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FEMALE LABOR FORCE PARTICIPATION IN URBAN BOLIVIA

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I. Introduction

Labor force participation in Bolivia still displays marked differences by gender group. One main reason could be the human capital gap, since education is higher for men than for women. However, personal choices related to tastes and family conditions could also explain labor force participation of women compared to men.

There are no studies in Bolivia that analyze individual characteristics to explain gender differences in labor force participation; so this paper is the first one of addressing this issue. The most important results found are that: i) women probabilities of being in the labor force increases with higher education and age; ii) family responsibilities by gender are marked in Bolivia and these factors are the most important to limit women labor force participation; and iii) family responsibilities roles between women and men are more marked for indigenous people than for non-indigenous, because the opportunity costs of spending time working at home instead of working in the labor market are lower for indigenous women compared to non-indigenous women.

The structure of the study is as follows. Section II describes the main personal characteristics by gender and ethnicity according to labor force participation. Section III studies individual characteristics that explain women labor market participation based on Probit models, including years of education; experience; family conditions (marital status, number of children, home headship, etc.); immigrant condition and living in the main cities. Conclusions and recommendations can be found in Section V.

II. Stylized facts

Table 2.1 describes population in working age (PWA) by gender, according to their economic activity condition for the Census of the years: 1976, 1992 and 2001.

It is observed that women participation in the labor force has been growing over the time. In the urban area, women that were employed or unemployed (economically active population) in 1976 represented the 24.82% of the population in working age (PWA), but in 2001 the percentage increased to 41.56%. In contrast, men participation in the labor force slightly decreases over the time, which could be attributed to per capita income growth with further human capital accumulation in adolescents and young people, leading to a higher economically inactive population.

Although, labor force participation of men and women has contrary trends over the time, the gap is still high. In 2001 for each 100 men that were in PWA about 61 of them were working or looking for a job, and for each 100 women in PWA only 42 of them were economically active.

TABLE 2.1
OVER 10 YEARS OLD POPULATION BY GENDER, ACCORDING TO ECONOMIC CONDITION OF
ACTIVITY AND GEOGRAPHICAL AREA

DESCRIPTION	ECONOMICALLY ACTIVE		ECONOMICALLY INACTIVE	TOTAL	
	EMPLOYED	UNEMPLOYED		Percentage	Number
MEN					
1976					
Bolivia	71.10%	2.40%	26.50%	100.00%	1,553,110
Urban area	61.54%	3.60%	34.85%	100.00%	647,601
1992					
Bolivia	66.19%	2.24%	31.57%	100.00%	2,228,656
Urban area	58.03%	3.29%	38.68%	100.00%	1,289,915
2001					
Bolivia	60.19%	3.42%	36.39%	100.00%	2,957,387
Urban area	56.39%	4.27%	39.34%	100.00%	1,843,695
WOMEN					
1976					
Bolivia	19.52%	0.36%	80.12%	100.00%	1,646,057
Urban area	24.27%	0.55%	75.17%	100.00%	713,263
1992					
Bolivia	41.00%	0.51%	58.49%	100.00%	2,332,638
Urban area	33.59%	0.73%	65.68%	100.00%	1,411,688
2001					
Bolivia	39.95%	1.14%	58.91%	100.00%	3,043,481
Urban area	40.01%	1.55%	58.44%	100.00%	2,008,328

Source: Own elaboration based on CENSUS 1976,1992 and 2001 data - National Institute of Statistics

Table 2.2 shows population in working age in 2001 by gender and ethnicity, for Bolivian urban areas. For both men and women, it is noted that indigenous people is fewer compared to non-indigenous one. This is because indigenous people are mainly concentrated in the rural areas of Bolivia and not in the urban areas.¹

Within each population group, it can be observed that indigenous people has a higher participation in the labor force. Among men, 75.59% of indigenous group work or look for a job and 56.75% of non-indigenous people are economically active (EA). Among women, 48.77% of the indigenous group participates in the labor force compared with the 39.42% of non-indigenous ones.

¹ Indigenous people have been determined according to their mother language, which can be: quechua, aymara or other native language.

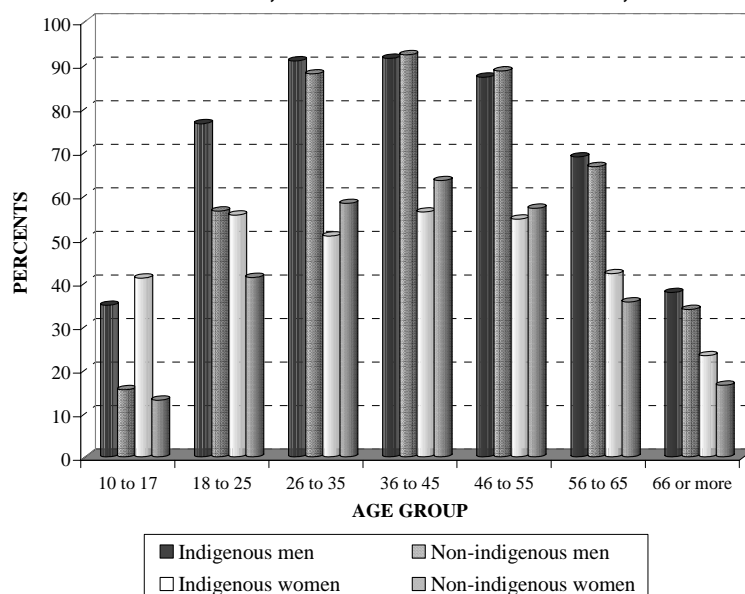
TABLE 2.2
OVER 10 YEARS OLD URBAN POPULATION BY GENDER AND ETHNICITY, ACCORDING
TO ECONOMIC CONDITION OF ACTIVITY, 2001

