The Right to Education and fair working conditions for natives and foreigners in Latin America. Argentina-Paraguay case study. Year 2006

Torres, Victor Eduardo $^{\infty}$ Andrada, Marcos Javier *

Abstract:

The International Agreement for Economic, Social and Educational Rights set up by the General Assembly of the United Nations outlines the right to education and fair working conditions for all. Yet, effective compliance of such an act shows different levels in Latin America Socio-economic status and education afflicting both native and foreigners alike. As a result, a vulnerable scenario rules labor insertion and social mobility.

This work attempts to assess as to what extent employment is linked to schooling for either natives or foreigners in an immigration recepting country such as Argentina versus a population rejecting one such as Paraguay.

Estimates are made by a binary logistic regression pattern using as data source the Permanent Housekeeping Survey for both countries during 2006.

 $^{^{\}infty}$ Ph D. Candidate, CEA (CONICET – UNC), Fac. Cs. Económicas (UNC), Argentina.

^{*} Ph D. Candidate, CEA (CONICET – UNC), Dpto. Académico de Humanidades (UNLAR), Argentina.

Introduction

Migration is a complex phenomenon which involves several multi-collateral causes namely political, educational, war related, socio-environmental and economic (among others). Within the latin american framework, changes occur influenced by the politicaleconomic context of the countries they are immersed.

Argentina and Paraguay, both located in South America exhibit extremely opposite migration patterns. Although both countries have welcomed european immigration, Argentina has traditionally at least since the XXI century been a receptor whereas Paraguay has been marked as a strongly rejecting immigration country mainly by the end of the XIX century.

The high peak of migration to Argentina took place between 1947 and 1960. Until the 50's, the primary paraguayan migration was neither definite nor permanent. Starting during the 60's, this flow settled in the country of destination, during that decade 23,7% of all paraguayans living in this country claimed (adopted) argentinean citizenship".

The leading causes of paraguayan migration would be linked to economic reasons, uneven soil distribution brought about a marked social imbalance which forced rural workers to move to urban centers.

The migrating paraguayan population settled down in more developed and populated areas like in the province of Buenos Aires, its main site of concentration known as rural exodus.

Within this context, but without disregarding the effect that social networks may play to strengthen migration and frequent returns to the source of origin, our analysis will focus on the real possibilities that both natives and foreigners have to face to satisfy their work needs.

As regards work opportunities, it must be pointed out that education obviously determines better work opportunities and income. If individuals do not invest in schooling, chances of better salaries or good employment are limited for both natives and foreigners.

These theories that support the notion of education as an investment, are held by authors like Gary Becker who, in 1964, published his famous book "Human Asset" discussing his theory that schooling and higher education are investments that increase personal efficiency and productivity.

¹ Fischer, Sara. **Inmigración y Emigración en el Paraguay 1870 - 1960**. *En publicación: Inmigración y Emigración en el Paraguay 1870 - 1960*. BASE-IS, BASE Investigaciones Sociales, Asuncion, Central, Paraguay 1997.

Based on the preceding facts, it is now time to show the main population features of both countries. Graph I indicates Paraguay displays a youthful population with a bell shaped pyramid but with a population deficit striking the productivity age. This trend is more evident in the 5 year-lapse of 25-29 years of age and in the 20-24 years range when population groups suffer the greatest impact of migration.



Red bars show the argentinean participation, green bars indicate the role of other foreign groups over the total population of Paraguay. The entire population of the country was six million (6.301.000) in the year 2006, according to the United Nations estimates, only 16% of the entire population of Argentina. Thereby the number of foreigners should be handled with care since it comprises very different absolute rates.

Gráfico II



Argentina, on the other hand, shows (Graph 2) a more aged population pyramid as a result of finding itself under a more advanced demographic transition.

Pyramids also show a significant participation of paraguayans over the whole argentinean population which according to UN estimates was thirty nine million inhabitants (39.134.000). The presence of paraguayans is noticed within the 45-54 year range which may arise from nationals already settled in the country for several years.

This last graph, as the previous one shows population patterns for both countries including the insertion of foreigners over the entire population by gender and age. However, it must be kept in mind that under the label foreigners in the group 'others' a wide variability of situations coexist that may conceal other relevant migration of Bolivians to Argentina.

