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Unemployment and precariousness of employment in Uruguay: who are the losers?

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ABSTRACT

Some of the main indicators of labor market performance in Uruguay are here analyzed in order to give some insight on which are the most urgent problems to be faced. Unemployment, underemployment, instability of employment and informality have gone up in Uruguay in the late nineties, in spite of the country having grown at a high average annual rate. The individuals that have worsen their relative position in the labor market are identified so that policy implications – both labor and social policies - can be suitably differentiated according to the reasons explaining the process.

RESUMEN

Los indicadores de desempeño del mercado laboral uruguayo aquí analizados ayudan a la comprensión de cuáles son los problemas más urgentes a enfrentar. El desempleo, el subempleo, la inestabilidad laboral y la informalidad aumentaron en la segunda mitad de los noventa, a pesar de que el país creció a una alta tasa promedio anual. Los individuos que han empeorado su posición relativa en el mercado de trabajo son identificados de forma que las implicaciones de política – laboral o social – puedan ser adecuadamente diferenciadas dependiendo de las razones que explican el proceso.

1. Introduction[*]

The Uruguayan economy has gone through various transformations along the last three decades. While financial and commercial liberalization processes started in the seventies, in the nineties a progressive integration process with its main commercial partners into the Southern Common Market (MERCOSUR) took place. The above has meant a re-structuring of the economy that has determined changes in the sectoral distribution of GDP as well as in the use of technology, at least in some sectors (Cassoni and Fachola, 1997; Croce, Macedo and Triunfo, 2000; Tansini and Triunfo, 1998a; 1998b). This, in turn, has had important effects on the labor market, displacing workers from some economic activities and changing the requirements of the work force. At the same time, some indicators suggest the income distribution is the same or better in the mid-nineties than that observed in the mid-eighties (Vigorito, 2000). However, there is evidence that it has deteriorated after that, while the unemployment rate is still high and increasing. Further, there are a high proportion of workers that are dissatisfied with their job according to official statistics (National Institute of Statistics).

These issues have been recently analyzed for other countries, with economies that have also gone through important transformations (Arango and Maloney, 2000; Maloney, 2000). One of the conclusions at which these researchers arrived is that in Argentina and Mexico informality and self-employment cannot be always labeled as disadvantaged sectors, since in many cases they are a voluntary choice. Further, evidence is not supportive of a one-to-one relationship between informality and poverty. In Chile Gill *et al.* (forthcoming) found there is greater job and earnings stability in the nineties relative to the eighties, so that the performance of the labor market should be considered adequate and hence new regulations are not necessary.

To shed some light on these same processes in Uruguay, two questions will be answered in this paper:

1. Who are the unemployed? That is, are there specific groups related to the re-structuring of the economy that can be recycled or are they specific social types to whom social policies should be designed?
2. Who are those workers that are not satisfied with their current working conditions? Are they subject to specific labor policies or have they voluntarily chosen their job?

In order to analyze the above issues, the evolution of employment and unemployment along the last decades is described in the next section. After summarizing the observed patterns, some critical groups are determined. The third part of the paper focuses on job instability and precarious employment. Workers that are dissatisfied with their current job are identified. Conclusions and policy recommendations are summarized in the last section.

2. Employment and unemployment trends

2.1 Stylized facts

The participation rate in Montevideo[2] has steadily increased since the mid-seventies. So has the employment rate. With smaller figures, the rest of the country has behaved in the same way (Table 1).

Table 1: Labor market indicators   1970 - 1999

	Montevideo			Interior		
	Participation	Employment	Unemployment	Participation	Employment	Unemployment
1970-1980	50.62	46.23	8.81	nd	Nd	nd
1981-1990	58.25	51.97	10.79	53.24	48.11	9.44
1991-1999	60.57	54.34	10.28	55.91	50.40	9.79

Note: nd = no data available
Source: National Institute of Statistics

Given that the unemployment rates in the last two decades are almost identical, one can conclude that additional jobs have been created so as to absorb the new entrants. This fact, however, does not necessarily mean that the labor market is working better today than in the past because of at least two reasons:

1. The overall performance of the economy has been substantially different in both sub-periods: while in the early 80s the economy underwent its worst economic crisis, the nineties were years of almost continuous growth (see Table 2 and Figure 1 in the appendix).
2. The quality of jobs might have deteriorated.

This second dimension will be analyzed in section 3 of the paper, after determining the salient patterns of employment. Regarding the first issue, in the nineties the adjustment of the level of employment to changes in product demand had a slower speed. *Positive exogenous shocks in the nineties have generated smaller increases in labor demand than before*, a fact that has been linked both to the re-structuring of the Uruguayan economy and to the different institutional settings (Cassoni, Allen and Labadie, 2000; Cassoni, 1999; Allen, Cassoni and Labadie, 1996). The higher degree of openness of the economy has faced firms to a more competitive environment, thus forcing them to change technology and/or increase the level of productivity of their workers. Moreover, bargaining over wages between firms and unions has also favored a reduced workforce in many sectors. As a consequence, the effects of isolated negative shocks by the late nineties, as those observed in 1995 and 1999, generated a rise in unemployment that has shown to be more difficult to revert than before.

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[2] Those employed or unemployed as a percentage of people older than 13 years.

**Table 2: Rate of growth of output
and unemployment rate 1970 – 1999**

	U	GDP		U	GDP
1970	7,4	4,7	1985	13,1	0,3
1971	7,6	0,2	1986	10,7	7,5
1972	7,7	-1,5	1987	9,3	5,9
1973	8,9	0,4	1988	9,1	0,5
1974	8,1	3,0	1989	8,6	1,6
1975	6,7	5,9	1990	9,3	0,9
1976	12,2	4,0	1991	8,9	3,2
1977	11,8	1,1	1992	9,0	7,9
1978	10,1	5,3	1993	8,4	3,0
1979	8,3	6,2	1994	9,1	6,3
1980	7,3	6,0	1995	10,8	-2,0
1981	6,6	1,9	1996	12,3	4,9
1982	11,9	-9,5	1997	11,6	5,7
1983	15,4	-5,8	1998	10,2	4,5
1984	14,0	-1,5	1999	12,0	-3,5

Average	70s	80s	90s
U rate:	8,8	10,8	10,3
GDP growth rate:	3,4	0,2	3,5

Notes: U is the unemployment rate in Montevideo.
Sources: National Institute of Statistics; Central Bank of Uruguay.

It could be argued that, given the increased labor supply, the high unemployment rate is due to the behavior of the new entrants to the market. However, those looking for a job for the first time (FTS) have been a quite stable, and in some cases even decreasing proportion of the labor force (Table 3). On the contrary, *by the end of the nineties, those unemployed with previous experience (UwE) have substantially increased their share in total unemployment.* This could be pointing at a rise in turnover and job instability.

A final observation relates to the comparative evolution of Montevideo and the rest of the urban the country. While both the overall unemployment rate and that of UwE in the Interior were generally smaller than those of Montevideo, differences are vanishing in the nineties. This suggests that *migration to the capital city has stopped or at least slowed down, while changes in the use of the labor input are taking place in all economic activities*.

One possible explanation of the lack of dynamism of employment and the apparent increased turnover, is that it is linked to the individual characteristics of those participating in the labor market. In what follows, both employed and unemployed workers are thus analyzed taking into consideration variables such as gender, age, and education level. Other characterizations used relate to their household status, occupation and economic activity, the reasons for leaving their last job and the duration of the unemployment spell, if unemployed. The possible link between unemployment and poverty is also studied.

Table 3: Unemployment rate by category 1982-1998

	Montevideo			Interior		
	Total	**FTS**	**UwE**	**Total**	**FTS**	**UwE**
1982	11,9	2,3	9,6	9,5	nd	Nd
1983	15,4	2,9	12,5	13,5	nd	Nd
1984	14,0	3,7	10,3	13,0	nd	Nd
1985	13,1	3,5	9,6	11,1	nd	Nd
1986	10,7	2,9	7,8	8,9	2,8	6,1
1987	9,3	2,7	6,6	8,9	3,1	5,8
1988	9,1	2,7	6,4	8,2	2,4	5,8
1989	8,6	2,5	6,1	7,4	2,1	5,3
1990	9,3	2,5	6,8	7,7	2,1	5,6
1991	8,9	2,4	6,5	8,8	2,5	6,3
1992	9,0	2,3	6,7	9,1	2,6	6,5
1993	8,4	2,4	6,0	8,2	2,3	5,9
1994	9,1	2,6	6,5	9,2	2,3	6,9
1995	10,8	2,4	8,4	9,7	2,2	7,5
1996	12,3	2,5	9,8	11,4	2,6	8,8
1997	11,6	2,4	9,2	11,3	2,5	8,8
1998	10,2	1,8	8,4	9,9	1,9	8,0
Average						
1982-86	12,9	3,0	9,9	11,2	nd	Nd
1987-90	9,0	2,6	6,4	8,1	2,4	5,6
1991-94	8,9	2,5	6,4	8,8	2,4	6,4
1995-98	11,2	2,3	9,0	10,6	2,3	8,3

Note: nd = no data available; FTS = first time job seekers;
UwE = unemployed with previous experience.
Source: National Institute of Statistics.

2.1.1 Gender and age

One issue widely discussed in Latin America is that of the effects of the changes in female labor supply on the labor market as a whole. Uruguay has not escaped to these changes and this is partially reflected in the distinct evolution of the labor market indicators by gender below depicted (Table 4). What is generally found is that while female labor supply increases, they also face relatively more obstacles in getting a job than men. In Uruguay, however, this is only partially true, as *both female participation and employment rates have gone up, while their specific rate of unemployment has gone down, at least in Montevideo for which data are available*. Further, differences in the specific rates of unemployment have diminished, especially when considering new entrants in Montevideo (Table 5 and Figure 2 in the appendix).

Table 4: Labor market indicators by gender   1970 – 1999

Montevideo	Participation rates		Employment rates		Unemployment rates	
	Male	Female	Male	Female	Male	Female
1970- 80	72.66	32.00	67.36	27.80	7.28	12.72
1981- 90	75.31	44.66	69.09	38.32	8.27	14.20
1991- 99	73.71	49.92	67.77	43.45	8.06	12.93
Interior						
	Participation rates		Employment rates		Unemployment rates	
	Male	Female	Male	Female	Male	Female
1985- 90	72.97	37.15	67.87	34.15	7.44	10.36
1991- 99	71.53	42.13	66.04	37.57	7.67	12.93

Note: No data is available before 1985 for the Interior.
Source: National Institute of Statistics

Table 5: Male and female specific rates of employment and unemployment 1982-1998

	Montevideo				Interior		
	1982- 86	1987- 90	1991- 94	1995- 98	1987- 90	1991- 94	1995- 98
Employment							
Overall rate	50,1	54,3	54,3	54,4	50,8	50,2	50,4
Male	67,5	70,3	68,7	67,2	69,0	66,7	65,6
Female	36,4	41,3	42,7	44,1	35,8	35,7	38,5
Unemployment							
Overall rate	13,0	9,0	8,9	11,2	8,2	8,8	10,6
UwE	9,9	6,4	6,4	9,0	5,6	6,4	8,3
Male	7,9	5,1	5,1	7,2	4,7	5,3	6,7
Female	12,6	8,3	8,1	11,0	7,1	8,0	10,5
FTS	3,0	2,6	2,5	2,3	2,4	2,4	2,3
Male	2,1	1,8	1,7	1,9	1,5	1,6	1,5
Female	4,4	3,7	3,4	2,9	3,9	3,7	3,5

Note: UwE are the unemployed with previous experience; FTS are the first time job seekers.
Source: National Institute of Statistics.

Another preferred topic discussed in the applied labor economics literature is that of the performance of young individuals in the Latin American labor markets. This group is generally pointed at as the one with more difficulties in getting a job, although the reasons for it may be very different.

The analysis of the behavior of employment and unemployment by age shows that *individuals are entering the labor market earlier in the nineties than in the eighties* (Table 6). However, *those in the age interval (14, 19), that represent a minor proportion of total employment, are having relatively more difficulties in getting their first job than other age groups.*

The age structure of employment and of unemployment when considering those with previous experience is quite stable in time, no matter whether unemployment is high or low (Table 6). *The share of those in the age interval (20, 29) in unemployment is structurally higher than in employment, thus pointing at a group with a higher rate of turnover.* Although turnover can be voluntary, specially if the individual is not head of the household, it can also be involuntary and linked to a lower cost of firing, as these costs are a function of tenure in Uruguay[3].

Table 6: Distribution of employment and unemployment by age   1982-1998

Age Interval	Montevideo				Interior		
	1982- 86	1987- 90	1991- 94	1995- 98	1987- 90	1991- 94	1995- 98
Employment							
Overall rate	50,1	54,3	54,3	54,4	50,8	50,2	50,4
14-19	5,2	5,6	5,7	5,1	8,0	8,0	7,2
20-29	25,4	23,5	22,7	24,0	21,4	20,9	22,0
30-39	22,2	23,7	24,7	23,7	24,7	24,3	23,2
40 and more	47,2	47,2	47,1	47,3	46,0	46,9	47,7
Unemployment							
Overall rate	13,0	9,0	8,9	11,2	8,2	8,8	10,6
UwE							
14-19	14,6	19,2	20,8	16,5	22,2	24,4	21,2
20-29	34,4	38,7	36,3	36,2	35,3	34,5	34,7
30-39	17,5	18,3	18,3	18,8	19,3	18,1	18,4
40 and more	33,5	23,7	24,6	28,6	23,3	23,1	25,8
FTS							
14-19	52,9	52,4	59,4	61,9	52,5	64,5	62,4
20-29	37,6	39,4	34,6	31,6	35,3	26,4	29,3
30-39	4,8	4,4	3,1	3,2	7,5	6,3	4,4
40 and more	4,7	3,9	3,0	3,3	4,7	2,9	4,0

Note: UwE are the unemployed with previous experience; FTS are the first time job seekers.
Source: National Institute of Statistics.