DESCRIPTION	ECONOMICALLY ACTIVE	ECONOMICALLY INACTIVE	TOTAL
MALE POPULATION			
Indigenous	26.06%	12.99%	20.92%
Non-indigenous	73.94%	87.01%	79.08%
TOTAL	100.00%	100.00%	100.00%
Indigenous	75.59%	24.41%	100.00%
Non-indigenous	56.75%	43.25%	100.00%
FEMALE POPULATION			
Indigenous	27.10%	20.27%	23.11%
Non-indigenous	72.90%	79.73%	76.89%
TOTAL	100.00%	100.00%	100.00%
Indigenous	48.77%	51.23%	100.00%
Non-indigenous	39.42%	60.58%	100.00%

Source: Own elaboration based on CENSUS 2001 data – National Institute of Statistics

Figure 2.1 shows urban labor force according to the age group, considering each EA group as the percentage of its own PWA.

FIGURE 2.1
OVER 10 YEARS OLD URBAN LABOR FORCE BY GENDER
AND ETHNICITY, ACCORDING TO AGE GROUP, 2001



Source: Own elaboration based on CENSUS 2001 data – National Institute of Statistics

In general terms, it is observed a higher labor force participation of people of 19 to 65 years old. It is worth to note that for the age group from 10 to 17 years old, indigenous women have the highest participation in the labor force (as a

percentage of their PWA), with 41.07%. In this age group, adolescent indigenous men occupy the second position with 27%, and finally, about 10% of both non-indigenous male and female populations participate in the labor force.

For people that are over 18 years old, it is noted that men labor force participation is higher compared to women participation. With exception of the 18 to 25 years old age group, there are no remarkable differences among indigenous and non-indigenous men. For women, it seems that non-indigenous in between 26 and 55 years old participate in a higher proportion in the labor force compared indigenous ones.

Finally, it is interesting to notice that within each gender group of over 56 years old, there is a higher proportion of indigenous people working or looking for a job (compared to economically inactive) rather than for non-indigenous people. It can be explained because, as it will be seen later, the first ones are generally poorer than the second ones and, therefore, they have to work still in the third age.

Comparing Figure 2.1 with Table 2.2 it is observed that the labor force participation gap by ethnicity is a consequence of a higher EA of adolescents and young indigenous people. Excluding the age group of 10 to 25 years old, for instance, the data shows a higher non-indigenous EA (within each population group): 48.15% of indigenous women working or looking for a job compared to 64.28% of non-indigenous women; and to 81.71% of indigenous men participation in the labor force, compared to 88.16% of non-indigenous men.²

Figure 2.1 shows the first decisive characteristic that explains labor market participation, through a relationship between age and EA in a U inverted shape. The low participation of adolescents and young people reflects, as a result, less needs to work given their economic dependence and, also an alternative use of the time, spent on education (mainly for non-indigenous people). The low participation of third age people in EA responds to pensions that some of them have, as well as to their limited own physical conditions for working.

The second factor that can affect the choice of participating in the labor market is related to education. Table 2.3 presents the average years of schooling for older than 19 by gender and ethnicity. Comparing first labor force participation by gender, it is observed that men have, on average, a higher level of instruction than women, although the gap is low. In urban area, women who are working or looking for a job have, on average, 8.70 years of education, and men in EA have 9.76 years of education. The educational gap becomes relevant if it is compared the population by ethnic origin. Indigenous women, in particular, are located in the worst position, with a gap of 2.65 years of schooling compared to indigenous men, and 5.62 compared to non-indigenous women.³

² Table A1 in annex A present in more detail the PWA by age group, gender and ethnicity.

³ Table A2 in annex A presents with detail educational gap by gender and ethnicity.

TABLE 2.3
AVERAGE YEARS OF SCHOOLING OF OVER 19 YEARS OLD BY GENDER AND
ETHNICITY ACCORDING TO ECONOMIC CONDITION OF ACTIVITY, 2001

DESCRIPTION	ECONOMICALLY ACTIVE			ECONOMICALLY INACTIVE		
	Indigenous	Non indigenous	Total	Indigenous	Non indigenous	Total
MALE POPULATION						
Bolivia	5.62	9.63	7.93	5.07	10.69	8.76
Urban area	7.28	10.66	9.76	6.36	11.27	10.28
FEMALE POPULATION						
Bolivia	3.51	9.72	7.04	2.75	8.63	6.17
Urban area	4.63	10.25	8.70	3.56	9.55	7.91

Source: Own elaboration based on CENSUS 2001 data – Bolivian National Institute of Statistics

Among indigenous, there is a slightly propensity of men and women with higher education to participate in labor force. In the urban area, for example, economically active indigenous women have 4.63 years of schooling compared to 3.56 years of schooling of inactive indigenous women. Between indigenous men the difference is 7.28 to 6.36. Among non-indigenous people, most educated women are also in a relative higher proportion in EA; however, men with more years of schooling are economically inactive. This last characteristic could reflect a preference for using the time in superior education among young men.

