groups of foreigners (in fact, in all cases it is the main insertion for migrant women), although with differing intensities. For Paraguayan women, this activity accounts for approximately 50% of total employment, while this figure is 41% in the case of Peruvian women.

In Chile the labour situation of migrants also differs significantly between Bolivians, Peruvians and Argentineans. The importance of retail and construction in the employment of these groups is mainly explained by the insertion of Peruvians for whom these activities account for, respectively 35% and 18% of total employment. On the other hand, almost half of male Argentineans work in transport activities while Bolivians work mainly in rural activities (representing almost 50%), and in manufacturing. The relevance of domestic service for migrant women is exclusively due to the insertion of Peruvian women where around half carry out this type of work. Bolivian women mainly work in rural activities and retail, while Argentinean women also work in retail and in service activities. So, the panorama of migrant workers in Chile in relation to the sector of activity seems to be more heterogeneous than in Argentina.

The more concentrated and precarious labour insertion for migrants compared to natives could also be associated with certain personal characteristics such as, for example, the level of education. In relation to this, it is interesting to note that in Argentina and Costa Rica non-native workers have a lower level of education than natives, which is the opposite case in Chile (Table A.3). At the same time, in the first two cases levels of schooling are higher among women, as much for natives as for migrants; in Chile, this only occurs among natives, a phenomenon which means that the greater level of schooling of migrants in relation to non-migrants reflects exclusively what happens among males.

Up to here results that arose from the descriptive analysis of each separate dimension have been presented, which suggest a greater degree of informality and labour concentration among migrants. However, it is also relevant to analyse to what extent this scenario reflects a real phenomenon of occupational segregation of migrants or, on the contrary, if it is associated with the individual characteristics of these groups. Particularly, it is interesting to evaluate if the migrants, with the same personal characteristics and jobs have less probabilities of a social security registered position, *vis a vis* other occupations. Multinomial Logit regressions shown

in Table A.4 allow for evaluation of these alternatives. In all cases, the baseline category is made up of these workers –formal wage-earners-. Therefore, a negative sign of the coefficients indicates a greater probability of being a registered wage-earner *vis a vis* other kinds of occupational insertion. These regressions, alternatively, include or excluded the sector of activity.

As shown, in all countries, excluding the sector of activity, migrants have less probability of becoming formal wage-earners than natives mainly due to the fact that they enter the labour market with greater chances in an informal wage earning position not registered in the social security system. In Argentina and Chile, this is also due, although to a lesser extent, to the greater probabilities that migrants have of working in a non-wage earning job (Table A.4). This therefore shows that foreigners have greater job precariousness in the labour market in the three receiving countries.

However, when a sector of activity is incorporated as a covariate in regressions, the coefficients of the variable that identifies the migratory condition change significantly (Table A.4). In particular, the relative risk of being an informal worker for migrants compared to natives is greatly reduced in the three countries and in Argentina the gap is no longer statistically significant. This therefore suggests that an important part or even the total of the greatest incidence of informal positions among migrants is explained by the higher concentration of this group in positions that are inherently more precarious, for example, domestic service and construction activities.

5. Labour income gaps between migrants and natives

So as to provide an overview of the income differences between natives and migrants, Table A.5 shows hourly income by educational level, according to gender and nationality, in relation to native male's earnings that make up the control group. In all cases, native males receive higher labour incomes than the three remaining groups, regardless of educational level. For example, in Argentina, among those with an incomplete university level, native women and migrant men receive salaries that are 16% and 30% less than the control group, respectively, a gap which widens even more -54%- in the case of migrant women. In Chile these values are 24%, 24% and 26% whilst in Costa Rica the gaps are 28%, 6% and 69%, respectively.

Migrant women constitute the least paid group of workers in every educational level (except for a few exceptions), a phenomenon which suggests that women are subject to double penalisation in their salaries, due to their gender as well as their nationality. However, these gaps could be explained by other dimensions that are not considered in this analysis. With the goal of taking them into account, different econometric regressions were carried out. The results obtained from the parametric and non-parametric methods detailed in section 3 are presented below. In particular, Table 1 shows the income gaps obtained from OLS method corrected for the sample selection bias using Heckman Two Step Estimator. These figures correspond to the dummy variables that identify migrants in the income equations. Dependent variable is the log of hourly incomes.

