



Economic Reform, Structural Adjustment and Female Labor Force Participation in Buenos Aires, Argentina

MARCELA CERRUTTI *

University of Pennsylvania, Philadelphia, USA

Summary. — Female labor force participation (LFP) has recently increased in the Metropolitan Area of Buenos Aires in a remarkable way. This increase has been a result neither of improvements in the conditions of labor supply nor due to the diversification of the structure of occupational opportunities available for women. Using cross-sectional and panel data I show that most of the growth in female LFP can be explained as a response to increasing unemployment and job instability associated with the implementation of structural adjustment policies since 1991. I argue that more women have decided to look for work as a way to reduce households' economic uncertainty. © 2000 Elsevier Science Ltd. All rights reserved.

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1. INTRODUCTION

Women's propensity to participate in labor market activities has recently increased in almost all Latin American countries (ECLAC, 1998). In the case of Argentina, and especially in the metropolitan area of Buenos Aires with one-third of the country's population, women's labor force participation (LFP) rates grew sharply from 38% in 1991 to 46% in 1995. In just four years the rate went up 20% and in the last 15 years almost 40%. This significant increase took place at the same time extreme economic reform and structural adjustment policies were being implemented.

During 1991–94 Argentina's GDP grew at a relatively high rate. This process, however, coexisted with increasing unemployment and a worsening income distribution (Monza, 1995). In 1995, with the impact of the 1994 Mexican crisis, Argentina's GDP fell and open unemployment skyrocketed, reaching 20% in the metropolitan area of Buenos Aires. During the same year, the female LFP rate reached the highest level of the century.

The aim of this article is to contribute toward an understanding of the ways in which female labor supply reacts in a context of decreasing employment opportunities, particularly among the economically disadvantaged. As such, this research contributes toward the analysis of women's incorporation into market activities in

the developing world. Specifically, this study seeks to identify the characteristics of and the reasons for the recent growth in female LFP in Buenos Aires, Argentina, one of the largest metropolitan areas in Latin America. It focuses on the effects of economic restructuring on the behavior of female workers and on the conditions under which they are incorporated into the labor market.

The social and economic context in which female LFP has recently increased in Buenos Aires is very different from the one that occurred in the developed world or even in Argentina during previous decades. Female LFP in the developed world was positively associated with increased clerical and service jobs, improvements in education, public welfare provisions (e.g., provision of childcare), and regulations against labor discrimination (Oppenheimer, 1976; Hartmann, 1987; Goldin, 1990; Joshi & Davies, 1992). In Argentina, for several decades the slow but steady growth in women's employment was related to

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diversification of occupational opportunities, improvements in education and changes in women's roles (Recchini de Lattes & Wainerman, 1977; Wainerman, 1979; Recchini de Lattes, 1980). But none of these reasons help to explain the sharp increase in women's LFP during the last years, when structural adjustment reforms were implemented.

The fact that the acceleration of growth in female LFP coincided with a remarkable expansion in male and female open unemployment rates may seem puzzling. This growth occurred neither as a result of an improvement in the structure of occupational opportunities available for women, nor because of improvements in the conditions of labor supply.

Two hypotheses suggest how economic fluctuations may affect labor force participation. One is the "discouraged worker effect," which predicts that during times of high unemployment, people become discouraged after long periods of job searching and decide to leave the labor force. When economic conditions improve, discouraged workers may start looking for jobs again. This hypothesis is not useful to explain what happened in Buenos Aires during 1991–95, since female LFP rates increased rapidly in a context of increasing unemployment. The second hypothesis is the "added worker effect," which predicts that during economic downturns, when primary earners (generally the household heads) become unemployed, other households' members will enter the labor force to maintain family income. Increasing women female labor force participation in periods of economic recession is understood as a specific case of this hypothesis. This explanation also predicts that after economic conditions improve, and primary earners get stable jobs, these additional family members leave the labor force.

The hypothesis of the added worker effect has been widely applied to explain fluctuations in the LFP in Latin America (ECLAC, 1992, 1995). In Mexico, Cortes (1994) has pointed out that during the late 1980s and the beginning of the 1990s, households were able to sustain their standard of living by sending more members to the labor market. Having more members in the labor force slowed down the deterioration of household income. Also in Mexico, several studies have explained the increasing presence of women in the labor force partly as a way to offset a deterioration in family income (Garcia & Oliveira, 1994; Gonzalez de la Rocha, 1994).

Humphrey (1996) considered the added worker hypothesis in the context of the Brazilian recession and restructuring during 1979–87. He found that, though the economic recession led to a drop in protected waged workers and to an increase in both unprotected employment and unemployment, at the aggregate household level the added worker effect was not visible. He concluded that in Sao Paulo the recession may have slightly accelerated the rate of entry of women in poorer households into the labor market, while decelerating the rate of entry of women in less poor households (Humphrey, 1996). In Argentina, scholars have also interpreted the increasing presence of married women in the labor force during the 1980s and the beginning of the 1990s as a way to counterbalance a loss in real income (Cortes, 1995; Geldstein, 1994; Wainerman, 1995).

Although the added worker effect has been hypothesized, empirical support is lagging. One of the limitations in the use of this concept has been an imprecise definition of economic downturns and of the mechanism through which labor force behavior is affected. If women are more likely to work to compensate a loss in family income, what are the specific processes that initiated the deterioration of income? Does income deteriorate because people are forced to accept low-paying jobs in the informal sector in a context of decreasing opportunities in the formal regulated sector? Does income deteriorate because real income easily decreases in contexts of high inflation and union inactivity? Perhaps income deterioration is driven by the unemployment of primary earners.

