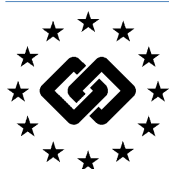
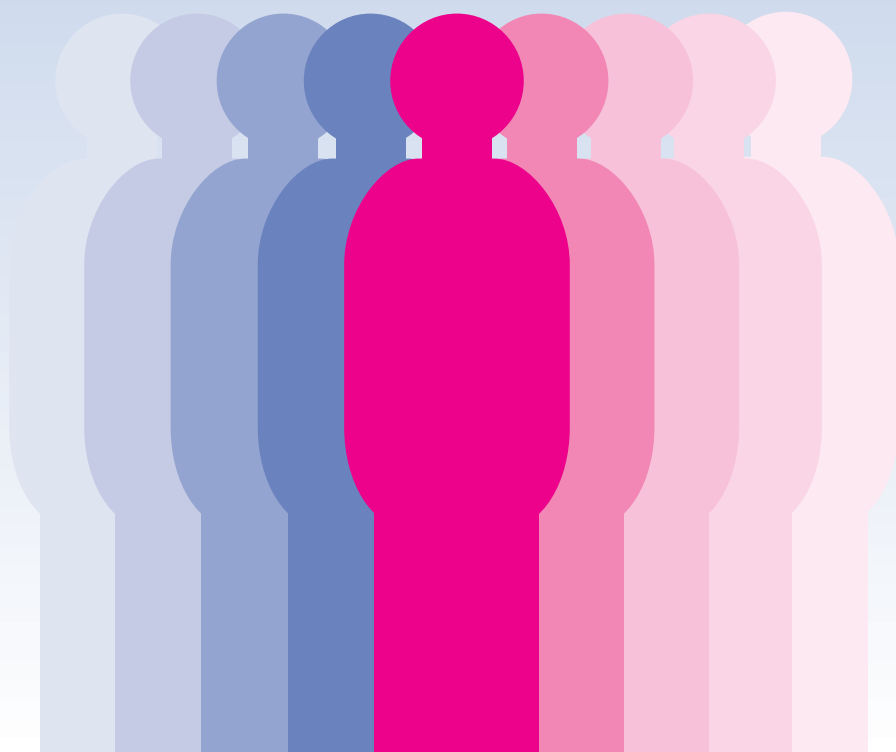


Precarious Employment and Working Conditions in Europe



EUROPEAN FOUNDATION
for the Improvement of Living and Working Conditions

Precarious Employment and Working Conditions in Europe

The European Foundation for the Improvement of Living and Working Conditions is an autonomous body of the European Union, created to assist the formulation of future policy on social and work-related matters.

Precarious Employment and Working Conditions in Europe

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Cataloguing data can be found at the end of this publication

Luxembourg: Office for Official Publications of the European Communities, 1998

ISBN 92-828-3044-6

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Printed in Ireland




Preface

Getting a clear picture of working conditions in Europe is a prerequisite to the definition of policies aimed at improving occupational health. The Foundation contributes to this task by carrying out surveys on working conditions throughout the E.U. The last survey, in 1996, highlights some major issues, such as the intensification of work, the extent of repetitive work, and the increased reporting of violence in the workforce.

It also shows the extent of precarious employment. Such employment not only covers employees with fixed term and temporary contracts, and some categories of self-employed workers, but also workers with low incomes and/or short working hours. These forms of employment are on the increase and seem to become a necessary step when first entering the labour market. Moreover they are frequently associated with poor working conditions.

In view of the problems created by these poor working conditions, as well as in view of the job creation debate (is any job better than no job?) and the flexibility debate (Green Paper of the Commission on “New Partnerships in Work Organisation”), the Foundation decided to carry out a specific analysis of the precarious employment issue. The present document aims at describing its extent, its consequences, and its reasons so as to provide policy makers with the quantified information they need.

Clive Purkiss
Director

Eric Verborgh
Deputy Director



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Introduction



Methods

In a European context where unemployment levels are increasing in many EU Member States, examining the quality of employment and working conditions might at first glance seem to be less crucial than the need to find jobs, of whatever kind, for people in order to take them off the unemployment lists. Recent studies show, however, that working conditions may not be improving and that in addition new types of constraints are appearing and bringing with them new types of mental rather than physical hardship.

In order to look in more depth at the question of the quality of work and employment in Europe, this study takes the following question as its starting point: to what extent does precarious employment go together with poorer working conditions? In other words, the study attempts to find out whether the flexibility of employment, generating a whole range of contracts of employment that are unstable and therefore precarious in comparison with the traditional model of the permanent contract of employment, is having an impact on the quality of people's life at work.

We have taken a sociological approach to the flexibility of employment in Europe, attempting both to pinpoint the actual extent of precarious employment in Europe and to measure its effects on workers.

This study is based largely on statistical processing of European data collected for the "Second European Survey on Working Conditions", conducted for the European Foundation in Dublin between November 1995 and January 1996. This survey by questionnaire was conducted in the fifteen Member States of the European Union among individuals having a job and aged 15 or more. The sample (after weighting) was 15 500: 1000 per country, including the former East Germany, and 500 in Luxembourg. As was the case with the initial survey, the construction of the questionnaire was discussed with a group of experts from various countries and with representatives of trade unions and employers' organisations in the EU¹.

¹ For further details, see the report on the *Second European Survey on Working Conditions - 1996*, Pascal Paoli, European Foundation for the Improvement of Living and Working Conditions, Dublin, 1997.

Starting from a variable constructed as an indicator of the precarious nature of employment, we shall organise this study into two main areas.

On the one hand, we shall attempt to find out whether there are areas of precarious employment in the European labour market that are more defined than others (by country, by economic sector, by occupation) and whether workers employed under precarious contracts have a particular profile (sex, age, education, etc.).

On the other hand, we shall relate precarious employment to different dimensions of working conditions, such as the new forms of labour organisation resulting from internal flexibility (atypical working hours, shift work, multi-skilling, etc.), factors causing work to become more intensive or even indicators relating to people’s involvement in their work or the effect that work has on their lives as a result of the occupational risks that they run.

At the end of these two stages, we hope to be able to redefine the notion of precariousness: not just from the point of view of employment, but also from the point of view of life at work. Going beyond the quantitative observation of numbers of jobs in order to address the issue of the flexibility of employment from a qualitative point of view (from the point of view of the worker) is the guiding thread of this research.

Concepts

Flexibility and precariousness are crucial to this study. These two terms, often used but less often clearly defined, can be understood at different levels. These are the definitions that we have taken as our starting point.

Flexibility

According to the OECD², flexibility “may be understood as the ability of systems, organisations and individuals to adapt to change by adopting new structures or new modes of behaviour”. Economic competitiveness, together with the global organisation of trade and production, are the current changes for which flexibility policies are most often advocated.

Marie-Thérèse Join-Lambert³ specifies what flexibility means for enterprises: “it lies in the more rapid ability to adapt (organisation and personnel) to a context which appears less foreseeable”. This is what we mean when we talk about flexibility, i.e. the extent to which it has brought about the changes in employment observed in recent years: jobs that are less rigidly framed by permanent contracts of employment and by labour legislation that is binding on enterprises.

M.-T. Join-Lambert specifies various dimensions of this flexibility:

	Quantitative flexibility	Qualitative flexibility
External flexibility	<ul style="list-style-type: none"> * Outsourcing (sub-contractors) * More flexible redundancy regulations * Temporary work 	
Internal flexibility	<ul style="list-style-type: none"> * Possibility of varying working hours and pay 	<ul style="list-style-type: none"> * Possibility of modifying the organisation of work and the allocation of employees

² Dahrendorf Report, OECD, 1986 (cited in the article “Flexibility and work organisation”, *Social Europe*, supplement 1, European Commission, 1995).

³ M.-T. Join-Lambert, 1994, *Politiques Sociales*, Presses de la Fondation Nationale des Sciences Politiques & Dalloz.



Precariousness

Introducing a study of the link between precarious employment and poor health, Nicolas Sandret notes that “precariousness is what hampers and reduces margins of manoeuvre in the construction of the identity”⁴.

He notes that there may be three levels of precariousness: that separating people having a job from those looking for one; that separating, among people having a job, those who are employed under stable contracts from those employed under non-permanent (and therefore precarious⁵) contracts; lastly, that separating workers whose working conditions are good from those whose working conditions are poor or even dangerous.

For people having a job (the level of analysis of this study), there may be precariousness at two levels of construction of the identity: the **social identity** of having a job and **work identity**, built up at the workplace. We shall separate, in this study, precarious employment status from the precariousness arising more specifically from working conditions. This level (working conditions) may be observed from existing variables in the survey. The employment status level has to be pinpointed from the dependent variable that has been constructed.

This approach to precariousness has the merit that it highlights the different points at which people may be faced with precarious situations. It also shows the deep-seated effects, from the point of view of the identity of the individual, of precarious situations experienced in the labour market. We need, however, to find precise indicators in order to be able to pinpoint precarious employment, which is our starting point.

Methods

In order to examine precariousness, we shall start from the employment status of workers, i.e. their position in the *employment* market, in order, subsequently, to compare this with their situation at *work* (precariousness due to poor working conditions).

We shall therefore use the conceptualisation proposed by A.C. Decouflé and M. Maruani⁶:

employment: set of methods of entry into and exit from the labour market and translation of working activity in terms of social status;

work: activity to produce goods and services and all the conditions under which this activity takes place.

Two indicators of **employment status** have been used:

1. the contract of employment (question Q7 of the survey). Contracts of employment for specific periods of time are considered to be precarious because they are not permanent: fixed-term contracts and temporary work contracts (options 3 and 4 of question 7). Because precariousness may go beyond status, we shall also analyse self-employed workers. The survey variable relating to the employment contract included a single option for all self-employed workers. We have made a distinction between, on the one hand, those working alone who we shall

⁴ N. Sandret, “Précarité, précarisation, santé et travail. Comment aborder cette question? Comment délimiter son champ?”, *Travail*, 30, Winter 93/94.

⁵ *Precarious*: (adj.) **1-** Law. Which exists or is exercised on the basis of an authorisation that may be revoked. **2-** Said of a thing whose existence is not certain, which may be called into question. *Dictionnaire de la langue française*, Lexis, Larousse, 1992 ed.

⁶ A.C. Decouflé & M. Maruani, “Pour une sociologie de l’emploi”, *Revue française des affaires sociales*, 3, 1987.

call “self-employed **sole traders**”, and, on the other hand, those employing at least one employee, who we shall call “**employers**”. The variable Q9: “*how many people do you manage?*” has been used as a filter on the assumption that a self-employed worker who states that he manages people necessarily employs them⁷.

2. the full-time / part-time distinction (Q12). While part-time work may be chosen deliberately and may be a sign of a person’s improved quality of life, part-time work may also be imposed on people. When imposed and not chosen, part-time work may then be a factor in making a person’s status precarious. In this case, part-time work corresponds to under-activity. The OECD⁸ considers people working part-time because they have “not been able to find a full-time job” or those who “are forced to work part-time because of economic recession” as “partly unemployed workers”. From the point of view of labour organisation, part-time work may be an efficient tool in the internal flexibility of an enterprise. There are therefore situations in which, paradoxically, part-time work goes together with a very pressurised pace of life, as the journalist Alain Lebaube⁹ notes in respect of many supermarket cashiers, whose life “between breaks, stand-by duties, extended opening hours, night work and overtime, is chopped up and ruled by work that may, however, be for only ten or twenty hours per week”.

Bearing in mind that the only variable in the survey relating to working time (Q12) relates to the number of working hours per week, on the one hand, and there is no statutory European definition of part-time¹⁰, on the other hand, we have arbitrarily defined part-time. We consider “part-time jobs” to be jobs in which people state that they work a minimum of 10 hours per week and a maximum of 35 hours per week. We are aware that these two thresholds are no more than indicative but, on the basis of the information available from the survey, this was the only way in which we could attempt to pinpoint the extent to which working less than the “norm” may be a sign of additional precariousness¹¹.

These two criteria representative of employment status are measured here in the same way, whatever the European country in question, since the survey questionnaire was the same everywhere. We are nevertheless aware that this identical approach masks disparities linked to cultural differences within each country. For instance, temporary workers have little statutory protection in Ireland (where sick leave is not paid, for instance), but have greater protection elsewhere. Moreover, some countries such as the United Kingdom or Denmark do not have the general legislation prescribing working hours that exists in other EU Member States.

The aim of this study is not to provide an exhaustive analysis of the legal differences in Europe¹²; the fact that we are aware of the problems underlying this European study explains why we shall

⁷ Annex 7 sets out some proposals to remedy this non-exhaustive evaluation (which was the only possibility on the basis of the variables available).

⁸ United Nations Development Programme, 1996, *World report on human development*, Economica - Paris.

⁹ A. Lebaube, “Rythmes de travail”, *Le Monde Emploi - Initiatives*, 08.01.97.

¹⁰ Part-time is defined, in each EU Member State, in relation to statutory weekly working hours. These hours vary from country to country and often from sector to sector (importance of collective agreements). For more details, see Annex 1.

¹¹ The choice of the two thresholds “over 10 hours” and “less than 35 hours” leads to an overestimation of part-time work in Europe: Under our criteria, 22% of European workers work part-time in comparison with 16% under the criteria used for EUROSTAT’s Labour Force Survey (in 1995). The questioning methods used by EUROSTAT enable a more reliable evaluation of part-time work (see Annex 7 “Suggestions for the next survey”). We are aware that not all the “part-time” workers pinpointed by our approach are part-time which means that we cannot assume too much from our observation of part-time work in this analysis. Nevertheless, the bias introduced does not call into question the sense of our comments, given that we are in a conservative test situation.

¹² For more details, see the work of A. Supiot, *Les notions de contrat de travail en Europe*, Report for the Commission of the European Communities, January 1992. On the link between precarious contracts of employment and employee status, see also “L’emploi, le travail et les droits sociaux”, A. Supiot, in U. Mückenberger & al., *Manifeste pour un Europe Sociale*, ed. Desclée de Brouwer, 1996.



not dwell at any length, in our analysis, on comparisons between countries. The focus of this study will be the link between employment status, undoubtedly imperfectly assessed, but assessed identically everywhere via certain survey variables, and working conditions.

A total of 14 654 people formed the **sub-population** used for this study. The following were excluded from the analysis:

- people who did not know or did not specify the type of their contract of employment (options 6 and 7 of Q7);
- apprentices, trainees, etc. (option 5 of Q7), not performing a job in the strict sense;
- self-employed workers unable to say how many people they managed (option 5 of Q9);
- employers employing 10 or more people, who were too few in number: 0.6% (at present, management personnel are in most cases employed);
- people working less than 10 hours per week (considered too marginal)¹³.

The “EMPLOYMENT STATUS” variable constructed includes 9 options broken down as follows:

1. <i>sole traders, part-time</i>	2.6%	}	
2. <i>sole traders, 35+ hours/week</i>	8.6%	}	total self-employed: 17.4%
3. <i>small employers</i>	6.2%	}	
4. <i>permanent contracts, part-time</i>	15.6%)	
5. <i>permanent contracts, 35+ hours/week</i>	54.5%)	
6. <i>fixed-term contracts, part-time</i>	3.1%)	total employees : 82.6%
7. <i>fixed-term contracts, 35+ hours/week</i>	6.5%)	
8. <i>temporary, part-time</i>	1.0%)	
9. <i>temporary, 35+ hours/week</i>	1.8%)	

The breakdown of **part-time** workers by employment status is as follows:

- 23.2% of sole traders work part-time (less than 35 hours per week)
- 22.3% of workers employed on permanent contracts work part-time
- 32% of workers employed on fixed-term contracts work part-time
- 36.4% of temporary workers work part-time

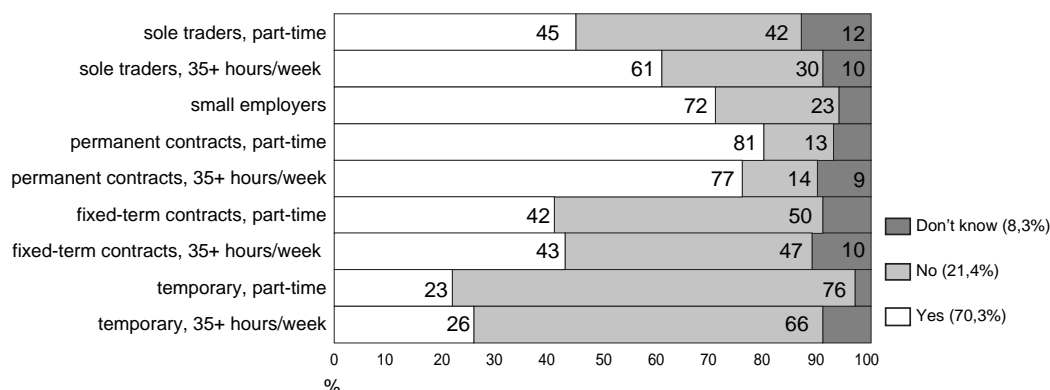
AVERAGE: 22%

It can be seen that the more precarious the contract of employment, the more substantial the proportion of part-time workers. The additional precariousness that part-time work entails for workers whose status is precarious (which therefore justifies the distinction between full-time and part-time work) can be pinpointed from:

¹³ Analysis of this excluded group shows that temporary workers account for by far the largest number of workers working such short hours: 4% in comparison with 1.2% of employees on fixed-term contracts, 0.9% of sole traders and only 0.4% of employees on permanent contracts.

① Cross-referencing with the variable “*is your job secure?*” (Q20f) :

Graph 1: “Secure” employment and employment status



We do not know what people understand by the adjective “secure” (polysemic), but it seems that precarious status and “insecure” work have especially strong links when people whose employment status is precarious work part-time. It can be supposed here that part-time work is more imposed when it goes with an unstable employment status and is therefore an additional factor of insecurity. In contrast, part-time work associated with a permanent contract works in the other direction which could well show, on the basis of the same logic, that such part-time work is more likely to have been chosen voluntarily.

② Cross-referencing with the variable (Q4b) “*do you have another regular paid job?*”: cross-referencing with the “employment status” variable shows that, leaving aside the case of temporary workers¹⁴, it is people who work part-time who, for a same contract of employment, say that they have a second paid job. Consequently, 20% of employees on full-time fixed-term contracts also have a second job as well as over 13% of self-employed, part-time sole traders, whereas the figure for people working full-time on a permanent or fixed-term contract or as sole traders is 10%.