Table 1

Labour income gaps. Mincer Equations by Heckman Two Step Estimator

Hourly labour incomes

Argentina	Chile (Total)	Chile (Bolivian)	Costa Rica
-0.0768***	0.00764	-0.154***	-0.112***
[0.0250]	[0.0286]	[0.0556]	[0.0247]

Source: Own elaboration based on data from Household Surveys

A statistically significant "penalty" due to nationality is verified in Argentina and Costa Rica –around 10%- but not in Chile where no significant differences are observed.[11] However this is the net result of different situations according to the immigrant's nationalities in this country. Particularly, Argentines and Peruvians living in Chile do not seem to experience statistically significant penalties as a result of their condition as migrants, while the gap between natives and Bolivians is significant at around 14% (Table 1).

As mentioned before, OLS estimates the effects of the covariates only in the centre of the conditional distribution. For this reason it is of interest to know, additionally, the impact of the covariates along the whole conditional income distribution. To do that, QR is applied to hourly labour incomes. The results shown in Tables 2 and Graph A.1[12] suggest that the gap associated with nationality is not constant through income distribution but it is, in Argentina and Costa Rica, wider in the upper extreme. In Chile, again, no significant differences are

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[11] Torres and Celton (2009) and Cerrutti and Maguid (2007) also find a significant wage gap between Argentinean and migrants.
[12] Only coefficients that identify nationality are shown.

observed on average between natives and immigrants, but they are observed between Bolivians and Chileans, although without a clear pattern along the conditional income distribution.

Table 2

Labour income gaps. Quantile Regression

Hourly labour incomes

	q10	q25	q50	q75	q90
Argentina	-0.0486	-0.0627**	-0.0690***	-0.0727***	-0.106***
	[0.0520]	[0.0257]	[0.0231]	[0.0237]	[0.0369]
Chile	-0.0137	-0.0143	0.00379	0.000865	-0.0129
	[0.0436]	[0.0220]	[0.0157]	[0.0167]	[0.0501]
Chile (Bolivian)	-0.244	-0.175***	-0.188***	-0.141***	-0.144
	[0.149]	[0.0597]	[0.0604]	[0.0509]	[0.225]
Costa Rica	-0.0256	-0.0334**	-0.0794***	-0.0715***	-0.145***
	[0.0378]	[0.0153]	[0.0160]	[0.0150]	[0.0243]
Standard errors in brackets					
*** p<0.01, ** p<0.05, * p<0.1					

Source: Own elaboration based on data from Household Surveys

Very interesting findings arise from the decomposition of the differences of hourly incomes obtained applying the Oaxaca-Blinder procedure (Table 3).

Table 3

Oaxaca-Blinder Decomposition

Hourly labour incomes

Decomposition	Argentina	Chile (Total)	Chile (Bolivian)	Costa Rica
Endowments	0.00464	-0.0153	0.215	-0.174***
	[0.0355]	[0.0649]	[0.259]	[0.0266]
Coefficients	-0.0730***	0.00625	-0.156**	-0.0706***
	[0.0262]	[0.0313]	[0.0781]	[0.0176]
Interaction	-0.0256	0.0442	-0.300	-0.0582**
	[0.0320]	[0.0622]	[0.258]	[0.0255]
Standard errors in brackets				
*** p<0.01, ** p<0.05, * p<0.1				

Source: Own elaboration based on data from Household Surveys

First, in Argentina and Costa Rica, and exclusively in the case of Bolivians in Chile, the total difference of mean incomes is larger than that found using OLS and QR. Secondly, when this difference is decomposed in the three above mentioned components, in all cases the "Coefficient effect" is statistically significant and negative. Therefore, the discrimination

hypothesis is verified again thus indicating that, given equal attributes, a migrant worker gets a lower wage than a similar native worker.

Third, the "Endowments effect" also proves to be significant and negative in Costa Rica, but not in the other two cases. Thus, in this country, total labour income gaps between natives and migrants are explained not only because the former have a more favourable endowment vector, but also because the returns to their attributes are higher than those of migrants.

