# Female Labor Force Participation in Argentina, 1980-2003: Gendered Trends and Responses to Crisis 

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Female labor force participation in Argentina, 1980-2003:
Gendered trends and responses to crisis

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# SUBMITTED TO SCRIPPS COLLEGE IN PARTIAL FULFILLMENT OF THE DEGREE OF BACHELOR OF ARTS 

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## Female labor force participation in Argentina, 1980-2003: Gendered trends and responses to crisis

## Introduction

How do the experiences of women in the labor market differ from the experiences of men? Do men and women face the same incentives when they decide whether or not to supply their labor? Do economic crises affect their labor market decisions differently? Female labor force participation in Argentina has been on the rise for the past several decades, and economists have identified changing social and economic factors that facilitate its gradual increase: the development of new economic sectors and the subsequent diversification of employment opportunities, increased access to education, changes in the roles that women play in society (Recchini de Lattes and Wainerman 1977; Wainerman 1979; Recchini de Lattes 1980). In addition to a literature on the long run trends, economists have also investigated the responses of women to specific moments of crisis in Argentina - the country lends itself well to this analysis, as the last three decades of its history have seen both economic growth and financial collapse. Existing literature seeks to situate the changes to Argentina's female labor force participation within the context of theoretical hypotheses regarding the ways that individuals respond to crisis conditions (Cerrutti 2000; Lee and Cho 2005; McKenzie 2004).

This project explores gendered labor market responses to crises. With the crisis literature in mind, I investigate trends in female labor force participation rates in Argentina between 1980-2003. What sorts of relationships does economic theory suggest might exist between women's labor force participation and other variables
(the unemployment rates for men and for women, male labor force participation, etc)? In a contemporary moment where countries throughout the world, including the United States, are emerging from a global financial crisis, this topic is very relevant; it is important to understand how people respond to crises in order to develop effective policies to lessen the burden on households in times of economic hardship. In addition, gaining a better understanding of how people respond within household units will prove useful in thinking about how to model decision-making within families at the level of the individual.

Past literature has found that, during the 1995 financial crisis in Argentina, more women did enter the labor market as a response to the increased unemployment and job instability of heads of household, pointing to the existence of an added worker effect (Cerrutti 2000; Lee and Cho 2005). Gendered responses to the 2002 financial crisis have not been explored as thoroughly, but McKenzie (2004) suggests that there was not an increase in female labor force participation, perhaps as a result of the pre-crisis recession conditions. His examination of the differential effects of the crisis on employment outcomes also suggests that male and female labor supplies are not acting as substitutes in urban labor markets in Argentina.

This paper uses data collected by the Argentina's INDEC to explore the questions posed above, and gestures at other work that might be done with more extensive information. I explore explanations for differences in trends over time by gender and age, and I find that a positive relationship exists both between female labor force participation and male unemployment and between female labor force participation and female unemployment. While this evidence is consistent with the
assumptions of the added worker effect, I do not find evidence that more women entered the labor force as a result of the 2002 crisis, despite differences in gendered outcomes.

## Section I: Literature Review and Background Information

In 1995, Argentina experienced a massive run on its banks that forced the institutions to stop making new loans and drastically drove up interest rates. Argentina consequently lost $42 \%$ of its reserves and $18 \%$ of its bank deposits in the first quarter of the year (Choueiri 2002). GDP fell by 5.1\% that year, and unemployment in Buenos Aires rocketed up to 20.2\% (Lee and Cho 2005). This crisis in Argentina followed on the heels of the collapse of the Mexican peso in December 1994, and has given rise to a body of economic literature devoted to interrogating the causal relationship between the two countries' misfortunes. The "contagion effect" (or the "tequila effect," as it's known in this particular case) describes the phenomenon in which currency devaluation in one country acts as a catalyst for financial crisis in another country or countries (Choueiri 2002; Uribe 1996). While economists might debate the extent to which the "tequila effect" can account for the severity of the 1995 crisis in Argentina, the forced devaluation of the Mexican peso was certainly a precipitating factor. Choueiri (2002) suggests that in the case of Mexico and Argentina, the contagion effect was compounded by weak underlying fundamentals in the second country, but the author does not doubt that Mexico's financial collapse played a catalyzing role.