Objective

The aim of this work is to evaluate the occurrence of certain variables (age, sex, educational level, and the fact of being an immigrant) with the odd of being employed or unemployed in two countries of traditionally opposite migratory behavior such as Argentina and Paraguay in the year 2006.

Data Source

The data source used was the Permanent Housekeeping Survey for both countries. These tools supply thorough information as regards demographic and socio-economic features of the population related to labor drawn by population samples that yield the typical drawbacks of a sample.

For the purpose of this work, the second semester of 2006 Permanent Housekeeping Surveys were used plus annual housekeeping records of Paraguay for the same year. Both studies show similar make up and an individual basic pattern was applied. In the case of Argentina, the last information available was collected with the highest number of cases detected during the second semester of 2006. As for Paraguay, the 2006 survey that applies to urban and rural areas of the country was used.

It is worth noticing that Permanent Housekeeping Survey is only carried out over various highly populated urban areas but based on an entirely urban population.

Based on this survey, official employment, unemployment, underemployment and poverty rates were issued.

In order to comply with this goal, this is the best available device to assess employment or unemployment in both countries .''employed ''refers to those who during a given time frame performed certain labor activity. In the case of the unemployed, it involves a group of people without occupation actively seeking for a job and available to work at immediate notice.

Population Dispersion

In order to understand population differences, a number of variables and rates are listed involving a small group of variables drawn from the entire population of one of the countries based on its own Permanent Housekeeping Survey and taking into account Argentinean or Paraguayan Nationals only.

To fulfill the planned objective this is the best instrument available in both countries to decide whether people are busily working or not. "Employed " were those individuals who developed during a time frame certain labor. In the case of the jobless it refers to the group of people who have no occupation but are available to do so upon demand.

Population Features

In order to understand population status, frequency distribution of a small group of variables withdrawn from the total population of each country according to its individual PHS was used focusing only on those from Argentina or Paraguay.

		Male	Female
PHS Argentina	Argentinean	48%	52%
	Paraguayan	40%	60%
	Total	48%	52%
EPH Paraguay	Argentinean	50%	50%
	Paraguayan	52%	48%
	Total	50%	50%

Table I. Population rate by gender

Source: PHS of Argentina and Paraguay.

Table I distinctly shows a predominantly Paraguayan female population. There is no significant unbalance among the rest of the cases.

		<20	20-39	40-59	60+
DUG	Argentinean	37%	30%	20%	12%
PHS Argentina	Paraguayan	7%	28%	33%	33%
Argentina	Total	37%	30%	20%	12%
PHS Paraguay	Paraguayan	47%	27%	17%	9%
	Argentinean	37%	34%	20%	9%
	Total	47%	27%	18%	9%

Table II. Population rate by age

Source: PHS of Argentina and Paraguay.

When analyzing age group among immigrants, a high percentage is found, 66% of the Paraguayans living in Argentina are above 40 years of age as recorded by PHS. This chart clearly shows that Paraguay has a much younger population than Argentina, that is 47% are below 20 years of age.

		Primario	Secundario	Superior
DUIG	Argentinean	32%	49%	19%
PHS Argenting	Paraguayan	28%	66%	6%
Argentina	Total	32%	49%	19%
DUC	Paraguayan	68%	25%	7%
PHS Paraguay	Argentinean	53%	31%	16%
	Total	68%	26%	7%

Table III. Population rate according to schooling achieved

Source: PHS of Argentina and Paraguay.

The layout of this indicator was based on the number of school years successfully passed by the subjects. Co-existence of various educational systems demanded data re - assessment in both countries in compliance with the uniform international code set by UNESCO as a standard measure to collect, unify, and submit educational stats around different countries and also at international level".^{II}

Distribution rate for completed scholastic levels point out that Argentineans have higher schooling levels than Paraguayans either among the residents of the country or the migrants settled in Paraguay. This finding may be due to the early and massive historical boom of education in Argentina.

This issue may be relevant if the theories of human asset and education as an investment are regarded. The population of Paraguay shows as a distinctive feature that only 68% had reached Grammar school level by the year 2006, nevertheless, the young population structure must not be ignored.