Though it seems reasonable that these factors may affect women's labor supply, increasing female LFP can also take place in a different context. As I will argue, in the case of Buenos Aires, female LFP grew not as much as a result of income deterioration but as a way to counterbalance the increasing employment instability of primary earners. Firms downsizing, proliferation of temporary employment, privatization of public enterprises and, as a consequence, growing unemployment increased both the real and perceived economic vulnerability of households. In this context, women who were out of the labor force decided to look for work to reduce economic uncertainty through diversification of their household economies.

In this article I identify the main reasons underlying the sharp increase in female LFP rates in a context of decreasing labor

opportunities. I first describe the main effects of structural adjustment programs on labor markets, mainly in terms of job generation. Second, I depict recent trends in female LFP, examining whether women's higher propensity to be in the labor force was accompanied by a significant change in the way individual and household characteristics affect their labor supply. Using a logistic regression model I identify the groups of women whose LFP increased the most, in terms of individual, socioeconomic and family characteristics. Third, I focus on the mobilization of secondary workers within households, examining differential trends in labor force behavior in households with different levels of per capita income. Finally, using panel data, I explore the relationship between increasing employment instability of male heads of household and increasing female LFP. In order to do this, I describe transitions among labor force statuses for men and women during different years over the period considered. Next, I estimate a multinomial logistic regression model to look at the effect of the employment instability of the male head of household on the labor force behavior of women who live in the same household.

2. DATA AND METHODS

The data for this study come from the *Encuesta Permanente de Hogares*, EPH, (Household Continuous Survey) and correspond to the metropolitan area of Buenos Aires. EPH survey is a representative household sample, gathered using a multistage and stratified design. It is collected by Argentina's Instituto Nacional de Estadísticas y Censos, INDEC (National Statistics and Census Institute). The survey contains information on employment, demographic, economic, and social characteristics of the population living in private households. I had access to consecutive individual raw data bases from October 1991 to May 1994 and a discontinuous wave corresponding to May 1995.

Because EPH is collected two times every year (in May and October), with one fourth of the respondents being replaced every six months, I was able to construct longitudinal data sets by merging information collected in different waves for each individual.¹ Three partially overlapping panel data bases were constructed for each year from 1991–94 (that is

1991–92, 1992–93, 1993–94). Each panel contains complete information for each individual at three points in time during a 12-month period.

In contrast to cross-sectional data, panel data allow the study of entries into and exits from different labor force statuses over a short period of time and thus the estimation of the effects of male household heads' labor force behavior on women's LFP. Generally, empirical tests of the added worker hypothesis have tended to rely exclusively on cross-sectional data, thus falling short of explaining the increasing presence of women in the labor market. These studies were not able to examine how individuals move into and out of the labor force. This paper partly overcomes those limitations.

3. STRUCTURAL ADJUSTMENT AND LABOR MARKETS

Starting in 1991 an aggressive combination of stabilization policies, economic openness and structural reforms was implemented in Argentina. These policies were also applied with a few differences in most Latin American countries (Bulmer-Thomas, 1996). The new economic package featured a "currency board" system, the privatization of public enterprises, the deregulation of markets for goods, capital and labor, fiscal reform, and stronger regional integration within MERCOSUR (South American Common Market) (Marshall, 1996). Regarding labor market institutions, several reforms were introduced in order to obtain greater flexibility in recruitment and dismissal and to decentralize union bargaining (Marshall, 1998). Besides these changes in labor regulations, employers' mandatory payments to social security were reduced and a process of privatization of the Social Security System was initiated.

For a few years after 1991, the economy experienced low inflation and a very high growth that was sustained by foreign capital inflows directed towards privatization and short-term portfolio investments. During 1991–93, the cumulative GDP grew around 25% and both the number of jobs as well as the number of unemployed experienced an increase (see Table 1). During 1993–94, however, the number of people seeking employment continued to grow, while the economy began to experience difficulties in preserving existing

Table 1. *Evolution of GDP and labor market indicators, 1991–95*

Year	GDP annual rate of change ^a	Average real income ^a (1990 = 100)	Labor force participation rate ^b	Open unemployment rate ^b
1991	9.9	100	55.9	5.2
1992	8.9	108	56.7	6.6
1993	5.9	113	57.9	9.6
1994	7.2	112	57.4	12.9
1995	-5.1	106	60.7	20.2

^a Sources: Ministerio de Economía y Obras y Servicios Públicos. Secretaría de Programación Económica. Economic Report, 1998. Data for Argentina.

^b Metropolitan area of Buenos Aires. Population 15 and over. EPH, 1991, 1992, 1993, 1994 October data, 1995 May data.

jobs. As such, it is clear that even before the 1994 Mexican peso crisis, the Argentine economy exhibited clear signs of employment stagnation.

In 1995, the situation worsened with the impact of the 1994 Mexican crisis that brought about a 5% fall in GDP during 1995. The number of people who were looking for work grew sharply again and the open unemployment rate reached extraordinarily high levels in the metropolitan area of Buenos Aires (20.2%). Moreover, during the period, the rate of underemployment increased. Whereas in 1991 it was 7.9, at the beginning of 1995 it was 11.3% (Ministerio de Trabajo y Seguridad Social, 1995).