While the 1995 crisis in Argentina initially resulted from the devaluation of the Mexican peso, the financial crisis in 2002 was caused by a devaluation of

Argentina's own currency. On January 6, 2002, the Argentinean government ended the Convertibility Plan that had tied their peso to the U.S. dollar since March of 1991.

The peso depreciated dramatically; the real exchange rate reached a low of 3.90 pesos/U.S.\$ on March 25, 2002, and ended the year at 3.40 pesos/U.S.\$ (McKenzie 2004). As a result of this financial upheaval, McKenzie (2004) reports that $78 \%$ of households surveyed by the INDEC (Instituto Nacional de Estadística y Censos) experienced a decline in real income, and $63 \%$ of households saw real income fall by at least $20 \%$. The economy shrank by $10.9 \%$, and by October 2002 urban unemployment reached 21.7\%.

Economic theory provides two hypotheses regarding the effects of crises and recessionary periods on labor force participation: the added worker effect and the discouraged worker effect. The discouraged worker effect describes a scenario in which higher unemployment during a recession discourages people who are looking for work, who then exit the labor force. In countries where the unemployment rate is higher for women then for men, one might expect a relatively greater decline in labor force participation rates (LFPRs) for women than for men as discouraged female workers opt to leave the labor force and become the hidden unemployed (Lee and Cho 2005). ${ }^{1}$ On the other hand, the added worker effect predicts that as real wages drop, and as primary earners become increasingly likely to be unemployed, other household members will enter the labor force to smooth family

[^0]income (Lee and Cho 2005). In families where heads of household tend to be male, one might expect to see more women - wives, daughters, other relatives - entering the labor force in response to the increase in unemployment, facilitating an increase in female LFPRs.

In two articles focused on the 1994-95 recession in Argentina, Lee and Cho (2005) and Cerrutti (2000) demonstrate that the data for Argentina do not support the discouraged worker effect. The authors use data from the Encuesta permanente de hogares (EPH) for the Buenos Aires metropolitan area, a survey conducted by the Instituto Nacional de Estadística y Censos (INDEC), Argentina’s National Statistics Institute. ${ }^{2}$ They find that female LFPRs in Buenos Aires increased during the recession, and that by 1995 women made up 37.1 percent of the labor force in Argentina, compared with 33.3 percent in 1991.

Cerrutti argues that while factors like changes in cultural attitudes towards women and the diversification of occupational opportunities in a given country do influence long term upward trends in LFPRs for women, these factors cannot explain the drastic short term increases witnessed in Argentina in the early 1990s. In her analysis of the crisis-driven increases in female labor force participation, Cerrutti emphasizes the role of increased male unemployment and job instability. In this interpretation of the added worker effect, the unpredictability and instability of labor markets, rather than any tangible decline in real wages, leads additional

[^1]household or family members to enter the labor force. Using a multinomial logistic regression, Cerrutti demonstrates that "women living in households where the head recently changed labor force status [the most likely change being from employed to unemployed] were almost twice more likely to enter the labor force than those who were living in households where the head was continuously employed" (2000). In this case the added worker effect does manifest as a labor supply response to the increased unemployment and job instability of heads of household.

In his discussion of the household responses to the 2002 crisis, McKenzie explains that labor force participation in Argentina fell for both men and women (2005). While this might suggest the discouraged worker effect, the differences between the initial conditions here and in 1995 should be noted. Argentina had been growing at an average annual rate of $8 \%$ in the three years prior to the devaluation of the Mexican peso, but in 2002 the country was in the midst of a three-year-long recession. As McKenzie suggests, preexisting recessionary conditions could limit household responses to unanticipated crises - families might have already used up their savings, and additional family members might have already begun to look for work. The added worker effect might have been less likely to exhibit in 2002 simply because, after three years of recession, additional household members might have already entered the labor force. McKenzie also notes that net female employment fell less than male employment during the crisis because women experienced a relatively higher rate of job entry; "For females, the significant relative increase in job losses is offset somewhat by a relative increase in job entry, with the net result being that female employment only fell by as much
after the devaluation as it had in the period immediately before" (McKenzie 2005). This suggests that perhaps the crisis itself did not provoke a decrease in female labor force participation, but rather that the decrease could be traced back to precrisis factors.