		<500,000	>= 500,000
		inhabitants	inhabitants
PHS Argentina	Argentinean	65%	35%
	Paraguayan	47%	53%
	Total	65%	35%
		Urbana	Rural
PHS Paraguay	Paraguayan	52%	48%
	Argentinean	64%	36%
	Total	52%	48%

Table IV. Population rate by residence

Source: PHS of Argentina and Paraguay.

The number of inhabitants living together in large groups, settled in crowded urban areas when PHS was applied in Argentina, impairs a direct comparison with the released Paraguayan PHS and its urban and rural dispersion. However, it is used as a proxy for the number of individuals to track the paraguayan migrant destination.

^{II} Clasificación Internacional Normalizada de la Educación C I N E (1997) UNESCO.

This follow-up by residence shows that paraguayans are concentrated in crowded areas of more than 500.000 dwellers whereas the higher rate (65%) of argentineans surveyed dwell in crowded sites of less than 50.000 inhabitants.

For those living in Paraguay, most Argentinean nationals reside in urban areas while most paraguayans do so in rural ones.

				married/live in
			Single/unmarried	arrangement
	DUC	Argentinean	62%	38%
	Argentina	Paraguayan	37%	63%
		Total	62%	38%
	DUC	Paraguayan	65%	35%
	PHS Paraguay	Argentinean	54%	46%
		Total	65%	35%

T 11	T 7	n 4 '	1 1		11	,	• 4 • 7	1
lania	v	Porcentai	e de i	a r	nanigeian	CAGUIN	situación	conviigat
I avia	· · ·	i vi cchiai	t ut i	aı	JUDIACIUI	JUZUII	SILUALION	convuzai.

Source:	EPH	of Argentina	and Paraguay.
---------	-----	--------------	---------------

Data shows that in the case of paraguayan living in Argentina, the majority are married or living together, the remaining 37% were not legally bonded. The relationship in Paraguay is practically reversed to that observed in Argentina where 65% are not married and only 35% are. No differences were detected for Argentineans living in that country. Once again the population structure affects the indicator.

Unemployment in both countries

As an early approach to unemployment, the following charts indicate unemployment rate for each country among natives and migrants.

Bearing in mind those individuals with 10 years or longer residence, unemployment rates for paraguayan and argentinean (by sex) living in Argentina are:

I abic V	· · · · · · · · · · · · · · · · · · ·	yment rate r	n mgentina
Gender	Nationality	Ν	Percentage
Male	Argentinean	31287	6,99%
Male	Paraguayan	240	5,00%
Female	Argentinean	23188	9,58%
	Paraguayan	239	6,69%

Table VI. Unemployment rate in Argentina
--

Source: PHS of Argentina.

As noticed, argentinean males hold a 7% unemployment while paraguayans hold only 5%, argentinean women suffer a 9.58% unemployment while their paraguayan counterparts hold a 6.69% unemployment record. However, it is uncertain whether the differences are really significant or simply a sample glitch.

To look into this matter, two different mean trials were made (one for men and another one for women) where significant differences were examined and validated. Results are shown below (Table VII).

		Levene's Test of variance		T test for mean levels			95% Con the diff	f Int for erence
Gender		F	Sig.	t	Sig. (bilateral)	Mean Differences	Inf	Sup
	Assumed equal variances	6,084	0,014	1,206	0,228	0,02	-0,012	0,052
Male	Not assumed equal variances			1,404	0,161	0,02	-0,008	0,048
Female	Assumed equal variances	9,761	0,002	1,509	0,131	0,029	-0,009	0,066
	Not assumed equal variances			1,767	0,078	0,029	-0,003	0,061

Table VII. T- Test of Independent Samples. Argentina 2006

Source: PHS of Argentina.

Although argentinean males experience 2% more unemployment than paraguayans, in the case of women such difference is 2.9%. So, there is no significant statistical evidence (at 5 %) in the average unemployment rate among paraguayans and argentineans.

Likewise, the same procedure was followed using the Paraguayan PHS and results were as follows:

Gender	Nationality	Ν	Percentage
Male	Paraguayan	6289	4,83%
whate	Argentinean	69	4,35%
Famala	Paraguayan	3929	8,55%
remate	Argentinean	52	3,85%

 Table VIII. Unemployment rate in Paraguay

Source: PHS of Paraguay.