Table 1: Second paid employment and employment status

“Do you have another regular paid job?” (Q4b)			
row %	Yes	No	No reply (spontaneous)
Sole traders, part-time	13.2%	86.7%	0.1%
Sole traders, 35+ hours/week	10%	89.1%	0.9%
Small employers	9.6%	90.1%	0.2%
Permanent contracts, part-time	10.9%	88.3%	0.8%
Permanent contracts, 35+ hours/week	9.8%	89.7%	0.5%
Fixed-term contracts, part-time	20.1%	78.2%	1.7%
Fixed-term contracts, 35+ hours/week	10.2%	87.8%	2%
Temporary, part-time	8.6%	91.4%	
Temporary, 35+ hours/week	14.2%	85.8%	
EU	10.5%	88.9%	0.7%

¹⁴ The unsatisfactory nature of temporary work is clearly evident here, since even when working full-time, 14% of these workers have a second paid job. The low percentage for part-time temporary workers makes them marginal in relation to the others.



Calculating some figures highlights the link between part-time work and second jobs: of the total of people having a second paid job, 26.4% work part-time in their first job and 73.6% work full-time. Part-time workers account for 22% of all workers. Moreover, the level of “super-activity” for the group of people working part-time is 12.3%, in comparison with a percentage of 9.9% for people working full-time in their first job.

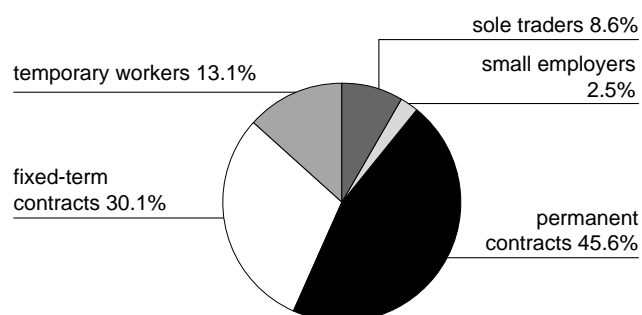
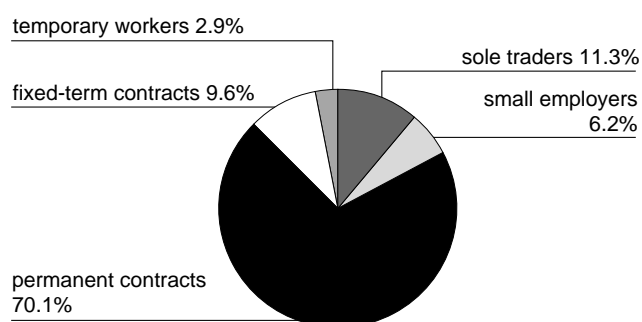
The extent to which part-time work is imposed is not clear from these percentages, bearing in mind that not all those people on whom part-time work is imposed have (or are not looking for) a second paid job. However, having a second paid job is an indicator of a lack of satisfaction (material or other?) with the main job.

Chapter One

Structural analysis of the different types of employment status

Employment under a permanent contract is the most widespread employment status in the EU: 7 out of 10 people have this employment status. This breakdown differs substantially if account is taken only of jobs occupied for less than one year¹.

Graphs 2 and 3: Breakdown by employment status



¹ We start from the assumption that people who have been in their job for less than one year are working under the same contract of employment that they declared at the time of the survey. If there were to have been any change, it would be likely that this would have been from a precarious contract to a stable contract and therefore we are in a conservative test situation, since we are working with a proportion of precarious jobs which is undoubtedly slightly overestimated. On this inaccuracy, see Annex 7 "Suggestions for the next survey".

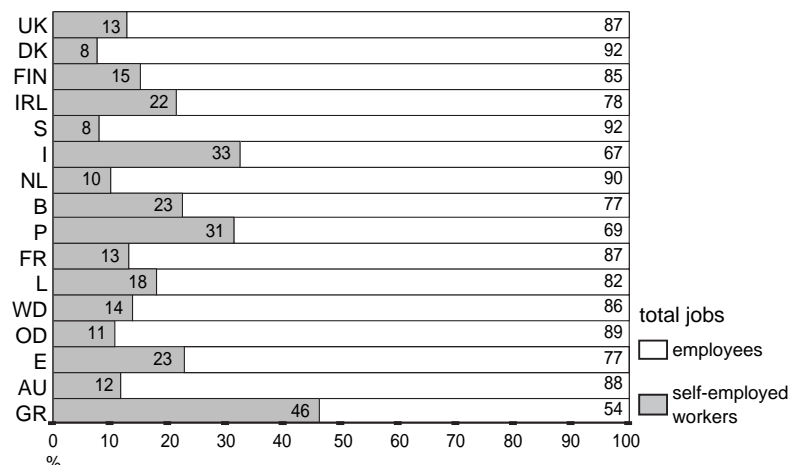
The proportion of precarious employment is then almost as substantial (43%) as that of employment on permanent contracts (45.6%). It can therefore be seen that precarious employment status is connected to the entry of people into working life or to new recruitment. We shall therefore take account of length of service in employment for this structural observation of employment status in Europe.

1.1. Employment status and structural characteristics

1.1.1. Description by country

In total, employment accounts for 82.5% of all jobs in the EU. This rate differs from one country to another. *Graph 4* shows that the number of self-employed workers in southern Europe is much higher than the average, Greece being particularly atypical, with almost as many self-employed workers (46%) as employees (54%). Self-employed workers account for proportions of approximately one third in Italy and Portugal and one quarter in Spain. Two countries in the remainder of the EU have a structure similar to the southern area: Belgium (23% of self-employed workers) and Ireland (22%).

Graph 4: Breakdown of self-employed workers by country



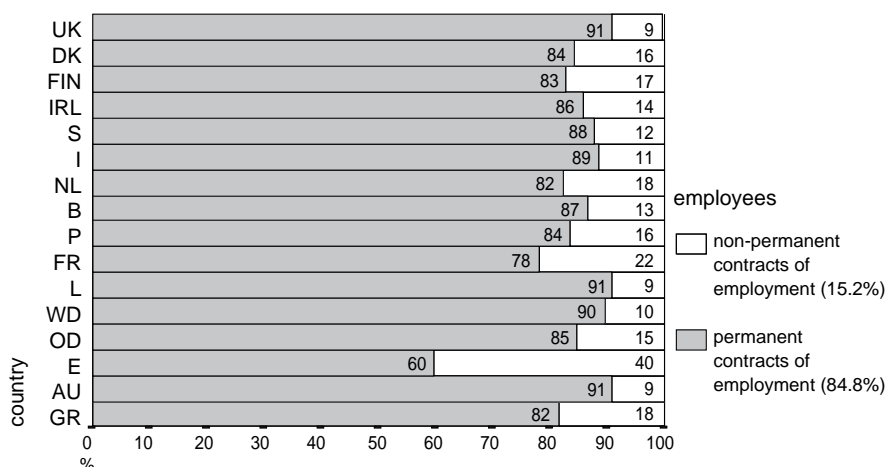
Countries in which small employers account for a high proportion of the total of self-employment are Germany (West and East) (over 45% in comparison with an average of 35.4%), and Austria (44%). In contrast, Greece has a substantial number of sole traders (76% in comparison with an average of 64.6%), followed by Spain (74%) and Sweden (73%). While the categories of self-employed workers are heterogeneous, it can be assumed that the percentage differences observed reflect actual differences in structure².

Graph 5 highlights the atypical character of Spain and France as regards the proportion of total employment for which precarious jobs account. 40% of employees working in Spain therefore have non-permanent contracts of employment (fixed-term or temporary work contracts); the figure for France is 22%, in comparison with a European average of 15%. At the other extreme, three countries have a very low level of employees under precarious contracts: the United Kingdom, Luxembourg and Austria (only 9% of non-permanent contracts in each of these countries).

² See V. Letourneau, *Emploi non salarié et conditions de travail en Europe*, brochure published by the European Foundation for the Improvement of Living and Working Conditions in Dublin.



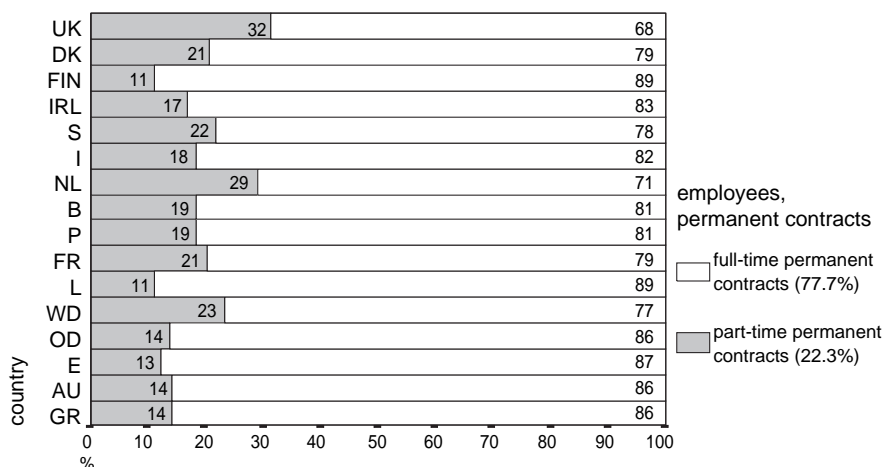
Graph 5: Breakdown of employees whose status is precarious by country



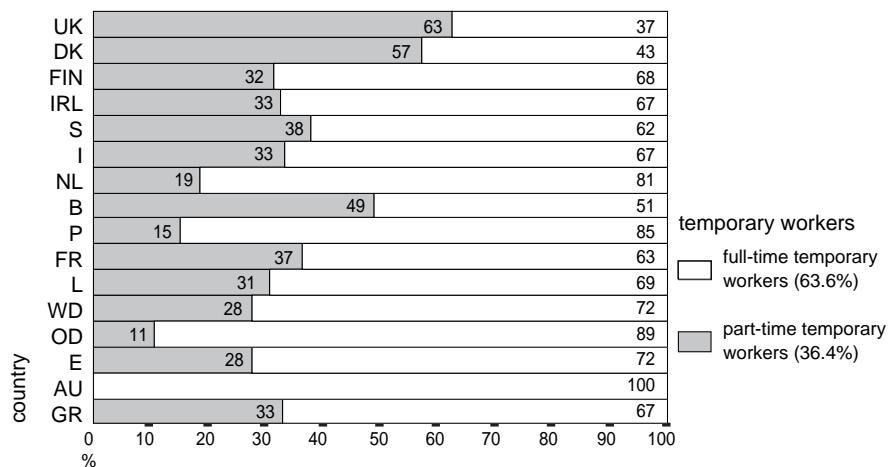
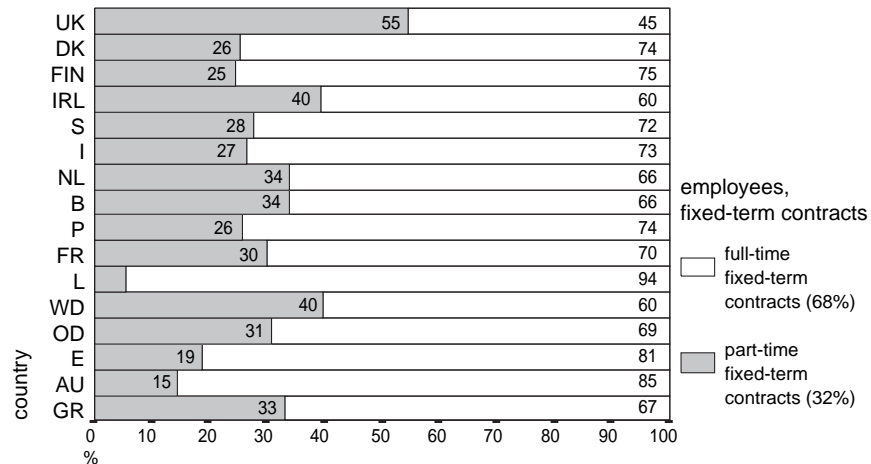
It is interesting to look at *graphs 6, 7 and 8*, in order to find out about the extent of part-time employment - which may be a factor in making status precarious when it is not chosen - in the various Member States of the EU.

One country stands out because of its proportion of part-time jobs: the United Kingdom. This country has the highest levels of part-time employment of all the countries, whatever the contract of employment. 32% of British employees on permanent contracts therefore work less than 35 hours per week (in comparison with a European average of 22%), 55% of British employees on fixed-term contracts work part-time (in comparison with a European average of 32%), and 63% of British temporary workers work part-time, whereas the European average is only 36.4%. This situation can be explained by the absence of general legislation on working hours in the United Kingdom³. There is a striking contrast with Luxembourg and Austria which have the same very low level of precarious employment as the United Kingdom but, in contrast, have very low part-time employment levels. The result is that only these two countries have a very low level of employment that is “atypical” in comparison with the remainder of the EU.

Graphs 6, 7 and 8: Employees working part-time by country



³ See Annex 1.



Spain, whose level of fixed-term employment is the highest of all, has in contrast part-time employment levels which are fairly low in comparison with the European average whatever the type of contract of employment. France, however, has part-time employment levels which are closer to the European average.

Among the other countries, Ireland and the former West Germany have a high proportion of employees working part-time on fixed-term contracts. The largest proportions of temporary workers working part-time, leaving aside the United Kingdom, are in Ireland and Belgium.

Overall, these comments show that forms of “non-standard employment” are developing in all the Member States by different methods and in different proportions: more part-time work in the United Kingdom, more fixed-term and temporary contracts in Spain and France, etc. Two countries are atypical in Europe: Luxembourg and Austria, where employment is almost exclusively stable and full-time.

The specific national features observed from the average breakdown are more finely shaded or even modified when the breakdown of jobs occupied for less than one year is observed. The main fact that emerges from *Table 2* is that there are substantial proportions of precarious employment

While Spain remains by far the most atypical as a result of its high levels of precarious employment, it can be seen that France, in contrast, is close to the average. Some countries appear to make more use of precarious employment: Finland (57% of employees in their jobs for less than one year are recruited on the basis of fixed-term contracts in comparison with a European average of 30%), the former West Germany (52% of fixed-term contracts), the Netherlands (45% of fixed-term contracts), Sweden (41% of new recruitment through temporary work agencies in comparison with an average of 13%), Greece (29.5% of temporary workers) and Denmark (21% of temporary workers). What this shows is that precarious employment in these countries is a tool for flexibility primarily at the recruitment stage (probationary period), in contrast to France where precarious employment is more permanent.

Table 2: Employment Status and Country – length of service less than 1 year

Row %	STATUS less than 1 year				
	Sole traders	Small employers	Permanent contracts	Fixed-term contracts	Temporary workers
United Kingdom	5.6	3.0	70.5	11.1	9.8
Denmark	1.9	1.0	58.2	18.2	20.7
Finland	6.4	2.0	25.9	57.4	8.4
Ireland	3.3	4.1	60.0	16.4	16.2
Sweden	5.5		43.2	10.0	41.3
Italy	25.2	4.2	39.9	23.6	7.2
Netherlands	7.0	2.8	31.6	45.2	13.3
Belgium	15.7	5.3	50.2	14.2	14.7
Portugal	9.3	7.6	32.3	32.0	18.8
France	7.9	1.8	42.0	34.6	13.6
Luxembourg	17.6		50.7	16.3	15.3
Former W. Germany	6.7	2.1	34.0	51.8	5.5
Former E. Germany	8.4	4.2	51.7	33.7	1.9
Spain	5.2	.5	10.8	61.3	22.3
Austria	3.5		82.5	14.0	
Greece	18.4	1.9	27.2	23.0	29.5
EU	8.6	2.5	45.6	30.1	13.1

1.1.2 Description by sector

Two economic sectors stand out as a result of high proportions of employees employed on fixed-term contracts or through temporary work agencies: the primary sector and the hotels and restaurants sector. In both these sectors, close on one out of five workers (20% of total jobs) is on a fixed-term contract or is a temporary worker. The seasonal nature of these types of economic activity undoubtedly goes a long way towards explaining this concentration of fixed-term jobs.

The primary sector also has a high proportion of self-employed workers (sole traders accounting for 30% and employers of one to nine workers for 14%).

Albeit to a smaller extent, other economic sectors have substantial proportions of precarious jobs. The public administration, in the first instance, where 12% of jobs are fixed-term, in comparison with a European average of 9.6%. Composed almost exclusively of employees (98.8%), this is a

two-tier sector with a high proportion of permanent contracts as well as a proportion of fixed-term contracts which is substantial and higher than the average.

Table 3: Breakdown by economic sectors

<i>NACE code</i>	<i>row %</i>	Sole traders	Small employers	Permanent contracts	Fixed-term contracts	Temporary workers
Agriculture, hunting, fishery (A-B)		29.8	14.3	36.1	12.8	7
Mining and quarrying, manufacturing (C-D)		6.2	3.6	78.1	9.3	2.7
Electricity, gas and water supply (E)		5.4	3.5	80.6	10.6	-
Construction (F)		12.1	6.5	68.3	9.8	3.4
Wholesale and retail trade, repair of motor vehicles and personal and household goods (G)		18.5	10.1	61.8	7.4	2.2
Hotels and restaurants (H)		15.3	10.9	55.1	13.8	5
Transportation and communication (I)		16.5	4.4	78.3	16.4	2.4
Financial intermediation (J)		7	7.2	77.7	6.8	1.3
Real estate, renting and business activities (K)		15.1	10.7	62.5	7.9	3.8
Public administration (L)		0.5	0.7	84.9	12.1	1.8
Other services (M-Q)		11.8	4.8	70.4	10.3	2.7
EU		11.3	6.2	70.1	9.6	2.9

Temporary work is more developed in two sectors: construction and real estate, renting and business activities (sector K), in which the proportion of temporary workers is higher than the average but does not, however, reach the high levels for agriculture or hotels and restaurants (4% of temporary workers in sector K, 3.4% in construction, 5% in hotels and restaurants, 7% in the primary sector).