Specific unemployment rates for those with previous experience are decreasing with age. However, *the increase in the specific rates of unemployment by the end of the nineties has been larger the older the worker* (Table 7 and Figures 3 and 4 in the appendix). Thus, displaced workers are probably those in need of re-cycling.

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[3] For discussion on the effects and level of non-wage costs in Uruguay, see Cassoni, Labadie and Allen (1995) and Cassoni and Ferre (1997)

Table 7: Specific rates of unemployment 1982 - 1998

	Montevideo				Interior		
	1982-86	1987-90	1991-94	1995-98	1987-90	1991-94	1995-98
FTS							
14-19	21,3	17,8	18,5	19,1	12,7	15,1	15,0
20-29	4,3	4,1	3,6	2,9	3,8	2,9	2,9
30-39	0,7	0,5	0,3	0,3	0,8	0,7	0,4
40 and more	0,4	0,2	0,2	0,2	0,3	0,2	0,2
UwE							
14-19	19,0	16,2	16,8	20,0	12,8	15,0	18,2
20-29	12,8	10,0	9,8	12,8	8,8	10,1	12,4
30-39	8,2	5,2	4,9	7,4	4,6	5,0	6,9
40 and more	7,4	3,6	3,7	5,9	3,1	3,4	4,8

Note: UwE are the unemployed with previous experience; FTS are the first time job seekers.
Source: National Institute of Statistics.

2.1.2 Education level

The higher level of schooling of the population as a whole is reflected in the distribution of employment and unemployment by education level: highly educated workers have increased their share while those with only primary school or the first years of secondary school have proportionally diminished (Table 8).

Relative shares in employment and unemployment, however, are only of the same magnitude for those with primary school. Highly educated workers are a larger proportion among employed workers than among unemployed individuals, while those with intermediate levels of education behave in the opposite way. Thus, *by the late nineties, those with secondary or technical studies are showing greater difficulties in finding a job.*

In spite of the above, when the unemployment rate went up in the second half of the nineties, *the least skilled individuals showed the highest increase in their specific unemployment rates in Montevideo* (Table 9). The opposite occurred in the Interior, as less educated workers are linked to primary sectors, with a more inelastic labor demand.

Table 8: Distribution of employment and unemployment by education level 1982-1998

| | Montevideo | | | | Interior | | |
Employment	1982- 86	1987- 90	1991- 94	1995- 98	1987- 90	1991- 94	1995- 98
Primary School	42,5	35,9	30,4	25,1	49,9	44,9	40,6
Secondary School L1	22,7	24,5	23,8	20,9	22,1	20,4	20,5
Secondary School L2	9,9	11,3	12,4	17,5	8,2	12,4	15,2
Technical School	11,2	11,6	12,8	12,9	12,2	14,0	14,4
High education	13,8	16,8	20,6	23,7	7,6	8,4	9,3
Unemployment							
FTS							
Primary School	19,6	16,1	11,4	14,7	24,5	20,0	19,0
Secondary School L1	28,4	30,0	27,4	26,5	35,2	28,1	24,4
Secondary School L2	19,6	20,6	23,0	24,3	18,3	26,2	29,5
Technical School	14,8	10,9	13,3	14,5	15,8	16,3	19,2
High education	17,7	22,5	24,8	19,9	6,2	9,5	8,0
UwE							
Primary School	47,0	32,9	29,6	26,1	46,6	43,0	38,4
Secondary School L1	25,3	30,5	30,3	27,4	28,3	25,9	23,9
Secondary School L2	8,7	13,8	13,5	19,5	8,8	11,7	16,7
Technical School	12,1	12,3	14,5	14,2	13,4	16,0	16,7
High education	7,0	10,5	12,2	12,8	3,0	3,4	4,3

Note: FTS = first time job seekers; UwE = unemployed with previous experience. Primary School = 6 years; Secondary School L1 = 3 years; Secondary School L2 = 3 years; Technical School = up to 6 years; High education = University and others.
Source: National Institute of Statistics.

Table 9: Specific rates of unemployment rate by education level 1982 - 1998

| | Montevideo | | | | Interior | | |
	1982-1986	1987-1990	1991-1994	1995-1998	1987-1990	1991-1994	1995-1998
FTS							
Primary School	1,4	1,2	1,0	1,3	1,2	1,1	1,1
Secondary School L1	3,7	3,1	2,8	2,9	3,7	3,3	2,7
Secondary School L2	5,9	4,6	4,5	3,1	5,2	5,0	4,4
Technical School	3,9	2,5	2,5	2,5	3,1	2,8	3,0
High education	4,1	3,6	3,0	2,0	2,0	2,9	2,1
UwE							
Primary School	11,0	6,0	6,3	9,4	5,4	6,2	8,0
Secondary School L1	10,9	7,9	8,0	11,4	7,0	7,9	9,5
Secondary School L2	8,6	7,6	6,8	9,8	5,8	5,9	8,9
Technical School	10,5	6,8	7,2	9,7	6,1	7,3	9,4
High education	5,1	4,1	3,8	5,1	2,3	2,7	4,1

Note: FTS = first time job seekers; UwE = unemployed with previous experience. Primary School = 6 years; Secondary School L1 = 3 years; Secondary School L2 = 3 years; Technical School = up to 6 years; High education = University and others
Source: National Institute of Statistics.

2.1.3   Other characteristics

The hypothesis of increased turnover is consistent with the changes in the distribution of employment by occupation and by economic activity.

The percentage of private employees has risen both in Montevideo and in the Interior while that of public employees has decreased. This is linked to the public policy of reducing the number of workers in the Central Government, carried out at the beginning of the nineties. The relative decrease in public wages until 1995 was an additional incentive (Table 10).

On the other hand, self-employed workers (known as "cuenta propia") have increased their share in total employment. In Montevideo, this is due to the behavior of those with a physical place where to run their business while in the Interior it is due to those without an establishment. This fact should be analyzed more deeply when studying the quality of current jobs.

Manufacturing employment in Montevideo has lost 5 percentage points in the last decade while commerce has increased its share in both Montevideo and the rest of the country. In Montevideo, jobs have also been created in activities linked to offering services to firms and in social and personal services, while in the Interior it is the agricultural and leverage sector that has generated new jobs. Thus, people expelled from the industrial sectors have apparently found a job in those linked to non-financial services and agriculture (Table 10). However, after 1995, the share in total unemployment of those that have worked in construction and commerce increased significantly, explaining most of the rise in the unemployment rate (Table 11).

Table 10: Employment distribution by occupation and economic sector 1982 - 1998

	Montevideo				Interior		
	1982-86	1987-90	1991-94	1995-98	1987-90	1991-94	1995-98
Occupation							
Salaried private	51,6	53,7	55,9	57,0	46,3	50,3	51,2
Salaried public	22,5	21,2	18,1	16,8	25,7	21,1	19,0
Self - employed w/establishment	12,6	10,6	12,4	12,9	13,5	14,8	16,0
Self - employed wo/establishment	5,3	6,1	6,0	6,1	7,7	7,7	7,8
Others	8,0	8,3	7,7	7,2	6,8	6,1	6,1
Economic Sector							
Agricult., leverage, fishing and mining	1,7	1,5	1,5	1,8	6,7	7,7	7,7
Manufacturing	22,6	24,0	22,8	17,8	19,3	18,1	15,9
Construction	4,4	4,3	5,0	5,3	8,9	9,2	9,0
Commerce	18,0	17,5	18,5	20,5	17,1	18,4	19,7
Electricity, transport and communicat.	9,1	8,6	7,5	7,8	6,9	6,7	6,4
Real estate & services to firms	6,1	6,5	7,7	8,8	3,0	3,2	3,6
Social and personal services	38,1	37,8	37,1	38,1	38,3	36,8	37,7

Note: w/ means "with"; wo/ means without. "Others" include owners of firms with employees and unpaid workers.

Source: National Institute of Statistics.

Table 11: Unemployment distribution by economic sector 1982 - 1998

Economic Sector	Montevideo				Interior		
	1982-86	1987-90	1991-94	1995-98	1987-90	1991-94	1995-98
Agricul., leverage, fishing and mining	1,1	1,3	1,2	1,1	9,1	10,4	8,0
Manufacturing	35,0	32,2	31,5	27,5	22,4	17,6	17,7
Construction	7,9	6,8	5,4	7,1	11,5	11,4	12,7
Commerce	20,4	23,2	23,9	25,8	18,1	18,7	20,7
Electricity, transport and communicat.	4,5	3,8	4,3	4,5	3,7	3,9	3,8
Real estate & services to firms	4,4	5,3	5,6	6,4	2,4	2,2	2,4
Social and personal services	26,5	27,5	28,1	27,7	33,1	35,7	34,8

Note: w/ means "with"; wo/ means without. "Others" include owners of firms with employees and unpaid workers. Unemployment refers only to those with previous experience.

Source: National Institute of Statistics.

Thus, *the change in the sectoral structure of employment is such that the degree of volatility of jobs has increased while the level of schooling generally required is higher than the one needed in manufacturing and/or construction.*

Another feature of unemployment that would also be consistent with increased turnover is its distribution according to the status of the individual in his/her household. Those that are not household heads are allowed to change jobs more frequently, as their labor income can be considered as a secondary source. Their behavior would then be considered as voluntary. On the other hand, household heads, although they may also change jobs voluntary, are expected to be more reluctant to do so when there is excess supply of labor.

Figures in Table 12 reveal that more than 96% of first time job seekers have always been other members of the household, while no substantial change in their share is observed in the period. Thus, this is only reflecting the age structure of FTS.

On the other hand, only 20% of UwE are household heads. *However, as the unemployment rate rose at the end of the nineties, the share of household heads in UwE also increased.*

Table 12: Distribution of the unemployed by household status

	FTS				UwE			
	1982-86	1987-90	1991-94	1995-98	1982-86	1987-90	1991-94	1995-98
Montevideo								
Head	2,4	3,9	2,0	1,1	26,9	20,6	18,1	20,8
Other members	97,6	96,2	98,0	98,9	73,1	79,4	81,9	79,2
Interior								
Head	-,-	1,8	1,3	1,1	-,-	22,1	17,9	19,0
Other members	-,-	98,2	98,7	98,9	-,-	77,9	82,1	81,0

Note: FTS = first time job seekers; UwE = unemployed with previous experience.
Source: National Institute of Statistics.

Further, the distinction of UwEs according to the reasons for leaving their previous job points at an increase in involuntary turnover (Table 13). The share of those that were laid-off, either individually or because their firm shut down, has more than doubled in the nineties relative to

the eighties in Montevideo. In the nineties, when the unemployment rate went up, those that involuntary lost their job increased their share in total unemployment in 10 percentage points.

Table 13: Distribution of the unemployed by reasons for leaving the job 1982 – 1998

	1982-86	1987-90	1991-94	1995-98
Montevideo				
Laid-off	22,9	17,4	26,9	37,5
Quit	77,1	82,6	73,1	62,5
Interior				
Laid-off	-,-	12,0	18,8	28,4
Quit	-,-	88,0	81,2	71,6

Note: FTS = first time job seekers;
UwE = unemployed with previous experience.
Source: National Institute of Statistics.

2.1.4 Labor status and poverty

Another dimension of unemployment that is crucial to policy makers is that of the link between unemployment and poverty, as when both characteristics go together they reproduce themselves in a perverse way. When the poorest individuals are the ones facing more difficulties in getting a job, it is generally the case that there are other issues at work than their personal characteristics, such as the channels through which jobs are found or the impossibility of getting the adequate re-training faced to changes in labor market requirements.

In order to analyze the above, a poverty index was built using principal factor analysis (see Harris, 1975 for an extensive treatment of the topic). All sources of income in the household were considered and a per capita income calculated. As the fact that the individual is working or not, especially if he/she is the head of the household, might change the strata in which the household is classified according to the per capita income, the characteristics of the house the individual lives in were also incorporated. Variables accounting for it are the number of household members per room and the level of precariousness of the house[4].

The index was built using households from Montevideo and the rest of the country simultaneously. The proportion of modest houses in the Interior, however, is larger than that in the capital city. Workers in Montevideo have a structurally higher labor income than that of those living in the Interior, partially associated to labor market conditions, such as the characteristics of workers and economic activities, but also to a lower cost of living in the rest of the urban country. As a consequence, it is expected that the distributions for those in Montevideo will be generally more concentrated on the right relative to the Interior, just reflecting its lower economic standards. In spite of this, there are other reasons for which *the distribution of employment and unemployment according to the level of poverty of their household is different depending on the geographic area. So is its temporal evolution* (Tables 14 and 15).

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[4] The precariousness of the house is an index taking values between 1 and 4 that accounts for the materials the house is built with, the size of the rooms and other issues related to comfort (1 is very high quality and 4 is precarious).

The location of employed individuals along quintiles of the distribution of households according to their poverty level is relatively flatter in the Interior than in Montevideo. Temporal stability is observed in both geographic areas (Table 15). On the other hand, concentration of unemployed individuals in the lowest quintile is substantial in the Interior while in Montevideo the distribution is quite flat (Table 16).

Hence, *while in Montevideo unemployed individuals belong to household all along the income distribution, in the Interior it is a relatively more serious problem for those in the poorest strata.*

Table 14: Distribution of the unemployed by level of poverty   1991 – 1998

	Montevideo					**Interior**				
	Q1	**Q2**	**Q3**	**Q4**	**Q5**	**Q1**	**Q2**	**Q3**	**Q4**	**Q5**
Total										
1991-1994	23,3	22,6	21,3	19,6	15,6	43,8	17,5	25,2	9,2	4,5
1995-1998	25,2	20,4	21,2	19,8	13,6	39,8	17,3	28,3	11,2	3,5
FTS										
1991-1994	19,9	17,7	21,1	22,9	20,9	35,8	18,0	28,5	11,9	5,9
1995-1998	24,0	18,7	20,7	20,7	15,9	34,8	16,4	31,3	13,7	3,8
UwE										
1991-1994	24,7	21,1	22,4	18,3	13,6	46,9	17,2	23,9	8,1	4,0
1995-1998	25,5	20,8	21,3	19,5	13,0	41,2	17,5	27,4	10,5	3,4

Note: FTS = first time job seekers; UwE = unemployed with previous experience. Quintiles Q1 to Q5 refer to the distribution of households according to the poverty index defined in the paper.
Source: National Institute of Statistics.