These strikingly high open unemployment rates were the result of two different kinds of processes: the difficulties experienced by the economy in maintaining or generating jobs, and the increase in the number of people looking for work. The generation of employment slowed for several reasons. One reason was government downsizing mainly through privatization of public enterprises. Though the lack of global estimates does not allow us to establish the exact loss of jobs due to these processes, there are several pieces of evidence that suggest that the loss was significant.² For example, in Buenos Aires the unemployment rate in public administration more than doubled over 1991–92 and, after decreasing in 1993, rose again in 1994. Similarly, the percentage of public employment over total non-agricultural employment dropped from 19% in 1990 to 14% in 1995 (Marshall, 1998).

A second reason for the slowdown in employment generation was a reorganization of the labor process undertaken by large formal firms operating in a more competitive economic environment. These firms made significant investments in capital goods to increase their

level of productivity and adjusted their labor force accordingly. One indicator of this process is that during 1990–95, gross value added by manufacturing firms grew 14.5% (Ministerio de Economía, 1996) whereas the number of workers decreased by 10% (INDEC, 1997).

A third reason resulted from the difficulties experienced in the new economic contexts by small and medium size manufacturing establishments, and to a lesser extent by large firms. From mid-1980s to mid-1990s the number of small and medium size manufacturing establishments decreased by approximately 24%, representing a loss of approximately 140,000 jobs (CEPAL, 1997). Between mid-1980s and mid-1990s the commerce sector was also restructured. Medium-size commercial establishments experienced negative growth whereas large establishments expanded (Cerrutti, 1996).

Recent studies in Latin America, and in other developing regions, have focused on the influence of labor demand on women's employment, particularly the effect of international economic restructuring (Standing, 1989; Stichter, 1990; Fernandez-Kelly, 1994). These studies have paid special attention to the effect of industrial development in export-oriented zones and the general increase in labor flexibility in promoting female employment. This is not the case of Argentina where the impact of economic restructuring was not experienced as a growth of labor market opportunities for women.

The problem of job generation was not accompanied by a significant deterioration in real incomes. For example during 1991–95, average real income experienced a mild increase (see Table 1). This increase, however, masks two trends: over 1991–93 real income increased while over 1993–95 it deteriorated. This aggregate trend applies in all of the first eight income deciles, though does not apply for the richest 20%, who experienced an increase in their real

income throughout this period (Ministerio de Economía, 1998).

From a labor supply point of view, the increase in unemployment was partly due to a growing number of people, mostly women, who started looking for jobs. Evidence of this behavior and an analysis of its determinants is provided in the next sections.

4. DETERMINANTS OF FEMALE LABOR FORCE PARTICIPATION

In Argentina female LFP has historically followed a traditional “U” shaped pattern (Recchini de Lattes and Wainerman, 1977). Women’s participation in economic activities attained very high levels during the last century, mainly in traditional industries such as handicrafts, textiles and garments as well as in personal services. During the process of industrialization and modernization at the turn of the century, these activity levels dropped dramatically and continued to do so until WWII. After 1960 female participation in the labor force started growing again,³ mainly due to changes in labor supply and to increasing opportunities in the service sector.⁴

During 1960–80, significant changes have taken place in female LFP. The youngest (ages from 15 to 19) stay for a longer time in the educational system, reducing their propensity to participate in the labor force. Participation among older people has also been decreasing in response to a more extensive social security systems. Since the 1980s LFP among adult women has increased the most (Recchini de

Lattes, 1980; Gallart, Moreno & Cerrutti, 1993; Wainerman, 1995).

During 1991–95, female LFP rates grew from 38.1 to 45.8. This increase was greater than the one experienced by almost all age groups during the 1980s (see Figure 1).⁵

Traditional explanations of the increasing presence of women in the labor force emphasize the effects of improvements in female education, changes in cultural values and beliefs and the expansion and diversification of occupational opportunities. These secular changes could not, however, cause the sharp increase in female LFP in such a short period of time (1991–95).

The largest increase in female LFP rates took place over 1993–95 when there were clear signs of economic deterioration, particularly after the advent of the Mexican crisis (see Table 2). Males, on the contrary, show a more stable rate of LFP throughout the period, particularly heads of households. But this apparent stability, as I will show, was more the result of an increase in the proportion of unemployed than an increase in the proportion of those working.

The growth in female LFP rates was mainly due to an unprecedented increase in the rate of open unemployment. Both sexes suffered from not being able to find a job: for males unemployment rates increased 3.6 times (from 4.8% in 1991 to 17.3% in 1995), while for women they increased 4.2 times (from 5.8% to 24.8%).

Though most women had higher LFP rates in 1995 than in 1991, those with very low levels of education, who traditionally experience the lowest rates, were the ones who increased the most (see Table 2). Although many more poor

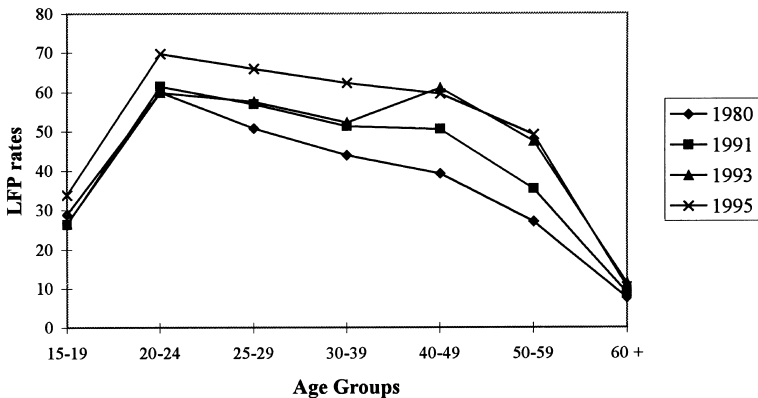


Figure 1. Female LFP rates by age groups.