Part-time employment accounts for the majority of employment in the public administration and “other services” sectors, whatever the type of employment contract (employees and self-employed workers taken together). In the case of temporary workers, part-time work is, moreover, over-represented in the wholesale and retail and hotels sectors. In contrast, full-time employment is predominant in the sectors of manufacturing industry and construction. The maximum proportions of full-time self-employed workers are in the primary sector and in commerce.

In the case of jobs **occupied for less than one year**, it can be seen that there are substantial proportions of precarious contracts (fixed-term and temporary) in all sectors. The two-tier nature of the public administration sector is even more evident here, since this sector has the highest percentage of new fixed-term contracts: 51% of people who have been working in the public administration sector for less than one year are employed on the basis of a fixed-term contract in

The sector in which the proportion of newly recruited temporary workers is highest is construction (18% in comparison with an average of 13%), followed by hotels and restaurants (16%).

1.1.3 Description by size of enterprise⁴

Small enterprises are more likely to use methods of external flexibility for their workforce, as can be seen from *Table 4*. The proportion of employees employed on permanent contracts therefore increases with size of enterprise. This is also evident from the figures for the primary sector which has, on the one hand, a high proportion of small employers and, on the other hand, a high proportion of employees under fixed-term contracts or recruited from temporary work agencies.

Table 4: Employee status and size of enterprise

column % “How many employees does the company for which you work employ in total?”	1 to 9	10 to 49	50 to 99	100 to 499	500 and over	Don’t know	EU
Permanent contracts	79	85.7	82.5	86.2	89.1	76	85
Fixed-term + temporary contracts	21	14.3	17.5	13.8	10.9	24	15

The “don’t know” option of question 5 can be seen as an indicator of a person’s integration into the enterprise. Being unaware of the size of the enterprise in which you work is a symptom of a lack of integration into the collective and the workplace. People who are unaware of the size of the enterprise or company for which they work are over-represented in the case of employees employed on precarious contracts: almost one out of four do not have a permanent contract. Calculation of the row percentages shows that 10% of employees whose employment status is precarious are unaware of the size of their enterprise, whereas only 6% of employees on permanent contracts are similarly unaware. There seems therefore to be an inverse correlation between integration into the workplace and precarious status. This is logical, since recruitment under fixed-term contracts and even more via temporary work agencies helps to distance the employee from the employer.

1.1.4 Description by occupation

The percentages of *Table 5* show a clear-cut link between level of training and responsibility and recruitment under an atypical (non-permanent) contract of employment.

The highest concentration of jobs whose status is precarious is therefore among the elementary occupations: 23% of this group have fixed-term contracts or work as temporary workers in comparison with an average of 12.4%. They are followed by skilled agricultural and primary-sector workers, over 16% of whom work under precarious contracts. This group is followed, although the percentage is higher than the average for only one of these forms of precarious contract, by sales workers, where fixed-term contracts are over-represented, and by plant and machine operators and assemblers, 4.5% of whom are temporary workers. These new forms of employment have not, in contrast, had much of an impact on senior officials and managers.

⁴ The question (Q5) relating to size of enterprise has in all likelihood been misunderstood in some cases (confusion between workplace and company). We propose, in Annex 7, a different questioning method that makes this question more precise.

Table 5: Employment status and occupation

row % ISCO code	Sole traders	Small employers	Permanent contracts	Fixed-term contracts	Temporary workers
Senior officials (1) and managers	16.3	22	58.8	2.8	0.1
Professionals (2)	12	5.7	70.4	9.8	2.1
Technicians and associate professionals (3)	7.9	3.6	78.7	8.2	1.6
Clerks (4)	4	1.3	84.1	7.3	3.3
Service workers and shop and market sales workers (5)	12.6	4.3	68.8	12.1	2.2
Skilled agricultural and fishery workers (6)	36.1	16.7	30.9	10	6.3
Craft and related trades workers (7)	15.6	8.8	64.1	9.6	1.9
Plant and machine operators and assemblers (8)	5.1	2.3	79.7	8.4	4.5
Elementary occupations (9)	8.4	3.3	65.5	16.2	6.7
EU	11.3	6.2	70.1	9.5	2.9

Part-time employment is most widespread among the occupational groups of professionals, clerks, service and sales workers and elementary occupations (whatever the type of employment status). Part-time work is also very widespread among self-employed sole traders and temporary workers in the intermediate occupational groups. In contrast, however, these two categories of workers in most cases work full-time in the primary sector. Among all groups of workers, it is in the professional workers' group that full-time work is predominant.

In the case of people recruited **less than one year ago**, it can be seen that this distinction by qualification still exists, since proportionally larger numbers of manual workers are recruited under precarious contracts (more fixed-term contracts for unskilled workers and more temporary work for skilled workers). In the case of people having less than one year's service, however, two occupational groups are in a more precarious position: clerks, 20% of whom are temporary workers (average of 13%), and sales workers, 38% of whom are on fixed-term contracts (average of 30%). The group of senior officials and managers is not protected from precarious contracts: 33% of new recruits are recruited on the basis of a fixed-term contract. The extent to which recruitment under a precarious contract is for the purposes of a probationary period⁵, at the end of which a permanent contract is obtained, is unknown, but what can be seen here is that the use of external flexibility at the time of recruitment is widespread whatever the occupational group.

1.2 Employment status and individual characteristics

1.2.1 Description by sex

At the time of the survey, women accounted for **42%** of the population in employment in the European Union. Over the last twenty years, there has been a constant increase in this percentage

⁵ We propose to refine the data on length of service in the job, in particular through a question relating to the period of the fixed-term or temporary contract (see Annex).

throughout the Member States of the European Union⁶. Women are predominantly employees: they account for 44% of all employees and only 33.4% of all self-employed workers.

Table 6: Employment status and sex

	Sex				EU Total	
	Men		Women		Col %	Row %
	Col %	Row %	Col %	Row %		
Detailed Status						
Sole traders, p-t	2.2	49.5	3.1	50.5	2.6	100.0
Sole traders	9.9	66.2	7.0	33.8	8.6	100.0
Small employers	7.9	74.0	3.8	26.0	6.2	100.0
Permanent, p-t	6.2	23.2	28.6	76.8	15.6	100.0
Permanent, 35h+/w	62.5	66.6	43.5	33.4	54.5	100.0
Fixed-term, p-t	1.7	33.2	4.9	66.8	3.1	100.0
Fixed-term, 35h+/w	6.9	61.5	6.0	38.5	6.5	100.0
Temporary, p-t	.7	38.3	1.5	61.7	1.0	100.0
Temporary, 35h+/w	2.0	63.9	1.6	36.1	1.8	100.0
Total/EU	100.0	58.1	100.0	41.9	100.0	100.0

In general, the most specific feature of women's status in the European labour market is part-time work. The breakdown shows that women account for the largest number of part-time workers whether under temporary work agency contracts, fixed-term contracts or permanent contracts: 77% of part-time permanent contracts, 67% of part-time fixed-term contracts and 62% of part-time temporary work contracts.

While jobs whose status is precarious are occupied by both men and women, the majority of such jobs are occupied by women when they are part-time and by men when they are full-time. This raises the question of the feminisation of the labour market: is the fundamental reason for this that women are increasingly aggressive and qualified on the labour market, or is there an increased demand for part-time workers, the type of work for which women are less difficult to find?

Reading the column percentages shows that 69% of all men working on the European labour market have a permanent employment status (permanent contracts) in comparison with 72% of women. If this percentage is calculated for the employee population alone, women seem to be disadvantaged with respect to men. 83% of women employees are employed under permanent contracts in comparison with 86% of men. It is especially evident that women are at a disadvantage from the point of view of their employment status since, combined with an unstable employment contract, part-time work seems to be more of a sign of additional precariousness than a personal choice.

Women account for 49.6% of all people with **less than one year of service** in their job. The fact that women are so strongly represented can be linked to the growing feminisation of the labour

⁶ This trend can be divided into three periods:

1) Between 1975 and 1985 the proportion of jobs in industry and agriculture decreased substantially; as jobs in these two sectors were mostly occupied by men, it was men who therefore suffered most from the economic recession.

2) The growth years towards the end of the 1980s led to an increase in men's total employment, but only to a level equivalent to half that for women, whether in industry or in the service sector.

3) Lastly, from 1990 to 1994, the recession affected men more than women. Overall, it has been in the services that the proportion of women has increased most.

See *Employment in Europe*, European Commission, Directorate General for Employment, Industrial Relations and Social Affairs, Luxembourg, 1995.

market (it is assumed that a short length of service goes in most cases with entry into working life). It may be that this higher proportion of women is the result of a higher turnover among women who are more likely to change jobs more often than men. Another explanation is that women return to “working life” after a period during which they do not work.

The disadvantaged position of women employees in the average breakdown is reversed here: 52% of women newly recruited as employees have permanent contracts in comparison with 49% of men. In the case of self-employment, proportionally larger numbers of men set up as sole traders or as small employers than women (13% of men who have been in their job for less than one year are self-employed workers in comparison with 9% of women).

1.2.2 Description by age group

The age group by far the most concerned by precarious employment contracts is that of 15 to 24-year-olds, almost one out of three (30%) of whom are employed under fixed-term contracts or through a temporary work agency.

The difference between men and women as regards part-time work is again evident, young women being more likely to combine precarious contracts and part-time work than young men. This combination of part-time work and unstable contracts decreases, however, as women get older. This is not the case when part-time work is combined with a permanent contract, where the proportion of women concerned increases with age. This comment would tend to show that part-time work associated with a stable contract is more likely to a choice and is more likely to be imposed when it is combined with a non-permanent contract.

The 55 and above age group is particularly representative of self-employed workers: 29% work as sole traders or are employers, while the figure for those aged 35 to 54 is less than 20%.

It is these people aged between 35 and 54 who are in the best position as regards working conditions in Europe, as they have the highest percentages of permanent contracts. These age groups correspond to people born during the baby boom of the post-war period and up to the beginning of the 1960s.

People aged under 35 account for 71.5% of all people who have been in their job for **less than one year**. The 35-44 age group accounts for 18%, and people aged 45 or over account for 10.5% of this group, figures which are not negligible. While, among the population of people occupying their job for less than one year, young people aged under 25 are more affected by forms of precarious employment, it can also be seen that the over-54 age-group is also more affected than the other age groups by precarious employment contracts: 50% of under-25s are employed on the basis of a precarious contract as are 52% of the 55+ age group. Consequently, age appears to play a part in precarious employment status at the time of entry into working life (this may well be precariousness of a temporary type linked to probationary periods), but it also appears to play a part in precariousness for workers (aged over 54) who, on the eve of their retirement, are recruited into a new job. These figures mirror the unemployment figures which are particularly high for

Table 7: Employment status and age

	Detailed status (Row % = 100%)								
	Sole traders part time	Sole traders, 35h+/w	Small employers	Permanent part time	Permanent 35h+/w	Fixed term, part time	Fixed term, 35h+/w	Temporary part time	Temporary 35h+/w
15-24									
men	1.1	3.8	2.9	8.2	52.5	5.6	18.3	2.2	5.4
women	2.8	3.1	1.1	20.6	45.3	8.2	12.7	2.2	4.0
Total	1.9	3.4	2.1	13.9	49.1	6.9	15.7	2.2	4.8
25-34									
men	2.0	9.1	6.1	5.4	65.3	2.0	7.3	0.5	2.2
women	1.8	6.7	3.7	27.2	43.8	5.7	7.5	2.0	1.5
Total	1.9	8.1	5.1	14.8	56.1	3.6	7.4	1.2	1.9
35-44									
men	2.5	10.0	8.2	5.4	65.7	0.9	4.9	0.8	1.6
women	3.3	7.8	4.3	30.5	43.3	3.8	4.6	1.2	1.2
Total	2.9	9.1	6.5	16.1	56.1	2.2	4.8	1.0	1.4
45-54									
men	1.4	11.6	9.4	7.1	64.4	0.8	4.2	0.3	0.9
women	4.0	7.4	4.0	33.2	44.1	2.9	2.9	0.9	0.5
Total	2.4	9.9	7.2	17.5	56.4	1.6	3.7	0.5	0.7
55 & above									
men	5.0	14.0	13.6	6.7	53.6	1.1	4.4	0	1.4
women	6.0	10.4	6.1	9.6	38.8	4.5	1.7	1.2	1.6
Total	5.4	12.7	10.9	15.0	48.3	2.3	3.4	0.5	1.5

1.2.3 Description by age at end of education⁷

Almost one out of four workers in the EU (23%) left education before the age of 16, 29% were 20 or more when they left education, and almost half of European workers (48%) left education between the ages of 16 and 19. Of these three categories, it is this last group which seems to be better protected against precarious employment situations, given that 74% are employed on a permanent contract in comparison with only 69% of people completing their education later and only 64% of people leaving school before 16. The fact that people with an average level of education are in a less precarious position can be explained by the fact that they are less likely to set up as self-employed workers; nevertheless, the percentages for employees alone also mirror this situation: 86% of the middle group have a permanent contract, whereas the figure for the two other groups is 83.6%. This finding shows that level of education does not in itself provide protection against precarious status.

⁷ We take age at the end of education as an indicator of level of education, assuming that on average people attend initial education at a comparable rate (there is no variable on levels of education in the survey).

Table 8: Employment status and length of education

column % “At what age did you leave full-time education?”	Before 16	From 16 to 19	20 and over	EU
Sole traders	16.2	9.1	10.8	11.3
Small employers	7.4	5.2	6.7	6.2
Permanent contracts	63.9	73.8	69.1	70.1
Fixed-term contracts	9.1	9.2	10.5	9.6
Temporary workers	3.3	2.7	2.8	2.9

People who left school before the age of 16 seem, however, to be at a disadvantage as regards entry into working life. Among the group of people in their job for less than one year, they account, proportionally, for the largest number of fixed-term contracts (39% in comparison with 32% of people leaving education after 19 and 26.4% of people leaving education between 16 and 19). There is little difference, however, as regards temporary work. The fact that everyone seems to be more affected by employment contracts of a non-permanent type and that level of education does not entail substantial differences is in keeping with current findings about the problems of entry into the labour market which is nowadays a reality for everyone.

1.2.4 Description by nationality

The foreign population (nationalities other than one of the fifteen EU Member States), who account for 1.3% of all workers in the EU, work largely in sectors or occupations where few qualifications are required (unskilled labourers and workers) and in work of a seasonal type (in hotels and restaurants and construction)⁸. It is not therefore surprising that non-EU nationals are proportionally much more likely to be in forms of employment providing no guarantee of security in the long term: fixed-term contracts and self-employment as a sole trader.

For the foreign population as whole, 16% of employees therefore work under fixed-term contracts in comparison with a figure of less than 10% for all EU workers. Moreover, 15% of foreign workers are self-employed in comparison with 11% of all European workers.

The various types of employment are not distributed comparably in the structure of the European labour market. Some occupational groups are connected more with stable employment status than others and size of enterprise also has to be taken into account. Similarly, people are not affected in the same way by non-permanent or part-time contracts depending on whether they are young or less young, men or women, Irish or Algerians. These structural differences need to be taken into account in our analysis of the extent to which precarious status entails or does not entail precarious working conditions. Observing working conditions in Europe through the filter of employment status, is an attempt to find out, over and above structural differences, what qualitative differences are linked to status.

⁸ 19.5% of the foreign work force are to be found in category 9 of the ISCO code (elementary occupations) in comparison with an average of 10% for all workers; 14% of foreign workers work in the hotels sector in comparison with an average of 3.5%; 14% work in the construction sector in comparison with an average of 8%. See Annex 3: “Structural breakdown of non-EU workers in the EU”.



Chapter Two

Employment status and working conditions

2.1 Analysis of internal flexibility

Labour flexibility has different dimensions: not just the dimension of employment conditions (*external flexibility*) but also the dimension of working conditions (*internal flexibility*). Are workers affected in the same way by atypical working hours, shift work, multi-skilling or other characteristics of internal flexibility irrespective of their employment status, or do both forms of flexibility go together?

The survey provides various indicators of internal flexibility. We have grouped them here into two groups: on the one hand, indicators of quantitative internal flexibility and, on the other hand, indicators relating more to qualitative internal flexibility.

2.1.1 Quantitative internal flexibility

Quantitative internal flexibility revolves around whether or not employers can vary working hours and/or pay. We have examined two interesting notions in this respect: whether or not pay includes a fixed component and working hours.

Type of pay

Among the whole of the population examined for this analysis, 17.5% of people stated that they had no fixed component in their pay. This high proportion is essentially due to self-employed workers, for whom the lack of a fixed component is more understandable. Among this group, employers have the “most” security as regards their pay. Almost one third said that their pay included a fixed component in comparison with less than one quarter of full-time sole traders.

Among the population of employees, only 6% of people have no fixed component in their pay. There are, however, substantial differences for different types of status. While only 5% of employees on permanent contracts do not have a fixed component in their pay, the figure for

employees under precarious contracts (fixed-term or temporary) is 11%. Analysis of *Table 9* shows that, among the latter, temporary workers are in the worst position: 16% of full-time temporary workers and 20%, i.e. one out of five, of temporary workers working less than 35 hours per week have no fixed component in their pay.

Table 9: Employment status and pay (fixed component or not)

row %	“Does your pay include a fixed component?”	
	Yes	No
Sole traders, part-time	74.2%	25.8%
Sole traders, 35+ h/week	76.2%	23.4%
Small employers	68.3%	31.7%
Permanent, part-time	4.5%	95.5%
Permanent, 35+ h/week	5.1%	94.9%
Fixed-term, part-time	10.5%	89.5%
Fixed-term, 35+ h/week	7.4%	92.6%
Temporary, part-time	20.1%	79.9%
Temporary, 35+ h/week	16.0%	84.0%
EU	17.5%	82.5%

Working for a set time, especially when working less than 35 hours per week, is therefore associated with pay that is less secure as it is less often fixed in advance, almost as though the pay itself depended on the temporary nature of the work, the completion of the task or the quality (or quantity) of the work performed between recruitment and the end of the contract¹.

