

Distr.  
GENERAL

CES/SEM.41/21  
29 February 2000

ENGLISH ONLY

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STATISTICAL COMMISSION and  
COMMISSION FOR EUROPE

STATISTICAL OFFICE OF THE ECONOMIC  
EUROPEAN COMMUNITIES (EUROSTAT)

CONFERENCE OF EUROPEAN STATISTICIANS

INTERNATIONAL LABOUR ORGANIZATION

Joint ECE-Eurostat-ILO Seminar  
on Measurement of the Quality of Employment  
(Geneva, 3-5 May 2000)

Topic 1

**Temporary jobs and rotation in the Spanish labour market**

Supporting paper submitted by the National Statistical Institute of Spain

**I. Introduction**

1. This document analyses the temporality and the rotation in the Spanish labour market. Three sources of data are used: one of them has a European scope, the Labour Force Survey (LFS) of the European Union (EU), the other two are national sources: the Spanish Active Population Survey (EPA), carried out quarterly by the National Statistical Institute (INE), and the Statistics on Registered Contracts, carried out monthly by the National Institute for Employment (INEM).

2. The Spanish labour market has three main problems:

- The highest unemployment rate within the EU. According to the LFS, the Spanish unemployment rate in the second quarter of 1998 was 18,9 percent, 8,7 points higher than the UE average (10,2 percent). The second country with the highest unemployment rate was Finland: 13,2 percent.
- The lowest activity rate for the population between 15 and 64 years old in the EU: 61,3 percent. Spanish females had an activity rate of only 47,5 percent. For the EU, these figures were, respectively, 67,8 percent and 58,1 percent.
- The highest temporary rate within the EU. In Spain, one third of employees have a temporary contract; nearly twice as in Finland (17,7 percent). The EU average was 12,8 percent.

3. The main characteristics of the employees with a contract of limited duration are discussed in the paper (sex, age group, level of education, industry, public or private sector, contract duration and time working without interruption in the firm). The following section analyses the rotation degree of the labour market, by means of the transition probabilities between two successive quarters; figures on the number of temporary contracts signed during may 1999 are also commented upon. Lastly, data on the receiving of benefits from the exchange office are commented upon.

## **II. Characteristics of the temporary employees**

### **II.1 SEX**

4. As it has been said in the previous section, the proportion of employees with a contract of limited duration is higher in Spain than in the rest of the EU countries. Table 1 shows data from the LFS of 1998 (latest available data). The percentage of employees with a temporary contract in Spain is 15 points higher than that in the second country (17,7 percent for Finland).

5. As for gender, in all countries the proportion of temporary contracts is higher among females than among males. In Spain, the percentage of females with a limited duration job is 2,3 points higher than that for males (34,4 percent and 32,1 percent, respectively); in other countries differences are larger, being of nearly 6 points in the Netherlands (16,1 percent and 10,2 percent, respectively).

**Table 1. Employees in the EU and percentage of temporality by sex**

Country	Males and females		Males		Females	
	Absolute value (1000)	Percentage of temporality	Absolute value (1000)	Percentage of temporality	Absolute value (1000)	Percentage of temporality
UE	126.779	12,8	70.876	12,0	55.902	13,7
Belgium	3.187	7,8	1.838	5,9	1.349	10,4
Denmark	2.419	10,1	1.267	9,3	1.152	11,0
Germany	31.635	12,3	17.570	12,1	14.066	12,5
Greece	2.245	13,0	1.383	12,0	862	14,7
Spain	10.115	32,9	6.401	32,1	3.715	34,4
France	19.671	13,9	10.558	13,0	9.112	15,0
Ireland (1)	1.088	9,4	604	7,1	484	12,1
Italy	14.395	8,6	8.720	7,5	5.675	10,3
Luxembourg	154	2,9	95	2,4	59	3,7
Netherlands	6.539	12,7	3.754	10,2	2.785	16,1
Austria	3.126	7,8	1.745	8,0	1.381	7,7
Portugal	3.382	17,3	1.850	16,2	1.532	18,6
Finland	1.861	17,7	919	13,3	942	21,9
Sweden	3.495	12,9	1.761	10,6	1.735	15,2
United Kingdom	23.467	7,1	12.414	6,0	11.053	8,3