Table 2. *Female labor force participation and unemployment rates by level of education and position in the household. Males and males heads of household LFP rates and unemployment rates^a*

Individual variables	LFP rates			Unemployment rates		
	1991	1993	1995	1991	1993	1995
Total males ^b	76.4	76.2	77.7	4.8	7.9	17.3
Heads of households	97.8	98.1	97.9	2.5	5.3	11.3
Total females ^b	38.1	42.1	45.8	5.8	12.4	24.5
Level of education ^c						
No Educ/Prim. incomplete	41.5	46.9	54.1	3.4	12.3	21.7
Primary complete	40.4	46.9	52.7	5.0	14.5	28
Secondary complete	58.5	57.9	63.5	7.2	12.0	24.7
College complete	81.8	85.9	87.7	5.9	3.6	9.4
Position in the household ^c						
She lives only with husband	66.6	69.4	72.0	2.9	6.6	23.1
Wife + Head + Child < 3	31.5	30.5	37.1	5.8	15.2	24.8
Wife + Head + Child 6 to 13	43.7	45.8	50.4	3.5	8.8	18.5
Wife + Head + Child > 13	37.3	50.4	51.5	1.6	7.7	21.1
She is head single parent	74.0	82.2	79.4	5.3	11.5	10.1
She is a daughter	50.9	51.8	57.7	10.8	19.4	34.6
She is other relative	54.2	64.0	73.3	7.9	17.4	27.3

^a Source: Encuesta Permanente de Hogares (EPH), Metropolitan Area of Buenos Aires. October 1991 and 1993, May 1995.

^b Ages 15 and older.

^c Ages 15 to 55.

women needed to work, they were not able to find jobs easily, and they suffered the highest increase in the unemployment rate.

Likewise, women with the highest domestic burden, excluding those with very young children at home, displayed a sharp increase in their LFP rates during these years, together with women in other positions in the households (i.e. daughters-in-law).

The fact that women in 1995 were more likely to be in the labor force (either employed or looking for jobs) than they were in 1991 opens the question of whether this increase implied a significant change in how individual and household variables affected women's labor force behavior. Differences in aggregate labor force participation rates presented in Table 2 do not control for the effect of other significant variables. To be able to overcome this limitation and examine changes in the determinants of female labor behavior, I estimated two dichotomous logistic regressions. These regressions predict women's odds to be in the labor force in 1991 and in 1995.⁶ Table 3 shows the relative odds of being in the labor force for women with different characteristics to those in the reference categories. For the estimation of the probabilities I used a multiple classification analysis to adjust the effects of predictor variables on labor force participation.⁷

Consistent with the Latin America literature regarding the determinants of female labor force participation, education has a strong positive effect on the likelihood that a woman is in the labor force. Those with college education are at least nine times more likely to be in the labor force compared with those having only a primary education or lower (see Table 3). Wives with children at home are generally less likely to be in the labor force, and those with the youngest children (under schooling ages) are significantly less inclined to be employed or looking for a job. Female heads show the highest propensity to be in the labor force followed by wives living alone with their husbands and daughters and other relatives. Finally, considering the effect of per capita family income on women's likelihood of being in the labor force, the better the household income the lower the chances a woman was working or looking for a job.

Comparing the two dates considered, though the effect of individual and household variables is the same for most groups, the probability of being in the labor force generally increased.⁸ Moreover, the intensity of the effects of a few variables on the likelihood to be in the labor force significantly changed during the period. Women with low levels of education, those married with children older than five years,

Table 3. *Relative odds and estimated probabilities of being in the labor force for women aged 15 and older living in households where at least one member receives an income^a*

Independent variables	1991		1995	
	Relative odds	Prob ^b	Relative odds	Prob ^b
Age				
Less than 24 years (25 to 39)	0.49 ^c	0.39	0.48 ^c	0.46
40 to 54	0.84	0.53	0.72 ^c	0.57
55 and older	0.11 ^c	0.13	0.14 ^c	0.21
Level of formal education (Primary completed or lower)		0.37		0.46
Secondary incomplete	0.87	0.34	0.80 ^c	0.40
Secondary completed	2.48 ^c	0.59	2.46 ^c	0.67
College education incomplete	3.04 ^c	0.64	2.53 ^c	0.68
College education complete	9.92 ^c	0.85	10.19 ^c	0.89
Position in the household				
Is the head living alone	6.25 ^c	0.93	7.89 ^c	0.86
Is the head living with other	4.41 ^c	0.69	3.07 ^c	0.71
She lives only with her husband	3.18 ^c	0.61	2.33 ^c	0.65
With husband + children under 6 (With husband + children 6 and over)	0.52 ^c	0.20	0.45 ^c	0.26
She is a daughter	1.61 ^c	0.44	1.30 ^c	0.51
She is other relative	1.60 ^c	0.44	1.95 ^c	0.61
Household income per capita				
Lower 33% (Middle 33%)	2.38 ^c	0.58	2.25 ^c	0.66
Highest 33%	0.85 ^c	0.33	0.64 ^c	0.47
Number of cases	2973		3498	0.36

^a Source: See Table 2.