Finally, the non-parametric estimates based on the Matching Estimator Method (Table 4) are consistent with previous results and confirm again the existence of a "penalty" to migrant workers in Argentina and Costa Rica and migrants from Bolivia in Chile. Specifically, the value of the ATT is significant and negative in these cases.

Table 4

Matching Estimator Method

Hourly labour incomes

Argentina	Chile (Total)	Chile (Bolivian)	Costa Rica
-0.0291**	0.0950*	-0.00423**	-0.0333**
[0.0445]	[0.0538]	[0.140]	[0.0347]
Standard errors in brackets			
*** p<0.01, ** p<0.05, * p<0.1			

Source: Own elaboration based on data from Household Surveys

The results suggest, therefore, that migrants in Argentina, Costa Rica and those who come from Bolivia in the case of Chile are subject to wage discrimination, scenario that is confirmed by the different parametric and non-parametric estimations carried out. That is to say, controlling for a vast set of personal and job characteristics migrants obtain a significantly lower labour income than natives. Added to this is the greater incidence of non-registered –precarious- jobs among migrants, a phenomenon which as well as generating an additional way in which these workers receive less remuneration –since these jobs are not covered by labour institutions such as the minimum wage-, also impede these workers from accessing a pension in the future, annual complementary salary, and other social security benefits.

6. Concluding remarks

International migrations constitute one of the important aspects of the process of globalization and integration on a global scale. International movement is a relevant and growing issue that has economic, demographic and social impacts on the sending as well as on the receiving countries. Growing inequality in the level of development attained by the countries, and the well-being of citizens, together with the progress of communication and transport generate expulsion and attraction factors that lead to an increase in migrations worldwide.

Despite the current high international mobility for those who have a certain level of human and financial capital, a situation that is enhanced by scarce restrictions in migratory terms for those groups, this is not the case for poor and less educated workers who are frequently faced with situations of exclusion and marginalisation. These phenomena also reach their highest level in cases where, faced with institutional rigidity, immigrants are subject to a totally illegal situation. In the regional context, Argentina, Chile y Costa Rica are relevant cases since they are important receiving countries of immigrants from Latin America and Central America.

However, the better relative scenario that these countries display in comparison with sending countries in the region does not imply that workers who come from countries in the region do not face serious difficulties in labour market insertion. Particularly, a strong occupational segregation is observed, where the majority of migrants carry out tasks in a reduced set of productive sectors. In the same way, regional migrants –men as well as women- suffer a higher level of job precariousness than natives, where between 30% and 40% of foreigners have jobs that are not registered in the social security system. In part, this situation is explained by the sector of activity in which migrants work, mainly in domestic service and construction, sectors which have, in general, higher levels of labour informality. At the same time, the income equations show that, even when controlling for personal and job characteristics, the migratory condition continues to be significant in explaining income gaps between natives and migrants.

Therefore, although the job opportunities and salaries of the regional migrants are probably higher than in their country of origin, this does not imply ignoring the degree of job precariousness and vulnerability that they suffer in receiving   countries associated with

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informality, segregation and wage discrimination. The illegal situation in which a high percentage of migrants find themselves favours the acceptance of unprotected labour conditions and wages that are below the established legal minimum.

Lastly, and even though in the three countries employment formalization and wage gap reduction processes have been verified −although with differing intensity in each case- over the last few years, informality and income inequality are still important characteristics in the labour market in Latin America. In this general context, certain groups such as migrants, young people and women experience more precarious working conditions. In this situation it is therefore necessary, on the one hand, to continue with these positive processes together with real wage increases and strengthening of labour institutions; and on the other hand, implement more universal policies that tend towards protecting the most vulnerable.

Therefore, the challenge is to design protection systems based on a coherent articulation between contributory and non-contributory components. In particular, the integration of policies aimed at securing full formal employment and consolidating a framework of protective labour regulations to allow appropriate working conditions and to facilitate social integration. In addition, universal policies that provide guarantees to access to essential services and ensure appropriate income levels, including periods of unemployment and when retiring in old age.

References

Acuña González, G. (2005) "La inmigración en Costa Rica: dinámicas, desarrollos y desafíos", Proyecto Fondo OPEC-UNFPA, Costa Rica.