If Table VIII is examined, it may be seen that unemployment rates are lower than those of Argentina PHS in general and that only paraguayan females display a considerable higher rate. However, to determine whether statistical differences are valid indeed, a hypothesis test was run. Results are depicted in Table IX.

		Levene's Test of variance		T test for mean levels			95% Cor the diff	If Int for erence
Gender		F	Sig.	t	Sig. (bilateral)	Dif de medias	Inf	Sup
Male	Assumed equal variances	0,142	0,707	0,187	0,851	0,005	-0,046	0,056
	Not assumed equal variances			0,195	0,846	0,005	-0,045	0,054
Female	Assumed equal variances	4,923	0,027	1,089	0,276	0,047	-0,038	0,132
	Not assumed equal variances			1,719	0,091	0,047	-0,008	0,102

Tabla IX. Tabla VII. Prueba T de Muestras Independientes. Paraguay 2006.

Source: PHS of Paraguay.

Just like in the study of PHS for Argentina, T- test does not rule out the hypothesis that the average unemployment rate for either paraguayans or argentineans is the same (male or female).

In short, based on the results obtained, there is clear evidence that being a native or an immigrant both in Argentina and Paraguay does not mark any significant differences in the unemployment rates either for men or women. Consequently, there are other variables that influence an individual to experience a higher risk of unemployment rather than the fact of being a native or a foreigner.

To find out which are the variables with higher impact over unemployment, two logistic models were designed for each country. Results made it possible to understand those variables and values more closely related to unemployment.

Methodology for model design

Similarly to the lineal regression charts, logistic binary regression is used to assess ratios between a single independent variable and one or more independent ones. The difference is that under binary logistic regression the dependent variable may assume one or two possible values (that is dichotomic or binary), independent variables may be metric o dichotomy (these independent variables are usually known as covariables in logistic regression).

In any linear regression problem, the key amount is the mean dependent variable given the value of the independent variable: E(Y/x) and may assume any value as long as x keeps a range between, where for the unvaried x case refers to a particular value of the independent variable.

Thus, if the independent variable is dichotomic as in this application where:

Y = 1 if the individual is unemployed

Y = 0 if the subject is not unemployed

To reach a solution that estimates E(Y/x) in the interval [0,1], a logistic regression is applied. By following Hosmer & Lemesho's notation (1989), an arbitrary mean is drawn such as $\gamma(x) = E(Y|x)$, whose specific form in this model is:

$$P(Y=1) = \pi(x) = \frac{e^{\beta_0 + \beta_1 x}}{1 + e^{\beta_0 + \beta_1 x}}$$

Odds is defined as a probability quotient that Y = I divided by the probability that Y = 0, that is:

$$Odds = \frac{\gamma(x)}{1 - \gamma(x)}$$

Logit transformation is defined in terms of $\pi(x)$ for the unvaried case is expressed as:

$$g(x) = ln\left[\frac{\pi(x)}{1-\pi(x)}\right] = \beta_0 + \beta_1 x_1$$

In problems that involve k variable predictors, those that shape an vector x, the logit of the multiple logistic regression model is:

$$g(\mathbf{x}) = ln\left[\frac{\pi(\mathbf{x})}{1-\pi(\mathbf{x})}\right] = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_k x_k$$

The way to interpret the odds in this study was by analyzing how probability was modified by unemployment when the value of the independent variable changed (for instance, if the subject was a native or a foreigner).

Hence, relevancy lies on the estimated value of the coefficient for each variable that comprises the model (sex, age, schooling, being a native or a foreigner, marital status) for both Argentina and Paraguay PHS.

Results

Logistic Model for paraguayan survey

Binary logistic regression included the following variables:

- Age (<20 years old, 20 to 39 years old, 40 to 59, 60 and older).
- Combined schooling years: Grammar (with no schooling until 6 years of age), High School (from 7 to 12 years) and Higher (12 years old, higher education).
- Area: Urban or Rural.
- Marital Status: Married or living together within a category versus the rest that was grouped separately.
- Migrant: Paraguayan or Argentinean.
- Gender: Male or Female.