McKenzie also examines the differential effects of the crisis on employment by gender, age, occupation and other individual characteristics, comparing the period containing the crisis, from Oct 2001 to May 2002, to the period just before it, May 2001 to Oct 2001. This allows him to attribute specific changes to the crisis itself, while acknowledging the preexisting increasing trend in unemployment. He finds that "males in construction, public administration, and education are found to be even more likely to exit [the workforce after the crisis]... [and that] both male and female workers in public firms are found to be less relatively likely to lose their jobs." He also finds that men with large families and women between the ages of 25 and 44 are more likely than other groups to enter the labor force, which is consistent with the incentives underlying the added worker effect. Individuals with families need to ensure continued income flows during crises. Taking these differential effects into account also throws into relief the fact that male and female labor are unlikely to be acting as substitutes; while McKenzie finds that men in construction are more likely to lose their jobs than other groups, he does not find a corresponding increase in the number of women acquiring jobs in construction. If there is a positive relationship between male unemployment and female labor force participation, it cannot be explained by a substitution effect where women are taking the jobs vacated by men.

Both Lee and Cho (2005) and Cerrutti (2000) point out that while female LFPRs increased significantly in Argentina from 1991-95 (and especially from 199395 , during the crisis), most of that increase in participation was reflected in increased unemployment rates for female workers. Between 1991 and 1995 the open unemployment rate for women in Buenos Aires increased from 5.8 percent to 24.5 percent (Lee and Cho 2005). This increase does not reflect a reality in which women who were employed became unemployed (a decrease in employment of female workers, in other words), but rather an increase in the overall number of women looking for work and not finding it, suggesting that most of the new entrants to the labor force did not successfully find jobs (Lee and Cho 2005; Cerrutti 2000).

## Section II: Data

The INDEC's report concerning labor market indicators presents statistics calculated from the Encuesta permanente de hogares (EPH, Continuous household survey) for the greater Buenos Aires area from 1980-2003. ${ }^{3}$ Argentina spans an immensely diverse geographical area, and large swaths of the country remain fairly sparsely populated. Table 1 shows the employment distribution by occupation for the Greater Buenos Aires area. The category "Otras ramas," (literally 'other branches') denotes agricultural professions, as well as other occupations not accounted for in the other columns. All of these professions aggregated account for 11.5-15\% of employment from 1992-2003, and for 14.9-20.9\% from 1980-1991, before the categories were revised and financial services were separated out of this

[^2]group. This table demonstrates that, while there is occupational diversity in the sample, agriculture employs only a small portion of the mostly urban labor force accounted for by the geographical demarcations of the sample. Rural and urban labor supplies tend to vary in composition, and limiting the data to an urban region makes analysis more feasible by eliminating ambiguity that comes specifically from the differences between agricultural and non-agricultural market responses to crises.

These data from Buenos Aires represent trends on the aggregate level, which makes it impossible to make claims about the behavior of individuals within the data set. I cannot know which women are deciding to enter or exit the labor force, but the aggregate-level trends should point to interesting opportunities for further research and investigation.

The observations from this 24-year period facilitate an examination of both crises and recovery phases, and should be considered in the context of the Argentinean economy as a whole. To that end, Figure 1 presents an overview of the trends in GDP/capita in Argentina from 1980-2003. This first figure demonstrates a negative global trend in GDP per capita in the 1980's in Argentina, but it also reveals a certain amount of volatility. The country experienced a few short bursts of growth between 1982-84 and 1985-87. According to the Maddison estimates, measured in 1990 International Geary-Khamis dollars, between 1980 and 1990 GDP per capital dropped from $\$ 8,206$ to $\$ 6,433$. The country then entered a new period of growth, and GDP per capita increased from $\$ 6,433$ in 1990 to $\$ 8,371$ in 1994. It fell 4.4\% between 1994 and 1995, and then grew until 1998 when reached \$9,155, its highest
point in this series of data. Argentina then entered the recession that characterized the three years preceding the 2002 financial crisis; GDP per capital fell at an average annual rate of 4\% between 1998 and 2001, before falling 12.3\% between 2001 and 2002.