The number of employees whose pay does not include any fixed component is higher in some sectors. 13% of all employees in the primary sector have no fixed component in their pay, this percentage increasing to 20% for the group of employees employed on a precarious basis. While the overall percentage of employees whose pay does not include a fixed component is less than 7% on average in the other economic sectors, the percentages are much higher for the group of employees whose contracts are not permanent within each sector. Close on 13% of employees without permanent contracts in manufacturing industry and mining and quarrying have no fixed component in their pay, in comparison with 6% of people on permanent contracts in the same sector. Similar disparities can be found in the sectors of construction, hotels and restaurants, transport, services (sections M to Q of the NACE code), and in particular in the sectors of business services and real estate and renting (sector K), where 18% of people employed on precarious contracts have no fixed component in their pay in comparison with less than 5% of people employed on permanent contracts. In only two sectors is treatment fairly egalitarian (in terms of whether or not pay includes a fixed component): financial intermediation - which also has the lowest number of people whose pay does not include a fixed component (2%) - and the wholesale and retail trade and repair sector (sector G).

¹ Among the population of employees with no fixed component in their pay, the largest number of employees to be paid by performance are employees on precarious contracts: 55% of full-time temporary workers, 56% of employees on full-time fixed-term contracts and 49% of workers on full-time permanent contracts are paid by performance (the distribution for part-time workers is similar).

In overall terms, payment by performance concerns, on average, 46.6% of employees having no fixed component in their pay, while only 8% of employees with a fixed component in their pay are paid by performance. Among this population, employees on permanent contracts are, in contrast, more affected by performance pay (permanent: 9%; temporary: 8%; fixed-term: 7%).

These differences in the treatment of employees depending on their status is also to be found within all the occupational groups; employees whose contracts are precarious are always at a disadvantage.

We know that there is a substantial difference between men's and women's pay (the "gender pay gap") in all the EU Member States². While the survey does not provide data on the amount of pay, we can examine the extent to which men and women, in the same occupational group and with the same employee status, are advantaged or disadvantaged in terms of pay that does or does not include a fixed component. On average, men are disadvantaged with respect to women, since 6.4% of men do not have a fixed component in their pay in comparison with 5% of women. This disadvantage is particularly clear-cut for employees on precarious contracts. However, two occupational groups stand out because women are in a more precarious position than men. The first is the group of craft trades, where precarious status and precarious treatment are very strongly correlated for women (28.4% of women employed on a precarious basis have no fixed component in their pay, in comparison with 8% of male employees employed on a precarious basis), and the second is the group of professionals where, whatever their employment status, many more women receive precarious treatment (9.5% of women not on permanent contracts and 6% of women on permanent contracts in comparison with 5.4% and less than 2% of men respectively).

Working time

At a time when the Europe of Fifteen is reaffirming its support for the 1993 Directive setting out a maximum working week of 48 hours in Europe³, it is interesting to find out to what extent working hours and employment status are connected. Setting a maximum threshold of weekly working hours reflects the will of the Member States, set out in Article 118A of the Treaty of Rome, to "encourage improvements (...) especially in the working environment, as regards the health and safety of workers". The analyses conducted in this respect from the survey data confirm this link between health and working hours: *it is people who work 45 or more hours per week who suffer the most symptoms of stress, back pain, general fatigue and more generally health problems connected with work:*

Table 10: Working hours and health problems

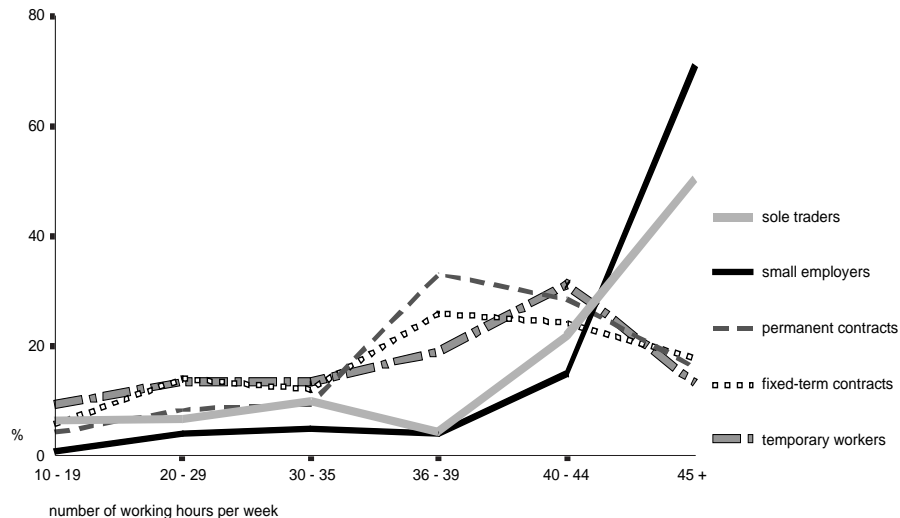
Weekly working hours :	"Work is affecting my health" (yes)	Stress (yes)	Back pain (yes)	General fatigue (yes)
10 to 19	46%	17	21.5	15
20 to 29	48	24	24.5	15
30 to 35	52.5	26.5	28	17
36 to 39	54.5	23	29	16
40 to 44	59.5	27	31	20.5
45+	61.5	37.5	30	27
EU	56	27	29	19

The average working week is, for the whole population of workers in the EU, 39 hours⁴. Self-employed workers work, however, much longer than employees, since the detailed averages are 47 hours per week for the self-employed and less than 38 hours (37.7) for employees.

² See the documents published by the European Foundation for the Improvement of Living and Working Conditions in Dublin, under the title *Equal opportunities and collective bargaining in the EU* (one report per country).

³ The European Court of Justice ordered the United Kingdom to implement the 1993 Directive in its judgment of 12 November 1996 (see *Le Monde*, 14 November 1996).

⁴ See Annex 4 for details of the breakdown of working time in the 15 EU Member States.

Graph 9: Working time and employment status

Among the self-employed, very long working hours are the lot of employers, while a larger number of sole traders work less than 35 hours per week. The largest number of employees, proportionally, working between 36 and 39 hours per week are employees on permanent contracts. In the case of employees whose status is precarious, however, working hours tend to be longer or shorter than the average. Particularly large numbers of temporary workers have very short working hours (less than 19 hours per week).

Full-time temporary workers have even longer working hours, bearing in mind that they have the longest times for travelling between home and work (46 minutes there and back on average in comparison with 41.4 minutes for the other groups of employees).

2.1.2 Qualitative internal flexibility

Qualitative internal flexibility revolves around the possibility of modifying labour organisation and employee allocation. If the consequences of quantitative internal flexibility already place employees whose status is precarious in an even more precarious position, are they also more exposed to the “good or bad” consequences of qualitative internal flexibility?

Night work⁵

In Europe, 21% of European workers - i.e. more than one out of five - work at least one night per month, although half of these do not work more than five nights per month. The different types of workers are not all in the same situation, however, as regards night work.

By far the most people affected by night work are small employers, close on one out of three of whom work at least one night per month (5% working more than 20 nights per month).

Among employees, those least affected by night work are working part-time on permanent or fixed-term contracts. It can be seen, here again, that part-time work, combined with temporary work, is a factor that adds precariousness: part-time temporary workers are those workers who, together with people on full-time fixed-term contracts, are most affected by night work (close on one out of four people in each of these groups).

Table 11: Employment status and night work

row %	Number of nights per month				
	None	1 to 5	6 to 10	11 to 20	> 20
DETAILED STATUS					
Sole traders, part-time	74.9%	15.8%	7.8%	1.5%	
Sole traders, 35+ h/week	73.8%	12.6%	5.7%	4.6%	3.3%
Small employers	67.7%	15.7%	6.9%	4.7%	5.0%
Permanent, part-time	85.5%	5.8%	4.3%	3.7%	0.7%
Permanent, 35+ h/week	79.3%	10.2%	6.6%	2.9%	1.0%
Fixed-term, part-time	85.6%	7.9%	2.7%	3.0%	0.8%
Fixed-term, 35+ h/week	76.0%	10.9%	5.8%	4.8%	2.4%
Temporary, part-time	75.3%	13.0%	7.2%	3.6%	0.9%
Temporary, 35+ h/week	79.5%	7.7%	4.9%	4.3%	3.5%
EU	78.9%	10.2%	6.0%	3.4%	1.5%

By far the most people affected by night work are small employers, close on one out of three of whom work at least one night per month (5% working more than 20 nights per month).

Among employees, those least affected by night work are working part-time on permanent or fixed-term contracts. It can be seen, here again, that part-time work, combined with temporary work, is a factor that adds precariousness: part-time temporary workers are those workers who, together with people on full-time fixed-term contracts, are most affected by night work (close on one out of four people in each of these groups).

From 11 nights onwards, it is interesting to note that, for workers working full-time, the proportion of those on permanent contracts is always smaller than the proportion of those who are not.

It can therefore be said that *employees whose status is stable are not particularly protected against night work (by comparison with employees on precarious contracts) but are protected against very frequent night work.*

Sunday work

Working on Sundays seems to be less atypical than night work, since 30% of workers work at least one Sunday per month in the EU in comparison with 20% in the case of night work.

In the same way as for night work, self-employed people - in particular small employers - work more Sundays than employees. Close on one out of four of them have to work every Sunday.

Part-time temporary workers stand out from other employees because they account for the maximum percentage of people who have to work on Sundays: 40.5% (in comparison with an average of 28% for all employees). It may well be that the 15% who work every Sunday of the month, bearing in mind the smaller working hours of these people, are specifically employed on Sundays rather than other days of the week (and not on Sunday *in addition* to other days). The fact that part-time temporary workers are over-represented in the sales and in the hotels and

restaurants sectors goes a long way towards explaining the greater exposure of part-time temporary workers to atypical working hours.

Table 12: Employment status and Sunday work

row %	Number of Sundays per month				
	None	1	2	3	4-5
DETAILED STATUS					
Sole traders, part-time	60.7%	8.9%	12.4%	6.0%	12.0%
Sole traders, 35+ h/week	51.8%	10.9%	10.4%	3.8%	23.0%
Small employers	47.3%	13.6%	12.6%	3.5%	23.0%
Permanent, part-time	76.3%	6.6%	7.5%	2.3%	7.2%
Permanent, 35+ h/week	74.3%	8.2%	9.8%	2.9%	4.7%
Fixed-term, part-time	77.1%	6.1%	8.0%	2.1%	6.6%
Fixed-term, 35+ h/week	71.7%	8.2%	8.9%	3.3%	7.9%
Temporary, part-time	59.5%	9.2%	14.4%	1.9%	15.0%
Temporary, 35+ h/week	81.8	3.9%	7.4%	2.0%	4.9%
EU	70.5%	8.4%	9.6%	3.0%	8.4%

While the number of people who never work on Sunday is the same for employees on full-time permanent contracts and for full-time temporary workers, it is nevertheless the case that the number of the latter increases proportionally (with respect to the former) with the number of Sundays worked.

Saturday work

Over half of European workers (54.6%) work at least one Saturday per month. While Sunday is still therefore a day of rest for a little over two out of three workers, Saturday cannot be seen as a day of rest, since Saturday work is a reality for over 50% of people in the European labour market.

Table 13: Employment status and Saturday work

row %	Number of Saturdays per month				
	None	1	2	3	4-5
DETAILED STATUS					
Sole traders, part-time	32.7%	14.5%	18.8%	8.1%	25.9%
Sole traders, 35+ h/week	14.5%	6.2%	9.8%	4.6%	65.0%
Small employers	12.4%	10.9%	13.8%	4.2%	58.6%
Permanent, part-time	56.7%	9.6%	10.9%	4.1%	18.7%
Permanent, 35+ h/week	50.3%	12.2%	15.5%	5.6%	16.5%
Fixed-term, part-time	54.8%	6.7%	14.8%	3.6%	20.1%
Fixed-term, 35+ h/week	48.4%	11.6%	14.1%	3.9%	22.0%
Temporary, part-time	46.0%	7.6%	15.0%	4.3%	27.1%
Temporary, 35+ h/week	51.9%	9.5%	16.8%	2.3%	19.4%
EU	45.4%	10.9%	14.2%	5.0%	24.5%

In this case, there is a very clear opposition between employees and self-employed workers, as only a minority of self-employed workers never work on Saturday. For employees, those most affected are, here again, part-time temporary workers, 27% of whom work every Saturday⁶. The same trends as for Sunday work can therefore be seen in larger proportions⁷.

Not all occupational groups and **economic sectors** are affected to the same extent by atypical working hours. The economic sector in which these three types of atypical working hours are most prevalent is that of hotels and restaurants - which explains the substantial exposure of part-time temporary workers to these atypical working hours, bearing in mind that they are over-represented in this sector. In the case of weekend work, the primary sector stands out in particular. In the case of night work, the sector most affected after hotels and restaurants is transport.

Similarly, the **occupational groups** most exposed to these atypical working hours are, for weekend work, the groups of agricultural and skilled primary-sector workers, senior management staff and sales staff (for Saturday work in particular). Skilled workers are the occupational group most affected by night work.

While these structural differences go some way towards explaining the differences observed by employment status, it should be noted, however, that employees under precarious contracts are more exposed to night or weekend work in all the occupational groups, as can be seen from *Table 14*. Clerks, least affected overall by atypical working hours, are one of the most inegalitarian groups in terms of employee status, as workers who do not have permanent contracts are much more affected than the others in all cases. The same is true of sales and skilled workers, where people are much more likely to work atypical working hours if they have a precarious contract of employment. In contrast, employees on permanent contracts in craft trades are more exposed to atypical working hours than employees whose status is precarious. There is a two-way relationship among elementary occupations: larger numbers of employees on stable contracts work at weekends, while more workers whose status is precarious work at night.

Senior officials and managers and professionals on permanent contracts are much less likely to work on Sunday than those who are not.

Shift work⁸

Overall, 15% of employees on the European labour market work shifts (*Table 12*). Temporary workers are by far the most affected: 23% of those working full-time work shifts, while less than 16% of other full-time employees work shifts; 15% of those working part-time work shifts in comparison with 12% of other part-time employees.

⁶ Part-time temporary workers are in an even more precarious position since the proportion who receive financial compensation for atypical working hours is also smaller: 12% receive such compensation in comparison with an average of 17% for all employees. The same remark can be made here as for overtime: it is when atypical working hours go beyond the norm - and therefore appear genuinely atypical - that compensation is paid. When they are part of people's daily practice, no compensation is paid, since compensation is paid only for what is not ordinary.

⁷ Sunday work in most cases also involves Saturday work, as cross-referencing of the two variables shows: 86% of people working every Sunday also work every Saturday (but only 29% of people working every Saturday also work every Sunday). In order to complete this relationship, it can be said that, inversely, not working on Saturday almost always entails not working on Sunday either (96% of people not working on Saturdays do not work on Sunday, but only 61.6% of people not working on Sunday never work on Saturday).

⁸ Shift work: rotating working hours (i.e. alternating morning, afternoon and night shifts).

Table 14: Atypical working hours, occupation and employee status

Atypical working hours:	Night work (at least 1 per month)	Sunday work (at least 1 per month)	Saturday work (at least 1 per month)
Senior officials and managers			
permanent	18.5 %	34 %	48 %
non-permanent	25	30	48
total	19	34	48
Professionals			
permanent	20	32	43
non-permanent	20	25.5	43
total	20	31	43
Intermediate occupations			
permanent	22	30	47
non-permanent	23	34	49
total	22	30	47.5
Clerks			
permanent	5.5	9	30.5
non-permanent	13	15	31.5
total	6.5	10	30.5
Service and sales workers			
permanent	23	32	68.5
non-permanent	24	40	74.5
total	23	33.5	69.5
Skilled agricultural and fishery workers			
permanent	9	25.5	53
non-permanent	7.5	30	62.5
total	8	27	56
Craft and related trades workers			
permanent	18	19	49
non-permanent	14	15.5	38
total	17.5	18.5	47.5
Plant and machine operators and assemblers			
permanent	36.5	31	53
non-permanent	37.5	36	59
total	36.5	31.5	53.5
Elementary occupations			
permanent	17.5	27	53.5
non-permanent	21	21	46
total	18.5	25.5	51.5

Table 15: Shift work and employee status

<i>“Do you work rotating shifts or irregular hours?”</i>			
row %	No shift work or irregular working hours	Irregular working hours (but not shift work)	Shift work
Permanent, part-time	71.1%	16.4%	12.5%
Permanent, 35+ h/week	69.4%	14.8%	15.9%
Fixed-term, part-time	69.1%	18.9%	12.0%
Fixed-term, 35+ h/week	67.7%	16.7%	15.5%
Temporary, part-time	58.2%	26.7%	15.1%
Temporary, 35+ h/week	59.7%	17.1%	23.2%
EU	69.2%	15.6%	15.2%

Temporary workers are also the most affected by irregular working hours, especially those working part-time (27% of whom have irregular working hours in comparison with an average of 15.6%). In more general terms, part-time work goes together with irregular working hours and full-time work with shift work.

There is an **age effect** behind this over-representation of temporary workers in shift work: among full-time temporary workers, shift work is more prevalent among the under-35s (29% in comparison with 14% of temporary workers aged 35 or over). This link between age and shift work is also to be found for all types of employment status. In contrast, temporary workers aged 35 or more have the most irregular working hours: in the case of full-time work, 28% of the over-35s are affected, in comparison with 10.6% of the under-35s and, in the case of part-time work, 34% of the over-35s are affected in comparison with 22% of the under-35s. In the case of people on permanent contracts, the younger age groups are proportionally more likely to work irregular hours and are also more likely to work shifts.

Multi-skilling

Multi-skilling, as measured by the question (Q23e) relating to “*rotation of tasks between yourself and your colleagues*”, may cover two very different situations in terms of working conditions. This task rotation may be within an autonomous team where changing tasks provide job enrichment (for instance, working on a product from the beginning to the end of its production). It may also take the form of a compulsory rotation of different simple tasks that may well make work slightly less repetitive, but does not provide any job enrichment (and may in some cases make work even more stressful as people are obliged to concentrate harder and to work at higher speeds).

In order to deal with this ambiguity, we have cross-referenced the “multi-skilling” variable with two indicators of job enrichment: complex tasks and learning new things through work. It is clearly evident that multi-skilling is in most cases associated with job enrichment.

67% of those for whom task rotation forms part of their work say that this “involves the performance of complex tasks” in comparison with 47% of people for whom task rotation does not form part of their job; 81% of the same group say that “they learn new things through their work”, in comparison with 65% of those for whom multi-skilling is not the case. *Table 16* also shows that multi-skilling goes together with enrichment especially when the employment contract is stable (permanent contracts).