In the second half of the nineties, concentration of unemployed new entrants in the lowest quintile increased in Montevideo. Given the age structure of the FTS, this is showing that *the youngest individuals that did not leave their search for a job when unemployment went up were those belonging to the poorest households in the capital city* (Table 16). Moreover, the distribution of the unemployed by level of poverty of their household and age shows that this age group is the one showing the strongest concentration in the left tail, and it further increased in the late nineties.

There are no significant differences in the distribution of unemployment and employment by poverty level depending on the gender, nor has the distribution changed in the late nineties (Table 16).

In the Interior, the rise is unemployment was matched by a decrease of the concentration of UwE in the lowest quintile*. Individuals from households in the intermediate strata of the income distribution in the rest of the urban country became unemployed in a higher proportion than those from the poorest households* (Table 16). This was mainly driven by the behavior of men, no differences being found depending on the age or the education level of the individuals.

Table 15: Distribution of employment by level of poverty of the household, gender, age and education level   1991 - 1998

	Montevideo					Interior				
	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5
All										
1991-1994	11,1	17,4	17,0	23,9	30,7	24,3	23,7	21,4	18,0	12,6
1995-1998	10,8	18,5	15,1	21,9	33,8	23,2	22,7	20,5	21,1	12,6
Gender										
Male										
1991-1994	12,3	17,8	17,4	23,4	29,2	26,1	24,1	21,3	16,8	11,8
1995-1998	12,3	19,1	15,5	21,3	31,9	24,9	22,9	22,0	18,6	11,6
Female										
1991-1994	9,6	16,8	16,5	24,6	32,5	21,5	23,1	21,5	20,1	13,8
1995-1998	9,0	17,7	14,6	22,5	36,2	20,1	21,9	22,8	21,4	13,9
Age										
14 – 19										
1991-1994	21,1	22,1	17,8	23,6	15,3	39,5	22,8	19,4	12,4	6,0
1995-1998	22,8	25,3	16,6	19,8	15,5	38,1	23,6	20,2	13,4	4,8
20 – 29										
1991-1994	11,8	17,8	15,6	23,4	31,3	26,1	25,6	20,1	17,2	11,0
1995-1998	11,3	20,0	14,3	22,2	32,2	24,9	24,1	21,0	19,6	10,5
30 – 39										
1991-1994	12,2	17,1	17,5	24,3	28,9	25,8	22,3	21,9	18,3	11,7
1995-1998	11,9	17,3	15,4	21,7	33,8	25,1	20,6	23,4	18,5	12,5
40 and more										
1991-1994	8,8	16,7	17,3	23,9	33,4	19,9	23,7	22,1	19,4	14,9
1995-1998	8,6	17,4	15,2	22,0	36,8	18,7	22,5	22,8	21,5	14,7
Education level										
Primary										
1991-1994	19,6	25,4	20,2	20,4	14,4	33,9	26,8	20,2	12,9	6,18
1995-1998	23,9	28,4	17,2	17,9	12,7	34,1	26,1	21,6	13,3	5,01
Secondary School L1										
1991-1994	10,5	18,0	18,1	26,5	26,9	19,5	22,4	23,2	21,1	13,7
1995-1998	12,0	22,4	18,1	23,5	23,9	19,5	21,7	25,1	22,0	11,7
Secondary School L2										
1991-1994	4,7	11,7	14,6	26,4	42,5	12,4	19,6	22,7	24,9	20,4
1995-1998	4,5	14,5	15,0	24,8	41,2	11,6	18,6	22,5	27,8	19,5
Technical School										
1991-1994	12,7	21,2	21,0	25,2	19,9	24,1	26,0	23,9	17,1	8,8
1995-1998	11,8	22,9	18,4	25,7	21,1	23,0	24,6	24,6	18,9	8,9
High education										
1991-1994	2,4	6,4	10,2	23,2	57,8	3,2	12,1	17,1	29,5	38,0
1995-1998	0,9	5,4	8,6	19,9	65,2	2,4	11,9	16,0	30,2	39,5

Note: Quintiles Q1 to Q5 refer to the distribution of households according to the poverty index defined in the paper. Primary School = 6 years; Secondary School L1 = 3 years; Secondary School L2 = 3 years; Technical School = up to 6 years; High education = University and others.
Source: National Institute of Statistics.

Table 16: Distribution of unemployment by level of poverty of the household, gender, age and education level 1991 - 1998

	Montevideo					Interior				
	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5
Gender										
Male										
1991-1994	22,9	20,7	21,1	19,7	15,6	45,9	18,0	23,5	8,8	3,8
1995-1998	25,6	20,5	21,0	19,6	13,4	39,6	18,3	28,2	10,5	3,5
Female										
1991-1994	23,7	19,7	21,5	19,6	15,7	41,8	17,0	26,6	9,5	5,1
1995-1998	24,8	20,3	21,3	19,9	13,7	40,0	16,5	28,3	11,8	3,5
Age										
14 – 19										
1991-1994	27,4	21,4	20,0	19,6	11,6	46,6	17,9	22,7	9,9	3,1
1995-1998	32,2	22,5	18,9	16,8	9,6	43,2	17,7	26,1	10,6	2,4
20 – 29										
1991-1994	20,5	18,1	20,4	20,8	20,3	38,9	17,8	27,0	9,9	6,4
1995-1998	20,8	19,8	18,8	23,9	16,8	35,7	17,8	29,6	12,6	4,4
30 – 39										
1991-1994	26,0	20,4	24,4	18,0	11,3	45,6	18,6	25,5	6,7	3,7
1995-1998	27,8	17,1	25,1	17,3	12,8	47,2	13,6	27,3	8,8	3,1
40 and more										
1991-1994	19,6	21,9	23,3	18,4	16,8	45,8	15,0	26,6	8,3	4,4
1995-1998	22,1	21,0	24,6	18,8	13,5	37,2	18,9	29,4	10,7	3,9
Education level										
Primary										
1991-1994	42,9	22,7	19,0	10,6	4,9	60,4	15,4	18,3	3,95	2,03
1995-1998	47,8	23,2	18,1	8,6	2,3	55,3	16,8	22,4	4,58	1,03
Secondary School L1										
1991-1994	22,6	24,7	24,8	17,4	10,5	38,5	21,5	27,2	9,63	3,3
1995-1998	28,3	23,5	22,5	16,8	9,1	37,1	18,5	31,2	10,9	2,3
Secondary School L2										
1991-1994	10,3	16,7	21,4	29,1	22,6	28,6	15,4	31,5	16,8	7,6
1995-1998	11,6	17,6	23,3	27,1	20,4	25,1	17,4	34,5	17,3	5,8
Technical School										
1991-1994	26,3	22,0	24,1	17,9	9,7	40,1	18,8	28,1	8,7	4,5
1995-1998	23,7	25,0	24,2	19,8	7,4	39,0	17,8	28,0	12,0	3,3
High education										
1991-1994	4,4	10,1	15,9	29,4	40,3	11,6	17,2	32,7	20,4	18,3
1995-1998	4,0	8,3	17,9	32,8	37,0	6,9	12,9	31,7	30,7	17,8

Note: Quintiles Q1 to Q5 refer to the distribution of households according to the poverty index defined in the paper. Primary School = 6 years; Secondary School L1 = 3 years; Secondary School L2 = 3 years; Technical School = up to 6 years; High education = University and others.
Source: National Institute of Statistics.

Skill, as measured by years of schooling, is negatively correlated with the level of poverty of the household the unemployed individual belongs to. More than 40% of those with only primary school belong to the 20% poorest households in Montevideo (50% in the Interior). At the other end, 40% of those unemployed highly educated belong to the richest households in Montevideo, being the percentage only 19% in the Interior.

Unemployment of the least skilled among members of the poorest households worsened in the late nineties in Montevideo (Table16).

2.1.5 Duration of the unemployment spell

A final aspect of unemployment that is here analyzed is that of the duration of the unemployment spell. The relevance of the analysis is linked to two issues. First, long-term unemployment is generally associated to a loss in human capital. When this is the case, re-cycling and re-training programs do help to revert the situation. Second, long unemployment spells may generate processes of hysteresis ending up with a structurally higher unemployment rate. On the other hand, short-term unemployment can reflect a dynamic labor market in which mobility is widespread. But it can also be signaling at an increase in turnover reflecting job instability.

A complete analysis of the above topics would require the estimation of duration models on the lines of Cox and Oakes (1984), but this is out of the scope of this paper. However, some stylized facts are described below in order to have a general picture of what is taking place in the Uruguayan market.

Those with more than 1 year of search - long-term unemployed - have decreased their share in the nineties relative to the eighties, while the opposite has occurred with short-term unemployment (those looking for a job for at most 3 months). There is not a clear trend year by year, however (Table 17).

Table 17: Distribution of the unemployed by length of the unemployment spell 1982 - 1998

	Montevideo				Interior		
	1982-86	1987-90	1991-94	1995-98	1987-90	1991-94	1995-98
FTS							
Up to 3 months	32,0	33,9	39,4	43,1	34,8	39,6	38,2
4-6 months	23,0	21,5	22,6	18,4	18,0	18,6	17,8
7-11 months	11,3	13,1	8,7	7,1	9,2	8,6	8,5
1 year and more	33,7	31,5	29,2	31,4	38,1	33,2	35,5
UwE							
Up to 3 months	40,2	48,4	51,0	46,5	48,6	54,9	49,0
4-6 months	20,8	18,7	19,6	18,2	16,6	16,5	17,6
7-11 months	10,1	9,5	8,2	7,7	8,8	6,7	8,3
1 year and more	28,8	23,5	21,3	27,7	26,0	21,9	25,1
Average duration (weeks)							
All	31,8	28,2	25,9	28,0	31,3	25,7	27,5
UwE	30,8	26,7	24,8	27,8	28,6	23,8	26,1
FTS	34,4	32,6	29,5	29,4	37	30,8	32,7

Note: FTS = first time job seekers; UwE = unemployed with previous experience.
Source: National Institute of Statistics.

The evolution of the average duration of the unemployment spell in Montevideo along 1982-1998 confirms the above: while in 1982-1990 the average spell was 30 weeks, it was 27 weeks in the nineties. This could be thought of as reflecting a better performance of the labor market. However, by the end of the nineties not only the unemployment rate went up but also the average length of the unemployment spell as well. It is thus more likely that the 47% share of short-term unemployed in 1998 together with the 11% unemployment rate and the fact that more than 34% of UwE have been laid-off are signaling at an increased involuntary turnover.

Temporal patterns of FTS and UwE are similar, but the average length of the unemployment spell is even shorter for UwE (Table 17). In spite of the fact that this behavior is partially explained by the positive effects of experience on the probability of finding a job in a short time, it is also revealing that stability of jobs has deteriorated[5].

The distribution by age of those unemployed for less than 6 months shows that around 60% of UwE are younger than 30 years (Table 18)[6]. Although this could be revealing a voluntary turnover process it might be the case that it is the cost of firing that is determining a last-in-first-out rule.

Table 18: Distribution of the unemployed by gender and age according to the length of the unemployment spell   Average 1995 – 1998

	Montevideo						Interior					
	< 6 months		6-11 months		1 year +		< 6 months		6-11 months		1 year +	
	FTS	UwE	FTS	UwE	FTS	UwE	FTS	UwE	FTS	UwE	FTS	UwE
Male												
14-19	80,0	24,4	69,8	17,4	61,2	17,0	80,0	26,3	80,3	27,0	67,4	21,6
20-29	20,0	38,5	30,3	37,3	36,8	37,4	20,0	34,3	18,0	30,6	30,7	36,1
30-39		15,4		16,6	2,1	11,1		13,7		13,1	1,9	14,4
40+		21,8		28,7		34,5		25,7	1,7	29,4		27,9
Female												
14-19	60,4	17,4	53,5	11,3	42,8	7,0	63,2	22,3	60,4	15,8	36,0	9,8
20-29	31,3	36,5	35,4	34,4	41,5	31,3	28,7	36,7	29,1	37,9	44,8	32,4
30-39	3,1	21,5	7,1	24,5	7,3	22,6	3,3	20,2	5,4	23,3	11,1	27,7
40+	5,2	24,6	4,0	29,8	8,4	39,3	4,8	20,9	5,1	23,1	8,1	30,1

Note: FTS = first time seekers; UwE = unemployed with previous experience.
Source: National Institute of Statistics.

Two hypotheses seem to be supported by the data. First, *the youngest individuals, as well as those that are not household heads, tend to be more selective job seekers than other groups*, as young men and middle-age women that are looking for a job for the first time are the majority among long-term unemployment. Second, *there are some groups in need of re-cycling, as the UwE older than 40 - male and female - have a larger participation in total UwE as duration increases* (Table 18). This last observation is consistent with the results of recent research, that have found an increasing share of older, non-educated individuals in total unemployment,

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[5] Another possible cause of a shorter unemployment spell is the increase in the inflow into the labor force and into unemployment. In the next section the analysis is thus done controlling for inflow.
[6] The number of cases does not allow for a classification by age of those with less than 3 months of unemployment.

especially among long-term laid-off workers (de Brun and Labadie, 1997; Reggio and Amarante, 2000).

On the other hand, this is only partially linked to differences in education. Long-term FTS in Montevideo do have a stronger concentration in the category of highly educated relative to those FTS that have been looking for a job for less than six months. But this does not happen in the rest of the urban country. However, the share of female FTS with intermediate levels of education in the Interior is the biggest and it can be explained in terms of them not being household heads and hence having the possibility of looking for a job during a longer period of time (Table 19).

On the other hand, UwEs are more concentrated in the categories corresponding to the lowest levels of education both among short and long-term unemployed. This was not a characteristic observed in the eighties, a period in which long-term unemployment was more generalized among occupations demanding high educated workers (Glejberman, 1992).