^b Probabilities were estimated standardizing on actual 1991 population proportions in each variable.

^c $p < 0.05$.

those who are other relatives in the household (most likely to be daughters-in-law), and those living in middle per capita income households were significantly more likely to be in the labor force. These findings support the claim that during periods of structural adjustment, lower and middle class households are particularly affected, and women who belong to these sectors have to start looking for jobs.

5. FEMALE LABOR FORCE BEHAVIOR WITHIN THE HOUSEHOLD CONTEXT

I shall argue that one of the factors clearly underlying the increased propensity of women to work has been the increased employment instability of male providers in the household. In order to support this argument, I first show that since the beginning of the period (1991–95)

males, including heads of households, had trouble in getting and keeping jobs. Second, I show how households, specifically poor households, sharply increased the average number of workers in the labor force (mainly looking for jobs), probably as a strategy to cope with the unemployment of other household members or with the decreasing family income. Finally, using panel data information, I show how heads of household are less likely to be constantly employed even during short periods of one year, and also how this labor force instability affects the labor force behavior of women who live in the same households.

During 1991–95 the demographic composition of the unemployed changed. For example, heads of households increased their incidence among male unemployed (from 32.8% to 42.0%). Women also increased their representation among the total unemployed population,

particularly wives of male heads of households (from 28.8% to 39.5%).

A decomposition of absolute changes in LFP rates in its two components (employment and unemployment) for 1991–95 shows that different trends have taken place for men and women (see Table 4). For men, particularly heads of households, stability in the LFP rate was the result of two counterbalancing processes: a significant decrease in employment and a significant increase in unemployment. For women, however, most of the increase in LFP reflects a practically constant employment component and a significant increase in the unemployment.

The fact that the employment component has either kept constant or substantially declined (depending on the date and sex) indicates that the increase in the unemployment rate was not due to perceived improvements in occupational opportunities, as many government officials declared when they had to explain the significant rise in the open unemployment. Rather, it appears that increasing unemployment was produced by a growing number of people who needed to work, induced by the deteriorating economic situation in their households.

A clear sign of this process is that the most affected groups have been the poorest segments of the Buenos Aires population. As Table 5

shows, these households had to send more members into the labor markets in order to sustain their standard of living, or to counterbalance job losses by other family members.⁹

The fact that more people needed to work did not mean, however, that they could find a job. Table 5 indicates that when economically active members of the households are distinguished by their employment status (that is, whether they are currently employed or unemployed), it was the poorest households that increased the number of unemployed members in the labor force. Whereas the proportion of employed members was relatively constant over 1991–95, that of the unemployed is significantly larger. This fact again indicates that relatively disadvantaged groups send more household members to look for jobs (without luck) as a survival strategy.

Another way to look at the labor force behavior of different members of the household, and to understand the growth in female LFP in that context, is by examining transitions between labor force statuses. Using panel information containing three observations during a one-year period it is possible to look at labor mobility into and out of different labor statuses, or in other words, labor force instability. Unfortunately panel data information covers 1991–94 and does not include the year

Table 4. *Decomposition of the absolute change of labor force participation rates by employment and unemployment components, by sex and position in the household, 1991–95^a*

Change in labor force participation rates	Years				
	1991–92	1992–93	1993–94	1994–95	1991–95
<i>Females</i>					
Total					
Change in employment	0.8	0.2	-2.1	-0.2	-1.3
Change in unemployment	0.3	2.7	1.2	4.8	9.0
Total LFP change	1.1	2.9	-0.9	4.6	7.7
<i>Wives</i>					
Change in employment	0.9	0.8	-1.3	-0.2	0.2
Change in unemployment	0.5	2.2	1.7	5.0	9.4
Total LFP change	1.4	3.0	0.4	4.8	9.6
<i>Males</i>					
Total					
Change in employment	-0.1	-2.1	-2.3	-3.6	-8.1
Change in unemployment	1.0	1.0	2.5	4.9	9.4
Total LFP change	0.9	-1.1	0.2	1.3	1.3
<i>Heads of household</i>					
Change in employment	-1.1	-1.4	-2.1	-4	-8.6
Change in unemployment	1.2	1.6	1.8	4.1	8.7
Total LFP change	0.1	0.2	-0.3	0.1	0.1

^a Source: See Table 2.

Table 5. Household classified by deciles of per capita income and average number of economically active, employed and unemployed members for every adult^a

Household members labor force status	Per capita household income deciles			
	Lower 20%	30%-50%	60%-80%	90%-100%
# Of members in the labor force for each member aged 15 and over				
1991	0.39	0.39	0.59	0.75
1993	0.42	0.45	0.59	0.75
1995	0.54	0.51	0.59	0.70
# Of member employed for each member aged 15 and over				
1991	0.35	0.37	0.57	0.74
1993	0.34	0.40	0.56	0.72
1995	0.34	0.38	0.52	0.66
# Of member unemployed for each member aged 15 and over				
1991	0.05	0.02	0.01	0.01
1993	0.09	0.05	0.03	0.03
1995	0.20	0.13	0.07	0.04

^a Source: See Table 2.

1995. The exclusion of 1995 produces a significant underestimation of the labor force mobility among statuses, since the largest increase in unemployment and the largest decrease in the number of jobs took place during 1995. Nonetheless, starting in 1994 a deterioration of the employment situation began to be apparent.