With the purpose of finding an equation that identifies both groups, all unemployed subjects available were included in the sample (636), a randomized equal number of unemployed subjects was collected. This is so because if the total number of the latter were left out, results would yield a decompensated equation due to the disparity between both groups and the result matrix would not predict unemployment.

The dependent variable is employed/unemployed .'Employed' covers all those paraguayan or argentinean nationals older than 10, that are not inactive (passive) and that minimally comply with any of the three following conditions:

- Worked as an employee, self employed or with the family in the last 7 days.
- Worked but not during the last 7 days.
- Worked at least one hour in the last 7 days.

By contrast, for those paraguayan or argentinean over 10 years or more active if this did not occur, the individual would be dubbed as unemployed'.

The result obtained by adding all variables to the method is:

	В	E.T.	Wald	gl	Sig.	Exp(B)
AGE			39,147	3	,000	
AGE(1)	1,457	,327	19,924	1	,000	4,295
AGE(2)	1,353	,303	19,977	1	,000	3,870
AGE(3)	,578	,314	3,386	1	,066	1,783
MARITAL_STATUS(1)	,609	,146	17,508	1	,000	1,839
SCHOOLING_LEVEL			27,240	2	,000	
SCHOOLING_LEVEL (1)	,270	,205	1,726	1	,189	1,310
SCHOOLING_LEVEL (2)	,860	,203	17,875	1	,000	2,364
AREA(1)	-0,888	,132	45,221	1	,000	0,412
MIGRANT(1)	,256	,633	,163	1	,686	1,291
GENDER(1)	0,667	,126	27,890	1	,000	1,949
Constant	-2,145	,714	9,031	1	,003	,117

Table X. Variables in the Equation

Source: EPH of Paraguay.

From the results obtained it is concluded that the younger the individuals, the higher the odds of unemployment: for those under 20, the odds is 4.295 times higher as compared to those 60 years old or older individuals. In the same way, the odds of being unemployed is 3.87 times higher for those between 20 and 39 years of age when compared with individuals of 60 or older. Finally, the target group between 40 and 59 has a 1.783 fold unemployment odds than the 60 years or older individuals.

As for marital status, those labeled as 'single/unmarried' showed a 1.839 times higher odds for unemployment than those married or living together out of wedlock.

Upon considering education, (one of the most important variables regarding labor assessment), results show that those who have completed grammar schooling experience a 1.31 higher odds of unemployment than those with a higher education. On the other hand, those who have finished their high school level have a 2.364 higher odds of being unemployed than those who have a higher education.

It is worth pointing out that the fact that unemployment odds are higher for high schoolers than for grammar schoolers does not imply that this latter group is at better working condition. It must be remembered that the variable under study refers to whether the individual is employed or not but does not take into account salary, or other relevant issues that might conclude either one is in better situation.

As regards the area the subject lives in, those in rural areas have recorded a 0.412 times higher odds of unemployment than those from rural zones. Paraguayans are at a 1.291 higher odds of unemployment than Argentineans. Finally, the unemployment odds for women is 1.949 times than for men.

Predictive certainty was attained as shown in this table.

	Observed		Forecasted			
			Working		Correct	
			Employed	Unemployed	Percentage	
	Working	Employed	401	235	63,1	
		Unemployed	169	467	73,4	
Global Percentage					68,2	

 Table XI. Table of Classification (PHS Paraguay)

Source: PHS of Paraguay.

It is noticeable that the general adjustment was correctly set in 68% of the instances (868 out of 1.272). From the 636 employed subjects, 401 were correctly assessed (63%) and from the unemployed force of 467 (73.4%) was confirmed. Thereby the equation estimates appear slightly better for the unemployed.

Logistic Model for Argentina Survey

PHS of Argentina developed the same work method as Paraguay, including the same independent variables under the same categories. The only modification introduced was a different variable to assess the area of residence, which would suggest whether the urban area was larger or contained more than 500.000 inhabitants or not.

In this case, the unemployment expression that the National Institue of Statistics and Census (INDEC) applies and is the basis of the present work involves all those individuals of 10 years of age or older who are not inactive or jobless and who claimed:

- Having worked one hour or more with pay.
- Having worked fifteen hours or more without pay.
- Not having woked during the reference week for any incidental reason but still holding the job.