Table 19: Distribution of the unemployed by gender and education level according to the length of the unemployment spell   1995 - 1998

	Montevideo				Interior			
	< 6 months		1 year +		< 6 months		1 year +	
	FTS	UwE	FTS	UwE	FTS	UwE	FTS	UwE
Male								
Primary School	12,4	29,2	18,9	29,2	18,6	44,1	19,3	36,4
Secondary School L1	34,6	23,9	19,4	23,9	22,9	22,4	25,2	18,9
Secondary School L2	21,6	17,7	21,8	17,7	27,1	11,8	21,0	15,2
Technical School	18,8	19,2	18,1	19,2	26,8	19,9	28,3	22,6
High education	12,8	10,0	21,8	10,0	4,6	1,8	6,2	6,9
Female								
Primary School	16,5	24,3	11,8	24,3	21,7	37,2	19,1	25,2
Secondary School L1	25,0	29,8	20,9	29,8	24,0	25,1	22,9	30,9
Secondary School L2	27,3	21,8	22,2	21,8	30,5	19,9	38,2	20,9
Technical School	10,4	10,1	6,7	10,1	14,5	12,8	9,3	12,3
High education	20,9	9,9	38,4	14,0	9,3	5,1	10,7	10,7

Note: FTS = first time job seekers; UwE = unemployed with previous experience. Primary School = 6 years; Secondary School L1 = 3 years; Secondary School L2 = 3 years; Technical School = up to 6 years; High education = University and others.
Source: National Institute of Statistics.

2. 2 A model to determine unemployment odds

To further analyze the determinants of unemployment related to the individual characteristics and to his/her personal environment, a multivariate logit model is used. This methodology allows one to take into account *simultaneously* all variables determining the odds of an individual being unemployed. Hence, it might be the case that although women have higher unemployment rates than men, they are not being discriminated but it is just the consequence of them having low education levels, for example. Variables to be considered among the individual characteristics are gender; age; education level; marital status; household status; and experience. Further, the geographical area in which the individual lives will also be included, as well as the previously defined index of his/her household poverty status[7].

The results of the model (as summarized in Table 20) show that when keeping other characteristics constant, *the odds of unemployment are higher for women than for men; for non-married than for married individuals; for divorced or widowers than for single individuals; for those not in charge of the household than for the household head; for those living in Montevideo than for people living in the Interior.*

Unemployment likelihood decreases with experience and increases with age at a decreasing rate. This result suggests that the higher unemployment rate of young individuals is mostly linked to their lack of experience or training.

Educated individuals have lower odds of being unemployed than those less educated. The speed with which this occurs increases with schooling.

Finally, when discriminating the labor force according to the above mentioned poverty index, it is seen that the *unemployment odds are higher for those belonging to the poorest households*. If the odds are allowed to vary per quintile, individuals belonging to households in the lowest 20% of the income distribution have significantly higher odds of unemployment than the rest.[8].

The poverty index was also calculated excluding the per capita income in order to analyze if the inclusion of the labor income, when there is one, would significantly bias the estimated effect of this variable or change other estimated coefficients. The results of the model are not sensitive to this choice. Only the estimates related to the poverty index change, revealing the expected upwards bias when including the per capita income of the household, implying that the unemployment odds are around 20% higher.

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[7] Gender is a binary variable (male=1, female=0). Age and schooling are continuous variables. Possible categories of marital status are single; married; and divorced or widower, defining a binary variable each. Household status is a binary variable accounting for the individual being in charge or not of the household (head of the household). Experience is calculated as the individual's age minus 6 minus years of schooling, except for the FTS for which experience is equal to 0 by definition. Region equals 1 if the individual lives in Montevideo, 0 otherwise. The poverty index ranges from 1 to 5, corresponding 1 to households in the 20% poorest strata.

[8] The estimated values of the relative odds with respect to the richest quintile in 1998 are: 1.58 (0.13); 2.64 (0.22); 1.78 (0.15); 3.66 (0.32), corresponding to the second richest quintile up to the fifth (the poorest). Standard deviations are in parenthesis.

The temporal evolution of the estimated coefficients shows the different groups have evolved in a distinct way (Table 20, Figure 5 in the appendix). First, the relative odds of age, schooling and experience are relatively constant along the period. However, *after 1994 there is some evidence of an increase in the relative risk of unemployment for young; educated; and experienced individuals*. This behavior is consistent with the increase in the unemployment rate, when relative gaps tend to disappear. Regarding differences by gender and household status, it is more apparent that the odds move with the unemployment rate. The relative risk of unemployment for women and household heads are larger when the unemployment rate is higher. Finally, the geographical area where the individual lives and the position of his/her household in the income distribution as factors differentiating the probability of being unemployed have decreased in importance in the nineties relative to the eighties. They also move with the unemployment rate, in the opposite direction.

Thus the model validates many of the findings derived from the descriptive analysis and helps identifying the real mechanisms at work:

1. Women, especially those that are single, not in charge of the household and living in the Interior show relatively more difficulties in getting and keeping a job. When FTS, however, the finding is consistent with a more selective job seeker, not with a discriminated individual.
2. Young individuals owe their relatively poorer performance in the labor market to their lack of experience. Experience and schooling account for skill and hence decrease the odds of unemployment.
3. The evolution and characteristics of those in the age interval (20-29) reveal they are the most fragile group in terms of job stability. Although turnover can be voluntary in many cases, it is also associated to the costs of firing workers according to tenure.
4. Individuals younger than 20 years old face high unemployment rates. However, their behavior is likely to be linked basically to their belonging to the poorest households.
5. The percentage of UwE that have not quit their job has increased sharply in the nineties, pointing further to job stability problems.
6. Less educated people have declined their share in total unemployment steadily in time. However, there is still a significantly higher proportion of UwE with only primary school, especially in the Interior.
7. A larger unemployment spell is both linked to a loss of human capital and to the social role of the individuals. Although most of the unemployed for more than a year are either young individuals or women, a large percentage of whom are also first time job seekers, there is a non negligible percentage of long-term UwE older than 40 years, a group that further has low education levels.

Three groups appear as clear targets of labor policy:

1. Long-term first time job seekers. They represent 6% of the unemployed, thus less than 1% of the labor force.
2. People belonging to the age group (20-29) living in urban areas other than Montevideo. They are 30% of the unemployed, thus 3% of the labor force.

3. Unemployed workers with previous experience older than 40 years and with more than 6 months of being unemployed. They are 12% of total unemployment (1.2% of the labor force).

The above three groups account for 5 percentage points (48%) of total unemployment. Hence, they can be seen as groups on which policy makers can focus.

Table 20: Results of the logit model for unemployment
Relative odds and coefficients 1986 – 1998

	Gender	Age	Coeff. Age**2	Schooling	Coeff.School.**2	Experience	Coeff.Exper.**2	Married
1998	0,63 (0,031)	1,86 (0,076)	-0,002 (0,000)	0,81 (0,033)	-0,02 (0,002)	0,53 (0,016)	0,003 (0,000)	0,78 (0,049
1997	0,67 (0,030)	2,02 (0,077)	-0,003 (0,000)	0,83 (0,030)	-0,02 (0,002)	0,50 (0,014)	0,003 (0,000)	0,92 (0,052
1996	0,75 (0,033)	2,01 (0,076)	-0,003 (0,000)	0,85 (0,031)	-0,02 (0,002)	0,51 (0,014)	0,004 (0,000)	0,83 (0,046
1995	0,68 (0,032)	1,84 (0,069)	-0,002 (0,000)	0,82 (0,030)	-0,02 (0,002)	0,53 (0,015)	0,003 (0,000)	0,76 (0,046
1994	0,68 (0,035)	2,28 (0,105)	-0,004 (0,000)	0,79 (0,033)	-0,02 (0,002)	0,45 (0,015)	0,004 (0,000)	0,79 (0,053
1993	0,68 (0,037)	2,28 (0,106)	-0,003 (0,000)	0,69 (0,030)	-0,02 (0,002)	0,45 (0,015)	0,004 (0,000)	0,74 (0,052
1992	0,69 (0,037)	2,17 (0,093)	-0,004 (0,000)	0,76 (0,029)	-0,02 (0,002)	0,48 (0,015)	0,004 (0,000)	0,78 (0,052
1991	0,74 (0,039)	2,20 (0,099)	-0,004 (0,000)	0,72 (0,029)	-0,02 (0,002)	0,46 (0,015)	0,005 (0,000)	0,89 (0,046
1990	0,79 (0,043)	2,07 (0,086)	-0,004 (0,000)	0,69 (0,025)	-0,01 (0,001)	0,49 (0,014)	0,004 (0,000)	0,94 (0,050
1989	0,70 (0,039)	2,41 (0,108)	-0,005 (0,000)	0,71 (0,026)	-0,01 (0,001)	0,44 (0,014)	0,005 (0,000)	0,94 (0100
1988	0,65 (0,034)	2,11 (0,083)	-0,003 (0,000)	0,71 (0,024)	-0,01 (0,001)	0,48 (0,013)	0,004 (0,000)	0,84 (0,042
1987	0,67 (0,035)	2,30 (0,091)	-0,004 (0,000)	0,77 (0,026)	-0,02 (0,001)	0,45 (0,013)	0,005 (0,000)	1,01 (0,051
1986	0,82 (0,042)	2,09 (0,037)	-0,004 (0,000)	0,74 (0,024)	-0,01 (0,001)	0,49 (0,013)	0,005 (0,000)	1,01 (0,054

	Divor./Wido.	Head	Region	Poverty 1	Goodness of fit (1)	(2)	(3)	(4)	Poverty 2
1998	0,88 (0,089)	0,52 (0,034)	1,28 (0,054)	1,29 (0,024)	0,16	90,82	0,000	0,78	1,06 (0,018)
1997	1,24 (0,109)	0,49 (0,031)	1,34 (0,057)	1,33 (0,023)	0,19	90,15	0,000	0,77	1,11 (0,018)
1996	0,96 (0,085)	0,48 (0,030)	1,45 (0,060)	1,39 (0,023)	0,19	89,64	0,000	0,78	1,13 (0,018)
1995	1,03 (0,096)	0,47 (0,033)	1,42 (0,061)	1,38 (0,024)	0,20	91,10	0,000	0,79	1,13 (0,018)
1994	1,09 (0,118)	0,48 (0,037)	1,34 (0,064)	1,38 (0,027)	0,23	92,37	0,000	0,81	1,14 (0,020)
1993	1,13 (0,127)	0,48 (0,041)	1,34 (0,070)	1,34 (0,027)	0,24	93,17	0,000	0,81	1,10 (0,021)
1992	1,06 (0,113)	0,44 (0,035)	1,13 (0,059)	1,29 (0,024)	0,22	92,48	0,000	0,80	1,10 (0,019)
1991	1,02 (0,090)	0,44 (0,034)	1,24 (0,061)	1,30 (0,026)	0,23	92,72	0,000	0,80	1,11 (0020)
1990	1,23 (0,109)	0,48 (0,037)	1,68 (0,085)	1,50 (0,030)	0,24	92,92	0,000	0,81	1,05 (0,019)
1989	1,02 (0,110)	0,47 (0,038)	1,50 (0,078)	1,48 (0,030)	0,25	93,51	0,000	0,82	1,08 (0,019)
1988	1,12 (0,094)	0,55 (0,040)	1,45 (0,070)	1,44 (0,027)	0,24	93,13	0,000	0,81	1,04 (0,018)
1987	0,96 (0,088)	0,48 (0,034)	1,51 (0,072)	1,51 (0,028)	0,26	92,96	0,000	0,81	1,07 (0,016)
1986	0,97 (0,074)	0,48 (0,033)	1,85 (0,088)	1,54 (0,028)	0,24	92,24	0,000	0,80	1,10 (0,016)

Notes: Figures refer to relative odds unless stated. In that case "Coeff." (coefficient) is added to the name of the variable. Standard deviations are in parenthesis besides the estimators. Goodness of fit measures are: (1) = pseudo-R^2; (2)= % correctly classified; (3) = prob.> χ^2 for the Pearson statistic; (4)= area under the receiver operating characteristic (ROC) curve. Variables included are gender: 1 if male, 0 if female; age: continuous; age**2: age squared; schooling: continuous; school.**2:schooling squared; experience: continuous; exper.**2:experience squared; married: 1 if married, 0 otherwise; divor./wido.: 1 if divorced or widower, 0 otherwise; head: 1 if head of the household; 0 other member; region : 1 if Montevideo, 0 if Interior; poverty1: 1 to 5 indicating from highest to lowest quintiles of a poverty index calculated using principal factor analysis. Factors are per capita income of the household; quality of the house and members of the household per room. Poverty2 is calculated analogously but excluding the per capita income.

Finally, the comparison of the behavior in the eighties and in the nineties reveals that with similar overall economic performance, on average, the unemployment rate is higher today than before, and this is mainly due to an increase in the percentage of those that have involuntary lost their job. The change in the economic structure is behind this phenomenon. The reduction in the size of the manufacturing sector in favor of the non-financial services sector has determined that the dynamics of employment slowed down, on the one side. Thus, demand policies should also be considered, such as those giving incentives to investing in specific industrial sectors.

On the other hand, job stability might have also deteriorated, as employment in the non-financial services sector is a lot more volatile that in the industrial sector. Evidence was found suggesting increased turnover: the share of those unemployed workers for less than 3 months rose in the nineties and the average duration of unemployment went down, despite the unemployment rates were higher than in the late eighties.

3. Who are the unsatisfied workers?

Some of the findings in the previous section suggest that there is job instability in the Uruguayan labor market. Although average real wages have increased in the nineties and employment has also achieved higher levels, it might be the case that, on average, the quality of jobs has deteriorated. In order to study this facet of the labor market performance, two analyses are carried out in what follows. First, the instability of jobs and earnings is analyzed following Haindl (1985) and Gill *et al.* (forthcoming). Expected tenure at the current job and the level of turnover are used as indicators of precariousness of employment, while the probability of losing the job and the expected duration of the unemployment spell are considered indicators of earnings instability. Second, disadvantaged workers are defined in terms of their lack of health care coverage and/or their dissatisfaction with their current job. The analysis of their characteristics compared to those of the rest of the employed workers can help determining if they are a precarious group of workers or not. A multinomial logit model is estimated so that the relative odds of belonging to different sectors can be explained in terms of individual characteristics.