(1) 1997 data

Source: EUROSTAT. Labour Force Survey (1998)

6. In the second quarter of 1999, the Spanish situation was similar to that shown in table 1. Employees with a contract of limited duration were 32,7 percent of the employees (3.524.400 over a total of 10.771.200 employees), this is only 2 decimal points lower than the 1998 figure. Difference between sexes is now one point larger, because the percentage of males with a temporary contract is half point lower than one year ago and the same percentage for females is half point higher (31,4 percent for males and 34,9 percent for females).

**II.2 AGE GROUP**

7. The age group which undergoes the biggest temporality rate is the 16 to 24 age group. More than 70 percent of employees in this age group have a temporary duration contract. It is remarkable that females in that group show a lower temporality proportion than males: 69,6 percent for females and 70,5 percent for males.

**Table 2. Employees by type of contract, sex and age group**

Contry: Spain. Second quarter 1999

Source: INE. Active Population Survey

Sex and age group	Total		Permanent job		Temporary job	
	Absolute value (1000)	Percent.	Absolute value (1000)	Percent.	Absolute value (1000)	Percent.
<b>MALES AND FEMALEES</b>						
<b>TOTAL</b>	10.771,2	100,00	7.246,8	67,28	3.524,4	32,72
16 to 24	1.581,0	100,00	472,4	29,88	1.108,6	70,12
25 to 44	6.114,8	100,00	4.167,8	68,16	1.947,0	31,84
45 to 64	3.032,8	100,00	2.570,8	84,77	462,0	15,23
65 and more	42,7	100,00	35,9	84,11	6,8	15,89
<b>MALES</b>						
<b>TOTAL</b>	6.689,6	100,00	4.590,6	68,62	2.099,0	31,38
16 to 24	934,8	100,00	275,9	29,52	658,9	70,48
25 to 44	3.642,7	100,00	2.513,9	69,01	1.128,9	30,99
45 to 64	2.086,9	100,00	1.777,8	85,19	309,0	14,81
65 and more	25,1	100,00	23,0	91,40	2,2	8,60
<b>FEMALEES</b>						
<b>TOTAL</b>	4.081,7	100,00	2.656,2	65,08	1.425,4	34,92
16 to 24	646,2	100,00	196,5	30,41	449,7	69,59
25 to 44	2.472,1	100,00	1.653,9	66,90	818,2	33,10
45 to 64	945,9	100,00	793,0	83,83	152,9	16,17
65 and more	17,5	100,00	12,9	73,65	4,6	26,35

8. Table 2 shows that temporality decreases with age. With the exception of the last age group (65 and more), between each age group and the following, the percentage of contracts with limited duration is divided by two. It diminishes from 70 percent to 15 percent.

### II.3 EDUCATION LEVEL

9. The education level also has an impact on the proportion of temporary contracts. The higher the education, the lower the percentage of limited duration contracts, which decreases from 41,8 percent for illiterates to 24 percent for people with a tertiary education. The relation between education and temporality is clearer more evident for males than for females. Among males, in fact, 52,2 percent of illiterates and only 19 percent of people with tertiary education have temporary contracts. Among females, instead, the highest percentages of temporality are recorded for people with primary and secondary education.