Table 16: Multi-skilling and job enrichment

row %	Complex tasks		Learning new things	
	Yes	No	Yes	No
Task rotation with your colleagues				
Yes				
Permanent contracts	69.3%	30.7%	82.6%	17.4%
Non-permanent contracts	52.8%	47.2%	73.3%	26.7%
EU	66.9%	33.1%	81.3%	18.7%
No				
Permanent contracts	49.6%	50.4%	66.6%	33.4%
Non-permanent contracts	32.5%	67.5%	58.1%	41.9%
EU	46.7%	53.3%	65.1%	34.9%

In total, 59% of EU employees have work which involves task rotation with their colleagues. Overall, multi-skilling concerns employees on permanent contracts more than the other groups, whether they are full-time or not. Temporary workers, particularly those working part-time, account for the smallest number of people with this type of work organisation.

Table 17: Employee status and multi-skilling

row %	“Does your work involve task rotation between yourself and your colleagues?”	
	Yes	No
Permanent, part-time	59.2%	40.8%
Permanent, 35+ h/week	60.3%	39.7%
Fixed-term, part-time	59.0%	41.0%
Fixed-term, 35+ h/week	54.0%	46.0%
Temporary, part-time	51.4%	48.6%
Temporary, 35+ h/week	52.7%	47.3%
EU	59.3%	40.7%

Home-working

Home-working is obviously more prevalent among self-employed workers: over 20% of sole traders work at home almost all the time (34.5% of those who work less than 35 hours a week); 18.6% of small employers work at home almost all the time.

Overall, the proportion of employees working at home remains very low: 3.2% work at home almost all the time, 2.4% work at home between three quarters and half of the time and 6% work at home for approximately one quarter of the time, which would tend to show that forms of home-working for employees (teleworking, craft subcontracting, etc.) have still not been developed to

any great extent in Europe. Among this population, the particular form of flexibility provided by home-working is closely associated with part-time work, whatever the type of contract of employment. 10% of employees on part-time fixed-term contracts work over half their time at home (in comparison with 4.6% of those working full-time); the figure for employees on part-time permanent contracts is 9% (in comparison with 4.2% of people working full-time) and the figure for part-time temporary workers is 7% (in comparison with 1.4% of full-time temporary workers).

In-house training

Only slightly less than one third of all employees working on the European labour market attended at least one day of training organised or paid for by their employer during the twelve months preceding the survey. While the in-house training organised by employers does not seem to discriminate against part-timers, there is a clear-cut link between the type of employment contract and the amount of in-house training attended over the preceding twelve months.

Table 18: Employment status and in-house training

row %	No training	Training
<i>“Over the last 12 months, have you or have you not attended training to improve your skills paid for or provided by your employer?”</i>		
Permanent, part-time	67.3 %	32.7
Permanent, 35+ h/week	64.7	35.3
Fixed-term, part-time	78.6	21.4
Fixed-term, 35+ h/week	78.1	21.9
Temporary, part-time	88	12
Temporary, 35+ h/week	87.8	12.2
EU	67.5	32.5

The training organised by enterprises is largely for permanently recruited personnel. Among employees under non-permanent contracts, those on fixed-term contracts benefit more from in-house training schemes than the other groups. Temporary workers, whose contractual link with the enterprise is through a third enterprise, receive the least in-house training. The fact that they are the main actors in organisational flexibility, but more as extras than genuine actors whose opinion is sought or for whom training is offered, places them in an even more precarious position.

2.2 Analysis of the intensification of work

Work is becoming more intensive⁹ throughout Europe: on the one hand, factors of physical discomfort generated by the organisation of work, the work environment or problems connected with ergonomics continue to be substantial and, on the other hand, the pace of work is increasingly high-speed, entailing psychological pressures on people which are particularly high when these people have only a restricted margin of autonomy over the pace at which they work.

⁹ See M. Gollac, S. Volkoff, “Citius, Altius, Fortius. L’intensification du travail”, *Actes de la Recherche en Sciences Sociales*, September 1996.

2.2.1 Factors of physical discomfort

Organisation of work

Substantial proportions of European workers are exposed to factors of physical discomfort arising directly from the organisation of work: over half (57%) say that they perform repetitive hand or arm movements for at least one quarter of their working time. 45% work in painful or tiring positions; over one third perform “short repetitive tasks lasting less than 10 minutes”; and one third have to handle heavy loads for at least one quarter of their working time.

Table 19: Physical discomfort and employment status

for at least 1/4 of working time:	Painful or tiring positions	Carrying or handling heavy loads	Repetitive arm or hand movements	Short repetitive tasks lasting less than 10 minutes
Sole traders, part-time	42 %	23 %	54 %	28.5 %
Sole traders, 35+ h/w	58.5	44	65.5	38.5
Small employers	53	41	54.5	38.5
Permanent, part-time	38	26.5	56	37.5
Permanent, 35+ h/w	42.5	30.5	55	35.5
Fixed-term, part-time	49	35	62	39.5
Fixed-term, 35+ h/w	53	46	65	44
Temporary, part-time	53.5	38	56.5	38
Temporary, 35+ h/w	59	47	71	49
EU	45	33	57	37

Employees employed on a precarious basis are the most exposed to these factors of physical discomfort, temporary workers being by far the largest group of workers in the EU exposed to very difficult working conditions. Over 70% of temporary workers carry out repetitive hand or arm movements in comparison with 65% of fixed-term contract employees and just 55% of permanent contract employees. While part-time employees seem¹⁰ less affected by these factors of physical discomfort, there is still a difference between employees on permanent contracts and employees on precarious contracts.

Among self-employed workers, numbers that are proportionally higher than the average experience these poor working conditions. Among this group, sole traders suffer the highest levels of physical discomfort.

Overall, people aged **under 35** are more likely to perform repetitive work, our analysis showing that this applies to all types of employment status. In contrast, in the case of temporary workers and employees on fixed-term contracts, those **aged 35 or more** are more likely to experience painful or tiring positions (little age difference for the other groups). Handling heavy loads is more the lot of older temporary workers and self-employed sole traders. The younger age groups suffer more, however, among the other types of status.

Cross-referencing with **occupation**, for employees alone, points to a direct link between precarious status and poor working conditions, since this is to be found within each of the

¹⁰ “Seem”, as we do not know if this is a qualitative or just a quantitative difference in working conditions (same intensity of physical discomfort, but less focused as it is experienced for only half the time).

occupational groups. The occupational groups most affected by physically hard working conditions are agricultural workers, craft workers, skilled workers and unskilled workers and labourers.

Table 20: Physical discomfort, occupations and employee status

for at least 1/4 of working time	Painful or tiring positions	Carrying or handling heavy loads	Repetitive arm or hand movements	Short repetitive tasks lasting less than 10 minutes
Senior officials and managers				
permanent	23 %	13.5%	39%	30 %
non-permanent	36	27.5	56	35
total	23.5	14	40	30
Professionals				
permanent	29.5	12.5	35	21
non-permanent	35.5	15	36	23
total	30.5	13	35	21.5
Intermediate occupations				
permanent	32.5	17	37	25
non-permanent	38.5	26	39.5	31
total	33	18	37	26
Clerks				
permanent	29	10.5	56	36
non-permanent	35	14.5	55.5	33.5
total	30	11	56	35.5
Service and sales workers				
permanent	42	32.5	54	37
non-permanent	51	44.5	53	39
total	43	34.5	54	37
Skilled agricultural and fishery workers				
permanent	71	62	72.5	48
non-permanent	64	56.5	79	51
total	68.5	60	75	49
Craft workers and related trades workers				
permanent	59.5	56	69.5	45
non-permanent	64	60	82	57
total	60	56.5	71.5	47
Plant and machine operators and assemblers				
permanent	54.5	46.5	74	46
non-permanent	69.5	59.5	84.5	42
total	56.5	48	75	45
Elementary occupations				
permanent	55	48	74.5	48
non-permanent	64	59.5	85.5	62.5
total	57.5	51	77.5	51.5

Working environment

While the averages here are less substantial than for factors of physical discomfort resulting from the organisation of work, they are not negligible: 28% of EU workers say that for at least one quarter of their working time they have to bear “such loud noise [that they have to] raise their voice to speak to people”; 24% have to withstand low temperatures and the same proportion have to “breathe in vapour, smoke, dust or other hazardous substances” or are subject to “vibrations caused by machinery”.

Table 21: Risks connected with the working environment and employment status

for at least 1/4 of working time:	Vibrations	Loud noise	Very low temperatures	Very high temperatures
Sole traders, part-time	15%	11.5%	19%	14%
Sole traders, 35+ h/w	29	24	26.5	20
Small employers	28	28	25	21
Permanent, part-time	13.5	22	17.5	16
Permanent, 35+ h/w	25	30	24	20
Fixed-term, part-time	13	18	22	11
Fixed-term, 35+ h/w	31	36	32	27
Temporary, part-time	15.5	31	22	20
Temporary, 35+ h/w	36	41	33.5	27
EU	24	28	24	20
for at least 1/4 of working time:	Wear personal protective equipment	Toxic vapours	Hazardous products	Radiation
Sole traders, part-time	12%	12%	9%	1.5%
Sole traders, 35+ h/w	16.5	28	15	2
Small employers	24	24	16	7
Permanent, part-time	18	13	9	4
Permanent, 35+ h/w	28	25	16	6
Fixed-term, part-time	24	18	15	3.5
Fixed-term, 35+ h/w	31.5	34.5	19.5	9
Temporary, part-time	18	15.5	8	4.5
Temporary, 35+ h/w	31	39.5	24	8
EU	25	24	15	5.5

People employed under precarious contracts, in particular temporary workers, are always more affected by these problems than other EU workers. 41% of full-time temporary workers and 36% of people on full-time fixed-term contracts suffer from noise at work in comparison with 30% of people on full-time permanent contracts. Similarly, while “only” 15% of all EU workers say that “they are in contact with or have to handle hazardous substances or materials”, the figure for full-time temporary workers is 24%. While less than 6% of the population questioned are exposed to radiation, the figure for employees on full-time fixed-term contracts is over 9%. Among part-timers, the most disadvantaged are those on fixed-term contracts.

In addition to these factors of discomfort arising from the working environment, it can be seen that in overall terms workers have a very small margin of **autonomy** over changes to certain parameters of the working environment.

Table 22: Personal control over comfort factors

“Can you personally change:” (reply : NO)	Temperature	Lighting	Ventilation	The position of your office, work place or workstation
Permanent, part-time	61.5%	52%	58%	69%
Permanent, 35+ h/w	59	53	58	66
Fixed-term, part-time	64	55	64	74
Fixed-term, 35+ h/w	64	59	66	77.5
Temporary, part-time	70	58	74	81
Temporary, 35+ h/w	65	69	76.5	77.5
EU	60	54	59.5	68

“Can you personally change:” (reply : NO)	The position of your seat	The instrument(s) that you use
Permanent, part-time	52%	64%
Permanent, 35+ h/w	50.5	57
Fixed-term, part-time	61	69
Fixed-term, 35+ h/w	62.5	63
Temporary, part-time	63	65
Temporary, 35+ h/w	65.5	67
EU	52.5	59.5

While it is understandable that it is impossible to move one’s work station (68%), change the equipment used for work (59.6%) or even the temperature of the workplace (60%), it is surprising to see that 52.6% of employees cannot even move their seat, 54% can do nothing about their lighting and close on 60% can do nothing about the ventilation of their workplace, all of which seem to be working conditions that could be more readily changed than the former. In each case, employees on permanent contracts have more personal control than those employed under precarious contracts. Large numbers of the latter, in proportional terms, have their working environment imposed on them and 60% cannot even change the position of their seat. Part-time temporary workers often have the least control. Over 76% of such workers cannot do anything about the ventilation of their workplace in comparison with “only” 58% of employees on permanent contracts.

We shall now look at the link between levels of personal control and levels of constraint for different aspects of employment in Europe.

2.2.2 Employees under pressure¹¹

According to the theoretical model that we have chosen, the “job demand-job control model”¹², high pressure situations (stress) are generated when the degree of pressure at work is very high and the degree of autonomy is very low.

Pace of work

Pressures connected with the pace of work are very high: 55% of all EU employees say that they work at “high speeds” and 58% have to meet very tight and very short deadlines for at least a quarter of their working time. This feature of work is on the increase, as the percentages found by the previous survey (1991), for the European Community of twelve, were lower: 47% for high speed work and 49% for very short deadlines.

Employees on full-time permanent contracts and, to a smaller extent, employees on fixed-term contracts, are most affected by very high speed work. 62.5% and 55.5% respectively (of those working full-time) say that they work to “very tight and very short deadlines” in comparison with “only” 48% of full-time temporary workers.

Table 23: Working under pressure

“Does your work entail :” (for at least 1/4 of working time)	Very tight and very short deadlines	High speed work
Permanent, part-time	47%	46.5%
Permanent, 35+ h/w	62.5	56.5
Fixed-term, part-time	48	47.5
Fixed-term, 35+ h/w	55.5	63
Temporary, part-time	39	45.5
Temporary, 35+ h/w	48	57
EU	58	55

Employees who have to meet very tight deadlines seem to work more under the pressure of demand than others. Almost two thirds (64.5%) of people on permanent contracts and 61% of people on fixed-term contracts have to match the pace at which they work to the direct demand from clients (passengers, pupils, patients, etc.) in comparison with 49% of temporary workers.

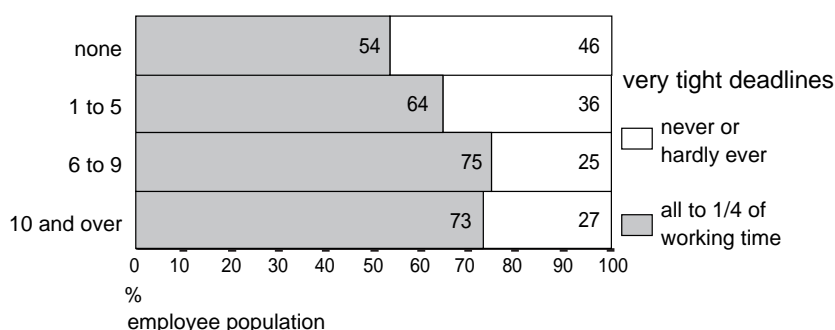
Part-time work goes together with this type of **commercial pressure**, whatever the contract of employment. The major role that direct pressure from clients plays in the pace of work (an average of 65% of employees are in such a situation) shows the importance of the product-client link around which production and personnel management are organised within enterprises.

¹¹ An average of 52% of self-employed workers have to meet very tight and very short deadlines. We shall not include them in the analysis, bearing in mind that the theoretical model used to measure the pressures suffered by workers takes account of the level of personal control over work. A self-employed worker is by definition free to organise his or her own work.

¹² Model defined by Karasek & Theorell, *Healthy work: stress, productivity, and the reconstruction of working life*. New York, Basic Books, 1990, cited and used by S. Dhondt *et al.*, *Monitoring occupational health and safety in Europe: Time constraints and autonomy. Description and implications*. Netherlands Organization for Applied Scientific Research, TNO, 1995.



Graph 10: Hierarchical position and pressures on pace of work



In addition to the direct demand from clients, there is a very clear-cut link between level of hierarchical responsibility and deadline pressures. The more employees people manage, the greater the time pressures that they experience (although the figures are slightly lower at the highest management levels). Employees on permanent contracts, followed by those on fixed-term contracts, are most likely to supervise other people’s work (32% and 23.4% respectively of these two groups supervise at least one person in comparison with 11.4% of temporary workers). These figures are for full-time work, bearing in mind that few part-time workers are in supervisory positions, especially if their contract of employment is precarious (8% of part-time temporary workers, 8.5% of employees on fixed-term contracts and 18.5% of people on part-time permanent contracts supervise at least one person).

Table 24: Pressures on the pace of work

“Does your pace of work depend on :” (YES)	Direct demand from clients, passengers, pupils, etc.	Work performed by other colleagues	The automatic speed of a machine or the movement of a product	The direct supervision of your boss	Production standards
Permanent, part-time	70.5%	36.5%	17.5%	32%	26%
Permanent, 35+ h/w	64.5	41.5	24	39	40.5
Fixed-term, part-time	64	32	13.5	46	21
Fixed-term, 35+ h/w	61	49	28	54	43
Temporary, part-time	64	38.5	26	43	25
Temporary, 35+ h/w	49	53	34.5	63	45
EU	65	41	23	40	37

The organisation of the production process exerts greater pressures on the pace of work of employees on precarious contracts. Among these, temporary workers suffer most from these industrial constraints: 34.6% (of those working full-time) have to adapt the pace at which they work to the automatic speed of a machine (in comparison with a European average of 23%) and 53% have to work at the same pace as their colleagues (in comparison with a European average of 41%). Although to a smaller extent, part-time temporary workers and employees on full-time fixed-term contracts also experience a higher than average level of these typical assembly line constraints.

Employees whose employment status is precarious are also more affected by traditional constraints on their pace of work, such as direct supervision by their boss of the work that they 37

perform or compliance with production standards. 63% of full-time temporary workers are under the direct supervision of their boss in comparison with 54% of employees on full-time fixed-term contracts and 39% of employees on full-time permanent contracts. In comparison with the new forms of management that place the emphasis on “participation” and client satisfaction, these methods of supervising work may appear somewhat outdated nowadays but they should not, however, be disregarded since, on average, the pace of work of 40% of EU employees depends on the direct supervision of their boss and 37% have to comply with production standards that have an impact on their pace of work.

The pace of work exerts pressures on workers especially if they are personally unable to change it. A substantial proportion of employees are unable personally to manage their working time whether during the actual working day or during the working year from the point of view of deciding when to take leave.

Table 25: Control over working time

(Employees in their jobs for **at least 1 year**)

“Can you: “(NO)	choose or change the pace at which you work	take a break when you want to	decide when to take holidays or days of leave
Permanent, part-time	28%	50.5%	47%
Permanent, 35+ h/w	31.5	39	46
Fixed-term, part-time	35.5	48.5	56
Fixed-term, 35+ h/w	37.5	48	57
Temporary, part-time	35	41.5	53
Temporary, 35+ h/w	44	49	57
EU	31.5	42	48

Over 31% of European employees in their jobs for **at least one year** cannot therefore change the pace or speed at which they work, 42% cannot take a break when they want to and 47.5% are not free to choose their days of leave or holidays.