Figure 2 displays the labor force participation rates by gender for the greater Buenos Aires area. As this figure demonstrates, the overall trend for female labor force participation (LFP) has been positive; the female LFPR increased by 12.8 percentage points between 1980 and 2003, from $24.5 \%$ to $37.3 \% .^{4}$ The male LFPR has remained remarkably constant over this same period of time, starting and ending at 54.7\%.

Figure 3 represents female LFPR by gender from 1980-2003. Over the course of this period, women of 15-19 years of age have significantly decreased their presence in the labor market. This pattern, echoed in Figure 4 for men in Buenos Aires, could reflect a delayed entrance into the labor force due to increased investment in education. Data from the World Bank show that the gross enrollment rate for tertiary education in Argentina increased from 22\% in 1980 to 65\% in 2003; young people in urban Argentina might be staying in school longer instead of starting to look for work. They also represent a much more elastic labor supply; most young people are not primary earners, and therefore do not actually need to work. This should make them more responsive to changes in economic conditions.

The LFPR for this group increases in 1995, just after the first crisis, and drops in

[^3]1996 from 33.8\% to 24\% 1996; it increases again in 1997, but remains below 1995 levels and then falls steadily until the increase in 2003. This suggests that perhaps during the crisis, younger women entered the labor force to supplement household income, but that, as predicted by the added worker effect hypothesis, they exited the labor force after crisis conditions abated. Perhaps the increase in education, a more gradual, long-term trend, could partially explain the difference between the responses of this youngest group of workers to the 1994 and 2002 crises.

It would also appear that women are staying in the labor force much longer than they were in 1980; the LFPR for women ages 50-64 increased between 1980 and 2003 by 25 percentage points, from $22.4 \%$ to $47.4 \%$. The LFPR for $35-49$ year old women has increased from $38.4 \%$ to $66.7 \%$, a rise of 28.3 percentage points. LFP for women aged 20-34 is the highest of all the groups in 2003, at 68.1\%. The slight drop from this age group to the next might reflect the higher proportion of married women in the third of the four age groups.

Figure 3 shows dramatic upward spikes in female LFP (for all ages) in the years 1995 and 2003. The first upswing, in which total female LFP increases by 5.5 percentage points, certainly represents the response that Cerrutti (2000) and Lee and Cho (2005) found in their investigations of the 1994 financial collapse. The second financial crisis, however, occurred in January of 2002, so the increase in the female LFPR between 2002 and 2003 cannot be read as a direct response to that crisis. Instead, as McKenzie (2004) discusses, there is a slight drop in female LFP from 2001 to 2002, from $35 \%$ to $34 \%$.

Just as in Figure 3, the graph of Male LFPR by age (Figure 4) also shows that men aged 15-19 are much less likely to participate in the labor force in 2003 than in 1980. The LFPR for this youngest group of men has dropped from $51.4 \%$ to $24.9 \%$. The LFPR for men aged 50-64 has increased slightly, from $78 \%$ to $83.7 \%$, while LFP for 34-49-year-olds has increased by a miniscule 1.3 percentage points from $96.7 \%$ to $98 \%$. The LFPR for men in the 20-34 age group has actually fallen slightly from 92.1\% to 89.5\%. In this figure, male LFP does not appear to respond to either of the crises with the same magnitude as female LFP. From 1994 to 1995 the male LFPR only increases from 84.5\% to 86\%, while the female LFPR increases from 48.7\% to 54.2\%.

Figure 5 depicts the changes, from one year to the next, in female and male LFPRs. In general it appears that male and female LFPRs vary positively with one another; the two variables have the same sign in every observation except the first two (1980-81, 1981-82) and the last one (2002-2003). The changes in the male LFPR are more tightly clustered around zero than are the changes in the LFPR for women. This suggests that the supply of female labor is more elastic than the supply of male labor, perhaps reflecting female labor as a secondary source of household income in Argentina rather than a primary one. While primary earners may be compelled to stay in the labor force despite changes in real wages or other incentives, secondary earners may have the flexibility to enter or leave the labor force as conditions change.