CELADE (1998) Boletín Demográfico N° 62

Cerrutti, M. and A. Maguid (2007) "Inserción laboral e ingresos de migrantes limítrofes y del Perú en el Área Metropolitana de Buenos Aires, 2005", Notas de la Población (CEPAL), Nº 83.

Cerrutti, M. (2009) "Diagnóstico de las poblaciones de inmigrantes en la Argentina", Serie de Documentos de la Dirección Nacional de Población, Dirección Nacional de Población, Ministerio del Interior, Argentina.

Cortés, R. and F. Groisman (2004) "Migraciones, mercado de trabajo y pobreza en el Gran Buenos Aires", **Revista de la CEPAL** Nº 82, CEPAL.

Grimson, A. (2005) "Un duro camino para los bolivianos de Argentina", NACLA.

Koenker, R. and G. Bassett (1978) "Regression Quantiles", **Econometrica**, 46, 33-50.

Lattes, A and Recchini de Lattes, Z. (1995) "Auge y declinación de las migraciones en Buenos Aires" in Jorrat, J. and Sautú, R. (comps.) **Después de Germani. Exploraciones sobre estructura social de la Argentina**, Ed. Paidós, Buenos Aires.

Maguid, A. (1990) "Argentina: migración y pobreza durante la década del 80", CREDAL, Doc. N° 21, Buenos Aires.

Marquette, C. (2006) "Nicaraguan migrants in Costa Rica", **Población y Sociedad en Mesoamérica**, vol 4, N° 1, Universidad de Costa Rica.

Marshall, A. (1977) "Inmigración, demanda de fuerza de trabajo y estructura ocupacional en el área metropolitana argentina", **Revista Desarrollo Económico,** Vol. 17 N° 65, Buenos Aires

Marshall, A. and Orlansky D. (1983) "Inmigración de países limítrofes y demanda de mano de obra en la Argentina, 1940-1980", **Revista Desarrollo Económico** Vol. 23 N° 89, Buenos Aires.

Martínez, J. (2003) "El mapa migratorio de América Latina y el Caribe, las mujeres y el género", Serie Población y Desarrollo, 44, ECLAC.

Martínez J. and Villa M. (2005) "International Migration in Latin America and the Caribbean: A Summary View of Trends and Patterns", United Nations Expert Group Meeting on International Migration and Development.

Maurizio, R. (2008) "Migración y Desarrollo. El caso de Argentina", in A. Solimano (coord.) **Migraciones internacionales en América Latina. Booms, Crisis y Desarrollo**, Sección de Obras de Economía, Fondo de Cultura Económica, Chile. ISBN: 978-956-289-065-6.

Morales Gamboa, A. (2008) "Inmigración en Costa Rica: características sociales y laborales, integración y políticas públicas", **Serie Población y Desarrollo**, No. 85, CEPAL, Santiago de Chile

Pellegrino, A. (2000) "El perfil de los uruguayos censados en la Argentina en 1991", International Organization for Migration, Buenos Aires.

Pellegrino, A. (2003) "Migración de mano de obra calificada desde Argentina y Uruguay", International Migration Program, ILO, Geneva.

Portes, A. (1997) "Immigration theory for a new century: some problems and opportunities". **International Migration Review**. Winter 1997, 1(4), p 799(27).

Rosenbaum, P. and D. Rubin (1983) "The role of propensity score in observational studies for causal effects", **Biometrika**, 70.

Solimano, A. (2003) "Development Cycles, Political Regimes and International Migration. Argentina in the Twentieth Century", Discussion Paper Nº 2003/29, WIDER.

Solimano, A. and N. Watts (2005) "International migration, capital flows and the global economy: a long run view", **Serie de Macroeconomía del Desarrollo,** No.35, CEPAL, Santiago de Chile.

Solimano, A. and V. Tockman (2006) "Migraciones internacionales en un contexto de crecimiento económico. El caso de Chile", **Serie Macroeconomía del Desarrollo**, No. 54, CEPAL, Santiago de Chile.

Torres, V. and D. Celton (2009) "Discriminación salarial en Argentina entre natiovs y paraguayos", **Cuadernos geográficos de la Universidad de Granada**, vol. 2 p. 263 – 285, España.