3.1 Instability of employment and earnings

The analysis of observed average tenure at the current job and observed average duration of the unemployment spell as indicators of turnover and the degree of instability of employment have been largely criticized as they are calculated using labor market stocks (Haindl, 1985, Gill *et al.*, forthcoming, and references therein). The reason for this is that instability relates to changes in the individual's status in the labor market, so that the appropriate measure should be linked to flows instead of stocks.

Employment instability is related with the worker's *expected* tenure on the current job. To quantify it, thus, one has to calculate the probability that a worker loses his/her job. This can be done using the model developed by Haindl (1985), where a steady state (constant outflow) is assumed, in which no people are hired. Precarious employment is said to increase when expected average tenure goes down and when turnover goes up, relative to the rate at which jobs are created.

As it is seen in Table 21 and Figure 6 in the appendix, for both Montevideo and the rest of the country, expected average tenure has decreased in the nineties relative to the eighties. Further, within the nineties, expected permanency in the job is shorter in the sub-period 1995-1998 than in 1991-1994. The evolution of this indicator is similar to that of average tenure. Flows out and into employment increased in the nineties, thus suggesting that turnover has also gone up. Hence, *the indicators here used point at an increased instability of employment.*

Table 21: Indicators of employment stability 1982 - 1998

	(thousand people)		Net flow	(thousand people)		Net flow	Tenure	Tenure
	1st time	Re-entrant	(%)	Outflow	Inflow	(%)	(months)	(months)
1982	5,3	-7,7	-0,4	22,8	14,0	-1,8	74	nd
1983	4,3	0,9	0,9	20,4	23,7	0,7	68	nd
1984	12,0	-9,2	0,5	24,7	29,7	1,0	60	nd
1985	10,2	-9,2	0,2	29,1	31,1	0,4	55	nd
1986	8,6	-7,1	0,3	23,7	29,0	1,0	79	nd
1987	12,1	-6,9	0,9	27,2	31,7	0,9	62	nd
1988	9,1	-12,9	-0,6	21,2	18,5	-0,5	81	nd
1989	7,4	-3,3	0,7	17,2	22,2	1,0	96	nd
1990	7,5	-7,6	-0,0	20,9	18,2	-0,5	80	nd
1991	1,0	0,1	0,2	31,5	34,7	0,6	55	117
1992	-1,3	4,4	0,5	30,0	32,8	0,5	64	118
1993	-0,1	-5,0	-0,8	21,0	17,3	-0,6	81	115
1994	-0,6	13,9	2,2	29,6	39,3	1,8	59	115
1995	-0,9	1,8	0,2	29,5	27,3	-0,4	60	116
1996	-1,0	1,5	0,1	35,3	34,8	-0,1	49	112
1997	0,8	-4,1	-0,5	30,7	30,8	0,1	58	112
1998	-1,3	3,5	0,4	26,2	27,0	0,2	69	111
Average								
80s	8,5	-7,0	0,3	23,0	24,2	0,3	73	nd
90s	-0,4	2,0	0,3	29,2	30,5	0,3	62	114
1982 - 1986	8,1	-6,5	0,3	24,1	25,5	0,3	67	nd
1987 - 1990	9,0	-7,7	0,2	21,6	22,6	0,2	80	nd
1991 - 1994	-0,2	3,3	0,5	28,0	31,0	0,6	65	116
1995 - 1998	-0,6	0,7	0,0	30,4	30,0	0,0	59	113
	Labor force entrants		Labor force	Employment flows		Employment	Expected	Average
	(thousand people)		Net flow	(thousand people)		Net flow	Tenure	Tenure
	1st time	Re-entrant	(%)	Outflow	Inflow	(%)	(months)	(months)
1986	9,8	-12,2	0,2	16,8	18,7	2,7	85	nd
1987	9,7	-2,9	1,3	18,1	23,7	1,2	83	nd
1988	7,0	-5,2	0,3	19,0	21,8	0,6	87	nd
1989	7,3	-4,3	0,6	18,8	22,9	0,8	87	nd
1990	6,4	-6,7	-0,0	19,4	17,3	-0,4	83	nd
1991	11,5	-3,1	1,5	25,3	31,9	1,3	64	116
1992	14,1	-16,2	-0,3	34,0	33,2	-0,1	50	118
1993	8,8	-9,5	-0,1	22,5	23,1	0,1	78	118
1994	8,0	3,2	1,9	27,4	32,7	1,0	69	114
1995	8,8	-9,5	-0,1	29,0	26,9	-0,3	63	116
1996	10,0	-6,3	0,6	34,4	37,3	0,5	49	115
1997	11,4	-7,5	0,6	37,0	42,0	0,9	47	113
1998	6,5	2,0	1,3	34,1	42,8	1,5	60	108
Average								
80s	8,0	-6,3	0,5	18,4	20,9	1,0	85	nd
90s	9,9	-5,9	0,7	30,5	33,7	0,6	60	115
1986 - 1998	9,2	-6,0	0,6	25,8	28,8	0,7	70	nd
1991 - 1994	10,6	-6,4	0,7	27,3	30,2	0,6	65	117
1995 - 1998	9,2	-5,3	0,6	33,6	37,2	0,7	55	113

Source: Elaborated using data from the Household Surveys 1982-1998, National Institute of Statistics.

Regarding earnings instability, a good proxy is one that takes into account the probability of a worker losing his job, as well as how long he/she is expected to be looking for a new one. Thus, high unemployment rates, together with expected long spells of unemployment and low probabilities of exiting unemployment are indicators of increased precariousness. Indicators in Table 22 suggest that *while stability of earnings improved in the nineties relatively to the eighties, the reverse holds within the nineties*.

Table 22: Indicators of earnings stability 1982 - 1998

	rate	Probability of finding a job in:				Duration	Duration
	(%)	1 month	3 months	6 months	1 year	(weeks)	(weeks)
1982	11,9	13,2	9,4	5,6	2,0	51,8	31,3
1983	15,1	6,9	5,8	4,5	2,8	47,8	37,3
1984	13,8	11,1	8,3	5,5	2,4	25,6	35,2
1985	13,0	13,5	9,3	5,4	1,9	24,6	33,9
1986	10,7	13,6	9,2	5,3	1,9	24,1	33,2
1987	9,3	14,7	9,8	5,4	1,7	17,8	30,0
1988	9,1	16,3	10,1	5,0	1,3	22,6	30,0
1989	8,5	11,2	8,5	5,6	2,4	25,7	32,5
1990	9,2	13,2	9,3	5,5	2,0	25,6	28,6
1991	9,0	16,5	10,1	5,0	1,3	13,9	27,9
1992	9,0	17,8	10,3	4,6	1,0	17,6	28,2
1993	8,5	13,5	9,4	5,5	2,0	20,6	28,3
1994	9,1	15,2	9,5	5,0	1,6	20,1	26,9
1995	10,8	14,6	9,7	5,4	1,7	24,4	26,2
1996	12,3	13,1	9,3	5,5	2,0	22,5	29,4
1997	11,6	12,7	8,8	5,2	2,0	26,2	32,4
1998	10,2	12,3	8,6	5,2	2,1	30,8	32,4
Average							
80s	11,2	12,6	8,8	5,3	2,1	29,5	32,4
90s	10,1	14,5	9,5	5,2	1,7	22,0	29,0
1982 - 1986	12,9	11,6	8,4	5,3	2,2	34,8	34,2
1987 - 1990	9,0	13,8	9,4	5,4	1,9	22,9	30,3
1991 - 1994	8,9	15,7	9,8	5,0	1,5	18,1	27,8
1995 - 1998	11,2	13,2	9,1	5,3	2,0	25,9	30,1
Interior	**Unemployment**					**Expected**	**Average**
	rate	Probability of finding a job in:				Duration	Duration
	(%)	1 month	3 months	6 months	1 year	(weeks)	(weeks)
1986	8,9	10,2	6,7	2,4	0,7	18,4	39,2
1987	8,9	13,2	9,3	6,6	2,5	23,3	36,7
1988	8,2	14,5	9,5	6,8	2,5	22,9	33,0
1989	7,4	13,0	9,0	4,8	2,1	24,1	33,6
1990	7,7	14,3	9,4	4,9	1,8	23,0	31,3
1991	8,8	15,2	9,7	6,8	2,6	20,3	29,1
1992	9,1	17,0	10,4	5,5	1,3	14,0	25,4
1993	8,2	17,4	9,7	3,8	1,1	18,2	28,1
1994	9,2	12,8	9,1	7,3	2,9	24,7	27,9
1995	9,7	15,5	9,9	5,0	1,5	21,1	29,5
1996	11,4	13,9	9,4	5,1	1,9	21,5	30,8
1997	11,3	14,8	9,8	4,5	1,4	18,8	30,6
1998	9,9	15,6	9,7	4,2	1,4	23,4	27,4
Average							
80s	9,9	13,1	8,8	5,1	1,9	22,4	34,7
90s	9,7	15,3	9,7	5,3	1,8	20,2	28,6
1986 - 1998	9,1	14,4	9,3	5,2	1,8	21,1	31,0
1991 - 1994	8,8	15,6	9,7	5,8	2,0	19,3	27,6
1995 - 1998	10,6	14,9	9,7	4,7	1,5	21,2	29,6

Source: Elaborated using data from the Household Surveys 1982-1998, National Institute of Statistics

Both in Montevideo and in the Interior, unemployment rates were lower in the nineties than in the eighties, the probability of finding a job in 1 and 3 months increased while the odds of having a long spell of unemployment went down. Accordingly, expected duration of unemployment decreased. However, when splitting the last decade in two, the previous comparison has to be reversed: unemployment went up, the probability of finding a job in 1-3 months decreased while the expected duration of the unemployment spell significantly rose (Figures 7 and 8 in the appendix).

The analysis thus suggests increased precariousness of employment, according to the indicators used. Is it possible to link this result with the behavior of specific groups of workers? This is analyzed in the following pages.

3.2 Precarious employment

In order to calculate an indicator of the quality of jobs, several categories of workers are used in this paper. They aim to measure different facets of employment dissatisfaction.

1) *Informality.* Informal workers are those that, voluntarily or involuntarily, are not covered by the social security system when they obliged by law to be so. If no data is available, the percentage of the labor force they represent is generally calculated as that of workers employed in firms with at most 5 employees. This definition would not be appropriate in Uruguay. Given the size of the market, around one third of total employment is concentrated in small firms that are, in turn, 85% of total firms[9]. The Uruguayan household survey, however, includes a question on the type of health insurance the individual has. Salaried private employees, by law, must be affiliated to a mutual-aid institution, the fees being paid by the social security system using a percentage of all the contributions to the system (the specific tax is called "contribution to DISSE"). Regarding other private workers, most self-employed individuals in occupations other than managers and University graduates should also be subject to the same legal scheme. This is not so for owners of firms with employees. Hence, an adequate measure of informality in Uruguay is the proportion of workers that, being salaried private employees, have no health coverage or that attend public institutions plus those self-employed that are not affiliated to mutual-aid or private institutions. Moreover, since 1991, the survey directly asks the individual if he/she is affiliated to a mutual-aid institution and if yes if he/she is paid by DISSE or is part of a collective agreement with the firm. There is a non-negligible percentage of salaried private workers that are affiliated to mutual-aid institutions individually (10% in Montevideo and 6% in the Interior, on average in the nineties). They are also considered as informal, but as no data for the eighties is available, their inclusion forces a second definition of informality. Summarizing, an informal worker is here defined as the one who, being a salaried private employee or a self-employed worker, is not covered by the legally established health care system[10].

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[9] Instituto Nacional de Estadística, 1999.
[10] The absence of coverage might be, however, partial, as firms could be paying the tax corresponding to pensions.

2) *Under-employment.* All those workers that work less than 30 hours a week in the eighties or 40 hours in the nineties, and are willing to work more but cannot find a new job, are considered under-employed for the period 1981-1998[11].

3) *Unstable employment.* All those workers that state that they are looking for a job because they consider the current one is unstable are included in this indicator.

4) *Unpaid workers.* They are considered a form of precarious work, as they are probably in that position because they cannot find a paid job.

3.2.1 Informality: private salaried workers

Informality in the Interior has generally been twice its value in Montevideo, if only salaried private workers with no health coverage or attending public institutions are considered. In the nineties, 7.9% of all workers in Montevideo (17.2% in the rest of the country) are salaried private workers not covered by the social security system, at least partially. There has not been an important variation in their share in total employment, on average, relative to the eighties. However, in the Interior there is a positive trend starting in 1986 while in Montevideo the same occurs by the end of the nineties. Thus, in 1998, informal workers are 9% of employment in Montevideo and 19% in the Interior. The increase in informality has been generally observed every time the unemployment rate goes up, especially in Montevideo. However, it has not necessarily gone down once the slowdown has come to an end (Table 23).

If the more accurate measure is considered, that is, when including all salaried private employees not covered by DISSE, the average percentage of total informal private salaried workers is around 18% in Montevideo and 23% in the Interior.

In order to determine if this sector can be considered as a disadvantaged one from a dualistic point of view, the evolution of its share in total employment has to be compared to that of its relative earnings (Table 24). This is depicted in Figures 9 and 10 in the appendix. The first graph shows the evolution of informal salaried private workers as a percentage of total salaried private employees and the formal-informal wage gap. The second graph illustrates relative shares and wage gaps with respect to all formal workers (that is, excluding informal salaried and informal self-employed). The first comparison is done assuming choices for the individual are restricted to being a salaried private worker. The second one further includes all available occupations.