The third factor that can explain the choice of being in the labor market is about individuals' choices that are related and influenced by family responsibilities. The Figure 2.2 presents labor force participation from 19 to 65 years of age by gender and ethnicity according to marital status.

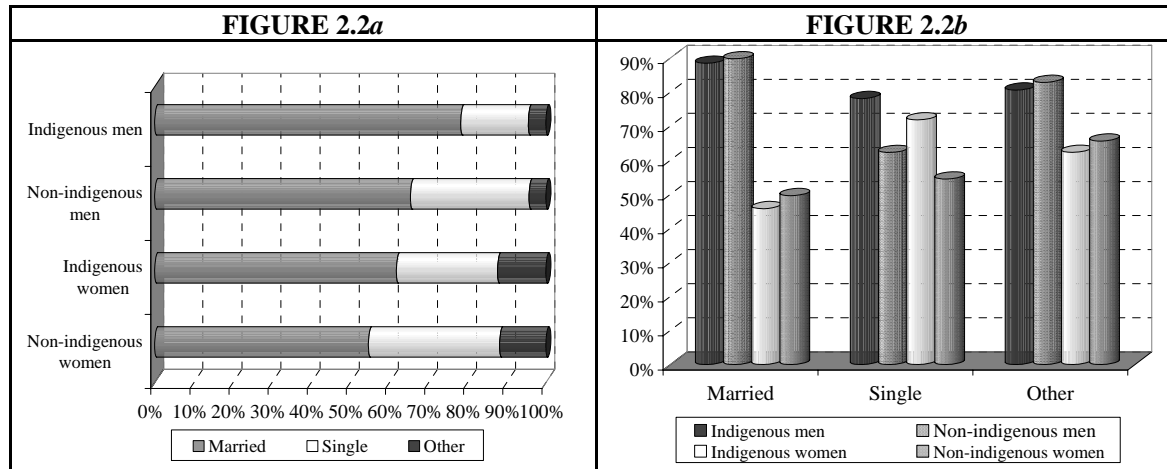
Figure 2.2a shows EA for each group according to marital status. In all of the cases it is observed that labor force is essentially married population (or who live as a couple).⁴ In opposite sides are married indigenous men with the 78.28% of them in the labor force and married non-indigenous women with the 54.56%. Single people occupy the second position in EA participation in each group, with higher proportion for non-indigenous: 33.53% of women and 30.30% of men. Finally, widow, divorced or separated (other) population is the less significant in EA; it represents 7.25% of feminine EA and 3.91% of masculine EA.

Figure 2.2b shows the labor force as a proportion of PWA (in this case population between 19 to 65 years old) according to marital status. The highest gap in the labor force by gender is between married men and married women, without significant differences by ethnicity: for each 100 married men about 89 of them are working or looking for a job and for each 100 married women, 48 are economically active. This gap can explain, in good part, the differences within EA by gender that have been described previously, since most of the population in working age is married.

⁴ A similar situation is verified in the PWA.

The married gender gap suggests that family responsibilities are still marked in Bolivia, with male population producing monetary income and female population working at home. This remark is supported by the research of Wanderley (2003). In this work, she concludes, that from a sample of 118 families, that both domestic tasks and caring for children are essentially women jobs.

FIGURE 2.2
URBAN LABOR FORCE OF 19 TO 65 YEARS OLD BY GENDER AND ETHNICITY,
ACCORDING TO MARITAL STATUS, 2001



Source: Own elaboration based on CENSUS 2001 data – National Institute of Statistics

Notes: Married population includes not only those legally constituted but also people that live in couple. The category “other” includes widow, separated or divorced population.

For single people, it is observed that indigenous people are in more proportion in the labor force rather than non-indigenous ones. Since most of single people are younger, this result is corroborated with Figure 2.1, where non-indigenous people usually participate in the labor market at a later age, probably because they use their time to obtain more education when they are young.

Finally, it is noted that gender gap decreases for widow, divorced or separated population, compared to married gender gap; being the result of lower men participation as well as higher women participation in the labor force. The lower gap can be explained because, on one side, mothers assume more responsibilities in the family having to work to generate income, since they usually live with their children. On the other side, men have fewer responsibilities in supporting economically their families.

The second characteristic related to home obligations, that could determine women labor force participation, is related specifically with children at home. Table 2.4 shows the ratio of the number of children per adult by house as a proxy variable of the number of children at home. The characteristic of the house has been attributed to each individual person, who belongs to it and who is between

19 to 65 years old. Children are considered as those who are 6 years old or less and adults are the population over 19 years old.⁵

Table 2.4 shows, according to the economically active condition, that the ratio has marked differences by gender. The male population that is economically inactive (EI) has an average ratio of children per adult smaller than female EI: 0.17 compared to 0.41. This gap suggests that men are EI for other reasons rather than caring for children, but for EI women this task seems to be an important reason for staying at home. Between feminine populations, the ratio is, on average, smaller for labor force people rather than for economically inactive people: 0.34 compared to 0.41.