Table 6 shows that for men the chances of being constantly employed during a one-year period decreased from 66.3% (during 1991-92) to 58.8% (during 1993-94) and among males heads of households from 75.5% to 66.6%. For them, the most common transition was to leave the status of being employed to enter others (most likely that of unemployed).

Women, generally speaking, show even higher labor mobility than men. Around one women in every four changes labor force status over a one-year period. Moreover, the percentage of those who are constantly employed is smaller than the percentage of those who change labor force status. But women's overall labor force instability did not change significantly in the period considered (from 26.5% to 27.8%). By examining those who did change, the most common transition was entering the labor force.

The effects of primary earners unemployment or employment instability on the labor force behavior of other household members is expected to be greater in contexts where unemployment insurance is not offered or its effective coverage is particularly low. Argentina constitutes one of these cases, since less than 10% of the unemployed are effectively covered.

To provide support for the hypothesis that the sharp increase in female labor force participation has been due to the employment instability of other family members, I examine how the employment instability of male heads of household affected the labor force behavior of women living in the same household. Specifically, I estimated a multinomial logistic regression¹⁰ predicting female labor force patterns over a one-year period. In this model, the dependent variable is a trichotomous variable constructed using three observations taken six-month apart of changes in labor force status during one year. The three categories of the dependent variable are: (a) if the woman was continuously employed, (b) if the woman was continuously out of the labor force or left her job to stay out of the labor force; and (c) if the woman entered the labor force during that year.

This exercise clearly demonstrates that women's movement into the labor force is significantly associated to the employment instability of the male heads of household. As can be seen in Table 7, women living in households where the head recently changed labor force status were almost twice more likely to enter the labor force than those who were living in households where the head was continuously employed, even controlling for individual and family characteristics associated with female labor mobility. Furthermore, living in a household where the male head was continuously out of the labor force (either because was retired, incapacitated to work, or was a discouraged worker) did not significantly affect women's labor force patterns.

Table 6. *Population aged 15 and older classified by labor force status during a 12-month period, sex, and year^a*

Labor force status during a 12-month period	1991-92		1992-93		1993-94	
	Males	Females	Males	Females	Males	Females
Keep same labor force status						
Always employed	66.3	24.4	60.9	25.1	58.8	23.9
Always in labor force	15.2	49.1	16.7	46.2	16.8	47.8
Always unemployed	0.2	0.00	0.4	0.3	0.8	0.5
Sub total	81.6	73.5	78.0	71.6	76.4	72.2
Change labor force status						
From Emp. to other LF status	9.2	8.8	9.8	10.2	11	11.5
From Unemp. to other LF status	2.3	1.8	4.9	2.3	6.0	4.3
From out of LF to other LF status	6.9	15.9	7.3	15.9	6.6	12.0
Sub total	18.4	26.5	22.0	28.4	23.6	27.8
Total	100.0	100.0	100.0	100.0	100.0	100.0

^a Source: Panel data constructed using Encuesta Permanente de Hogares from October 1991 to May 1994.

Table 7. *Female population 15 and older. Multinomial logit regression coefficients predicting women's LFP during a 12-month period as a function of male head of household LFP^{a,b}*

Male head of household LFP during a 12-month period	Women's LFP during a 12-month period			
	Continuously employed vs. continuously out of LF or leave LF		Entered the labor force vs. continuously out of LF or leave LF	
	Coefficient	Relative odds	Coefficient	Relative odds
Constant	-0.7547 ^c		-0.7504 ^c	
(Continuously employed) ^d				
Continuously out of the labor force	0.0827	1.09	0.2214	1.25
Change LF status	0.2906 ^c	1.34	0.6592 ^c	1.93
Number of cases: 3042, Likelihood ratio: 462.2				

^a Source: Panel data base constructed using successive Encuesta Permanente de Hogares. Four partially overlapping annual panels (from October 1991 to May 1994) were put together.

^b The model controls for the effects of: age, position in the household and age of the youngest child, and level of education. A variable indicating the date of the panel was initially included but was not statistically significant.

^c $p < 0.05$.

^d Reference category.

6. CONCLUDING REMARKS

Increasing female labor force participation in Latin America has traditionally been associated with secular changes in female labor supply as well as labor demand. Improvements in female educational levels, decreasing fertility, and postponement of marriage, together with an increase in occupational opportunities in tertiary activities, have been identified as the main determinants of raising female participation in the labor force. These explanatory factors, which implied changes in the value of

women's time and in gender roles, have traditionally been associated with "modernization" in Latin American societies. They appear to be, however, insufficient explanations in the context of economic reform and structural transformations.

In this article I examined the determinants of increasing labor force participation in the third largest metropolitan area of Latin America, Buenos Aires. In this city, the sharp growth in the relative number of women looking for work was a result neither of improvements in the conditions of labor supply nor due to the

diversification of occupational opportunities available for women. I argue that most of female LFP growth has been a response to decreasing job opportunities and labor conditions and as a way of diversifying households economic risks. Increasing levels of employment instability and unemployment among male primary earners have been important forces driving women to look for work.

I found that practically all women increased their likelihood of being in the labor force. Though, after controlling for significant characteristics those with low levels of education, married with children of schooling age or older, and from middle and low income households were the ones who experienced the most dramatic changes.

I also showed that male employment instability, particularly among heads of households, worsened during 1991–95, and in turn affected the labor force behavior of other women who were living in the same household. Women's likelihood of entering the labor force was positively associated with the employment instability of the male head.