People who experience the greatest industrial constraints linked to the organisation of work (assembly lines, etc.) - in particular temporary workers and employees on fixed-term contracts - have the least personal control over their pace of work. Over 45% of full-time employees whose status is precarious (fixed-term or temporary) are not free to decide when to take a break from their work and 44% of full-time temporary workers cannot change the pace at which they work.

The freedom to decide when to take holidays goes together with stability in the enterprise or organisation. It is only among employees on permanent contracts that the number of people free to choose when to take their holidays is above 50%.

Organisation of production, product quality

In addition to constraints on the pace of work, large numbers of European employees are also subject to constraints linked to quality requirements. Close on 78% have to provide an “evaluation of the quality of their own work”, and 72.5% say that they have to “comply with specific quality standards”. While slightly larger numbers of employees on permanent contracts are subject to these constraints, the difference in terms of employment status is, however, only slight. If the

occupational group is also taken into account, it can be seen that, among employees on permanent contracts, blue-collar workers (categories 7, 8 and 9 of the ISCO code) and agricultural workers (ISCO code 6) are undoubtedly more concerned by these quality constraints, but that, in contrast, among employees under precarious contracts, the intermediate occupations (ISCO categories 3, 4 and 5) and professionals and senior managers (categories 1 and 2 of the ISCO code) are most affected by this type of constraint.

Table 26: Quality control and employment status

Col %	Permanent part-time	Permanent 35+ h/w	Fixed-term part-time	Fixed-term 35+ h/w	Temporary part-time	Temporary 35+ h/w	EU
Compliance with specific quality standards							
Yes	69.0%	74.2%	60.6%	73.2%	66.9%	72.6%	72.5%
No	31.0%	25.8%	39.4%	26.8%	33.1%	27.4%	27.5%
Evaluating the quality of your own work							
Yes	75.6%	79.4%	68.2%	75.3%	69.7%	72.8%	77.7%
No	24.4%	20.6%	31.8%	24.7%	30.3%	27.2%	22.3%

Employees working part-time, whatever the form of their employment contract, are less affected by these quality controls than those working more than 34 hours per week.

Just as many employees often have no personal control over the pace at which they work, they are also unable to change their working methods, solve any problems encountered or even change the order in which they perform tasks. How can quality requirements be met when people are unable or are not free to act on the way in which work is performed? This tension between a high level of supervision of work and limited autonomy in performing this work is another source of pressure for people.

Table 27: Autonomy at work for employees in their jobs for at least one year

Col %	Permanent part-time	Permanent 35+ h/w	Fixed-term part-time	Fixed-term 35+ h/w	Temporary part-time	Temporary 35+ h/w	EU
Order of tasks							
Yes	63.8%	61.6%	57.1%	54.9%	55.0%	48.7%	61.2%
No	36.2%	38.4%	42.9%	45.1%	45.0%	51.3%	38.8%
Working methods							
Yes	74.2%	68.2%	62.0%	57.7%	64.7%	61.5%	68.4%
No	25.8%	31.8%	38.0%	42.3%	35.3%	38.5%	31.6%
Make decisions, possibly with colleagues, about problems in your department such as task distribution, personnel replacement, production objectives, etc.							
Yes	45.7%	48.3%	34.4%	39.8%	54.2%	28.0%	46.7%
No	54.3%	51.7%	65.6%	60.2%	45.8%	72.0%	53.3%
Resolve unforeseen problems yourself							
Yes	81.0%	83.5%	69.1%	73.2%	86.9%	70.6%	81.8%
No	19.0%	16.5%	30.9%	26.8%	13.1%	29.4%	18.2%

39% of European employees in their jobs for at least one year are not free to change the order in which they perform their tasks. This lack of freedom is greater for employees on precarious contracts: over 51% of temporary workers and over 45% of employees employed on fixed-term contracts are not free to change the order in which they perform their tasks. These two groups of employees are more concentrated in the manual occupations which explains why there is more of a correlation.

Similarly, employees whose employment status is precarious have a less than average chance of changing their working methods: 42% of employees on full-time fixed-term contracts and 38.5% of full-time temporary workers cannot change their working methods in comparison with an average of 31.6% of all employees who have been in their jobs for at least one year.

While 82% of employees say that they can “resolve unforeseen problems themselves”, this freedom is especially true of employees who have the most freedom to change their working methods or the order in which they perform their tasks: those on permanent contracts. A much lower percentage of employees are free to take action on a larger scale than their own work. Only 46.7% of European employees in their jobs for at least one year can “make decisions, possibly with colleagues, about problems such as task distribution, personnel replacement, production objectives, etc.”. This freedom to make decisions that go beyond the scope of one’s own work is again most prevalent among employees whose employment status is stable.

We can link **constraints and autonomy** using the “job demand-job control” method put forward by Karasek and used by S. Dhondt for the situation in Europe. According to this model, the combination of a high level of constraint and a low level of autonomy generates substantial pressures on people. If the occupational group is taken into account, it can be seen that, for each occupational group, people¹³ who are not on permanent contracts suffer fewer constraints linked to very tight deadlines but have less autonomy in choosing their working methods than people employed on permanent contracts. This therefore reflects the typology put forward by S. Dhondt¹⁴. It is interesting to examine the differences existing within the occupational groups between, on the one hand, employees on permanent contracts and, on the other hand, those whose employment status is precarious.

Consequently, while senior officials and managers on stable employment contracts occupy “active” jobs (high levels of constraint and autonomy), those whose status is not permanent have “passive” jobs (low levels of constraint and autonomy).

In the case of professionals, intermediate occupations and clerks, there is little difference by employment status: whether or not they have permanent jobs, people in these groups suffer few pressures (few constraints and a great deal of autonomy), although employees on precarious contracts have levels of constraint and autonomy which are slightly lower than those observed for employees on stable contracts in each group.

Sales workers employed on permanent contracts are more likely to be in low pressure situations, while those on precarious contracts are more likely to be in passive jobs (low levels of constraint and autonomy).

¹³ We shall look here only at people aged between 35 and 44 in order to avoid age effects.

¹⁴ While our objective was not to verify this typology, our analysis does tend to verify the relevance of the two indicators used.

Agricultural and other primary sector workers face substantial pressures when they have permanent contracts (high levels of constraint and low levels of autonomy). In contrast, employees on precarious contracts in this group suffer fewer time constraints and have more autonomy: they therefore occupy more “low-pressure” jobs.

Table 28: Occupations, employee status and pressurised jobs

	Very strict and very short deadlines (for at least 1/4 of working time)	Possibility of choosing or modifying your working methods (YES)
Senior officials and managers		
permanent	79%	89%
non-permanent	43	57.5
total	77.5	88
Professionals		
permanent	55	86
non-permanent	47	71.5
total	54	84
Intermediate occupations		
permanent	52	80.5
non-permanent	47	75.5
total	52	80
Clerks		
permanent	56	74.5
non-permanent	57	75
total	56.5	74.5
Service and sale workers		
permanent	53	72
non-permanent	32	63
total	50	71
Skilled agricultural and fishery workers		
permanent	61	69.5
non-permanent	49	85
total	59	72
Craft and related trades workers		
permanent	70	61
non-permanent	61	47
total	69	60
Plant and machine operators and assemblers		
permanent	66	49.5
non-permanent	50	55
total	64.5	50
Elementary occupations		
permanent	45.5	57
non-permanent	33.5	47.5
total	42.5	54.5

Craft workers are subject to substantial pressures, especially if employed on a precarious basis.

Skilled workers on permanent contracts face substantial pressures in view of their high levels of constraint and very low levels of autonomy; those whose status is precarious have, in contrast, more passive job conditions.

Lastly, manual workers and unskilled workers have passive jobs, especially when they are employed under fixed-term contracts or by a temporary work agency. Unskilled workers aged under 25 are, however, subject to more pressures when they do not have a permanent contract. In comparison with young manual workers on permanent contracts, larger numbers of young manual workers on precarious contracts have to meet tight deadlines and smaller numbers can change their working methods.

In overall terms, therefore, people on permanent contracts best reflect the occupational typology drawn up by S. Dhondt. The main finding, however, is that the trend towards making workers responsible, right down to the bottom of the hierarchy, for economic imperatives (in this case very tight deadlines) is helping to move some groups of people (the youngest and the least skilled) from the passive jobs group (traditional situation of workers employed in large industry) towards the pressurised jobs group (new situation in which workers are more responsible for production objectives, but are no longer free to change their own situation).

2.3 Analysis of quality of life at work

Work is not limited to the production of the goods or service, but is also a social activity. We have examined characteristics of work connected with this dimension of work: sociability, the job enrichment that people experience and lastly the impact that work may have on people's health and safety. If we look at these three dimensions we also raise the question of the meaning of work. Are we reaching a point at which work entails little interest or human contact, but poses an increasing threat to people's health (or lives)?

2.3.1 Sociability

The indicators of sociability available from the survey show the extent of involvement of employees in their workplace, measured by conversations or discussions with superiors, colleagues or personnel representatives.

Overall, only one out of two employees had been "consulted about changes in work organisation or working conditions" **during the twelve months preceding the survey**. Employee involvement tends to be at a less formal level: 75% of European workers had therefore discussed their work with their colleagues and 66% had discussed their work with their superior during the twelve months preceding the survey. In contrast, only one quarter of European employees had discussed their work with personnel representatives during this twelve-month period (this low percentage may be due to the fact that the legislation in force in individual countries or industrial sectors may not make provision for personnel representatives so that they may not be very widespread).

Table 29: Involvement/discussions and employee status

“During the last 12 months, have you :” (YES)	Had a frank discussion with your superior concerning your personal work	Been consulted about changes in work organisation and/or your working conditions	Discussed problems relating to work with your superior	Discussed problems relating to work with your colleagues	Discussed problems relating to work with personnel representatives
Permanent, p-t	44%	52.5%	67%	75.5%	23%
Permanent, 35+ h/w	48.5	53	68	77	27
Fixed-term, p-t	41.5	43	60	67	20
Fixed-term, 35+ h/w	45.5	39	57	65.5	17
Temporary, p-t	38.5	34	47	62	11
Temporary, 35+ h/w	39	33	45.5	60	13.5
EU	47	51	66	75	25

People on stable employment contracts were more involved in their relationships at work, whether in the form of discussions about work with their colleagues, with their superior or with personnel representatives or consultations about changes planned or taking place in their work.

2.3.2 Discrimination, intimidation

Are people whose employment status is precarious more vulnerable because the threat of losing their job makes them less able to avoid discrimination or intimidation at the workplace?

In the case of physical violence or intimidation at the workplace, the percentages obtained would tend to bear this out. 10.5% of temporary workers said that they had been subject to “**intimidation**” over the twelve months preceding the survey in comparison with 9.7% of employees on fixed-term contracts and “only” 8.7% of employees on permanent contracts (overall average for employees = 9%). The difference was less pronounced for physical violence (slightly over 4% for those on precarious contracts and just under 4% for those on permanent contracts).

Looking solely at the population of women employees¹⁵, a comparison of exposure to “**sexual discrimination**” or “unwanted sexual attentions” at the workplace shows, here again, that precarious status goes with greater vulnerability: 6.8% of female temporary workers had been subject to sexual discrimination over the preceding twelve months in comparison with just under 5% of permanent female employees. While the smallest number of women in this situation were on fixed-term contracts (2.3%), these women suffered a higher than average level of unwanted sexual attentions at their workplace.

Lastly, we cross-referenced employment status with **discrimination linked to age**. Among employees aged under 35, those on precarious contracts (fixed-term and temporary workers) were most exposed to discrimination linked to age (5.4% and 5.8% respectively, in comparison with less than 3% for employees on permanent contracts).

¹⁵ Only 0.6% of male employees had suffered sexual harassment over the preceding twelve months. We shall therefore look only at the female population here.

Among the population of employees aged 55 or over, this two-tier discrimination - by status and by age - is very clear-cut: 21.4% of temporary workers aged over 54 had been subject to discrimination linked to age during the twelve months preceding the survey in comparison with 10% of employees on fixed-term contracts and only 4.6% of employees on permanent contracts.

2.3.3 Job enrichment

As might be expected, those workers who are most exposed to physical discomfort in their work are also those who find the content of their work least satisfying.

Table 30: Job enrichment and employment status

“In general, does your work involve:” (reply: YES)	Monotonous tasks	Complex tasks	Learning new things
Sole traders, part-time	30%	50%	75%
Sole traders, 35+ h/w	45	60	75
Small employers	37	62	84.5
Permanent, part-time	35	53	74
Permanent, 35+ h/w	46	64	77
Fixed-term, part-time	48	40	71
Fixed-term, 35+ h/w	51	48.5	68
Temporary, part-time	57	33	59
Temporary, 35+ h/w	60	41.5	60
EU	45.5	59	75.5

Over 60% of full-time temporary workers find their work monotonous in comparison with 57% of part-timers and 51% of employees on full-time fixed-term contracts, whereas the average for European workers is 45.6%. The other column percentages mirror this finding: employees whose employment status is precarious account for the smallest number of people who consider that they learn new things from their work or who have to perform complex tasks. While part-time employees, whatever the type of employment contract, account for the smallest number of people, in proportional terms, who feel that their work is either monotonous or complex, the same proportion of part-timers as full-timers consider that they gain job enrichment from learning new things.

Self-employed status goes together with substantial job enrichment, in particular for small employers, over 84% of whom consider that they learn new things from their work, as do 75% of sole traders.

Over-qualification

Feeling over-qualified for work is another way of saying that the content of the work performed provides no genuine enrichment. Over 18% of EU employees consider that the demands made upon them by their jobs are out of kilter with their abilities. People who feel over-qualified (10.4% consider that their jobs are not demanding enough) outnumber those who feel under-qualified (7.2% consider that their jobs are too demanding).

Table 31: Under/over qualification and employment status

row %	<i>“Do you feel that your abilities are generally in keeping with the demands that your job makes upon you?”</i>		
	Too demanding	In keeping with my abilities	Not demanding enough
Permanent, part-time	6.8%	82.1%	11.1%
Permanent, 35+ h/week	7.2%	82.8%	10.0%
Fixed-term, part-time	7.9%	80.1%	12.1%
Fixed-term, 35+ h/week	8.8%	76.9%	14.3%
Temporary, part-time	7.6%	68.0%	24.4%
Temporary, 35+ h/week	13.4%	70.7%	15.9%
EU	7.4%	81.7%	10.9%

The largest number of people who feel that there is a mismatch between their vocational skills and the content of the work that they are required to perform are employees on precarious contracts and in particular temporary workers. Almost one part-time temporary worker out of four (24.4%) therefore feels over-qualified in comparison with 16% of full-time temporary workers, 14.3% of employees on full-time fixed-term contracts and only 10% of employees on full-time permanent contracts. The mismatch between tasks and qualifications is greatest for temporary workers. 29% of full-time and 32% of part-time temporary workers feel that their qualifications are not in keeping with the content of their work.

Among temporary workers there is a major **age** difference. More of the under-35s feel over-qualified: 28.4% of part-timers feel over-qualified in comparison with 18.5% of the older age group; similarly, 20% of the under-35s working full-time feel over-qualified in comparison with only 9% of the older age group. More full-time temporary workers aged over 35 feel under-qualified for their job (19%) than their younger colleagues (10% of the under-35s feel that they are not qualified enough).

Use of computers

Almost 40% of EU workers have to work on a computer for at least one quarter of their working time. While we have no information on the type of work carried out using computers (which may range from routine work such as typing to design or research work), it can, however, be assumed that information technology does not really represent a factor of physical discomfort. People who make the greatest use of computers are also those who are least subject to poor working conditions. Consequently, only 54.6% of full-time employees on permanent contracts never or hardly ever use computers in their work in comparison with 78% of full-time temporary workers and 79% of self-employed sole traders working over 35 hours per week. Employees on stable contracts also use computers for the longest periods: 21.6% of employees on full-time permanent contracts use a computer almost all the time or all the time in comparison with 13.5% of people on full-time fixed-term contracts and just under 11% of full-time temporary workers.

In the case of self-employed workers, there is a clear-cut difference between small employers, for whom the computer is starting to become a very widespread resource, and (full-time) sole traders, smaller numbers of whom use computers in their job.

2.3.4 Health and safety

Health and work are very closely connected since a total of 57% of European workers consider that their health or safety is “affected” by their work, this percentage reaching 60% among full-time workers who have been in their jobs for at least one year¹⁶.

Table 32: Health and employment status (full-time and length of service of more than one year)

	Sole traders 35+ h/w	Small employers	Permanent 35+ h/w	Fixed-term 35+ h/w	Temporary 35+ h/w	EU
Work is affecting my health						
Yes	62.2%	62.5%	59.4%	56.9%	62.4%	59.8%
No	37.8%	37.5%	40.6%	42.1%	37.6%	40.2%
Back problems						
Yes	62.1%	66.7%	69.7%	65.2%	63.2%	68.2%
No	37.9%	33.3%	30.3%	34.8%	36.8%	31.8%
Muscular pain in the arms or legs						
Yes	75.0%	82.7%	84.4%	77.7%	72.3%	82.5%
No	25.0%	17.3%	15.6%	22.3%	27.7%	17.5%
Headaches						
Yes	87.3%	86.9%	86.4%	86.3%	85.0%	86.5%
No	12.7%	13.1%	13.6%	13.7%	15.0%	13.5%
Eye problems						
Yes	91.5%	93.7%	88.6%	89.3%	87.8%	89.4%
No	8.5%	6.3%	11.4%	10.7%	12.2%	10.6%
Ear problems						
Yes	94.1%	95.9%	92.2%	89.9%	96.1%	92.6%
No	5.9%	4.1%	7.8%	10.1%	3.9%	7.4%
Stress						
Yes	67.3%	63.5%	71.0%	73.3%	73.5%	70.2%
No	32.7%	36.5%	29.0%	26.7%	26.5%	29.8%
General fatigue						
Yes	73.6%	74.3%	80.3%	70.1%	76.2%	78.4%
No	26.4%	25.7%	19.7%	29.9%	23.8%	21.6%
Irritability						
Yes	91.2%	84.2%	88.0%	85.9%	88.4%	88.0%
No	8.8%	15.8%	12.0%	14.1%	11.6%	12.0%
Anxiety						
Yes	87.4%	89.4%	93.2%	94.6%	90.9%	92.3%
No	12.6%	10.6%	6.8%	5.4%	9.1%	7.7%
Insomnia						
Yes	92.4%	89.3%	92.4%	94.3%	96.1%	92.3%
No	7.6%	10.7%	7.6%	5.7%	3.9%	7.7%

¹⁶ In order to facilitate comparisons between the different types of employment status, we have included only people working full-time who have been in their job for at least one year in this analysis.