There are differences by region and in time. Following the idea that informality is a voluntary choice if the proportion of informal workers goes up whenever their earnings relative to that of formal workers increase, the informal sector in Montevideo in the eighties should not be labeled as disadvantaged. However, in the nineties, particularly from 1992 onwards, there seems to be a rise both in informality and in the wage gap. In the rest of the country informality is clearly counter-cyclical since 1986.

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[11] Questions related to the individual being looking for an additional job are not included for those working for more than 30 hours before 1991.

Table 23: Precarious employment 1982 – 1998

(percentage over total employment)

	Montevideo							Interior						
	Total informal	Self-employed informal	Salaried private informal	Under-employ-ment	Unstable	Unpaid	Unemp. rate	Total informal	Self-employed informal	Salaried private informal	Under-employ-ment	Unstable	Unpaid	Unemp. rate
1982	13,5	4,9	8,6	7,7	nd	2,4	11,9	nd	nd	nd	nd	nd	nd	9,6
1983	15,9	6,4	9,5	11,0	nd	3,1	15,4	nd	nd	nd	nd	nd	nd	13,5
1984	16,6	6,7	9,9	10,5	nd	3,1	14,0	nd	nd	nd	nd	nd	nd	13,0
1985	16,0	6,9	9,1	10,2	nd	2,6	13,1	nd	nd	nd	nd	nd	nd	11,1
1986	14,5	6,7	8,0	8,5	1,5	2,8	10,7	25,8	10,9	14,9	9,5	1,6	3,1	9,2
1987	13,4	5,8	7,6	6,6	1,4	2,8	9,3	24,7	10,6	14,1	7,9	1,4	3,4	9,1
1988	13,2	5,9	7,3	5,4	1,1	2,7	9,1	22,9	10,7	12,2	8,0	1,5	3,4	8,4
1989	13,5	5,9	7,6	5,0	1,8	2,4	8,6	24,2	10,9	13,3	6,8	1,3	2,9	7,4
1990	12,9	5,6	7,3	5,7	1,5	2,2	9,3	24,6	10,4	14,2	7,4	1,1	1,9	7,8
1991	13,7	6,1	7,6	7,3	1,1	2,0	8,9	27,4	12,1	15,3	8,0	1,8	2,0	8,9
1992	13,5	6,2	7,3	5,4	0,9	2,2	9,0	29,0	12,8	16,2	6,5	1,7	2,3	9,0
1993	12,8	6,0	6,8	4,3	1,0	1,8	8,4	30,3	13,4	16,9	6,2	1,7	2,2	8,0
1994	13,7	6,2	7,5	5,7	1,4	2,0	9,1	30,7	14,0	16,7	6,9	1,8	2,3	9,2
1995	15,0	6,7	8,3	10,5	1,8	2,2	10,8	31,4	14,1	17,3	7,9	2,3	2,1	9,7
1996	15,1	7,0	8,1	13,2	2,2	1,9	12,3	31,9	14,0	17,9	8,1	2,2	2,3	11,4
1997	16,4	7,7	8,7	10,0	2,1	1,6	11,6	33,2	14,7	18,5	9,2	2,4	2,5	11,3
1998	16,7	8,0	8,7	9,0	1,8	1,3	10,3	33,2	14,4	18,8	9,1	3,2	1,7	9,9
Average														
1982-86	15,3	6,3	9,0	9,6	1,5	2,8	13,0	nd	nd	nd	nd	nd	nd	nd
1987-90	13,2	5,8	7,4	5,7	1,5	2,5	9,1	24,1	10,7	13,4	7,5	1,3	2,9	8,2
1991-94	13,4	6,1	7,3	5,7	1,1	2,0	8,9	29,4	13,1	16,3	6,9	1,8	2,2	8,8
1995-98	15,8	7,4	8,5	10,7	2,0	1,8	11,2	32,4	14,3	18,1	8,6	2,5	2,2	10,6
80s	14,4	6,1	8,3	7,8	1,5	2,7	11,3	24,4	10,7	13,7	7,9	1,4	2,9	9,9
90s	14,6	6,7	7,9	8,2	1,5	1,9	10,1	30,9	13,7	17,2	7,7	2,1	2,2	9,7

Source: National Institute of Statistics

Which are the characteristics of these workers in comparison to that of other groups? By the end of the nineties, 17% of female salaried private workers and 13% of male salaried private workers are informal in Montevideo while the figures rise to 39% and 26%, respectively in the Interior (see Table 25).

Their schooling level is, on average, 7 to 8 years (secondary or technical school) and their average age is 32 to 33. *Informal salaried private employees are less educated and younger than their formal counterpart.*

Although differences do not seem huge when looking at averages, the distribution by age and education level in 1998 shows there is a greater concentration of informal workers among individuals in the age interval 14-19 and with only primary school, relative to the distribution of

formal workers (Table 26). They are relatively more concentrated in personal services and, if living in Montevideo, in construction while if living in the Interior, in the primary sectors.

Hence, informality among salaried private workers appears as a way of getting a job for those less educated and younger, so that a possible explanation for their status is perhaps the lack of specific training, given the sectors in which they are more concentrated.

Table 24: Informal workers: share and relative wage gaps 1982-1998

Montevideo	%Informal self-employed /totalself-employed	%Informal salaried private/total salaried private	Average hourly earnings: formal salaried private	Average hourly earnings: informal salaried private	Salaried Private: formal-informal wage gap	Average hourly earnings: formal self-employed	Average hourly earnings: informal self-employed	Self-employed: formal-informal wage gap
1982	28,2	16,2	38,6	22,8	52,7	44,8	24,6	59,9
1983	32,3	18,8	27,8	17,7	45,3	34,8	18,3	64,1
1984	33,8	19,5	24,7	14,0	56,8	28,6	17,1	51,2
1985	34,5	17,5	25,8	14,0	61,3	27,6	15,8	55,9
1986	38,3	15,5	29,1	14,4	70,0	31,1	16,9	61,2
1987	34,3	14,6	31,3	16,6	63,4	32,7	19,7	50,7
1988	36,0	13,6	32,6	18,1	58,8	43,4	21,6	69,9
1989	35,3	14,1	33,7	18,2	61,9	46,7	20,0	84,8
1990	35,7	13,2	32,4	15,6	73,1	38,7	18,7	72,5
1991	34,5	13,9	35,4	17,7	69,3	39,0	20,2	65,7
1992	33,7	13,1	39,8	19,4	71,8	45,4	26,2	55,1
1993	31,9	12,1	37,8	20,5	61,1	46,5	26,3	57,1
1994	32,1	13,2	42,0	20,3	72,6	51,1	26,8	64,5
1995	34,2	14,8	39,7	21,3	62,3	52,5	26,3	69,1
1996	34,5	14,3	41,6	20,8	69,5	49,8	26,1	64,7
1997	37,9	15,1	41,4	20,0	72,8	51,9	26,2	68,5
1998	38,3	15,1	42,0	21,9	64,9	54,2	25,8	74,3
Interior								
1986	51,4	33,7	19,8	9,6	72,9	20,9	11,7	57,9
1987	49,8	31,2	22,8	12,0	63,8	23,5	13,6	54,8
1988	49,8	27,2	23,9	13,0	60,9	26,6	15,3	55,5
1989	50,9	28,6	24,5	13,8	56,9	28,0	15,5	58,9
1990	50,5	29,1	23,6	11,9	68,4	25,8	13,9	62,1
1991	55,8	30,7	26,9	13,2	71,3	28,6	17,0	51,9
1992	58,4	31,3	25,8	12,8	69,9	32,0	16,8	61,4
1993	59,0	33,7	26,2	12,9	71,0	32,3	16,3	68,4
1994	59,1	33,9	26,4	13,8	65,0	32,6	17,8	60,9
1995	59,7	34,8	27,0	12,9	73,6	30,1	17,4	54,7
1996	57,6	36,0	26,2	12,8	71,6	32,0	17,9	57,8
1997	60,2	36,3	26,0	13,6	65,2	33,3	17,4	65,2
1998	62,5	34,5	30,9	14,0	79,0	38,2	18,0	75,0

Source: Household Surveys 1982-98, National Institute of Statistics.

Table 25: Characteristics of precarious employment: gender, age and education 1982 – 1998

Montevideo

	Salaried private		Self-employed		Underemployed		Unstable		Unpaid	
	Informal	Formal	Informal	Formal	Yes	No	Yes	No	Yes	No
1982-1985										
Female %	23	77	30	70	6,5	93,5	1	99	1,9	98,1
Male %	13	87	40	60	4,5	95,5	2	98	0,7	99,3
Age	33	37	40	43	36	36	30	36	37	38
Schooling	7	9	7	9,5	8	8,5	9	9	8	8
1987-1994										
Female %	16	84	28	72	4	96	0,5	99,5	2	98
Male %	11	89	44	56	3	97	1	99	0,6	99,4
Age	33	37	40	43	33	36	30	36	38	38
Schooling	7,5	9,5	7,5	10	9	9	9,5	9,5	8,5	9
1995-1998										
Female %	17	83	32	68	7,5	92,5	1	99	1,5	98,5
Male %	13	87	44	56	6	94	2	98	0,7	99,3
Age	33	36	40	43	34	36	32	36	36	37,5
Schooling	8	10	8	11	10	10	10	10	9	10

Interior

	Salaried private		Self-employed		Undermployed		Unstable		Unpaid	
	Informal	Formal	Informal	Formal	Yes	No	Yes	No	Yes	No
1987-1994										
Female %	39	61	54	46	5	95	0,3	99,7	1,7	98,3
Male %	26	74	57	43	3	97	1,7	98,3	0,7	99,3
Age	31	36	41	43	33	35	32	36	36	37
Schooling	7	8	6,5	8,5	7,5	8	8	8	8	8
1995-1998										
Female %	41	59	54	46	5,5	94,5	0,4	99,6	2	98
Male %	31	69	63	37	5	95	2,7	97,3	0,8	99,2
Age	32	36	41	44	32	35	31	35	38	37
Schooling	7,5	9	7	9	8	8	8	8	8	8

Source: Household Surveys 1982-98, National Institute of Statistics

Table 26: Distribution of precarious workers by age, gender, education and economic sector 1998 (%)

Montevideo	Salaried private		Self-employed		Underemployed		Unstable		Unpaid	
	Informal	Formal	Informal	Formal	Yes	No	Yes	No	Yes	No
Gender										
Female	54	47	29	42	55	53	21	53	77	52
Male	46	53	71	58	45	47	79	47	23	48
Age										
14 - 19	16	5	4	1	6	14	15	17	17	17
20 - 29	31	32	20	15	31	23	34	20	16	21
30 - 39	20	24	26	25	24	19	22	20	19	20
40+	33	39	50	59	39	44	29	43	48	42
Schooling										
Primary	46	20	46	18	25	25	44	38	38	39
Sec. L1	26	22	23	21	20	24	19	22	22	22
Sec. L2	12	22	8	16	17	19	15	18	23	17
Technical	11	13	16	14	13	11	21	13	10	14
High Educ.	5	23	7	31	25	21	1	9	7	8
Economic sector										
1&2	2	1	1	2	1	1	3	1	13	1
3	16	23	15	15	10	20	18	20	11	20
5	9	4	23	6	9	5	26	5	1	5
6	18	21	28	28	16	20	16	20	59	20
7	6	9	5	5	4	7	7	6	1	7
8	3	10	16	16	8	8	4	8	3	8
9	46	32	12	28	52	39	26	40	12	39
Interior										
Gender										
Female	50	40	31	41	55	53	22	33	75	53
Male	50	60	69	59	45	47	78	67	25	47
Age										
14 - 19	20	6	5	1	6	14	6	14	16	14
20 - 29	32	28	19	12	31	23	35	23	18	23
30 - 39	18	26	24	27	24	19	26	20	20	20
40+	30	40	52	60	39	44	33	43	46	43
Schooling										
Primary	48	32	51	28	25	25	30	25	37	38
Sec. L1	22	21	17	22	20	24	20	24	22	22
Sec. L2	13	21	11	19	17	19	18	19	23	17
Technical	15	16	17	13	13	11	11	17	10	13
High Educ.	2	10	4	18	25	21	21	15	8	10
Economic sector										
1&2	10	6	6	9	4	7	13	6	14	7
3	13	22	19	13	12	16	12	16	12	16
5	10	9	23	5	8	9	33	8	3	9
6	16	23	24	37	13	20	12	19	54	19
7	3	6	4	5	3	4	3	4	3	4
8	1	5	1	8	3	4	1	4	5	4
9	47	29	23	23	57	40	26	43	9	41

Note: Economic sectors are: Agriculture, leverage, fishing and mining (1&2); Manufacturing (3); Construction (5); Commerce (6); Transport (7); Real state and services to firms (8); Social and Personal services (9). Primary School = 6 years; Secondary School L1 = 3 years; Secondary School L2 = 3 years; Technical School = up to 6 years; High education = University and others.
Source: National Institute of Statistics.

3.2.2 Informality: self-employed workers

As in the previous case, the proportion of informal self-employed workers in the Interior has been twice that of Montevideo, the figures being 13,7% and 6,7% respectively in the nineties (Table 23). They are almost 40% of the self-employed in Montevideo and 60% of those in the Interior. If the definition of informality that includes only those not covered by DISSE is used instead, these percentages rise to 80% in the nineties.

Looking at Figures 11 and 12 and Table 24, self-employed workers behave counter-cyclically in the nineties, both in Montevideo and the Interior. In the eighties the picture is not so clear, but the underlying trends do seem to follow the same pattern. Thus, they should be considered as precarious workers.

The average education of informal self-employed workers is lower than their formal counterpart. They are also younger than formal self-employed. The percentage of self-employed women that are informal is lower than the proportion of informal men (Table 25). Hence, it is not the increase in female participation rates or them being discriminated that explain the large size of the informal sector in Uruguay.

The distribution by age shows, further, that the bulk of informal self-employed workers are older than 40 years, as it is the case with their formal counterpart. Those younger than 20 have a small participation. However, the share of those in the age interval (20-29) is relatively larger than that in formal self-employment. It might be the case, hence that these individuals are finding job opportunities in the informal sector, at the cost of not having social security coverage (see Table 26).