The analysis of panel information suggests that the conditions under which women are incorporated into the labor force are not particularly stable. More than a quarter of all women, and more than half of those in the labor force at any point during a one-year period, ended up changing their labor force status. Greater labor force instability characterizes women with low levels of education and those who are married with children (Cerrutti, 2000). In relative terms, more women now are compelled to work than ever before but they are also more frequently unemployed and with intermittent labor force trajectories. The conditions in which an increasing number of women are being incorporated to the labor force should be of concern, as labor force instability has negative consequences on women's well being. Intermittent employment lowers the likelihood of obtaining labor benefits, such as pension rights, seniority premiums and health insurance, and prevents the acquisition and accumulation of skills and the expansion of women's social networks.

NOTES

1. Unfortunately, the available data that allow the construction of those panels cover 1991–94 and do not include the year 1995. It is very likely that had this year been included, the estimations of labor force mobility would have been much higher. Males leaving the status of being employed and women entering the status of unemployed are expected, therefore, to be much higher.

2. Marshall (1998), using estimates from an official report, points out that between 1989 and 1993, employment in public enterprises decreased from 350,000 to 67,000.

3. Female participation in the labor force dramatically dropped from a very high initial level, 60.7 in 1869, to a substantially much lower level in 1914, 27.4%.

4. During 1960–70, 60% of the total increase in female employment took place primarily in the service sector and secondly in commerce. These two sectors account for the 85% of the total increase in female employment. In contrast, the proportion of women in the manufacturing sector decreased dramatically from 35% of the total nonagricultural female labor force to 25% in 1960, dropping to 19% in 1970 (Recchini de Lattes, 1980).

5. Women in all age groups were more likely to be in the labor force in 1995 than in 1991. Though the long-term trend has been toward a systematic decrease in the LFP rates of very young women (aged 15–19), in 1995 this group experienced a reverse in the secular trend of staying longer in the educational system. Their LFP rate grew mainly as a result of a sharp rise in the proportion of youngsters looking for jobs.

6. A binomial logistic regression is used when the response variable is dichotomous, for example, to be in the labor force (0), or not to be in the labor force (1). The predictor variables may be quantitative, categorical or both. The logistic model overcomes the limitation of the linear probability model (see Retherford and Choe, 1993). The estimated model used in those regressions was:

$$\log \frac{P}{1-P} = \alpha + \beta_i \text{Age}_i + \delta_j \text{Educ}_j + \chi_k \text{Hhold}_k + \eta_m \text{PCinc}_m,$$

where P is the probability of being in the labor force; α the intercept and $\beta, \delta, \chi, \eta$ are the coefficients. Age (age groups: 15–24; 25–39; 40–54 and 55 and older), Educ (level of education: primary complete or lower; secondary incomplete, secondary complete, some college; college complete), Hhold (position in the household:

head living alone; head living with others; women living only with her husband); Pcinc, (household per capita income decile: lower 33%, middle 33%, highest 33%), are the independent variables; and i, j, k and m are the set of dummy variables corresponding to each independent variable listed above.

7. In order to eliminate differences in population compositions during 1991–95, I estimated 1995s probabilities by using 1991s population proportions. I should emphasize, however, that differences in population composition turned out to be too small to make any significant difference.

8. I also estimated a pooled regression with the data corresponding to 1991 and 1995 in which I included the year 1991 as a dummy variable (not shown here) and all interaction terms with that year. The relative odds for the year 1991 having 1995 as a reference category was 0.54 and significant at the 0.999 level.

9. Only three years were considered because they constitute the most paradigmatic of the business cycle: 1991, when the economic stabilization and reform program started to be implemented; 1993, when that program was well established and the economy was growing, though the unemployment was also increas-

ing; and finally 1995, when the economic crisis was apparent.

10. As independent variables I included several characteristics associated with the likelihood of having an intermittent participation in the labor force (Cerrutti, forthcoming). The estimated model was:

$$\log \frac{P_n}{P_3} = \alpha_n + \beta_{ni} \text{Age}_{ni} + \delta_{nj} \text{Educ}_{nj} + \gamma_{nk} \text{Hhold}_{nk} + \gamma_{nl} \text{Hlfp}_{nl},$$

where $n = 1, 2, 3$; P_1 is the probability of being constantly employed over a one-year period; P_2 the probability of entering the labor force over a one-year period; P_3 the probability of being constantly out of the labor force or leaving the job over a one year period; α the intercept. and $\beta, \delta, \gamma, \eta$ are the coefficients. Age (age groups: 15–24; 25–39; 40–54 and 55 and older), Educ (levels of education: primary complete or lower; secondary incomplete, secondary complete, some college; college complete:), Hhold (position in the household: married with small children; married with older children or childless; other positions), Hlfp (male head of household labor force participation: always employed; always out of the labor force; change labor force status or always unemployed) are independent variables; and where i, j, k, l and m are the set of dummy variables corresponding to each independent variable.