The five main problems from which EU workers suffer are:

1. Back problems: 32%
2. Stress: 30%
3. General fatigue: 21.6%
4. Muscular pain in the arms or legs: 17.5%
5. Headaches: 13.5%.

The health problems generated by work therefore involve both physical and mental health. Depending on their status, European workers do not all suffer in the same way from the same problems. The largest numbers who consider that their work is affecting their health are self-employed workers and temporary workers (over 62% of these groups). While work seems to have the least effect on the health of employees on fixed-term contracts, it is nevertheless interesting to move away from the overall response and look at the percentages for the different health problems selected for the survey (we have analysed the ten most significant variables).

Two groups stand out among the 60% of people whose health is affected by their work: those whose health problems are predominantly physical and those whose work causes suffering at a more psychological level.

Problems connected more with physical health affect employees on precarious contracts in particular - temporary workers being the most affected - and, in the case of self-employed workers, sole traders. While 30% of employees on permanent contracts therefore suffer back pain as a result of their work, the figures for fixed-term contract and temporary workers are 35% and 37% respectively. Among self-employed workers, 33% of small employers suffer from back pain in comparison with 38% of self-employed sole traders. The same relationship with employment status can be seen for musculo-skeletal disorders, which are the second cause of physical pain resulting from work, coming just after back pain and before headaches (which may also be connected with mental health). Temporary workers are clearly more exposed to headaches than all the other groups. The percentage for eye problems is also higher among temporary workers.

Problems having more to do with mental health (stress, general fatigue, insomnia, etc.) are more prevalent among self-employed workers than among employees as a whole, small employers being the most exposed to all the problems of stress (36.5%), irritability (16%) and insomnia (11%). Among employees, those on permanent contracts suffer more stress and insomnia. In contrast, a larger proportion of employees on fixed-term contracts suffer from general fatigue and irritability; temporary workers account for the highest percentage of anxiety.

It can be assumed that levels of responsibility and mental health are connected and that physical health problems are due more to the hard working conditions involved in manual work than to levels of responsibility. Cross-referencing with occupation (see *Table 33*) bears out this assumption.

Manual workers - in particular skilled workers - have by far the highest levels of back problems, followed by agricultural and craft workers. In contrast, stress is more prevalent among professionals (42%) and senior officials and managers (38%). The link between level of qualification and stress is, however, less clear-cut than for back problems, since the groups most

Table 33: Back problems and stress by occupation and status

row %	(full-time; length of service > 1 year)			
	Back problems		Stress	
	No	Yes	No	Yes
Senior officials and managers				
Permanent	83.1%	16.9%	62.3%	37.7%
Non-permanent	81.1%	18.9%	63.8%	36.2%
Total	83.1%	16.9%	62.3%	37.7%
Professionals				
Permanent	80.4%	19.6%	56.8%	43.2%
Non-permanent	79.0%	21.0%	68.3%	31.7%
Total	80.3%	19.7%	57.8%	42.2%
Intermediate occupations				
Permanent	79.6%	20.4%	71.5%	28.5%
Non-permanent	76.9%	23.1%	73.3%	26.7%
Total	79.4%	20.6%	71.6%	28.4%
Clerks				
Permanent	78.8%	21.3%	75.5%	24.5%
Non-permanent	76.3%	23.7%	77.2%	22.8%
Total	78.6%	21.4%	75.6%	24.4%
Sales workers				
Permanent	68.7%	31.3%	68.3%	31.7%
Non-permanent	67.4%	32.6%	71.7%	28.3%
Total	68.6%	31.4%	68.6%	31.4%
Agricultural and fishery workers				
Permanent	54.3%	45.7%	76.8%	23.2%
Non-permanent	66.5%	33.5%	79.0%	21.0%
Total	57.6%	42.4%	77.4%	22.6%
Craft workers				
Permanent	61.3%	38.7%	74.9%	25.1%
Non-permanent	53.8%	46.2%	72.0%	28.0%
Total	60.4%	39.6%	74.5%	25.5%
Skilled workers				
Permanent	52.1%	47.9%	70.5%	29.5%
Non-permanent	60.5%	39.5%	75.6%	24.4%
Total	52.9%	47.1%	71.0%	29.0%
Unskilled workers				
Permanent	57.4%	42.6%	80.0%	20.0%
Non-permanent	54.8%	45.2%	74.0%	26.0%
Total	56.9%	43.1%	79.0%	21.0%

affected by stress, after these initial two groups, are sales workers (31.4%) and skilled workers (29%). Skilled workers, who are in top position as regards the number of people suffering from back problems, are therefore particularly exposed to both types of health problem. Skilled workers on permanent contracts suffer most back problems and stress. Agricultural workers are the only other group among which employees on permanent contracts are more exposed to back problems and stress. Precarious status places employees in a worse position in two groups: unskilled workers and craft workers whose employment status is precarious suffer more back problems and stress. Among the other occupational groups, a difference which might reflect a Tayloristic



division of labour can be seen: employees whose status is precarious are more exposed to back problems, while employees on permanent contracts are more exposed to situations of stress.

Two occupational groups are far less exposed to back problems and stress: intermediate occupations and office workers.

As well as affecting workers' health, work may in some cases be seen as a genuine **threat** to people's health and the lives. Close on one out of three workers (29.5%) on the European labour market consider that their health or safety is "threatened" by their work. This percentage, which is very high bearing in mind the force of the verb "to threaten", has not increased or decreased for some years since it is almost equal to the figure obtained for the first European survey on working conditions (30% of affirmative replies in 1991).

The largest numbers of people who consider that their work poses a threat to their health are among full-time temporary workers, full-time sole traders and employees on full-time fixed-term contracts (36%, 34.5% and 32% respectively). There is an inverse relationship for part-time workers, since proportionally larger numbers of people on permanent contracts consider that their work poses a threat to their health.

Table 34: Threat to health and employment status

row %	(Q31) Do you consider that your work poses a threat to your health or safety?	
	Yes	No
Sole traders, part-time	18.4%	81.6%
Sole traders, 35+ h/w	34.5%	65.5%
Small employers	28.0%	72.0%
Permanent, part-time	24.3%	75.7%
Permanent, 35+ h/week	31.0%	69.0%
Fixed-term, part-time	22.2%	77.8%
Fixed-term, 35+ h/week	32.3%	67.7%
Temporary, part-time	19.1%	80.9%
Temporary, 35+ h/week	35.9%	64.1%
EU	29.5%	70.5%

When work is seen as a threat, it seems logical to try to leave it. 8% of all EU workers are trying to leave their jobs "in order to find work that is less hazardous and better for [their] health"¹⁷. If the percentage of people who have already changed jobs over the last five years is added to this figure, it can be seen that over one out of five European workers (21%) has been faced or is faced with a working situation that posed or is posing a threat to their health.

The hazards posed by work are greatest among full-time temporary workers, 16% of whom are trying to move into another job that is less hazardous. They are followed by employees on fixed-term contracts, among whom 11% of part-timers and 10% of full-timers would like to change jobs

¹⁷ The hazardous nature of employment and status can be linked here only for those people who would like to change jobs because their current job is hazardous. In the case of people who have already changed jobs during the last five years, there is no information as to whether the job that they left had the same status as the job that they are now in. The most that can be deduced is the extent of people's exposure to hazardous working situations during the five years preceding the survey.

because of the hazardous nature of the job that they currently occupy. In addition to their precarious status, these people therefore combine the instability of their jobs with the further instability brought about by forced turnover as a result of the hazardous nature of their jobs. These jobs are consequently even more precarious¹⁸.

Table 35: Changing jobs to find less hazardous work

row %	Yes, I have changed jobs	No, but I have tried	No, and I have not tried
<i>“Over the last 5 years have you changed your job in order to find a job that is less hazardous or better for your health?”</i>			
Sole traders, part-time	15.9%	6.8%	77.3%
Sole traders, 35+ h/w	10.7%	4.8%	84.4%
Small employers	10.7%	5.3%	84.0%
Permanent, part-time	9.8%	8.2%	82.0%
Permanent, 35+ h/week	11.8%	8.1%	80.2%
Fixed-term, part-time	23.0%	11.2%	65.8%
Fixed-term, 35+ h/week	23.5%	10.1%	66.4%
Temporary, part-time	26.4%	7.6%	66.1%
Temporary, 35+ h/week	31.6%	16.1%	52.3%
EU	13.0%	8.0%	79.0%

Among self-employed workers, sole traders working less than 36 hours per week are most affected by working conditions that pose such a threat to their health or safety that they have tried to change jobs: 7% of these people would like to change jobs for this reason.

The proportions of employees who would like to change jobs because of the hazardous nature of their work are highest (12%) in the construction sector and in the primary sector. In each of these sectors, proportionally larger numbers of employees on precarious contracts would like to change jobs because their work is too hazardous. 21.6% of temporary workers and fixed-term contract workers would therefore like to change their job for this reason in comparison with 10.5% of permanent employees; similarly, 18.5% of agricultural workers whose employment status is precarious are in this position in comparison with 8.3% of permanent employees. While the percentages for the other sectors are not as high, it can be seen in every case that employees on precarious contracts are over-represented among those who would like to move to less hazardous jobs.

Consequently, *employees on precarious contracts are more exposed overall to working conditions that affect and in some cases pose a threat to their health*. Permanent workers are more exposed to problems connected with their mental health (stress, fatigue, etc.). Lastly, self-employment does not provide any protection against health problems caused directly by work. Overall, self-employed sole traders are more exposed to physical health problems, whereas small employers are more exposed to stress.

¹⁸ People employed on precarious contracts are in an even more precarious position if their jobs are hazardous **and** they are not well informed about the occupational risks that they run. While 12.6% of all EU employees consider that they are “not well informed” or “very badly informed” about the occupational risks that they run, the figures for employees on fixed-term contracts and temporary workers are 16% and 17% respectively.



It might have been expected, in response to the question: “*Over the last twelve months, how many days have you been absent as a result of **health problems caused by your main paid job?***”, that absences would be greatest among those people most exposed to health problems. In the case of employees, those on permanent contracts were most often absent: 26% were absent for at least one day during the year preceding the survey, while only 18% of temporary workers and 24.5% of fixed-term contract workers were absent for at least one day. Among people who were absent at least once, moreover, employees on permanent contracts had the highest number of days of absence (permanent contracts: 17 days of absence on average per year; fixed-term contracts: 13.7; temporary workers: 15.5).



Chapter Three

Effect of structure or effect of status?

Throughout this analysis we have established that there was a clear-cut link between employees whose status is precarious (depending on whether or not their contract of employment is permanent) and poor working conditions. Are these correlations the result of structural differences that lie behind differences in status (paid employment being greater in some sectors than in others) or do differences in status alone explain these qualitative differences in working conditions? In other words, are qualitative differences due primarily to the structural position of employment or is there an evident link between precarious employment and precarious working conditions?

Taking account, throughout this analysis, of the occupational group has made it possible to show that the qualitative differences observed overall were also to be found between precarious employees and permanent employees within each group. We have therefore attempted to pinpoint the link between employment status (for employees) and working conditions after controlling **all** the structural and individual characteristics (“all things being equal”). For this purpose, we conducted a regression, taking the variable representative of all employees (permanent contract/non-permanent contract dichotomy) as a dependent variable and a selection¹ of variables used in the analysis, representative of both the structure of the labour market and the individual characteristics of workers (8 variables) and working conditions (28 variables), as independent variables.

3.1 EU analysis

3.1.1 Structure predominates, but there is still a clear link between employment status and working conditions

The main finding emerging from the regression² is that the structural variables play a much more crucial part in explaining the variance of the dependent variable than the variables connected with

¹ The independent variables linked to working conditions were chosen after reading the coefficient of correlation observed on the correlation matrix in order to avoid information that was redundant as a result of two variables too closely correlated with one another.

We also ascertained that the figures missing from the regression - as a result of figures missing in each of the independent variables input into the model - were distributed in an order that was in all likelihood random (cross-referenced tables showing a quasi-identical distribution between the various types of contract of employment and between the sexes).

² Full results in Annex 5.

working conditions. While an R2 of 0.20 is obtained overall, the variables connected with the structure of the labour market and individual characteristics give an R2 of 0.176, i.e. explain 17.6% of the variance. In contrast, inputting only variables connected with working conditions into the model gives an R2 of 0.48 (explaining just under 5% of the variance). It would therefore seem that *the relationship observed between employment status and working conditions is primarily due to the fact that jobs involving difficult working conditions are occupied more by workers on precarious contracts of employment.*

However, the second finding emerging from the regression is that variables connected with working conditions remain significant when the structure has been controlled. While the relationship is undoubtedly not as strong, there seems to be a clear-cut link between employees' precarious status and poorer quality working conditions.

In order to compare the respective weight of the independent variables in explaining the variance, we used the "step" method of regression in which each independent variable is input into the model one after the other ("step by step") in the order of importance of their respective contributions to the R2. The first ten variables in order of importance are as follows:

1 → Length of service (less than 1 year/more than 1 year)	(R2 + 0.11)
2 → Spain	(R2 + 0.14)
3 → Primary sector	(R2 + 0.15)
4 → France	(R2 + 0.16)
5 → Age (under 25/over 25)	(R2 + 0.17)
6 → Painful positions	(R2 + 0.175)
7 → Complex tasks	(R2 + 0.179)
8 → United Kingdom	(R2 + 0.182)
9 → Less than 20 hours/week	(R2 + 0.185)
10 → Fixed component in pay	(R2 + 0.187)

The close links between these variables and the type of contract of employment have been observed elsewhere in the analysis. It is interesting to note here that, much more than the other characteristics, these characteristics are strongly connected with employment status. It can be seen, for instance, whatever the type of employment, that a low length of service is correlated with precarious employment status and that the atypical situation of Spain and, to a lesser extent, France, do not correspond to strong structural differences, since once structure has been controlled, the variables representative of these two countries are among the most decisive as regards their level of contribution to the R2. For the individual variables, it can also be seen that age comes in second place. The variable "sex" is in only 21st place, but the sign of its coefficient is interesting: positive, showing that women are clearly disadvantaged in terms of employment status.

The first variable relating to working conditions is in sixth place: the fact that work involves "painful or tiring positions", immediately followed by an indicator of job enrichment: whether or not people have to carry out complex tasks. The variables connected with working conditions that follow are connected with internal flexibility: very short working hours and type of pay (fixed component or not). The variable "discussion of problems relating to work with personnel representatives" and the variable "breathing smoke or vapour" are in twelfth and thirteenth place



respectively. All things being equal, therefore, an employee employed on a non-permanent basis (fixed-term or temporary) runs a greater risk, at work, of being exposed to painful or tiring positions, performing work whose content is not complex, receiving precarious treatment as regards working hours or pay, being less integrated into the work community or even working in a harmful working environment (smoke, vapour, etc.).

3.1.2 Precarious employment and health

The first non-structural factor in order of contribution to the R2 - painful or tiring positions - is directly connected with discomfort at work. We attempted more precisely to pinpoint whether there is a clear-cut link between precarious employment and health problems due to work. For this purpose we conducted a second regression³ taking whether or not work “affects the health” of workers (Q34C01→ dichotomy: 1:yes; 2:no) as a dependent variable and the same list as above with the addition of the variable EMPLOYEES (dichotomy 1: permanent contract; 2: non-permanent contract) as independent variables.

An R2 of 0.54 was obtained, which means that 54% of the variance of the dependent variable can be explained by the independent variables input into the model. The fact that the variables that contribute most to the R2 are primarily linked to health problems (the first four being, in order: back problems, stress, general fatigue, eye problems) is logical. The most interesting finding is that the EMPLOYEES variable appears in tenth place and is the first variable linked to structure (the second structural variable, representative of the occupational group of senior officials and managers and professionals, appearing only in twentieth place). Consequently, *being employed on a precarious contract is clearly correlated with health problems due to work.*

The same regression carried out using the variable representative of the feeling of “general fatigue” also confirms this link since, here again, the EMPLOYEES variable is the first structural variable to appear, again in tenth place. The variable representative of long working hours (45 or more) is in sixth place in this regression bearing out the link between general fatigue and long working hours.

If stress is taken as the dependent variable, the EMPLOYEES variable is also close to the top (12th) in terms of its contribution to the R2. Two other structural variables are, however, in higher places: ISCOSUP, representative of senior officials and managers and professionals (4th), and ISCOMED, representative of intermediate occupations, clerks and sales workers (6th place). Consequently, *the structural position of employment within the occupational groups plays more of a part in explaining stress than not having a permanent contract as an employee (although this factor is still important).*

3.2 Analysis by country

It is interesting to conduct a regression to compare the various EU Member States. While the legal and cultural differences specific to each country would make a comparative analysis of employment status problematic, it is possible to ascertain to what extent structure explains the variations in the dependent variable EMPLOYEES in each of the EU Member States. The higher the R2 obtained, the more differences in the status of employees in that country are due to

³ Full results in Annex 6.

differences in the structural position of jobs. Countries for which the regression gives only a low R2 are more likely to correspond to situations in which the labour market is deregulated, where the status - permanent or non-permanent - of employees has little correlation with the structural position of these jobs.