ANNEX

Table A.1

Distribution of workers by occupational category

Argentina (2010), Chile (2009) and Costa Rica (2008)

	Argentina		Chile		Costa Rica	
Occupational category	**Native**	**Migrant**	**Native**	**Migrant**	**Native**	**Migrant**
Registered wage earner	52%	35%	59%	54%	53%	42%
Non-registered wage earner	26%	37%	17%	26%	20%	37%
Own account	18%	23%	21%	16%	18%	16%
Employer	4%	3%	3%	2%	8%	3%
Unpaid family worker	1%	1%	0%	1%	2%	1%
Total	100%	100%	100%	100%	100%	100%

Source: Own elaboration based on data from Household Surveys

Table A.2

Distribution of workers by branch of activity

Argentina (2010), Chile (2009) and Costa Rica (2008)

	Argentina				Chile				Costa Rica			
	Native		Migrant		Native		Migrant		Native		Migrant	
Brach of activity	**Men**	**Women**	**Men**	**Women**	**Men**	**Women**	**Men**	**Women**	**Men**	**Women**	**Men**	**Women**
Manufacture	18%	9%	29%	10%	12%	8%	9%	8%	13%	12%	9%	7%
Construction	14%	1%	25%	0%	14%	1%	13%	2%	11%	1%	30%	0%
Trade	24%	21%	25%	24%	17%	28%	24%	21%	24%	26%	15%	31%
Transport	10%	2%	6%	1%	11%	3%	23%	2%	10%	3%	4%	2%
Financial services	10%	12%	5%	4%	9%	7%	5%	3%	10%	11%	7%	4%
Personal services	3%	11%	2%	6%	3%	12%	0%	8%	3%	10%	1%	3%
Domestic services	0%	16%	2%	42%	1%	14%	2%	40%	1%	13%	1%	39%
Public sector	12%	21%	6%	7%	7%	13%	7%	4%	7%	13%	0%	1%
Others	8%	7%	100%	7%	26%	14%	17%	12%	22%	10%	34%	14%
Total	100%	100%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%

Source: Own elaboration based on data from Household Surveys

Table A.3

Distribution of workers by educational level

Argentina (2010), Chile (2009) and Costa Rica (2008)

Argentina						
		Native			Migrant	
Educational level	Total	Men	Women	Total	Men	Women
Incomplete primary school or less	5%	6%	3%	10%	12%	7%
Complete primary school	19%	21%	15%	27%	27%	28%
Incomplete secondary school	16%	19%	12%	18%	18%	18%
Complete secondary school	26%	26%	25%	30%	30%	29%
Incomplete university	13%	12%	15%	7%	7%	6%
Complete university	22%	16%	31%	8%	5%	13%
Total	100%	100%	100%	100%	100%	100%

Chile						
		Native			Migrant	
Educational level	Total	Men	Women	Total	Men	Women
Incomplete primary school or less	13%	15%	11%	7%	7%	7%
Complete primary school	10%	11%	9%	10%	8%	12%
Incomplete secondary school	14%	15%	13%	7%	6%	8%
Complete secondary school	35%	35%	36%	43%	39%	47%
Incomplete university	8%	8%	8%	15%	20%	9%
Complete university	19%	16%	23%	18%	20%	16%
Total	100%	100%	100%	100%	100%	100%

Costa Rica						
		Native			Migrant	
Educational level	Total	Men	Women	Total	Men	Women
Incomplete primary school or less	15%	9%	11%	13%	8%	38%
Complete primary school	30%	22%	28%	32%	22%	23%
Incomplete secondary school	21%	19%	20%	21%	19%	21%
Complete secondary school	14%	18%	15%	14%	18%	13%
Incomplete university	5%	6%	6%	5%	6%	2%
Complete university	15%	25%	20%	15%	27%	3%
Total	100%	100%	100%	100%	100%	100%

Source: Own elaboration based on data from Household Surveys

Table A.4

Multinomial Logit regressions

Probability of being registered wage earner, non-registered wage earners o non-wage earner