**Table 3. Employees by type of contract, sex and education**

Country: Spain. Second quarter 1999

Source: INE. Active Population Survey

Sex and level of education	Total		Permanent job		Temporary job	
	Absolute value (1000)	Percent.	Absolute value (1000)	Percent.	Absolute value (1000)	Percent.
<b>MALES AND FEMALES</b>						
<b>TOTAL</b>	10 771.2	100.00	7 246.8	67.28	3 524.4	32.72
Illiterates	46.0	100.00	26.8	58.20	19.2	41.80
Primary	5 638.6	100.00	3 555.0	63.05	2 083.6	36.95
Secondary	2 953.9	100.00	2 044.6	69.22	909.2	30.78
Tertiary	2 132.7	100.00	1 620.4	75.98	512.3	24.02
<b>MALES</b>						
<b>TOTAL</b>	6 689.6	100.00	4 590.6	68.62	2 099.0	31.38
Illiterates	23.8	100.00	11.4	47.77	12.4	52.23
Primary	3 847.1	100.00	2 449.3	63.67	1 397.7	36.33
Secondary	1 767.9	100.00	1 278.4	72.31	489.6	27.69
Tertiary	1 050.8	100.00	851.6	81.04	199.2	18.96
<b>FEMALES</b>						
<b>TOTAL</b>	4 081.7	100.00	2 656.2	65.08	1 425.4	34.92
Illiterates	22.2	100.00	15.4	69.36	6.8	30.64
Primary	1 791.5	100.00	1 105.6	61.72	685.9	38.28
Secondary	1 185.9	100.00	766.3	64.61	419.7	35.39
Tertiary	1 082.0	100.00	768.9	71.06	313.1	28.94

#### **II.4 BRANCH OF INDUSTRY**

10. Three industries group one half of all temporary employees: manufacturing industries, construction and commerce. However, there are two branches that may be considered as temporary branches: agriculture and construction. Among the 370.600 agricultural employees of the second quarter of 1999, 237.600 (more than 64 percent) had a temporary contract; in construction there were 694.200 temporary employees out of a total in the branch of 1.129.300, meaning more than 61 percent. Hotels and restaurants was the third branch in the temporality rank (nearly 45 percent of employees with a contract of limited duration). There are some differences by gender but the aforementioned branches maintain the highest temporality rates for both sexes; it is worthwhile to point out that more than 75 percent of female employees in agriculture had a temporary contract.

**Table 4. Temporary employees by type of contract, sex and branch industry**

Country: Spain. Second quarter 1999

Source: INE. Active Population Survey

Sex and industry	Total		Permanent job		Temporary job	
	Absolute value (1000)	Percent.	Absolute value (1000)	Percent.	Absolute value (1000)	Percent.
<b>MALES AND FEMALES</b>						
<b>TOTAL</b>	10,771.2	100.00	7,246.8	67.28	3,524.4	32.72
A (Agriculture)	370.6	100.00	133.0	35.89	237.6	64.11
B (Fishing)	31.7	100.00	22.8	71.97	8.9	28.03
C (Mining & quarrying)	60.6	100.00	48.0	79.18	12.6	20.82
D (Manufacturing)	2,295.9	100.00	1,643.7	71.59	652.2	28.41
E (Electr. gas & water)	90.4	100.00	77.2	85.46	13.1	14.54
F (Construction)	1,129.3	100.00	435.0	38.52	694.2	61.48
G (Commerce)	1,450.6	100.00	975.4	67.24	475.2	32.76
H (Hotels & restaurants)	556.9	100.00	305.3	54.81	251.6	45.19
I (Transport & commun.)	593.8	100.00	452.3	76.18	141.5	23.82
J (Financial intermed.)	334.0	100.00	293.0	87.72	41.0	12.28
K (Real estate & bus. act.)	722.9	100.00	500.4	69.22	222.6	30.78
L ( Public administration)	884.2	100.00	739.8	83.67	144.4	16.33
M (Education)	779.9	100.00	599.5	76.87	180.4	23.13
N (Health & social work)	682.8	100.00	499.0	73.08	183.8	26.92
O (Other community activ.)	389.0	100.00	261.9	67.33	127.1	32.67
P (Private households)	398.5	100.00	260.5	65.36	138.1	34.64
<b>MALES</b>						
<b>TOTAL</b>	6,689.6	100.00	4,590.6	68.62	2,099.0	31.38
A (Agriculture)	279.2	100.00	110.6	39.63	168.5	60.37
B (Fishing)	30.5	100.00	21.9	71.82	8.6	28.18
C (Mining & quarrying)	54.3	100.00	43.1	79.37	11.2	20.63
D (Manufacturing)	1,763.3	100.00	1,314.1	74.52	449.2	25.48
E (Electr. gas & water)	79.3	100.00	68.8	86.77	10.5	13.23
F (Construction)	1,083.2	100.00	405.4	37.43	677.8	62.57
G (Commerce)	806.5	100.00	591.5	73.34	215.0	26.66
H (Hotels & restaurants)	280.6	100.00	170.6	60.78	110.0	39.22
I (Transport & commun.)	457.9	100.00	356.1	77.77	101.8	22.23
J (Financial intermed.)	219.7	100.00	206.4	93.97	13.2	6.03
K (Real estate & bus. act.)	350.1	100.00	249.8	71.34	100.4	28.66
L ( Public administration)	549.3	100.00	469.4	85.45	79.9	14.55
M (Education)	284.3	100.00	229.5	80.74	54.7	19.26
N (Health & social work)	200.0	100.00	158.8	79.39	41.2	20.61
O (Other community activ.)	203.8	100.00	151.4	74.33	52.3	25.67
P (Private households)	47.6	100.00	43.2	90.62	4.5	9.38
<b>FEMALES</b>						
<b>TOTAL</b>	4,081.7	100.00	2,656.2	65.08	1,425.4	34.92
A (Agriculture)	91.5	100.00	22.4	24.46	69.1	75.54
B (Fishing)	1.2	100.00	0.9	75.66	0.3	24.34
C (Mining & quarrying)	6.3	100.00	4.9	77.53	1.4	22.47
D (Manufacturing)	532.6	100.00	329.6	61.89	203.0	38.11
E (Electr. gas & water)	11.1	100.00	8.4	76.07	2.7	23.93
F (Construction)	46.0	100.00	29.6	64.31	16.4	35.69
G (Commerce)	644.1	100.00	383.9	59.60	260.2	40.40
H (Hotels & restaurants)	276.3	100.00	134.7	48.75	141.6	51.25
I (Transport & commun.)	135.9	100.00	96.2	70.81	39.7	29.19
J (Financial intermed.)	114.3	100.00	86.5	75.70	27.8	24.30
K (Real estate & bus. act.)	372.8	100.00	250.6	67.22	122.2	32.78
L ( Public administration)	334.9	100.00	270.4	80.74	64.5	19.26
M (Education)	495.7	100.00	370.0	74.65	125.7	25.35
N (Health & social work)	482.8	100.00	340.3	70.47	142.6	29.53
O (Other community activ.)	185.2	100.00	110.4	59.63	74.8	40.37
P (Private households)	350.9	100.00	217.3	61.93	133.6	38.07