TABLE 2.4
URBAN POPULATION OF 19 TO 65 YEARS OLD BY GENDER ACCORDING TO THE RATIO OF CHILDREN PER ADULT, 2001

DESCRIPTION	ECONOMICALLY ACTIVE	ECONOMICALLY INACTIVE	TOTAL
AVERAGE			
Men	0.32	0.17	0.29
Women	0.34	0.41	0.37
POPULATION PERCENTAGE OF OVER AND UNDER TOTAL AVERAGE (0.29 FOR MEN AND 0.37 FOR WOMEN)			
Men			
Over the total average	84.75%	15.25%	100.00%
Under the total average	77.89%	22.11%	100.00%
Women			
Over the total average	48.99%	51.01%	100.00%
Under the total average	54.75%	45.25%	100.00%

Source: Own elaboration based on CENSUS 2001 data – National Institute of Statistics

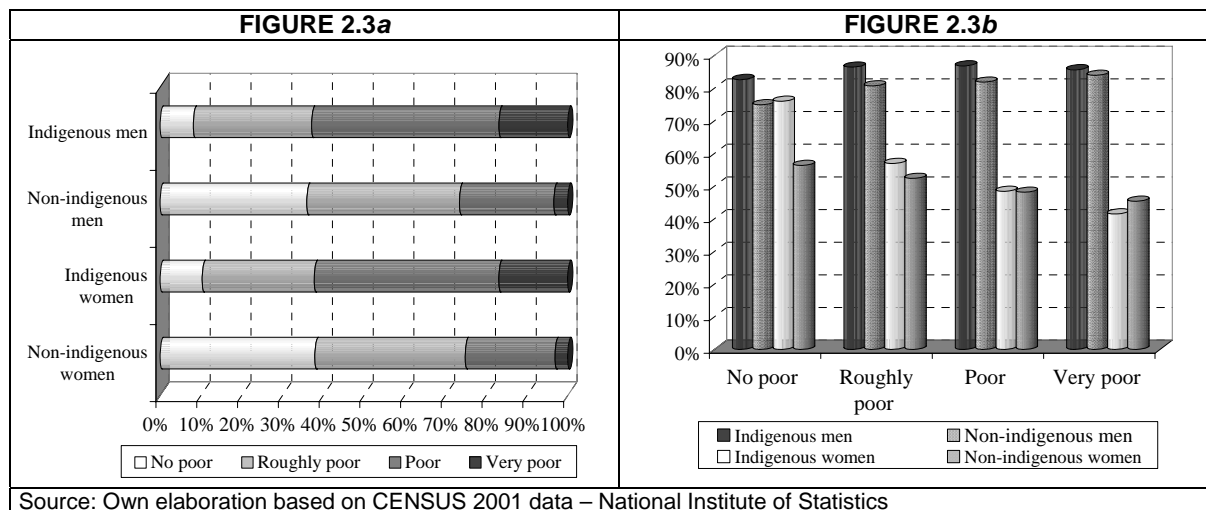
For each gender group the PWA was disaggregated in two: 1) individuals that have a ratio of children per adult higher than the population average ratio (for a given gender group); and 2) individuals that have a ratio lower than the population average ratio. According to this, it is separated the individuals into economically active and economically inactive people. This calculations show that men with a higher rate of children per adult in their house participate in a higher proportion in the labor market than men that have a rate under the average: 84.75% compared to 77.89%. Within female population it can be seen the opposite, a smaller percentage of EA women with high rates of children per adult and a greater percentage of EA women with rates lower than the average: 48.99% compared to 54.75%.

Finally, labor force participation is analyzed considering the level of individual's poverty. Figure 2.3a shows population by gender and ethnicity according to four categories of poverty: non-poor, roughly poor, poor (moderate) and very poor (indigent and marginal). This indicator is built by Bolivian National Institute of Statistical through the "unsatisfied basic needs" that are evaluated considering

⁵ This indicator is because there is no information of number of children at family level, only at house level. The house can have one or more families.

housing and individual characteristics: use of water services, basic sanitation and combustible, years of education and health attendance.

FIGURE 2.3
URBAN LABOR FORCE OF 19 TO 65 YEARS OLD BY GENDER AND
ETHNICITY ACORDING TO THE LEVEL OF POVERTY, 2001



A first result, which has been documented in the literature, is that non-indigenous population is mostly non-poor: in the first two categories – non-poor and roughly poor– it is found the 74.88% of women and the 73.45% of men. Indigenous population, on the other hand, is generally poor or very poor: the 62.14% of indigenous women and the 62.80% of indigenous men belong to the two last categories – poor and very poor.

Figure 2.3b shows the labor force participation as a proportion of PWA for each category of poverty. Among men, it is observed that when they are non-poor they participate relatively in less proportion in the labor force. Among women the contrary fact can be seen, non-poor women participate in more percentage in the labor force than poorer women. It is interesting to note that the 75.94% of non-poor indigenous women are working or looking for a job, a high percentage compared to women EA population (see Table 2.1).