Argentina

Covariates	With branch of activity		Without branch of activity	
	Non-registered wage earner	Non-wage earner	Non-registered wage earner	Non-wage earner
Migrant	0.158	0.208*	0.607***	0.449***
	[0.116]	[0.107]	[0.104]	[0.0981]
Head of household	-0.352***	-0.169***	-0.434***	0.0192
	[0.0434]	[0.0419]	[0.0390]	[0.0370]
Age	-0.185***	0.00594	-0.173***	-0.0390***
	[0.00930]	[0.00974]	[0.00839]	[0.00865]
Age*age	0.00191***	0.000443***	0.00173***	0.000745***
	[0.000111]	[0.000111]	[9.94e-05]	[9.74e-05]
Incomplete primary	0.455***	0.478***	0.516***	0.539***
	[0.0977]	[0.0978]	[0.0876]	[0.0880]
Incomplete secondary	-0.129**	-0.0147	-0.338***	-0.126**
	[0.0623]	[0.0646]	[0.0560]	[0.0589]
Complete secondary	-0.727***	-0.339***	-1.114***	-0.516***
	[0.0588]	[0.0582]	[0.0526]	[0.0525]
Incomplete university	-0.777***	-0.248***	-1.341***	-0.562***
	[0.0734]	[0.0729]	[0.0659]	[0.0654]
Complete university	-1.221***	0.0469	-2.233***	-0.859***
	[0.0783]	[0.0679]	[0.0690]	[0.0549]
Construction	1.180***	1.207***		
	[0.0814]	[0.0765]		
Trade	0.475***	0.856***		
	[0.0676]	[0.0612]		
Transport	0.536***	0.0181		
	[0.0884]	[0.0858]		
Financial services	0.232***	0.454***		
	[0.0896]	[0.0770]		
Personal services	0.0838	-0.308***		
	[0.106]	[0.0932]		
Domestic services	2.699***	-2.396***		
	[0.0905]	[0.280]		
Public sector	-1.148***	-7.887***		
	[0.0844]	[1.002]		
Others	0.291***	0.151*		
	[0.0845]	[0.0773]		
Constant	3.324***	-1.988***	4.007***	-0.349*
	[0.194]	[0.215]	[0.172]	[0.189]
Observations	22,556	22,556	22,556	22,556
Standard errors in brackets				
*** p<0.01, ** p<0.05, * p<0.1				

Source: Own elaboration based on data from Household Surveys

Chile

Covariates	With branch of activity		Without branch of activity	
	Non-registered wage earner	Non-wage earner	Non-registered wage earner	Non-wage earner
Migrant	0.234**	-0.224	0.561***	0.438***
	[0.118]	[0.139]	[0.105]	[0.0990]
Head of household	-0.304***	-0.119***	-0.402***	-0.130***
	[0.0247]	[0.0286]	[0.0213]	[0.0189]
Age	-0.116***	-0.0262***	-0.0982***	-0.0216***
	[0.00472]	[0.00573]	[0.00397]	[0.00388]
Age*age	0.00123***	0.000731***	0.00107***	0.000736***
	[5.53e-05]	[6.38e-05]	[4.65e-05]	[4.29e-05]
Incomplete primary	0.285***	-0.00711	0.363***	0.105***
	[0.0353]	[0.0402]	[0.0305]	[0.0277]
Incomplete secondary	-0.0474	0.00199	-0.105***	-0.0532*
	[0.0383]	[0.0447]	[0.0330]	[0.0302]
Complete secondary	-0.507***	-0.0887**	-0.748***	-0.469***
	[0.0346]	[0.0400]	[0.0294]	[0.0266]
Incomplete university	-0.269***	0.473***	-0.663***	-0.330***
	[0.0564]	[0.0732]	[0.0479]	[0.0462]
Complete university	-0.817***	0.781***	-1.435***	-0.967***
	[0.0523]	[0.0613]	[0.0428]	[0.0350]
Construction	0.388***	0.283***		
	[0.0564]	[0.0618]		
Trade	0.457***	0.504***		
	[0.0491]	[0.0521]		
Transport	0.412***	-0.0416		
	[0.0604]	[0.0669]		
Financial services	-0.0908	-0.931***		
	[0.0712]	[0.0782]		
Personal services	-0.210***	-1.361***		
	[0.0731]	[0.0866]		
Domestic services	1.042***	-2.211***		
	[0.0555]	[0.0654]		
Public sector	0.121**	-18.43		
	[0.0597]	[505.9]		
Others	0.549***	0.0308		
	[0.0453]	[0.0502]		
Constant	3.007***	5.730***	1.566***	0.0828
	[0.152]	[0.177]	[0.118]	[0.104]
Observations	86,443	86,443	86,443	86,443
Standard errors in brackets				
*** p<0.01, ** p<0.05, * p<0.1				