**II.5 PUBLIC OR PRIVATE SECTOR**

11. Among the temporary employees, 3.092.600 work in the private sector and 431.700 in the public sector; therefore, 9 out of 10 employees with a contract of limited duration belong to the private sector. As the private sector employs 8 out of 10 employees, the temporality rate is nearly twice as high in this sector as in the public sector. As it is shown in table 5, the temporality rate is 19 percent in the public sector and 36 percent in private sector.

**Table 5. Employees by type of contract, sex and private or public sector**

Country: Spain. Second quarter 1999

Source: INE. Active Population Survey

Sex and Public or private sector	Total		Permanent job		Temporary job	
	Absolute value (1000)	Percent.	Absolute value (1000)	Percent.	Absolute value (1000)	Percent.
<b>MALES AND FEMALES</b>						
<b>TOTAL</b>	10.771,2	100,00	7.246,8	67,28	3.524,4	32,72
Public	2.237,5	100,00	1.805,8	80,71	431,7	19,29
Private	8.533,7	100,00	5.441,0	63,76	3.092,6	36,24
<b>MALES</b>						
<b>TOTAL</b>	6.689,6	100,00	4.590,6	68,62	2.099,0	31,38
Public	1.171,7	100,00	989,4	84,44	182,3	15,56
Private	5.517,9	100,00	3.601,2	65,26	1.916,6	34,74
<b>FEMALES</b>						
<b>TOTAL</b>	4.081,7	100,00	2.656,2	65,08	1.425,4	34,92
Public	1.065,8	100,00	816,4	76,60	249,4	23,40
Private	3.015,8	100,00	1.839,8	61,01	1.176,0	38,99

**II.6 DURATION OF CONTRACT AND TIME WORKING IN THE FIRM**

12. A great deal of employees with a temporary contract does not know its duration (36 percent of males and 30 percent of females). That is because the contract is signed to supply a product or to provide a service, and as soon as the product is supplied or the service is provided, the contract expires. There are also temporary contracts to replace a sick employee (and the interviewee does not know for how long he or she will be employed). Among those who know the duration, the majority declares a duration between 4 and 6 months, with no big differences between females and males. The average contract duration is 283 days, 290 days for males and 264 days for females.