Finally, the distribution by economic sectors shows the proportion of informal workers in construction is substantially greater than that of formal workers, a fact that can partially explain why the informality percentage is higher for men than for women (Table 24).

Thus, informality among self-employed relates both to the level of schooling and to those relatively new entrants in the labor market.

3.2.3 Underemployment

Underemployment has also moved with the unemployment rate, in its same direction. The percentage of under-employed workers, however, increases a lot more than that of informal workers when unemployment is high (Table 23). At the beginning of the eighties, in Montevideo, under-employed workers were around 10% of all employed workers. A similar value is observed at the end of the nineties (9%). On average, Montevideo has a higher percentage of under-employed workers than the rest of the country, but this is true only when unemployment is high. Dissatisfaction linked to a shorter length of the working week tends to rise in the Interior and moves pro-cyclically in the capital city. Their hourly earnings, however, is above that of those that are not willing to work more hours.

The analysis by occupation shows the percentage has drastically increased for all categories since 1995, both in Montevideo and the rest of the country. In 1998, around 7.5% of private workers; 7.2% of public workers; and 14.5% of self-employed workers were under-employed. There are no differences in education neither in the proportion of underemployed by gender. The average age of underemployed workers is smaller than that of the rest, but this could be linked just to the vital cycle of an individual (Table 25). The highest percentages of underemployed are in the age interval (20, 39). Lastly, when looking at their relative distribution among economic sectors, it is seen that these workers are concentrated in personal services (Table 26).

The above characteristics suggest that this group of workers is likely to be reflecting a lack of dynamism in job creation that has characterized the Uruguayan labor market in the nineties.

3.2.4   Unstable employment

The percentage of those that consider their current job is unstable is quite small: around 2% in Montevideo and 3% the rest of the country in 1998. However, it has gone up since 1991 in the Interior and only after 1994 in Montevideo (Table 23). On average, half of these workers are private employees, being the other 50% self-employed.

They earn an hourly wage that is half that of their counterpart. Although the average schooling is similar to that of those considering their job as stable*, the distribution by education level in 1998 reveals that the relative share of those with only primary school is higher than that of their counterpart.* More interesting, however, is the larger concentration in the categories "technical school" in Montevideo and "highly educated" in the Interior, as it might be signaling at different job opportunities in each labor market. *It is also consistent with the fact that young workers and men consider their job is unstable in a higher proportion than the rest* (Tables 25 and 26).

3.2.5 Unpaid workers

They are mostly family members helping in a small business. They are out of the formal sector by definition and so they can be considered as precarious workers. Unpaid workers are around 2.5% of all workers on average. They move with the unemployment rate in the Interior, the pattern not being so clear in Montevideo (Table 23). The percentage of women that work as unpaid employees is higher than that of men, while the average age and schooling is similar between both categories. No differences by education level are found (Table 25). They are concentrated in commerce, thus suggesting that this group is mainly *constituted by female family members older than 40* (Table 26).

All the above categories can be taken together in order to define the percentage of workers that have unsatisfactory working conditions. These will be labelled as precarious workers. The evolution in time of the index is quite discouraging. In Montevideo, 25% of employed individuals are precarious while the proportion is 40% in the rest of the urban areas. If salaried employees not covered by the legally established health system are included, the figures rise to 32% and 44%, respectively. Further, in the Interior there has been a permanent increase of the

share of precarious workers since the beginning of the nineties while in Montevideo it only rose by the mid-nineties.

3. 3 A model explaining sectoral choices in the labor market

In order to get more information on the determinants of the choice among sectors for individuals, a multinomial logit model is estimated. The dependent variables accounts for the following choices: not participating, being unemployed, having an informal job –as a salaried private worker or as self-employed- and having a satisfactory job (5 categories). Variables used to explain these choices are related to the characteristics of the workers and those of his/her environment. The first group of variables includes gender; age; education level; marital status; household status; and experience. The second one considers the previously defined poverty index transformed to a qualitative variable with the number of quintiles (1 means richest and 5 poorest household); number of children younger than 14; and geographical area where the individual lives. The model was estimated for the period 1986-1998, using all individuals in the age interval (14, 65), as well as only for men and only for women.

The results of the model (Table 1 in the appendix) can be summarized as follows:

1. The odds of participating in the labor market relative to not participating are higher for men, for those that are head of the household and for older individuals. If women, they are higher if no members of the household are younger than 14 years.
2. Unemployment and informality are more likely relative to non-participation for the poorest individuals. If women, the relative odds are higher for non-married than for single, divorced, etc.; and for inexperienced and educated than for experienced, uneducated women. Non-single men have higher relative odds than single men.
3. Unemployment is more likely than non-participation for those having lower schooling and experience.
4. Informality is more likely in the Interior while odds of formal employment and unemployment are larger in Montevideo.
5. Differences between informal self-employment and informal salaried private employment relative odds are only identified for the model estimated for men. Being in charge of more children makes it more likely to be an informal salaried private worker; while being less experienced makes it more likely to be an informal self-employed.
6. Regarding the relative risk of being unemployed relative to having a formal job, it is seen that older, uneducated, inexperienced, poor individuals, that are not household heads have larger odds than their counterparts. Women have higher relative odds than men. Unmarried men with no children have a larger likelihood of unemployment with respect to formal employment while these characteristics do not differentiate the odds in the case of women.
7. Relative odds of informality with respect to formality are higher if living in the Interior and for poor individuals. More educated women have higher relative odds of informality while the opposite holds for men. Self-employment among non-single women is more likely than formal employment with respect to the odds of single women. The opposite is observed when comparing informal salaried private women with formal female workers. Non-married men have higher odds of informality *vis → vis* formality, being the odds for salaried private men further higher if younger.

8. Women are more likely to be unemployed or employed as an informal salaried worker than to have a formal job relative to the odds of men; while the opposite holds for informal self-employed.
9. Differences in the unemployment odds relative to non-participation according to the various characteristics are generally higher for men than for women. While age, the level of poverty and the number of children under 14 differentiate in a similar proportion among men and women, the effects of schooling, experience, marital status, household status and region are stronger when analyzing relative odds among men than among women.
10. Regarding employment as informal salaried private *versus* non-participation, schooling, experience, geographical region and number of children differentiate the odds more among women than among men, while the opposite holds for marital status. Poverty, age and household status do not have a distinct effect by gender.
11. Informal self-employment relative odds with respect to non-participation are more differentiated among men depending on marital status, geographical area and level of poverty. Characteristics differentiating the odds among women more than among men are the number of years of schooling and of children under 14.
12. Factors allowing wider differences in the relative odds of formal employment among men than among women are schooling, region and marital status, while the opposite holds for experience and number of children in the household and no difference is found for age, status in the household and poverty.
13. Relative odds of unemployment and informality with respect to formal employment are generally differentiated in a similar percentage among men and women.

Thus, the results of the model point at some interesting facts. First, there are some characteristics linked to the social role of the individual that have an effect on his/her decisions of insertion in the labor market. Men and household heads, as well as individuals that have children younger than 14 years old participate more than women, other members than head of the household, and those with no children. Women, on the other hand, are more likely to be in the informal than in the formal sector if they are not single, but they are generally employed as salaried private workers. Second, regarding the characteristics of the individuals that can be linked directly to the way the labor market works, the model predicts that those individuals belonging to households in the lowest quintiles of the income distribution are more likely to participate and, in doing so, they have higher relative odds to get a job in the informal than in the formal sector. They are also more likely to be unemployed than not to participate or to work as a formal employee. The level of schooling, among women, is a factor favoring informal relative to formal work, non-participation relative to unemployment and formal work relative to unemployment. Hence, the apparent picture for women in 1998 is that high levels of education are linked to individuals that have resources that enables them not to work, and that when possible they prefer informal jobs. This result, further, could explain why women earn less than men for each education level (so that they have lower returns to schooling). Although it is possible to argue that they are being discriminated from the formal sector, it is also likely that they prefer jobs that allow them more time flexibility. Third, the relative likelihood of participation is higher the older the individual is. However, age is also a factor affecting the relative odds of unemployment with respect to formal employment, a finding consistent with that of the logit model that predicts higher odds of unemployment for older people. Young individuals, on the other hand, find informal salaried private jobs as a relatively easier employment opportunity. Fourth, experienced workers have higher odds of formal employment than unemployment but they are also more likely not to

participate than to participate. However it is important to note that given the definition of the variable (age minus education minus 6) its effect might be mixed with that of education and age in the latter case[12]. Finally, poverty and age, in general, have a similar effect in differentiating the odds of unemployment and informal employment both relative to non-participation and to formal employment. On the other hand, level of education, experience, status in the household and geographical region tend to differentiate unemployment relative odds more among men and to differentiate informality relative odds among women. This finding points at a qualitatively distinct insertion of men and women in the labor market depending on their specific skill -as measured by education and experience- and on their social role and the characteristics of the specific labor market, as measured by marital status, household position and geographical region.

The analysis of the evolution of the relative odds along the last 13 years shows that there are some structural characteristics that have changed the value of the relative risk of different choices. Further, some of them were reversed after 1994, when the rise in the unemployment rate smoothed the differences among individuals.

Differences by gender in the relative odds of formal employment with respect to not participating have decreased in time while those of being unemployed or an informal self-employed worker have increased. This is showing that women are participating relatively more and with a higher probability – relative to that of men - of finding jobs in the formal sector than in the past. However, while the differences in the odds of informality relative to not participating increased until 1994, suggesting men have become informal self-employed workers in a higher proportion, this was reversed once the unemployment rate rose in 1995.

Those living in the Interior have seen their situation in the labor market worsened relative to those in the capital city: unemployment odds are similar today between both regions, while informality for salaried private workers has become an even more likely choice than in Montevideo. Informal self-employment followed the same path until 1994, while after that year regional differences diminished. Regarding the poverty status of the individual's household, the temporal trend suggests that today the differences between individuals belonging to poor and rich households are wider in terms of their probability of being informal salaried private, both with respect to not participating and to find a formal job.

Finally, the indicators related to skill – education and experience – show the gaps tend to narrow in the first case and to widen in the second when analyzing the odds of unemployment. Changes in the odds of informality, on the other hand, are not linked to variations in the effects of experience, although they do relate to changes in the effect of education for informal self-employed. There is, however, a distinct behavior of men and women. Regarding men, education increases the odds of formal employment relative to informal work, while uneducated and educated men have more similar chances of getting into the informal labor market instead of not participating than in the past. Experience, on the other side, has favored increased informal self-

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[12] The variable "experience" takes the value 0 for first time job seekers. Hence, it is more likely that the relative real differences in experience are reflected in the variable when making comparison among participants in the labor market. On the contrary, there is no way to approximate experience for non-participants, thus generating an upwards bias for this category that cannot be eliminated.

employment odds. Hence, both patterns together with the counter-cyclical evolution of informality, point at a dualistic view of the labor market, at least for men. Women, on the contrary, have found that higher schooling levels allow them to find jobs more easily in the informal sector today than in the past, although at the same time the odds of unemployment are more similar for all education levels. Regarding the effects of experience, differences in the odds of participating have increased in time while the opposite is observed with the odds of unemployment. Finally, the evolution in time of the estimated effects of individual characteristics of men reveal that most changes took place at the beginning of the nineties, thus signaling at a different process than that of women. This might be related to a slowdown in migration towards Montevideo, and the specific characteristics of the labor market in the Interior (lower relative share of public employment; higher relative importance of agriculture, among others).

To conclude the analysis of the different groups participating in the labor market, the evolution of their labor earnings is studied in what follows. If precarious employment is the only choice faced to unemployment or non-participation, then relative earnings should have evolved accordingly, that is, counter-cyclically.

3.4 Average earnings by occupational category

3.4.1 Employed workers

Among the different categories of employment, it was already demonstrated that informal - salaried private and self-employed - as well as unstable workers earn less than their counterparts on an hourly basis. Underemployed workers, on the contrary, have a higher hourly wage. Further, if one looks at the distribution of workers according to their labor earnings in 1998 (Table 27), it is seen that:

a) Women earn less than men: around 30% of male workers belong to the lowest two quintiles while almost 50% of women do.
b) Youngest and oldest workers earn less than the rest: around 30% of workers 60 years old or older belong to the first quintile of income. Workers in the (14-19) age interval are concentrated in the first quintile. Those older than 19 and younger than 30 are quite equally distributed along the three lower quintiles, and drastically diminish their share in the last two. The other age groups have progressively increasing distributions.
c) Those earning the lowest wages are concentrated in some economic sectors: in Montevideo, those individuals working in agriculture and leverage are located in the tails of the income distribution, while in the Interior they mostly belong to the first three lowest quintiles. On the other hand, construction workers are relatively more concentrated in the left tail. Finally, workers involved in activities that sell services to firms are concentrated only in the fifth quintile in both regions.
d) Tenure is also a determinant of wage structure: the distribution considering tenure at the current job is highly concentrated on the left for workers with less than 6 months at the current job. At the other end, workers with tenure equal to 10 years or more are concentrated in the upper tail.