The gap by gender found in Figure 2.3b seems to reflect two important aspects: differences in responsibilities at home between men and women and opportunity costs for female population. In this way, poor women are generally less educated (in quality and quantity) and they have fewer opportunities of getting a good job rather than more educated women. In this case, the use of the time in domestic tasks seems to be not only an occupational stereotype imposed by the society, but also a good way of dividing the responsibilities at home. As the family is less poor, however, mother domestic tasks can be carried out through recruiting domestic workers in Bolivia. Additionally, since less poor women are generally more educated, the opportunity cost of not working in labor market and staying at home becomes higher.

III. Econometrics analysis

III.1. The model

The potential factors that could explain female labor force participation can be analyzed through models of binary choice. In general terms, in these models the dependent variable assume only two values: $y = 1$ if observation k ($k = 1, 2, 3, \dots, K$) has a given characteristic and $y = 0$ otherwise. The explanatory factors are collected in a vector \mathbf{x} and related with y through the following probabilities,

$$(3.1) \quad \begin{aligned} \text{Prob}(y = 1) &= F(\boldsymbol{\beta}'\mathbf{x}) \\ \text{Prob}(y = 0) &= 1 - F(\boldsymbol{\beta}'\mathbf{x}) \end{aligned}$$

The vector of coefficients $\boldsymbol{\beta}$ resume the \mathbf{x} impact over the probability of having (or not) the given characteristic, and $F(\cdot)$ is the cumulative distribution function. The marginal effects are determined through the

$$(3.2) \quad \frac{\partial E(y)}{\partial \mathbf{x}} = \left(\frac{dF(\boldsymbol{\beta}'\mathbf{x})}{d(\boldsymbol{\beta}'\mathbf{x})} \right) \boldsymbol{\beta} = f(\boldsymbol{\beta}'\mathbf{x})\boldsymbol{\beta}$$

where $f(\cdot)$ is the density function that corresponds to the cumulative distribution $F(\cdot)$. Here it is used the Probit model, which assumes that $f(\cdot)$ is a normal distribution function.

III.2. The results

Probit model has been estimated for female urban population in working age, between 19 and 65 years old, using Census data of 2001. The dependent variable used is: $y = 1$ if the individual is working or looking for a job (if it belongs to EA population) and $y = 0$ otherwise. The explanatory variables are: 1) years of education; 2) age; 3) squared age (given the EA U inverted shape according to age group, see Figure 2.1); 4) an ethnicity dummy, which takes the value one if individual is an indigenous person and zero if otherwise; 5) the index of “unsatisfied basic needs” for measuring poverty; 6) a dummy variable of whether the individual lives in the main cities of Bolivia (La Paz, Santa Cruz and Cochabamba); 7) a marital status dummy (equals one if the person is single and zero if otherwise); 8) the ratio of children per adult; 9) a dummy variable of whether the individual is immigrant; and 10) a home headship dummy. The econometrics estimation results are in Table 3.1.

The basic regression - (1) and (1a)– considers the dependent variable as a function of two main factors, usually studied in the literature: years of education and age. In (1) coefficients have the expected signals and are significant at 1% level. On one hand, as woman is more educated the probability of participating in the labor force increases. On the other hand, the positive coefficient for age and negative coefficient for squared age show that the possibility of a woman being EA increases with age, but at decreasing rates. In (1a) the marginal effects of explanatory variables are calculated. It is interesting to note that age has a higher

impact rather than years of education over woman probability of participating in the labor force.

TABLE 3.1
Probit model: Women probability of being in the urban labor force, 2001
(In between 19 to 65 years old)

Variables	(1)	(1a)	(2)	(2a)
Years of schooling	0.0220 (0.0002)***	0.0088	0.0174 (0.0003)***	0.0069
Age	0.1070 (0.0006)***	0.0426	0.1263 (0.0006)***	0.0503
Age squared	-0.0013 (0.0000)***	-0.0005	-0.0016 (0.0000)***	-0.0006
Ethnicity dummy			-0.1284 (0.0030)***	-0.0511
Poverty			-0.1176 (0.0027)***	-0.0468
Dummy for principal cities			0.0974 (0.0027)***	0.0388
Single dummy			0.2940 (0.0029)***	0.1159
Ratio: children adults			-0.1478 (0.0025)***	-0.0588
Immigrant dummy			0.0399 (0.0023)***	0.0159
Household head dummy			0.2755 (0.0027)***	0.1085
Constant	-2.0566 (0.0107)***		-2.2638 (0.0135)***	
Number of observations	1,333,498	1,333,498	1,333,498	1,333,498

Notes: a) Between parentheses are the standard errors; b) (***) means that the coefficient is significant at 1%; c) the standard errors have been calculated using the robust covariance-variance matrix; d) the database used is the Census 2001.

The second regression - (2) and (2a)– considers the dependent variable as a function of all of the explanatory variables described before. All coefficients are significant at 1% level. Through the marginal effects, it is observed that two factors are most relevant over woman probability of participating in the labor force: being single and being household head. Both characteristics show that selections related to family responsibilities determine fundamentally female EA population: man assumes the responsibility of getting income and woman is dedicated to domestic tasks. When woman has to be household head - essentially because she is widow, divorced or separated – she has additional responsibilities

at home, having to work also for monetary payment in order to support and sustain their children. In this case she is strongly stimulated to participate in the labor force.