**Table 6. Temporary employees by sex and duration of contract**

Country: Spain. Second quarter 1999

Source: INE. Active Population Survey

Duration of contract	Males and females		Males		Females	
	Absolute	Percent.	Absolute	Percent.	Absolute	Percent.
	value (1000)		value (1000)		value (1000)	
TOTAL	3.524,4	100,00	2.099,0	100,00	1.425,4	100,00
Do not know	1.176,8	33,39	749,8	35,72	427,0	29,96
1 to 6 days	36,7	1,04	21,8	1,04	14,9	1,04
7 to 14 days	10,5	0,30	6,2	0,29	4,3	0,30
15 days to < 1 month	34,0	0,96	23,6	1,13	10,3	0,72
1 to 3 months	547,7	15,54	292,4	13,93	255,3	17,91
4 to 6 months	865,7	24,56	504,1	24,02	361,6	25,37
7 to 12 months	587,6	16,67	333,0	15,87	254,6	17,86
more than 1 year	265,4	7,53	168,0	8,00	97,4	6,83

13. When analysing the variables time working without interruption in the firm and time since the last renewal of the contract, it appears that for a significant number of people the first variable is higher than the second one; in fact the average time a temporary employee has been working without interruption in his firm is 14,8 months, while the average time since the last renewal has been 8,4 months. Both averages are higher for females than for males: respectively 15,2 months and 14,5 months for the first variable; 9,43 months and 7,65 months for the second one.

**Table 7. Average time working in the firm and average time since the last contract renewal of temporary employees by sex**

Contry: Spain. Second quarter 1999

Source: INE. Active Population Survey

SEX	Average (months)	
	Time working without interruption by the firm	Time since the last renewal
Males and females	14,81	8,37
Males	14,53	7,65
Females	15,23	9,43

14. When the temporary employees are asked the reason for having a contract of limited duration, 86,6 percent answer that they have this kind of labour relation because they could not find a permanent job.

**III. Labour market rotation and temporality**

15. From the last comments of the previous section, the conclusion may be drawn that for temporary workers it is frequent to have two or more successive temporary contracts.

16. This situation seems to be confirmed by the data shown in tables 8 and 9. These tables have been obtained by linking the EPA files of the first and second quarter of 1999 and analysing the flows between the two quarters. Since one sixth of the EPA sample is renewed quarterly, two successive surveys have in common five sixths of the sample.

17. Table 8 shows the probability that a temporary worker continues to be a temporary worker in the following quarter (second quarter 1999) or that he is in a different situation.

**Table 8. Transition probabilities for temporary employees by duration of contract**  
**Initial quarter: 1º 1999. Final quarter: 2nd 1999.**

Contry: Spain

Source: INE. Active Population Survey

Duration of contract (1/99)	Situation second quarter 1999			
	Non-employed	Self-employed	Permanent job	Temporary job
	Percentage	Percentage	Percentage	Percentage
TOTAL	11,80	0,70	5,70	81,80
Do not know	9,80	0,80	5,00	84,40
< = 3 months	23,00	1,00	4,10	71,80
4 to 6 months	10,40	0,60	7,40	81,70
7 to 12 months	6,60	0,30	6,00	87,10
13 months or more	5,90	0,70	5,90	87,50

18. The probability for a temporary employee with a contract of less than three months to obtain another temporary contract the following quarter is more than 70 percent. Employees with contracts of a longer duration have higher probabilities. In conclusion, it is very likely that a temporary employee will still be a temporary employee the following quarter, even if the duration of the contract is shorter than three months.

19. Table 9 shows the probability that a non-employed person (and who was looking for an employment) continues to be non-employed the following quarter (2/99) or that he is in a different situation (temporary employee, permanent employee or self-employed).