REFERENCES

- Bulmer-Thomas, V. (1996). Introduction. In V. Bulmer-Thomas, *The new economic model in Latin America and its impacts on income distribution and poverty*. New York: St. Martin's Press.
- CEPAL (1997). *Panorama Social para América Latina, Edición 1997*. Comision Económica para América Latina y el Caribe (CEPAL), Santiago de Chile.
- Cerrutti, M. (1996). Small and medium scale enterprises in a context of trade liberalization and structural adjustment: the Argentinean case. The University of Texas at Austin.
- Cerrutti, M. (2000). Intermittent employment among married women: a comparative study of Buenos Aires and Mexico City. *Journal of Comparative Family Studies*, 31 (1), 19–43.
- Cortes, F. (1994). *Estrategias de los hogares en contextos de crisis, ajuste y estabilización*. Paper prepared for the seminar Hogares, Familias: Desigualdad, Conflicto Redes Solidarias y Parentales, SOMEDE e INEGI, Aguascalientes, Mexico, 27–29 June.
- Cortes, R. (1995). Marginación de la fuerza de trabajo femenina? Estructura de ocupaciones 1980–1993. In H. Birgin, *Acción Pública y Sociedad, Las Mujeres en el Cambio Estructural*, H. CEASEL/Feminaria, Buenos Aires.
- ECLAC (1992). *Major changes and crisis: the impact on women in Latin America and the Caribbean*. Economic Commission for Latin America and the Caribbean (ECLAC), Santiago de Chile.
- ECLAC (1995). *Social panorama of Latin America* ECLAC, Santiago, Chile.
- ECLAC (1998). *Social panorama of Latin America* ECLAC, Santiago, Chile.
- Fernandez-Kelly, P. (1994). *Political economy and gender in Latin America: the emerging dilemmas*. Working Papers No. 207, Woodrow Wilson International Center for Scholars, Washington, DC.
- Gallart, M. A., Moreno M., & Cerrutti M. (1993). *Educación y empleo en el Gran Buenos Aires, 1980–1991*. Situación y perspectivas de Investigación. Cuadernos del CENEP No. 49, Centro de Estudios de Población (CENEP), Buenos Aires.
- García, B., & Oliveira de O. (1994). *Trabajo femenino y vida familiar en México*. El Colegio de México, Mexico City.
- Geldstein, R. (1994). *Los roles de género en la crisis. Mujeres como principal sostén económico del hogar*. Cuadernos del CENEP No 50, Centro de Estudios de Población, (CENEP), Buenos Aires.

- Goldin, C. (1990). *Understanding the gender gap: an economic history of American women*. New York: Oxford University Press.
- Gonzalez de la Rocha, M. (1994). *The resources of poverty. Women and survival in a Mexican city*. Oxford: Blackwell.
- Hartmann, H. (1987). Changes in women's economic and family roles in Post-World War II US. In L. Beneria, & C. Simpson (Eds.) *Women households, and the economy*. New Brunswick, NJ: Rutgers University Press.
- Humphrey, J. (1996). Responses to recession and restructuring: employment trends in the Sao Paulo metropolitan region, 1979–87. *Journal of Development Studies*, 33 (1), 40–62.
- INDEC (Instituto Nacional de Estadísticas y Censos) (1997). *1997 Anuario Estadístico de la Republica Argentina*. INDEC, Buenos Aires, Argentina.
- Joshi, H., & Davies, H. (1992). Day care in Europe and mothers' forgone earnings. *International Labour Review*, 132, 561–579.
- Marshall, A. (1996). Weakening employment protection in Latin American: incentive to employment creation or to increasing instability. *International Contributions to Labour Studies*, 6, 29–48.
- Marshall, A. (1998). State intervention, the labour market and inequality in Argentina. In A. Berry, *Poverty, economic reform, and income distribution in Latin America*. Boulder, CO: Lynne Rienner.
- Ministerio de Economía y Obras y Servicios Públicos (1996). *Economic Report, 1996*. Ministerio de Economía, Secretaría de Programación Económica, Buenos Aires.
- Ministerio de Economía y Obras y Servicios Públicos (1998). *Economic Report, 1998*. Ministerio de Economía, Secretaría de Programación Económica, Buenos Aires.
- Ministerio de Trabajo y Seguridad Social (1995). Boletín de estadísticas laborales, No. 30:3. Ministerio de Trabajo y Seguridad Social, Dirección Nacional de Empleo, Buenos Aires.
- Monza, A. (1995). Situación actual y perspectivas del mercado de trabajo en la Argentina. In A. Canitrot et al., *Libro Blanco sobre el Empleo en la Argentina*. Ministerio de Trabajo y Seguridad Social, Buenos Aires.
- Oppenheimer, V. K. (1976). *The female labor force in the US: demographic and economic factors governing its growth and changing composition*. Westport, CT: Greenwood Press.
- Recchini de Lattes, Z. (1980). La participación económica femenina en la Argentina desde la segunda posguerra hasta 1970. Cuadernos del CENEP, No. 11, Centro de Estudios de Población (CENEP), Buenos Aires.
- Recchini de Lattes, Z., & Wainerman, C. (1977). Empleo femenino y desarrollo económico: algunas evidencias. *Desarrollo Económico*, 17 (66), 301–317.
- Retherford, R., & Choe, M. K. (1993). *Statistical models for causal analysis*. New York: Wiley.
- Standing, G. (1989). Global feminization through flexible employment. *World Development*, 17 (7), 1077–1095.
- Stichter, S. (1990). Women employment and the family: current debates. In S. Stichter, & J. Parpart, *Women, employment and the family in the international division of labour*. Philadelphia: Temple University Press.
- Wainerman, C. (1979). Educación, familia y participación económica femenina. Cuadernos del CENEP No. 19, Centro de Estudios de Población (CENEP), Buenos Aires.
- Wainerman, C. (1995). *Las mujeres y el trabajo en la Argentina*. Paper prepared to elaborate the Argentine Report presented in the IV International Conference on Women. Beijing, China.