Other variables that increase the possibility of getting women to work or look for a job are - besides the ones in (1) – living in the main cities of Bolivia and being immigrant. Regarding the first variable, a positive coefficient seems to reflect the higher economic activities in these regions compared to other cities in Bolivia, where more and better employment opportunities could stimulate women participation in the labor market. In the case of immigrant women it is known that one of the causes of changing residence, from rural to urban or from urban to urban, are certainly to look for a (better) job.

In regression (2) and (2a) it can also be observed that the probability of women labor force participation diminish when she is indigenous and poor. This result is broadly consistent with the previously commented premise: the opportunity costs of spending time working at home instead of working in the labor market are lower for these type of women, and probably do not compensate the choice of being EA given the family responsibilities. Lastly, it is observed that the higher is the ratio of children per adult, the probability of female labor force participation decreases. In the same sense, the single dummy result reflects the family responsibilities division by gender.

The previous observations are supported with Probit regressions analysis for masculine population (see Table 3.2). On one hand, single men, or with a fewer number of children per adult in the house, have less probability of being in the labor force. This shows that this kind of men have less responsibilities of generating income for the family. On the other hand, when men are indigenous or poor, they have higher possibilities to work or to look for a job. In this case, indigenous or poor families seem to have further marked separation responsibilities, perhaps because income gap by gender in these families is relatively higher than in other cases.

TABLE 3.2
Probit model: Men probability of being in the urban labor force, 2001
(In between 19 to 65 years old)

Variables	(i)	(ia)	(ii)	(iia)
Years of schooling	-0.0273 (0.0004)***	-0.0068	-0.0147 (0.0004)***	-0.0035
Age	0.2451 (0.0007)***	0.0614	0.1787 (0.0008)***	0.0431
Age squared	-0.0030 (0.0000)***	-0.0008	-0.0023 (0.0000)***	-0.0006
Ethnicity dummy			0.0072 (0.0040)***	0.0017
Poverty			0.0465 (0.0036)***	0.0112
Dummy for principal cities			0.1483 (0.0034)***	0.0372
Single dummy			-0.4908 (0.0038)***	-0.1276
Ratio: children adults			0.1576 (0.0049)***	0.0380
Immigrant dummy			0.0761 (0.0030)***	0.0183
Home headship dummy			0.2660 (0.0036)***	0.0662
Constant	-3.2037 (0.0127)***		-2.1283 (0.0169)***	

Notes: a) Between parentheses are the standard errors; b)(***) means that the coefficient is significant at 1%; c) the standard errors have been calculated using the robust covariance-variance matrix.

IV. Concluding remarks and recommendations

This research has been carried out in order to analyze labor force participation in Urban Bolivia controlling mainly by gender group. The analysis was based in two main differences between women and men: human capital (years of education and work experience) and family conditions (marital status, number of children, household headship, etc).

The results found in this research are summarized in the following points. First, education is constituted as an important explanatory factor. When women have more years of education, they have a higher probability of being in the labor force - nevertheless, this factor is not the most important. This characteristic reflects the

average years of educational gap between EA and EI women, with almost one more year of education for EA. Second, EA population and age have an inverted U-shaped correlation: there is a higher proportion of adults working or looking for a job compared to young or third age people. The indigenous women group has the highest proportion of the population that get into the labor market at an earlier age, but the adult indigenous women proportion is relatively lower than non-indigenous people and indigenous men.

Third, the most important factors that explain women labor force participation are related with family responsibilities. It is less probable that married women with children get into the labor force - because they have more housework responsibilities, while men with these characteristics have a higher probability of belonging to the EA population. This result shows that social occupation division inside the household by gender is still marked in Bolivia. Because most of the EA population is married, it also explains significantly the labor force gap by gender. However, when women are household headship, they have more responsibilities for generating income, having, therefore, a higher probability of working or looking for a job.

Finally, family socio-economic features such as the place where they live and poverty determine also the women labor force participation choices. When these conditions are better, there are more possibilities for women to be EA. This result seems to be related with women opportunity costs. On one hand, living in the main cities of Bolivia (La Paz, Santa Cruz and Cochabamba) can incentive women to participate in the labor force, probably because there are more job opportunities. On the other hand, poor women are generally less educated (in quality and quantity), have more children within the household and have fewer possibilities to get a good job compared to more educated and less poor women.

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Annex

TABLE A.1
BOLIVIA: OVER 10 YEARS OLD POPULATION BY GENDER AND ETHNICITY, ACCORDING
TO CONDITION OF ACTIVITY AND GEOGRAPHICAL AREA, 2001