### Table 9. Transition probabilities for non-employed by time looking for job

Country: Spain

Source: INE. Active Population Survey

Time looking for job (1/99)	Situation second quarter 1999			
	Non-employed	Self-employed	Permanent job	Temporary job
	Percentage	Percentage	Percentage	Percentage
TOTAL	80,60	1,50	1,90	16,10
< = 3 months	69,30	1,90	3,00	25,90
4 to 6 months	74,30	1,70	1,80	22,20
7 to 12 months	78,80	1,40	2,00	17,80
13 months or more	87,70	1,30	1,50	9,50

20. The probability for a non-employed who has been looking for job for less than three months to be employed the following quarter (2/99) is 30 percent; the same probability for people looking for job for more than one year is less than 13 percent. Figures in table 8 and 9 seem to indicate that temporary contracts are concentrated on some people who, when finishing one contract, sign another one (with the same or a different company) without interruption or after a short period of time.

21. Data on the number of registered contracts during one month and the number of people covered follow the same line. In May 1999, 1.129.132 contracts were signed and 959.490 employees were covered. This means that 169.642 people signed more than one contract during this month. Table 10 shows the distribution of contracts by number of employees. It can be noted that in May 1999 3.448 persons signed 7 contracts or more.

### Table 10. Persons by number of contracts signed in May 1999

Country: Spain

Source: INEM. Statistics on registered contracts

Number of contracts during the month	Number of persons	Total of contracts
TOTAL	959.490	1.129.132
1	868.536	868.536
2	58.570	117.140
3	15.102	45.306
4	8.089	32.356
5	3.832	19.160
6	1.913	11.478
7 or more	3.448	35.156

22. In conclusion, temporary employees may be divided into two groups. One consists of employees who link successive contracts of limited duration (or who, after a short period of time, get another contract). The other consists

of temporary employees who work from time to time and who spend long periods without a job. The first group may be, in a way, assimilated to that of permanent employees.

#### IV. Temporary employees and unemployment benefits

23. Lastly, are the non-employed who have had a contract of limited duration receiving unemployment benefits in the same measure as the non-employed that have been dismissed? According to the Spanish legislation, unemployment benefits depend on the time the employee has been working; at least one year in employment is required to receive unemployment benefits for six months.

### Table 11. Non-employed who have been dismissed or have finished a temporary contract within the last 12 months by sex and receiving or not unemployment benefits

Country: Spain. Second quarter 1999

Source: INE. Active Population Survey

	Total		Temporary contract		Dismissed	
	Absolute value	Percent.	Absolute value	Percent.	Absolute value	Percent.
<b>MALES AND FEMALES</b>						
TOTAL	922,5	100,00	837,0	100,00	85,5	100,00
Receiving	265,3	28,76	220,4	26,33	44,9	52,52
Not receiving	657,2	71,24	616,6	73,67	40,6	47,48
<b>MALES</b>						
TOTAL	471,5	100,00	425,3	100,00	46,2	100,00
Receiving	150,3	31,87	124,3	29,23	26,0	56,21
Not receiving	321,2	68,13	301,0	70,77	20,2	43,79
<b>FEMALES</b>						
TOTAL	451,0	100,00	411,7	100,00	39,3	100,00
Receiving	115,0	25,50	96,0	23,33	18,9	48,18
Not receiving	336,0	74,50	315,6	76,67	20,4	51,82

24. Table 11 shows that 50 percent of non-employed people who have been dismissed within the last 12 months are receiving unemployment benefits. For the non-employed who have finished a temporary contract within the last 12 months, this percentage is only 26 percent.

## **V. Conclusions**

25. The Spanish labour market has the highest temporality rate of all the EU countries, nearly 9 points higher than the EU average of 10,2 percent.

26. The temporality rate is especially high for the following groups:

- The young people
- People with low education
- Employees in agriculture, construction, hotels and restaurants
- Private sector employees

27. Temporality is partly reduced or softened because some temporary employees link successive contracts or find quite soon another temporary contract.

28. Non-employed who have had a contract of limited duration receive unemployment benefits in a lower proportion than non-employed who have been dismissed.

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