By contrast, unemployed are those who:

- Looked actively for a job during the week of reference or else
- Had been seeking for one during the aforementioned week but had quit searching for circumstantial reasons.

The result for binary regression was:

	В	E.T.	Wald	gl	Sig.	Exp(B)
AGE			309,764	3	,000	
AGE (1)	1,340	,127	111,210	1	,000	3,819
AGE (2)	,525	,099	28,145	1	,000	1,690
AGE (3)	-,198	,103	3,727	1	,054	,820
MARITAL_STATUS(1)	,772	,048	259,360	1	,000	2,164
SCHOOLING_LEVEL			101,322	2	,000	
SCHOOLING_LEVEL(1)	,771	,098	62,294	1	,000	2,162
SCHOOLING_LEVEL(2)	,469	,052	79,867	1	,000	1,598
AREA(1)	-,330	,047	50,358	1	,000	,719
MIGRANT(1)	,162	,279	,334	1	,563	1,175
GENDER(1)	0,400	,046	75,100	1	,000	1,491
Constant	-,887	,295	9,046	1	,003	,412

Tabla XII. Variables in the Equation (PHS Argentina)

Source: PHS of Argentina.

According to the results obtained it is concluded that the younger the person, the higher the odds of unemployment: for those under 20 the odds are 3.919 times higher as compared with people of 60 or older. Identically, the odds of unemployment are 1.69 higher for those between 20 and 39 years of age as compared with those of 60 or older and finally, those between 40 and 59 experience a 0.82 higher odds of unemployment than the 60 years old or older (this rate is a little lower than the standard reference). Therefore, the higher the age of the groups, the higher the odds for unemployment.

As for marital status, the individuals found under 'single/unmarried' are exposed to a 2.164 higher odds of being unemployed than those legally married or living together out of wedlock.

Upon reviewing education, results show that those with a gramar school level experience a 2.162 higher odd of unemployment than those holding a higher education, while those with a high school education are exposed to 1.598 higher odd than those with a higher education.

Unlike the above mentioned stats for Paraguay PHS, this finding does ratify that for individuals with higher education the odds of unemployment gradually drop.

Regarding the area where the individual lives, those from crowded urban areas with less than 500.000 settlers record the odds value of being left redundant as 0.719 higher than those living in urban areas of 500.000 inhabitants or more. Argentineans hold an unemployment odd 1.175 times higher than Paraguayans. Finally, the odds of being unemployed is 1.491 times higher for females than for males .

In this case the classification table is:

Observed		Forecasted			
		Wo	orking Unemployed	Correct Percentage	
Working	Employed	3010	1426	67,9	
	Unemployed	1681	2755	62,1	
Global Percentag	je			65,0	

Tabla XIII. Table of Classification (PHS Argentina)

Source: PHS of Argentina.

From the tables it is clear that the general adjustment was correct in 65% of the cases (5765 out of 8872 included in the survey). From 4436 working subjects, predictions were correct for 3010 that is (68%). From the table it may be seen that the general adjustment that involved around 65% of the cases was correct (5765 out of 8872). From the 4436 working individuals predictions were correct for 3010 (68%) and for the unemployed, rates were slightly lower (62%) since 2755 out of 4436 were also correctly predicted. The resulting equation yields a better rate for the unemployed unlike the regression data found for Argentina PHS.

Closing Remarks

If the International Agreement for Economic, Social and Educational Rights is abided when it sets fair working conditions and schooling for all, the analysis of employment opportunities in a traditionally immigration friendly country as Argentina until the XX century, compared with a traditionally rejecting one as Paraguay, no significant statistical differences among natives or foreigners, working or jobless can be found.

This fact does not imply an equal job opportunity for everyone but it might signal multiple situations like this particular one where migrants accept working conditions that natives would turn down but this analysis, though extremely challenging, is not the primary goal of this report.

From values drawn for each regression, it is patent that the case of Argentina PHS as well as for Paraguay affects more directly the unemployed individuals under 20 years old who experience a 3.819 unemployment odd (in the study case of Argentina PHS) and 4295 times higher (Paraguay PHS) for those individuals 60 years old or older. It is an issue for young folks effectively and seriously seeking for a job.