DESCRIPTION	ACTIVE POPULATION				INACTIVE POPULATION		TOTAL	
	EMPLOYED		UNEMPLOYED		Indigenous	Non indigenous	Indigenous	Non indigenous
	Indigenous	Non indigenous	Indigenous	Non indigenous				
TOTAL POPULATION								
Total	1,281,969	1,710,935	46,345	89,264	940,224	1,922,685	2,268,538	3,722,884
10 to 17 years	109,622	165,668	3,229	6,336	292,485	939,922	405,336	1,111,926
18 to 25 years	224,990	411,126	9,607	28,209	136,310	431,310	370,907	870,645
26 to 35 years	263,942	468,875	11,193	25,558	123,531	190,223	398,666	684,656
36 to 45 years	258,521	347,536	9,609	15,562	107,213	112,940	375,343	476,038
46 to 55 years	196,103	196,711	6,734	8,853	84,479	79,976	287,316	285,540
56 to 65 years	126,468	81,522	3,835	3,502	75,039	72,588	205,342	157,612
66 or more	102,323	39,497	2,138	1,244	121,167	95,726	225,628	136,467
Urban area	488,716	1,353,141	28,576	81,276	331,538	1,564,123	848,830	2,998,540
10 to 17 years	33,727	118,340	1,187	5,090	56,598	745,258	91,512	868,688
18 to 25 years	95,404	326,205	5,423	25,604	54,581	371,406	155,408	723,215
26 to 35 years	114,170	382,700	7,493	23,722	55,048	154,568	176,711	560,990
36 to 45 years	111,513	284,941	6,511	14,425	44,895	88,556	162,919	387,922
46 to 55 years	76,584	157,690	4,539	8,226	34,546	63,454	115,669	229,370
56 to 65 years	36,350	58,520	2,402	3,158	32,372	60,363	71,124	122,041
66 or more	20,968	24,745	1,021	1,051	53,498	80,518	75,487	106,314
Rural area	793,253	357,794	17,769	7,988	608,686	358,562	1,419,708	724,344
10 to 17 years	75,895	47,328	2,042	1,246	235,887	194,664	313,824	243,238
18 to 25 years	129,586	84,921	4,184	2,605	81,729	59,904	215,499	147,430
26 to 35 years	149,772	86,175	3,700	1,836	68,483	35,655	221,955	123,666
36 to 45 years	147,008	62,595	3,098	1,137	62,318	24,384	212,424	88,116
46 to 55 years	119,519	39,021	2,195	627	49,933	16,522	171,647	56,170
56 to 65 years	90,118	23,002	1,433	344	42,667	12,225	134,218	35,571
66 or more	81,355	14,752	1,117	193	67,669	15,208	150,141	30,153

Table A.1 continued

DESCRIPTION	ACTIVE POPULATION				INACTIVE POPULATION	TOTAL		
	EMPLOYED		UNEMPLOYED			Indigenous	Indigenous	Non indigenous
	Indigenous	Non indigenous	Indigenous	Non indigenous	Indigenous			

MALE POPULATION								
Total	750,244	1,027,906	37,569	63,364	307,811	765,658	1,095,624	1,856,928
10 to 17 years	53,198	94,992	2,327	4,367	150,161	463,527	205,686	562,886
18 to 25 years	128,432	243,645	7,072	18,075	42,320	172,388	177,824	434,108
26 to 35 years	162,180	282,377	8,963	17,535	20,181	37,908	191,324	337,820
36 to 45 years	155,178	205,533	8,070	11,879	17,835	17,708	181,083	235,120
46 to 55 years	117,361	120,920	5,895	7,345	17,211	15,317	140,467	143,582
56 to 65 years	75,472	53,947	3,410	3,094	20,940	22,303	99,822	79,344
66 or more	58,423	26,492	1,832	1,069	39,163	36,507	99,418	64,068
Urban area	269,038	769,805	22,152	56,521	94,043	629,762	385,233	1,456,088
10 to 17 years	14,082	63,187	739	3,356	27,767	365,505	42,588	432,048
18 to 25 years	49,450	183,259	3,553	15,923	16,285	153,760	69,288	352,942
26 to 35 years	66,823	220,511	5,673	15,939	7,239	32,419	79,735	268,869
36 to 45 years	63,246	159,541	5,285	10,868	6,360	14,198	74,891	184,607
46 to 55 years	44,170	91,649	3,902	6,763	7,061	12,669	55,133	111,081
56 to 65 years	20,573	36,382	2,129	2,775	10,261	19,585	32,963	58,742
66 or more	10,694	15,276	871	897	19,070	31,626	30,635	47,799
Rural area	481,206	258,101	15,417	6,843	213,768	135,896	710,391	400,840
10 to 17 years	39,116	31,805	1,588	1,011	122,394	98,022	163,098	130,838
18 to 25 years	78,982	60,386	3,519	2,152	26,035	18,628	108,536	81,166
26 to 35 years	95,357	61,866	3,290	1,596	12,942	5,489	111,589	68,951
36 to 45 years	91,932	45,992	2,785	1,011	11,475	3,510	106,192	50,513
46 to 55 years	73,191	29,271	1,993	582	10,150	2,648	85,334	32,501
56 to 65 years	54,899	17,565	1,281	319	10,679	2,718	66,859	20,602
66 or more	47,729	11,216	961	172	20,093	4,881	68,783	16,269

Table A.1 continued

DESCRIPTION	ACTIVE POPULATION				INACTIVE POPULATION		TOTAL	
	EMPLOYED		UNEMPLOYED		Indigenous	Non indigenous	Indigenous	Non indigenous
	Indigenous	Non indigenous	Indigenous	Non indigenous				