The INDEC data also provide estimates of the unemployment rates for men and women from 1980-2003. Figure 6 shows that the female unemployment rate
was consistently higher than the male unemployment rate throughout the last decades of the twentieth century. Until 2002, 1990 was the only year where male unemployment exceeded female unemployment. While the two indicators exhibit similar trends, there are differences in magnitude, suggesting that the demand for, as well as the supply of, female labor might also be more elastic than the demand for male labor.

The difference between the male unemployment rate and the female one increases after the 1994 crisis. In 1994, female unemployment was 3.6 percentage points above male unemployment, but that difference jumped to 7.1 percentage points in 1995. This is consistent with the predictions of the added worker effect; many women entered the labor force as a result of the crisis, and most of them did not actually find jobs (Cerrutti 2000; Lee and Cho 2005). In the early 2000's, however, the gap between male and female unemployment actually shrinks, falling from a difference of 2.8 percentage points in 2000 to a 0.6 percentage point difference in 2001. The unemployment rates reported were collected in the spring of each year, so in May of 2002, less than five full months after the financial crisis, male unemployment exceeded female unemployment by 3.1 percentage points. This implies that individuals in Argentina after the 2002 crisis did not behave as the added worker effect predicts. Perhaps male-dominated sectors of the economy were hardest hit in the recession and the crisis.

Figure 7 compares changes from one year to the next in the female LFPR and the female unemployment rate. This figure suggests a positive relationship between female labor force participation and female unemployment. That correlation, while
not strong throughout the whole period, is especially visible in the observations from 1990-91 through 1995-96. For these observations, as the unemployment rate for women goes up, so does female LFP; as the unemployment rate drops, labor force participation also falls. While this graphical representation is useful as a starting point for thinking about the relationship between these variables, it does not take into account the fact that labor supply decisions might respond to factors in the preceding periods.

The relationship between the year-to-year changes in the female LFPR and the male unemployment rate in Figure 8 is much harder to read than the relationship in Figure 7. While it does appear that for that same period in the 1990's a positive correlation could exist between the two variables, there are other moments where the change in male unemployment and the change in female LFPR have opposite signs. Again, the relationship might be temporally more complicated than this graph makes it appear; in order to get a better sense of this I calculated the correlation between the relevant variables.

The results in Table 2 suggest that both the female and the male unemployment rates are positively correlated with female labor force participation. This, in turn, suggests that in this data set the added worker effect is stronger than the discouraged worker effect; if the discouraged worker effect were driving the results, one would expect to find a negative relationship between female unemployment and female LFP, as it predicts that as the unemployment rate for women increases, more women exit the labor force.

The added worker effect represents just one possible explanation for the positive relationship between male unemployment and female LFP; it could also be the case that men and women compete for jobs, and that positive relationship could reveal a substitution effect. Employers could choose to fire male employees and hire female workers in times of crisis. But unless there is some underlying incentive structure encouraging this - maybe women are more willing to work without benefits - it seems implausible. Lee and Cho (2005) point out that economists have found that labor markets tend to be segmented by gender, especially labor markets for jobs that require less education (which tend to also be the most vulnerable to economic shocks.) In this case, the correlation table shows that female and male unemployment in Buenos Aires are positively correlated, which implies that female and male labor supplies do not function as substitutes.

Of course, the correlations really just gesture at the possible existence of a relationship between these variables. To explore the matter further, it would be advantageous to have a large set of panel data, and to be able to account for household income, marital status and family size, and level of educational attainment of individual women who are entering and exiting the labor force. Also, much of the literature regarding labor supply decisions pertains specifically to responses during economic crises, suggesting that modeling this relationship on the aggregate level over a large period of time might not answer the existing hypotheses as they've been deployed in the literature.

Using data at the aggregate level, it would also be helpful to include a variable for the average level of educational achievement by gender. As noted early,
if women are staying in school longer, that might account for the decrease over time of teenage girls in the labor force in Argentina (the same holds for the trend with males ages 15-19). ${ }^{5}$ Additionally, because of the confusion over the mechanism through which male unemployment affects female LFP, it might be worthwhile to break the observations up by occupation and run separate regressions with the aggregate unemployment rate and with the unemployment rate within the specific occupation. If the male unemployment rate within a given occupation varies positively with female LFP in that occupation, it would suggest a substitution effect.