After studying job opportunities, it must be singled out that schooling at various degree rules the best labor opportunities and income. It ratifies that years of education play a fundamental role specially in Argentina where grammar school level strongly amplifies (2.162 fold) the odds of unemployment when compared with those individuals with higher scholastic background. Oddly enough, in Paraguay those with a high school education are more exposed to unemployment odds (2.364 times higher than those who have achieved higher education levels). This may be associated to the trend that an individual with certain skills would not be willing to accept menial positions thus increasing his unemployment risk. The variable under study hints at being employed or not but does not bear in mind, as already mentioned, working conditions, legal jobs, salary as well as other relevant aspects that might suggest either one could meet better status.

Marital status as regarded by this work also appears as a strong issue being 2.164 times higher the odds of unemployment for those who are not married or living in together versus those who are legally bonded while Paraguay PHS revealed this value is 1.839.

Both PHS render similar results, for instance for gender purposes, being a female means that the odds are 1.949 fold higher than for a male whose rate was 1.491 (for both Argentina and Paraguay PHS respectively).

Moreover, being a migrant or a native in those countries respectively shows the odds are 1.175 and 1.291 times higher if the subject is a native in contrast with a migrant. This finding favors being employed against being a foreigner. This paper sticks to the considerations already expressed evaluating only the employment or unemployment status. Nevertheless, there are many more issues that should be elucidated before claiming that either natives or foreigners are in better working position than the other.

Finally, both models have shown correctly classified similar estimates and rates: 68% for the Argentina PHS and 65% for the Paraguayan PHS. In the former case prediction certainty was higher for the unemployed and in the latter the equation was slightly improved and has a better performance for the employed.

Bibliography

- Becker, G. S., and Chiswick, B. R. "Education and the Distribution of Earnings." American Economic Review, May 1966.
- Becker, G. S. (1964), *Human capital: a theoretical and empirical analysis with special reference to education*, Nueva York: National Bureau of Economic Research, Culumbia University, p. 187.
- Fischer, S. Inmigración y Emigración en el Paraguay 1870 1960. En publicación: Inmigración y Emigración en el Paraguay 1870 - 1960. BASE-IS, BASE Investigaciones Sociales, Asuncion, Central, Paraguay 1997.
- Hosmer, D. and Lemeshow, S. (1989). Applied Logistic Regression. New York, Wiley.
- Instituto Nacional De Estadística Y Censos (INDEC) (2001). Proyecciones provinciales de población por sexo y grupos de edad 2001-2015, Serie Análisis Demográfico.
- Menard, S. (1997). *Applied Logistic Regresión Analysis*. Sage University Paper series on Quantitative Applications in the Social Sciences. Thousand Oaks CA: Sage.
- OIT (2003), Convenio sobre la discriminación (empleo y ocupación), 1958 (núm. 111) y Recomendación (núm. 111), artículo 1(1a), http://www.ilo.org/ilolex/spanish/convdisp1.htm
- Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura, (UNESCO) 1997, Clasificación Internacional Normalizada de la Educación (CINE), Instituto de Estadística.
- Instituto Nacional de Estadística y Censos (INDEC), 1997: "Como se mide el desempleo", Centro Estadístico de Servicios.
- Organización de Estados Iberoamericanos, (OEI), 1994 "Principios y Estructura General del Sistema Educativo, Sistemas Educativos Nacionales, Paraguay", Informe OEI-Ministerio de Educación.
- Josefina García Lozano, Juan Gómez García, Esther Muñoz Sánchez, José Solana Ibáñez, "Modelos Migratorios: Teoria del Capital Humano", X Jornadas de la Asociación de Economía de la Educación.

Fuentes

- Dirección General de Estadística, Encuestas y Censos (DGEE), Encuesta Permanente de Hogares (EPH), Año 2006.
- Instituto Nacional De Estadística Y Censos (INDEC), Encuesta Permanente de Hogares (EPH), Bases Usuarias Ampliadas, Segundo Semestre de 2006, disponible en <u>http://www.indec.gov.ar/</u>