FEMALE POPULATION								
Total	531,725	683,029	8,776	25,900	632,413	1,157,027	1,172,914	1,865,956
10 to 17 years	56,424	70,676	902	1,969	142,324	476,395	199,650	549,040
18 to 25 years	96,558	167,481	2,535	10,134	93,990	258,922	193,083	436,537
26 to 35 years	101,762	186,498	2,230	8,023	103,350	152,315	207,342	346,836
36 to 45 years	103,343	142,003	1,539	3,683	89,378	95,232	194,260	240,918
46 to 55 years	78,742	75,791	839	1,508	67,268	64,659	146,849	141,958
56 to 65 years	50,996	27,575	425	408	54,099	50,285	105,520	78,268
66 or more	43,900	13,005	306	175	82,004	59,219	126,210	72,399
Urban area	219,678	583,336	6,424	24,755	237,495	934,361	463,597	1,542,452
10 to 17 years	19,645	55,153	448	1,734	28,831	379,753	48,924	436,640
18 to 25 years	45,954	142,946	1,870	9,681	38,296	217,646	86,120	370,273
26 to 35 years	47,347	162,189	1,820	7,783	47,809	122,149	96,976	292,121
36 to 45 years	48,267	125,400	1,226	3,557	38,535	74,358	88,028	203,315
46 to 55 years	32,414	66,041	637	1,463	27,485	50,785	60,536	118,289
56 to 65 years	15,777	22,138	273	383	22,111	40,778	38,161	63,299
66 or more	10,274	9,469	150	154	34,428	48,892	44,852	58,515
Rural area	312,047	99,693	2,352	1,145	394,918	222,666	709,317	323,504
10 to 17 years	36,779	15,523	454	235	113,493	96,642	150,726	112,400
18 to 25 years	50,604	24,535	665	453	55,694	41,276	106,963	66,264
26 to 35 years	54,415	24,309	410	240	55,541	30,166	110,366	54,715
36 to 45 years	55,076	16,603	313	126	50,843	20,874	106,232	37,603
46 to 55 years	46,328	9,750	202	45	39,783	13,874	86,313	23,669
56 to 65 years	35,219	5,437	152	25	31,988	9,507	67,359	14,969
66 or more	33,626	3,536	156	21	47,576	10,327	81,358	13,884

Source: Own elaboration based on CENSUS 2001 data – Bolivian National Institute of Statistics

TABLE A.2
LEVEL OF EDUCATION OF OVER 19 YEARS OLD POPULATION BY GENDER AND ETHNIC,
ACCORDING TO CONDITION OF ACTIVITY AND GEOGRAPHICAL AREA, 2001

DESCRIPTION	ACTIVE POPULATION				INACTIVE POPULATION	
	EMPLOYED		UNEMPLOYED		Indigenous	Non indigenous
	Indigenous	Non indigenous	Indigenous	Non indigenous		
MALE POPULATION						
BOLIVIA	682,988	909,906	34,500	57,462	146,670	263,702
None	83,731	25,751	3,764	1,282	33,119	9,896
Primary	434,458	296,782	22,109	17,374	75,677	54,879
Secondary	124,858	339,146	7,380	24,929	27,058	97,670
Superior non university	28,673	108,504	747	5,208	6,299	32,670
University	11,268	139,723	500	8,669	4,517	68,587
URBAN AREA	250,228	690,705	21,126	51,889	62,326	231,172
None	12,253	8,728	1,444	825	9,001	5,673
Primary	137,491	162,013	13,108	14,030	31,091	39,852
Secondary	75,997	290,800	5,545	23,436	14,790	88,256
Superior non university	15,494	94,959	581	5,034	3,847	30,505
University	8,993	134,205	448	8,564	3,597	66,886
RURAL AREA	432,760	219,201	13,374	5,573	84,344	32,530
None	71,478	17,023	2,320	457	24,118	4,223
Primary	296,967	134,769	9,001	3,344	44,586	15,027
Secondary	48,861	48,346	1,835	1,493	12,268	9,414
Superior non university	13,179	13,545	166	174	2,452	2,165
University	2,275	5,518	52	105	920	1,701
FEMALE POPULATION						
BOLIVIA	461,826	595,378	7,576	22,995	477,642	638,346
None	155,646	26,281	1,748	487	195,473	51,769
Primary	256,059	184,806	4,468	4,789	243,333	234,362
Secondary	33,506	191,095	1,020	8,357	28,418	209,506
Superior non university	13,200	103,839	202	3,938	7,542	63,660
University	3,415	89,357	138	5,424	2,876	79,049
URBAN AREA	193,535	513,964	5,781	22,135	204,640	518,790
None	38,593	14,298	1,113	411	63,790	25,718
Primary	120,760	141,510	3,501	4,393	115,390	163,399
Secondary	23,675	176,649	868	8,107	18,614	192,258
Superior non university	7,506	94,230	167	3,868	4,450	60,006
University	3,001	87,277	132	5,356	2,396	77,409
RURAL AREA	268,291	81,414	1,795	860	273,002	119,556
None	117,053	11,983	635	76	131,683	26,051
Primary	135,299	43,296	967	396	127,943	70,963
Secondary	9,831	14,446	152	250	9,804	17,248
Superior non university	5,694	9,609	35	70	3,092	3,654
University	414	2,080	6	68	480	1,640

Source: Own elaboration based on CENSUS 2001 data – Bolivian National Institute of Statistics