Table 27: Distribution of workers by quintiles of labor earnings, gender, age occupation, economic sector and tenure   1998 (%)

	Montevideo					Interior				
	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5
Gender										
Male	14,8	16,3	19,3	22,9	26,7	13,8	15,9	21,6	23,2	25,6
Female	26,8	24,1	20,8	15,8	12,4	31,9	21,8	19,0	15,6	11,7
Age										
14 - 19	61,8	29,1	7,2	1,3	0,5	54,7	27,7	13,8	3,1	0,6
20 - 29	23,1	29,6	23,5	16,3	7,4	23,8	24,4	24,5	18,5	8,8
30 - 39	13,5	16,2	21,7	25,1	23,5	13,2	15,9	19,5	24,5	26,8
40 - 49	14,3	14,9	19,2	23,2	28,4	14,2	14,6	20,4	22,8	28,0
50 - 59	16,4	16,2	19,9	20,6	26,9	18,4	15,2	20,7	21,9	23,8
60+	30,8	16,6	14,4	13,7	24,5	34,2	16,5	17,8	14,7	16,8
Occupation										
Salaried private	18,6	23,2	22,2	20,0	15,9	22,4	22,6	19,9	19,1	15,9
Public	6,4	16,2	24,0	26,4	27,1	1,8	9,9	25,5	32,5	30,2
Self-employed w/estab.	29,5	16,5	15,8	16,3	21,9	24,3	15,5	21,2	18,8	20,2
Self-employed wo/estab.	45,0	22,7	14,4	9,7	8,1	36,7	23,6	23,1	10,7	5,9
Economic sector										
1&2	28,5	12,1	10,5	23,2	25,6	22,6	27,1	22,3	13,6	14,4
3	19,0	21,3	20,0	21,1	18,6	21,5	19,2	20,7	21,0	17,7
5	27,1	22,7	23,1	17,4	9,8	18,6	15,7	27,3	23,2	15,1
6	22,8	24,1	20,0	16,6	16,5	22,0	18,3	21,4	19,5	18,7
7	9,4	12,1	19,9	30,8	27,7	12,3	12,8	16,9	24,4	33,6
8	11,4	13,2	13,9	18,5	43,0	9,5	10,8	16,1	16,1	47,6
9	22,5	20,0	21,3	18,9	17,3	23,6	19,0	19,3	19,7	18,5
Tenure										
< 6 months	47,6	29,3	14,0	6,8	2,4	40,5	27,8	17,6	10,6	3,5
6m-1year	32,3	30,7	21,8	9,6	5,6	24,8	29,4	24,3	15,0	6,6
1-2 years	30,2	28,3	19,1	13,4	9,1	27,5	27,8	22,5	13,3	8,8
2-3 years	25,6	28,1	21,8	14,5	10,1	25,7	24,5	22,1	15,6	12,0
3-4 years	21,7	25,1	22,7	18,3	12,2	21,3	20,4	21,9	22,4	13,9
10 years+	9,9	10,9	18,5	25,8	34,9	11,5	10,6	18,7	25,1	34,1

Note: Quintiles Q1 to Q5 are defined using only labor earnings of the workers. Economic sectors are:
Agriculture, leverage, fishing and mining (1&2); Manufacturing (3); Construction (5); Commerce (6); Transport (7);
Real state and services to firms (8); Social and Personal services (9).
Source: National Institute of Statistics.

3.4.2   Unemployed workers and non-participants

The time evolution of total earnings of the different groups is not balanced (Table 28). While the employed population increased its level of earnings in 52% in the period 1986 to 1998 in Montevideo (35% in the Interior), unemployed workers only got a 7% (16%) in rise. On the other hand, non-active individuals duplicate their income in the same period, due to their pensions being indexed to the inflation rate by law (since 1989).

Table 28: Average monthly earnings by status in the labor market
(pesos of 1998)

	Montevideo Unemployed	Employed	Out of Labor Force	Interior Unemployed	Employed	Out of Labor Force
1982	1337	8010	1800	nd	nd	nd
1983	802	5664	1434	nd	nd	nd
1984	640	4738	1224	nd	nd	nd
1985	673	5041	1177	nd	nd	nd
1986	857	5826	1514	514	4135	935
1987	979	6661	1715	607	4631	1115
1988	1206	7177	2061	725	5192	1283
1989	1232	7045	1906	929	5130	1264
1990	945	6775	1897	683	4786	1357
1991	939	7335	2187	559	4996	1431
1992	969	8082	2608	500	5060	1553
1993	879	8030	2638	488	5043	1654
1994	860	8660	2831	541	5192	1765
1995	984	8220	2838	543	5067	1709
1996	951	8279	2855	559	6996	1752
1997	918	8217	3088	600	4984	1883
1998	1099	8701	3162	672	5659	1890

Source: National Institute of Statistics.

In the nineties the gaps involving unemployed workers tend to widen relative to the eighties, more in the Interior than in Montevideo. On the contrary, relative earnings of employed workers to non-participants have decreased in time.

People in Montevideo, no matter their working status, have a level of earnings that is, on average, between 50% and 60% higher than the corresponding categories in the rest of the country. These gaps have also widened in the nineties relative to the late eighties.

Summarizing the above findings, it can be said that female are being discriminated with respect to the wage they are paid. Regarding those in the age interval (14-19) the fact that they receive the lowest wages is likely to be explained in terms of selection bias, that is, because they do not have the required skills for being hired in better paid jobs.

Workers in the economic sectors linked to manufacturing, construction and commerce earn a wage that is in the lowest quintiles of the earnings distribution. Those in real state and selling services to firms are in the opposite end. Although this distribution may be related to the skill of the workers, it has also to do with the level of income of their household. Hence, together with the flatter distribution of employment according to the per capita household income described in previous sections, this fact suggests that labor earnings have deteriorated relatively more for the poorest strata.

There is a negative bias towards workers in the Interior. In spite of the fact that many essential goods are more expensive in Montevideo than in the rest of the country, this is a warning to policy makers, as it is related to undesirable migration processes.

Precariousness, in all its possible forms, is not linked to higher levels of earnings. On the contrary, workers in the categories labeled as informal, under-employed or unstable earn a lot less than their counterparts, thus suggesting it is not a voluntary decision. The gaps between them have increased either all along the period or in the late nineties. The same can be stated when comparing unemployed workers with both employed and out of the labor force individuals.

4. Conclusions: who are the losers?

Unemployment, underemployment, instability of employment and informality have gone up in Uruguay in the late nineties. While external adverse shocks did have a negative impact in the economic performance of the country in 1995 and 1999, the rate of growth of GDP has averaged 3.5%, yearly. At the same time, the economic structure has changed, given the liberalization and integration processes Uruguay has undergone. So the question to be answered is: have employment dissatisfaction, lack of job opportunities and precariousness of employment become structural characteristics of the Uruguayan labor market? The most likely answer is that now is the time to reverse these trends.

Unemployment has gone up in the second half of the nineties. The re-structuring of the economy and the transformations undertaken by firms have determined that the pace at which new jobs are created in response to positive demand shocks is slower today than in the past. On the other hand, the effects of negative demand shocks on employment are more difficult to revert. As a consequence, some undesirable characteristics of the labor market have shown up: long unemployment spells, increased involuntary turnover, increased lay-offs.

One of the most important problems in the Uruguayan labor market today is that of unsatisfactory working conditions. Although it affects workers from the poorest households more than other workers, it is also a sizeable problem for those belonging to the richest households as well. It is not concentrated among the youngest or the oldest workers, as a high proportion of those in the typical working age (20 to 60 years old) are also precarious workers. The number of precarious workers has risen by the end of the nineties, relative to the eighties. Although their share in total employment generally increases with the unemployment rate, it does not necessarily go down with it. This is further worrying, as precariousness could thus become a structural characteristic of the Uruguayan labor market. If precarious and unemployed workers are added, then it can be argued that half the labor force in Uruguay is in an unsatisfactory position regarding employment.

Who are the individuals that have worsen their relative position in the labor market? Some of them have been here identified:

1. Displaced middle-aged workers, generally with low education levels, that have been unemployed for more than a year.
2. Very young men and middle age women that are looking for a job for the first time.
3. Young individuals, particularly those living in the Interior, whose lack of experience works as a huge obstacle for finding a job. They have turned to the informal sector as a means of avoiding unemployment or in order to get some working experience.
4. Those individuals belonging to the poorest strata of the income distribution, that are subject to increased turnover and job instability. Further, their job opportunities in the

formal sector and their income level have deteriorated relatively more than those of other groups. However,

5. Individuals belonging to households in all the quintiles of income distribution have been adversely affected by the decline in dynamism of job creation in the nineties.
6. Precarious workers –underemployed, informal, unpaid, unstable workers– that have lower hourly earnings than formal employees, the gaps having further widen in the recent past.
7. Those living in the Interior, that earn less than in Montevideo and that are increasingly either unemployed or informally employed.

Is there room for policy action? Some of the groups above identified could be helped to ameliorate their relative position by means of specific policies:

1. Long-term unemployment is generally suggesting that both displaced workers and first time job seekers do not have the qualifications demanded in the market. Thus, policies oriented to creating or to give incentives to offer the necessary training to these workers may be in place.
2. It is also likely that information channels are not good enough, so that policies aiming at the development of them should be welcome[13]. This has to do both with new entrants that have chosen the wrong training and with any unemployed that is not able to find a match between his/hers individual characteristics and those of the jobs offered. Further, there is little geographic movement, a fact that can also be linked to the lack of information on vacancies.
3. Young individuals, especially men, with no experience on the job and no social contacts, have higher odds of unemployment than other groups. Two possible policies directed to them are the lowering of their relative non-wage labor costs and the offering of free training on the job. As the level of taxes and social security contributions is very high in Uruguay, it is possible to think of tax exemptions for firms and individuals in this age interval. The Spanish experience showed that a likely and undesirable consequence of this strategy is the increase in turnover and labor instability (see, for example, García-Fontes and Hopenhayn, 1995). However, there are means of avoiding this effect as, for example, if it is done subject to the individuals staying at least one year in the firm, so that turnover becomes costly enough.
4. There are also some groups for which social policies should be designed. Most individuals in the (14-19) age interval that are unemployed or in precarious jobs belong to the poorest households. They further have very low education levels. Hence, social policies that aim to help covering the basic needs in the household so that the individual can finish his/her education will be helpful now and for the future. Moreover, as more than 50% of people in this group lives in the Interior, policy action should be decentralized, in order to take into account all the specific characteristics of each geographical place.
5. Some evidence in this paper also signaled at a subgroup of women, older than 30 years, especially those living in the Interior, that have increased their already high relative share in unemployment. Being the head of the household unemployed, or being themselves household heads, many women in the rest of the country are not qualified for most jobs or cannot even keep the time schedules required in formal jobs. If belonging to poor households with children, they may also be considered a possible target for social policy makers, although training programs may also be of help in some cases.

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[13] This need not be done by the government, but may be thought of as a mixed enterprise as well. One experience of the sort is that of Nice, France, known as CyberEmploi (www.cyber-emploi.org).

References

Allen, S., A. Cassoni and G. Labadie (1996). "Wages and employment after re-unionization in Uruguay", *Cuadernos de Economía* # 99, Chile.

Arango, C. and W. Maloney (2000). "Labor market structure in Mexico. Time series evidence on competing views", unpublished paper, World Bank, Washington.

Cassoni, A. (1999). "The wage elasticity of labour demand in the Uruguayan manufacturing sector after re-unionisation: new evidence", Working paper 14/99, Department of Economics, Social Sciences Faculty, Uruguay.

Cassoni, A., S. Allen and G. Labadie (2000). "The effect of unions on employment: evidence from an unnatural experiment in Uruguay", NBER W7501.

Cassoni, A. and Z. Ferre (1997). "Costos no salariales en el mercado de trabajo de Uruguay", Working paper 8/97, Department of Economics, Social Sciences Faculty, Uruguay.

Cassoni, A. and G. Fachola (1997). "El sector servicios no financieros: perspectivas ante la apertura y la integración", unpublished report for the Ministry of Labor, Uruguay.

Cassoni, A., G. Labadie and S. Allen (1995). *Reforming the labor market in a liberalized economy,* (Chapter 4), Ed. G.Marquez. Center for Research in Applied Economics-Interamerican Development Bank, Washington.

Cox, D. and R. Oakes (1984). *Analysis of survival data*, Chapman and Hall, London.

Croce, H., L. Macedo & P. Triunfo (2000). "Función de costos: un estudio para los bancos comerciales uruguayos", Working paper 1/00, Department of Economics, Social Sciences Faculty, Uruguay.

de Brun, J. and G. Labadie (1997). "Mercado laboral, apertura y recesión: la experiencia uruguaya de los noventa", in Mercados laborales en los noventa: cinco ejemplos de América Latina, CIEDLA, Konrad Adenauer, Stiftung, Argentina.

García de Soria, X., M.F. Rivas & M. Taboada (1999). "Oferta laboral de las mujeres", unpublished dissertation, BA Economics, Uruguay.

García-Fontes, W. and H. Hopenhayn (1995). "El mercado de trabajo en España", chapters 6 and 7 in the book *La economia española: una visión diferente*, Ramón Marimón, Antoni Bosch editores, Barcelona, Spain.

Gill I.S., E. Haindl, C.E. Montenegro and C.N. Sapelli (forthcoming). "Has employment in Chile become more precarious", in *Stabilization, Fiscal Adjustment, and Beyond: Quantifying Labor Policy Challenges in Argentina, Brazil and Chile*, (I.Gill, ed.).

Glejberman, D., (1992). "Perfil ocupacional de la población económicamente activa de Montevideo", CEPAL, Uruguay.

Haindl, E. (1985). "Un modelo para la determinación de flujos y parámetros dinámicos en el mercado de trabajo", *Estudios de Economía*, Vol.12.

Harris, R.J. (1975). *A primer of multivariate statistics*, Academic Press, New York.

Instituto Nacional de Estadística (1999). "Registro Estadístico de actividades económicas, en base a los registros administrativos del área económica, actualizado al año 1997", Uruguay.

Maloney, W. (2000). "Employment, informality and poverty in the Argentine labor market", World Bank, Washington.

Reggio, I. and V. Amarante (2000). "El desempleo en el Uruguay, 1995-1997", Working paper 1/00, Institute of Economics, Economic Sciences and Administration Faculty, Uruguay.

Tansini, R. & P. Triunfo (1998a). "Eficiencia técnica y apertura externa en el sector manufacturero uruguayo", Working paper 4/98, Department of Economics, Social Sciences Faculty, Uruguay.

Tansini, R. & P. Triunfo (1998b). "Cambio tecnológico y productividad de las empresas industriales uruguayas", Working paper 12/98, Department of Economics, Social Sciences Faculty, Uruguay.

Vigorito, A. (2000). "La distribución del ingreso en Uruguay entre 1986 y 1998", paper presented at the Seminar on Social Economics, Montevideo, Uruguay.