It would also be ideal to have data that break down LFPRs by gender and by household income quintile. The relationship between the added worker effect and the discouraged worker effect can be described as a relationship between the competing incentives of necessity and opportunity (or, more accurately, the lack of it). The added worker effect explains that necessity compels individuals or families to look for more sources of income when household income falls or becomes increasingly more uncertain or irregular. The discouraged worker effect, on the other hand, is a response to the inability to find employment. As prospects worsen, people give up on looking for work and exit the labor force. Because families experience the necessity implicit in the added worker hypothesis differently according to their relative economic security, one should expect the added worker effect to be stronger amongst lower quintiles of population. The discouraged worker

[^4]effect, on the other hand, might be more likely to manifest in households with higher incomes.

## Conclusion

The data suggest that while female labor force participation responded positively to the crisis in 1994 and negatively to the crisis in 2002, some evidence for the added worker effect in Argentina does exist. Between the years 1980 and 2003, female LFP varies positively with both male and female unemployment, although both of these relationships merit further investigation. This correlation does suggest, however, that women make decisions as members of a household, responding to changes that affect them indirectly through other family members. They tend to be more responsive than men to changes in economic conditions.

In his article, McKenzie (2004) also evaluates work programs implemented in Argentina for unemployed heads of household. He finds that the program Jefas y Jefes de Hogar Desocupados (Unemployed heads of household) had 1.9 million participants by February 2003, 64\% of whom were women. The program was designed for disadvantaged households, and participants came from lower income deciles. McKenzie, who finds that this work program represented "the largest source of average household income gains for the bottom quintile in October 2002," argues that in the case of the 2002 financial crisis, families were not able to offset falls in real wages. Demand for labor was too low, and individuals who were willing and able to work more hours or simply to enter the labor force could not ultimately do so. The Jefas y Jefes program effectively provided families who could not find gainful
employment with a source of income, but it was only available to heads of household. While families whose primary earner was unemployed were likely to be the worst off, in the long run it is beneficial to encourage families to diversify their income sources. In the case of Argentina, the government should consider extending the work programs to secondary earners as economic conditions improve in order to increase future stability for families in lower income quintiles.

In an essay on the effects of the industrial revolution on family income, Horrell and Humphries (1992) find that while in the early $19^{\text {th }}$ century women and children were able to find work to supplement household income, by the 1840's those opportunities were scarce, and families became reliant on a single male earner. The authors write,

For our families it mattered a great deal whether they were dependent on a husband/father, whether other families members also had employment, whether the security and earnings of those jobs varied directly or inversely with the security and earnings of the male head of household, and whether there were other nonwage sources of income (Horrell and Humphries 1992).

The same could be said of Argentina, or of any country, for that matter. As Horrell and Humphries point out, this information matters because it determines living standards for households and for the individuals in them. Reliance on one primary earner makes families more vulnerable to economic shocks; in a country with Argentina's history of instability, it makes sense to encourage women, whether they are primary or secondary earners, to enter the labor force to mitigate the effects of future crises.

## Appendix: Figures and Tables

Table 1. Percentage distribution of the working population of Greater Buenos Aires
by branch of occupation, 1980-2003
a. Apertura según CIIU Rev. 2, 1980/1993

| Periodo |  | Industria manufacturera | Construcción | Comercio | $\begin{gathered} \text { Servicios } \\ \text { comunitarios, } \\ \text { sociales y personales } \end{gathered}$ | Otras ramas ${ }^{1}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Abril | 1980 | 29,5 | 9,0 | 18,0 | 28,5 | 15,0 | 100 |
| Abril | 1981 | 28,2 | 9,0 | 19,3 | 28,6 | 14,9 | 100 |
| Abril | 1982 | 26.1 | 8,0 | 19,9 | 30,7 | 15,3 | 100 |
| Abril | 1983 | 24,9 | 6.4 | 19,2 | 34,2 | 15,3 | 100 |
| Abril | 1984 (n) | 26,2 | 5,7 | 17.1 | 35,0 | 16,0 | 100 |
| Mayo | 1985 | 25,4 | 7,3 | 17,3 | 29,1 | 20,9 | 100 |
| Abril | 1987 | 25.8 | 6,6 | 19,0 | 33,7 | 14,9 | 100 |
| Mayo | 1988 | 25.1 | 7.5 | 19,0 | 32,3 | 16,1 | 100 |
| Mayo | 1989 | 25,0 | 6,5 | 18,7 | 33,3 | 16,5 | 100 |
| Mayo | 1990 | 23,3 | 6,2 | 19,8 | 33,5 | 17,2 | 100 |
| Mayo | 1991 | 23,8 | 6.4 | 20,4 | 33,4 | 16,0 | 100 |
| Mayo | 1992 | 24.9 | 7,0 | 19,7 | 32,3 | 16,1 | 100 |
| Mayo | 1983 | 23,0 | 6,0 | 21,0 | 33,0 | 17,0 | 100 |