Source: Own elaboration based on data from Household Surveys

Costa Rica

Covariates	With branch of activity		Without branch of activity	
	Non-registered wage earner	Non-wage earner	Non-registered wage earner	Non-wage earner
Migrant	0.202***	-0.430***	0.433***	-0.297***
	[0.0724]	[0.0823]	[0.0688]	[0.0807]
Head of household	-0.321***	-0.135***	-0.435***	-0.0352
	[0.0514]	[0.0472]	[0.0477]	[0.0439]
Age	-0.169***	0.0122	-0.153***	-0.00466
	[0.00969]	[0.0100]	[0.00898]	[0.00935]
Age*age	0.00211***	0.000613***	0.00190***	0.000695***
	[0.000122]	[0.000122]	[0.000113]	[0.000113]
Incomplete primary	0.274***	0.0247	0.383***	0.0963
	[0.0641]	[0.0632]	[0.0608]	[0.0607]
Incomplete secondary	-0.246***	-0.121**	-0.348***	-0.167***
	[0.0583]	[0.0568]	[0.0550]	[0.0542]
Complete secondary	-0.858***	-0.461***	-1.096***	-0.635***
	[0.0753]	[0.0671]	[0.0704]	[0.0632]
Incomplete university	-0.697***	-0.389***	-1.146***	-0.662***
	[0.117]	[0.111]	[0.111]	[0.104]
Complete university	-1.250***	-0.423***	-2.159***	-1.327***
	[0.105]	[0.0771]	[0.0954]	[0.0660]
Construction	1.252***	0.776***		
	[0.0924]	[0.0895]		
Trade	0.505***	0.690***		
	[0.0783]	[0.0684]		
Transport	0.769***	0.716***		
	[0.105]	[0.0911]		
Financial services	0.0197	-0.0573		
	[0.109]	[0.0935]		
Personal services	-0.248*	-1.678***		
	[0.144]	[0.155]		
Domestic services	2.669***	0.913***		
	[0.113]	[0.121]		
Public sector	-1.993***	-20.20		
	[0.203]	[855.8]		
Others	0.580***	0.269***		
	[0.0790]	[0.0713]		
Constant	2.050***	-2.041***	2.521***	-1.232***
	[0.184]	[0.201]	[0.164]	[0.183]
Observations	17,251	17,251	17,251	17,251
Standard errors in brackets				
*** p<0.01, ** p<0.05, * p<0.1				

Source: Own elaboration based on data from Household Surveys

Table A.5

Hourly wages by educational level, gender and nationality

Index Men natives=100

Argentina				
Educational level	**Men Natives**	**Women Natives**	**Men Migrants**	**Women Migrants**
Incomplete primary school or less	100	104	105	90
Complete primary school	100	85	77	66
Incomplete secondary school	100	92	81	75
Complete secondary school	100	90	71	74
Incomplete university	100	84	69	46
Complete university	100	94	73	70
Total	100	104	68	66

Chile				
Educational level	**Men Natives**	**Women Natives**	**Men Migrants**	**Women Migrants**
Incomplete primary school or less	100	87	124	87
Complete primary school	100	80	48	172
Incomplete secondary school	100	90	73	106
Complete secondary school	100	78	74	63
Incomplete university	100	66	76	74
Complete university	100	57	125	59
Total	100	77	111	75

Costa Rica				
Educational level	**Men Natives**	**Women Natives**	**Men Migrants**	**Women Migrants**
Incomplete primary school or less	100	78	79	68
Complete primary school	100	71	79	73
Incomplete secondary school	100	87	84	66
Complete secondary school	100	87	57	47
Incomplete university	100	72	94	30
Complete university	100	76	65	72
Total	100	96	55	50

Source: Own elaboration based on data from Household Surveys

Graph A.1
Quantile Regression

Argentina

Ln(Hourly_Wages)

Chile
(Bolivian workers in Chile)

Ln(Hourly_Wages)

Costa Rica

Ln(Hourly_Wages)