${ }^{1}$ Incluye: "Agricultura, caza, silvicultura y pesca", "Explotación de minas y canteras". "Electricidad, gas y agua", "Transporte, almacenaje y comunicaciones". "Servicios financieros, seguros, bienes inmuebles y servicios prestados a las empresas" y "Actividades no bien especificadas".

${ }^{1}$ Incluye:-"Enseñanza", "Servicios sociales y de salud" y "Otras actividades de servicios comunitarios, sociales y personales".
${ }^{2}$ Incluye: "Agricultura, ganadería, caza y silvicultura", "Pesca", "Explotación de minas y canteras", "Suministro de electricidad, gas y agua", "Hoteles y restaurantes". "Transporte, almacenamiento y comunicaciones" . "Organizaciones y órganos extraterritoriales" y "Actividades no bien especificadas".

Source: INDEC, May 2003, Table 19

Figure 1. GDP/capita in Argentina, 1980-2003


Source: "Historical Statistics of the World Economy: 1-2008 AD", Angus Maddison

Figure 2. Labor force participation rates by gender, Buenos Aires, 1980-2003


Figure 3. Female labor force participation rates by age, Buenos Aires, 1980-2003


Source: INDEC, May 2003

Figure 4. Male labor force participation rates by age, Buenos Aires, 1980-2003


Source: INDEC, May 2003

Figure 5. Changes in labor force participation rates by gender, greater Buenos Aires, 1980-2003


Source: INDEC, May 2003

Figure 6. Unemployment rates by gender, greater Buenos Aires, 1980-2003


Source: INDEC, May 2003

Figure 7. Changes in female labor force participation and unemployment, greater
Buenos Aires, 1980-2003


Source: INDEC, May 2003

Figure 8. Changes in female labor force participation and male unemployment, greater Buenos Aires, 1980-2003


Source: INDEC, May 2003

Table 2. Correlation, female labor force participation and male and female unemployment, greater Buenos Aires, 1980-2003

|  | Female LFP | Female unemployment |
| :--- | ---: | ---: |
| Female unemployment | 0.8554 |  |
| Male unemployment <br> Source: INDEC, May 2003 | 0.8343 | 0.9133 |

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[^0]:    ${ }^{1}$ The "hidden unemployed" refers to those individuals who would like to work but are not actively seeking jobs and therefore not in the labor force. The women who leave the labor force as a result of the discouraged worker effect might be described by authors Elliot and Dockery (2006) as "discouraged jobseekers," "the subset of the hidden unemployed who are willing and able to work but have given up searching because they believe that no jobs are available."

[^1]:    ${ }^{2}$ Cerrutti (2000) uses the raw data from the EPH to construct three partially overlapping panel data bases for the years 1991-94. Because INDEC collect the survey data twice every year and replace a quarter of the respondents with every new wave, each of the three data bases contains 3 observations per individual over the course of 12 months.

[^2]:    ${ }^{3}$ Data from 1985 is missing from the set, which therefore contains 23 observations rather than 24.

[^3]:    ${ }^{4}$ The labor force participation rates used in Figure 2 were calculated by INDEC without taking age limits into account, whereas the labor force participation rates that appear in other tables and figures in this paper were calculated by gender for people between the ages of 15 and 64.

[^4]:    ${ }^{5}$ The World Bank data referenced earlier in this paper does not contain observations for every year in the data set, and does not break down school enrollment by gender. It also provides enrollment statistics at the country level, rather than at the provincial level, and therefore only serves a descriptive purpose here.