A list of EU Member States is given below, in order of importance of the R2 obtained, showing the first three independent variables in order of contribution to the R2 for each of these Member States:

			sign of the coefficient :
Finland	R2=0.37	1- length of service (R2=0.27)	-
		2- tight and short deadlines (R2=0.28)	+
		3- service sector (R2=0.3)	-
Sweden	R2=0.37	1- length of service (R2=0.275)	-
		2- fixed component in pay (R2=0.3)	-
		3- sex (R2=0.318)	+
Italy	R2=0.36	1- length of service (R2=0.1)	-
		2- primary sector (R2=0.178)	-
		3- fixed component in pay (R2=0.24)	-
Spain	R2=0.344	1- length of service (R2=0.175)	-
		2- complex tasks (R2=0.22)	+
		3- age (-25) (R2=0.25)	-
Luxembourg	R2=0.317	1- length of service (R2=0.12)	-
		2- age (-25) (R2=0.16)	-
		3- ear problems (R2=0.182)	+
Netherlands	R2=0.29	1- length of service (R2=0.22)	-
		2- age (-25) (R2=0.24)	-
		3- sex (R2=0.25)	+
Greece	R2=0.284	1- length of service (R2=0.185)	-
		2- intermediate occupations, sales workers, etc. (R2=0.196)	-
		3- discussions with colleagues (R2=0.208)	+
former West Germany	R2=0.27	1- length of service (R2=0.13)	-
		2- age (-25) (R2=0.157)	-
		3- primary sector (R2=0.176)	-
Portugal	R2=0.257	1- length of service (R2=0.168)	-
		2- less than 20h/week (R2=0.186)	-
		3- fixed component in pay (R2=0.198)	-
Belgium	R2=0.20	1- length of service (R2=0.07)	-
		2- service sector (R2=0.097)	-
		3- age (-25) (R2=0.114)	-

Denmark	R2=0.18	1- length of service (R2=0.08)	-
		2- age (-25) (R2=0.1)	-
		3- freedom to take a break (R2=0.115)	+
France	R2=0.174	1- length of service (R2=0.1)	-
		2- age (-25) (R2=0.108)	-
		3- shift work, irregular hours (R2=0.115)	-
Austria	R2=0.174	1- blue-collar workers (craft, manual workers) (R2=0.057)	-
		2- fixed component in pay (R2=0.087)	-
		3- high temperatures (R2=0.11)	-
Ireland	R2=0.125	1- length of service (R2=0.06)	-
		2- shift work, irregular hours (R2=0.067)	+
		3- size of enterprise (R2=0.075)	+
United Kingdom	R2=0.12	1- length of service (R2=0.05)	-
		2- complex tasks (R2=0.06)	+
		3- 45+ hours/week (R2=0.066)	+
former East Germany	R2=0.83	1- length of service (R2=0.03)	-
		2- complex tasks (R2=0.04)	+
		3- loud noise (R2=0.048)	-

It can be seen that **length of service** is the most decisive factor in explaining the differences in status between employees on permanent or non-permanent contracts in all the EU Member States, except Austria, where precarious paid employment (9% of paid employment) is not at all correlated with recruitment, but much more with manual (blue-collar) jobs and difficult working conditions.

In most cases, the criterion of **age** or **structural position** also plays an important part in explaining the variance. The characteristics connected with working conditions that appear most often are linked to **internal flexibility** (fixed component in pay) and **job enrichment** (complex tasks). **Health** problems also play a fairly key role in the model in some countries. In others, sex appears to be much more of a key factor.

The low R2s obtained for the former West Germany, the United Kingdom and Ireland make them exceptions; this tends to show that there is not much of a connection between employee status and the structural position or content of jobs.

Consequently, it is important to take account of structural differences in order to find out about employment status differences among employees. *As the main factor explaining differences in contracts, structure is not as important in all countries, which reflects different regulations and legislation on the use of precarious employment contracts.* All things being equal, however, jobs occupied under precarious contracts are more exposed to poor working conditions. *Non-permanent contracts of employment, which are a tool for structural flexibility, also appear to be a tool for internal flexibility, as jobs that involve poor working conditions are more likely to be occupied by workers whose conditions of employment already place them in a precarious position.*



Chapter Four

Conclusions

The link between precarious employment and poor working conditions has been clearly established by this analysis, temporary workers proving to be the most penalised from the point of view of the negative consequences of internal flexibility (atypical working hours, shift work, pay with no fixed component, etc.) and from the point of view of the intensification of work, factors of discomfort and even the hazards posed by working conditions. Bearing in mind that temporary workers also tend to be absent less often than other groups of employees and are less integrated into the life of the enterprise, the conclusion has to be that temporary employment provides an ideal tool for problem-free management of employment and labour flexibility.

The fact that the working conditions of employees on fixed-term contracts are not as good as those of employees on permanent contracts may be surprising, especially as it might have been thought that the fixed-term contract, in contrast to temporary work, was a kind of prelude to permanent recruitment. It seems as though this form of employment is also a method of managing internal flexibility and that poorer working conditions are primarily the lot of employees whose contracts of employment are not permanent. Has the fixed-term contract become a different form of temporary employment rather than a period of probation prior to permanent recruitment¹ ?

The analysis also highlights the ambivalence of part-time work. Associated with a stable contract of employment (permanent contract), part-time work appears to “add value” to jobs whose working conditions are perceived to be better than those of full-time jobs under the same contract of employment. In contrast, part-time work associated with a precarious contract of employment is more likely to “add problems” and to involve poorer working conditions than full-time work, particularly as regards the negative consequences of internal labour flexibility. This apparent ambivalence can be explained by the following hypothesis that has been borne out throughout our

¹ This raises the question of the **duration** of precarious contracts (see Annex 7 “Suggestions for the next survey”).

analysis: part-time work is primarily chosen by people on stable contracts of employment and is primarily imposed on people whose employment status is precarious.

The status of self-employed sole trader - in some cases encouraged by current employment policies - is more precarious in overall terms than the status of small employer, those working the least (less than 35 hours per week) being particularly exposed to substantial organisational flexibility (atypical working hours, pay by performance, etc.).

The economic sectors in which working conditions are hardest are also those in which the proportion of atypical jobs is highest: the primary sector and the hotels and restaurants sector in particular. One of the reasons for this is that employment has to be flexible in these sectors where there are high levels of seasonal work. On the other hand, poor working conditions and precarious employment status go together on the labour market, whatever the economic sector or occupational group. This could well point to the existence of a two-tier labour market, where the first tier is made up of jobs subject to statutory protection and involving good working conditions and the second tier is made up of jobs involving poorer working conditions and less statutory protection, providing fewer guarantees and less protection of the rights of the individual.

The regression carried out on the variable representative of all European employees (whether or not they have permanent contracts) shows that structure is undoubtedly paramount in explaining the link between precarious status and poor working conditions, but that the relationship between working conditions and employee status is still significant once all the variables connected with structure have been controlled. Consequently, while the poorer quality working conditions of employees whose employment status is precarious are predominantly due to the fact that they are more likely to occupy jobs involving difficult working conditions, there is nevertheless still a link between precarious employment status and poor working conditions, whatever the type of job occupied and the individual characteristics of the employee.

The regressions carried out by country also show that the effect of structure is more clear-cut in some Member States than in others as a result of the different levels of deregulation of the labour market in each of these Member States.

In view of the economic costs involved, flexible work and employment nowadays seem inevitable and are being advocated (see the recent report on **employment in Europe**² which makes such flexibility one of the priorities for “tackling the problems of employment”). In the light of the findings of this study or, more dramatically, after the recent events in South Korea, it is important, however, to contrast the economic savings that flexibility may provide with the human costs that it may entail. It is often a “news story” that provides us with a crude reminder, such as the death of six women workers in 1992 at the Ardystil factory - a small subcontracting enterprise specialising in textile printing (region of Valencia, Spain) - following the handling and inhalation of toxic products, without any regard for basic health and safety conditions. Laurent Vogel, reporting on the story³, highlights the extent to which the extremely precarious nature of jobs in this factory, combined with very dangerous working conditions and a complete lack of attention to safety (the public and institutional authorities having closed their eyes, preferring to stress “the

² European Commission, Directorate General for Employment, Industrial Relations and Social Affairs, *Employment in Europe. 1995*, Luxembourg, Office for Official Publications of the European Communities, 1995.

³ L. Vogel, “L'affaire Ardystil ou les conséquences extrêmes de la précarisation”, *Travail*, 30, Winter 1993/1994.



jobs created” by this factory in a disadvantaged region), shaped this tragic scenario. He speaks of what he calls an “unspoken social compromise” according to which it goes without saying that an extremely precarious job does not involve the same health and safety conditions as a stable job.

Thinking about the human cost of precarious employment and work may make it necessary to change our focus on the issue of employment in Europe. It seems essential to move away from the opposition “unemployed people/people with jobs” towards the opposition “precarious **and** unemployed workers/workers having stable jobs **and** good working conditions”. The frontier between precarious employment and unemployment is very blurred. According to Margaret Maruani and Emmanuèle Reynaud⁴ “precarious jobs have become *a preliminary to recruitment* at the same time as a *prelude to unemployment*” because more and more people are being recruited initially under unstable forms of employment, which may then be converted into stable contracts, but also because, in the case of “redundancy programmes” brought about by the economic situation, the first to be made redundant are unstable employees. Consequently, polarising “employment policies” on unemployed people alone would be to close one’s eyes to the real two-tier nature of the employment market: workers whose status is genuinely protected and workers whose employment status provides them with only the minimum of rights and few guarantees of their health or safety.

⁴ M. Maruani & E. Reynaud, 1993, *Sociologie de l’emploi*, La Découverte, p. 60.



Annex 1

Comparison of legislation
on working time in the EU

Legal and Contractual Limitations to Working Time

With the exception of Denmark and the United Kingdom, Member States' legislation lays down a maximum weekly working time. However, effective working time and overtime are normally determined by collective agreements.

Austria

Statutory limit: 40 hours per week. Collective agreement: 36-40 hours per week. Daily working time may be increased to 12 hours where it includes regular and lengthy waiting periods.

Overtime: 5 hours per week + 60 hours per calendar year, though not exceeding a total of 10 hours per week. Further overtime may be authorised by collective agreement or labour inspectorate decision.

Belgium

Statutory limit: 40 hours per week. Collective agreements may stipulate shorter working times.

Overtime: 65 hours per quarter, compensatory leave to be taken by the end of the quarter, except where there is a sectoral collective agreement stating that a maximum of 65 hours per quarter may be paid at overtime rates instead.

Leave: 20 calendar days + 10 public holidays.

Denmark

Statutory limit: no legislation regarding number of hours per week, which is fixed in collective agreements.

Overtime: regulated by collective agreements.

Leave: 30 days

Finland

Statutory limit: 40 hours per week. Possibility of derogations through national collective agreements.

Overtime: 200 hours (daily accounting) or 120 hours (weekly accounting) per calendar year. In the case of working in periods, 320 hours per year.

Leave: 2 days per month; after 1 year's service 30 days.

France

Statutory limit: 39 hours per week. Many exceptions for the various sectors.

Overtime: 9 hours per week or 130 hours per year, or more if included in a collective agreement.

Leave: 30 calendar days.

Germany

Statutory limit: 48 hours per week. Weekly working time has been amended by collective agreements in all sectors.

Overtime: 2 hours per day over a period of 6 months or 24 weeks, provided that the average working does not exceed 8 hours.

Leave: from January 1995 uniformly 24 days in all Bundesländer, 5-6 weeks under collective agreements.

Greece

Statutory limit: 5-day, 40 hour week.

Overtime: 3 hours per day, 18 hours per week or 150 hours per year (private sector).

Leave: up to 24 calendar days.

Ireland

Statutory limit: 48 hours per week. Possibility of regulating working time by collective agreement. There are differences between certain sectors (retail trade, catering, etc.) and also for young people.

Overtime: 2 hours per day, 12 hours per week or 240 hours per year (young people 2 hours per day, 10 hours per week or 200 hours per year).

Leave: 3 calendar weeks; 4 weeks by collective agreement.

Italy

Statutory limit: 48 hours. National collective agreements (branch level) generally stipulate a statutory limit of 40 hours in industry and 36 hours in the public service.

Overtime: stipulated in sectoral collective agreements.



Luxembourg

Statutory limit: 40 hours per week. Possibility of derogations by collective agreement (very rare).

Overtime: 2 hours per day. Total working time may not exceed 10 hours, except for urgent work (e.g. accidents, *force majeure*).

Leave: 25 calendar days; 26-28 days by collective agreement.

Netherlands

Statutory limit: 48 hours per week; collective agreements: 36-40 hours.

Overtime: No general legislation.

Leave: 4 calendar weeks; normally 5 weeks by collective agreement.

Portugal

Statutory limit: 44 hours per week (42 hours for office workers). Possibility of including working time in collective agreements (max. 50 hours per week). Wide use is made of this possibility at branch level (reduction and reorganisation of working time).

Overtime: 2 hours per day or 200 hours per week (no limit in cases of *force majeure* or serious risk to the company).

Leave: 22 calendar days.

Spain

Statutory limit: covered by collective agreement or employment contract. The maximum length cannot exceed 40 hours per week averaged over year.

Overtime: 80 hours per week.

Leave: 30 calendar days.

Sweden

Statutory limit: 40 hours per week. Possibility of derogations through collective agreements.

Overtime: 48 hours per 4-week period or 50 hours per calendar month, with a maximum of 200 hours per year.

Leave: 27 calendar days (statutory provisions, more according to some collective agreements).

United Kingdom

Statutory limit: No general legislation on working time, which is a matter for agreement between employers and employees and their representatives.

Overtime: By agreement between employers and employees and their representatives.

Leave: No legislation; for agreement between employers and employees or their representatives. 20-27 days is customary.

Part-time contracts

A general trend in the regulation of part-time contracts can be identified: although statutory provisions and even definitions vary between Member States, equal rights with full-time workers (on a pro rata basis) is a universal objective.

Austria

The law on working time (Arbeitszeitgesetz) defines a part-time contract as one which stipulates a working week which is shorter than the statutory limit or the time fixed in the relevant collective agreement.

Various rules set out in the law protect part-time workers against discrimination compared with full-time workers. The employer is not allowed to change part-time worker's working time without his or her consent. Part-time workers also have the same rights as full-time workers in respect of pay, bonuses and all other conditions of employment.

A 5-year period of part-time employment has little or not effect on pensions, which in Austria are calculated on the basis of the best 15 years of contributions.

Belgium

Part-time employment is governed by the law of 22.12.1989 and the collective agreement of 27.2.1981 applicable. However, there is legal definition of the concept of part-time work. Any person working shorter hours than a full-time worker is regarded as a part-time worker. The law imposes a minimum working time: 1/3 of weekly full-time working time (approx. 13 hours) and 3 hours per work period.

Rules on part-time employment must be included in internal agreements, which in companies with at least 100 employees must be negotiated by the works council.

An individual employment contract for part-time work, which is not regarded as a special contract, must be in written form and must indicate the agreed working time and system.

Part-time workers have priority for full-time jobs or part-time jobs with longer hours with the same employer.

Denmark

There is not legal definition of part-time work. Nor is it defined in collective agreements. Generally speaking, a part-time worker is anyone who works less than normal collectively-agreed working time.

The rules on part-time employment differ significantly from one collective agreement to another, making it impossible to give a general overview of how part-time employment is organised.

Nor does legislation contain rules specifically covering persons in part-time employment.



Finland

There is no definition of a part-time contract. Legislation on employment contracts, periods of notice, redundancy pay etc. applies equally to full-time and part-time workers. Part-time workers do not suffer disadvantages in terms of health insurance or health care entitlement, as benefits are linked to residence. Retirement pension is calculated on the basis of the length of employment periods and level of earnings.

The employer may, having given notice, unilaterally convert an employment contract into a part-time contract from the end of the period of notice, subject to conditions similar to those applicable to the termination of employment contracts (723/88)

France

The law of December 1993, which permits annualisation of part-time work, means there are two definitions. The Labour Code defines part-time employment as any situation in which weekly or monthly working time is less than one-fifth of statutory or collectively-agreed time. It also classifies as part-time any worker who, over a one year period, alternates periods of activity and inactivity and whose annual working time is less than one fifth of statutory working time (weekly) during the same period (annual).

A part-time contract may be concluded at the initiative of either the worker or the employer, must be in written form, and must cover certain specific points (pay, classification, working hours, etc.). Remuneration is proportional to that of a full-time employee performing comparable work. Part-time workers enjoy their full rights. Depending on the collective agreement, overtime must not exceed one tenth or one third of agreed working time.

Germany

Specific legal regulation in the 1985 employment promotion act (e.g. the definition of equal treatment). Otherwise the general labour regulation is in force.

Greece

Part-time work has recently been regulated by the Law No 1892/1990. A part-time contract must be in writing, and may be open-ended or fixed-term. The Law stipulates equal treatment for part-time and full-time workers, allowing for the shorter working time. It does not stipulate a minimum or maximum working time, and the contracting parties have complete freedom in this matter.

Replacement of a full-time job by a part-time one is subject to certain conditions: I) dismissal of a worker because he or she refuses to accept part-time employment is prohibited; ii) a part-time worker must be given priority when full-time workers are to be recruited; iii) a part-time workers has the right to refuse to work overtime if he or she has another job or family responsibilities. Collective autonomy is relatively important, given that all the statutory provisions on part-time employment laid down by the law may be modified or supplemented by collective agreements.

Ireland

The 1991 Worker Protection Act defines regular part-time employees as persons working continuously for the same employer for at least eight hours and week, for at least 13 weeks. Otherwise, what is meant by full-time or part-time employment depends on what is recognised or agreed by the company, sector or industry in question.

Regular part-time employees are covered by legislative provisions or periods of notice, maternity leave, unfair dismissal, workforce participation, redundancy pay, protection in the event of the employer's insolvency and entitlement to leave. They are not at a disadvantage compared to full-time workers with regard to health and safety legislation, equality, remuneration and conditions of employment.

Italy

Part-time work is very vaguely defined as where working time is less than that normally stipulated by collective agreement. It is subject to the general provisions of labour law and collective agreements.

Employees willing to work part-time as entered in special lists kept by the State employment service. Contracts must be in writing, describe the job and stipulate working hours. A copy must be sent to the provincial labour inspectorate. Changes from full-time to part-time employment are subject to written agreement between the two parties and ratification by the provincial labour inspectorate. A contract may be converted from part-time to full-time at the employer's request.

Overtime is prohibited unless provided for by collective agreements.

Recently, Law No 451/94 has introduced certain advantages in terms of the contributions payable by companies offering part-time contracts.

Luxembourg

The law of 26 February 1993 specifically deals with part-time employment. A part-time worker's contract must contain the same details as that of a full-time worker.

Part-time workers have the same statutory and agreement-based rights as full-time workers. Their remuneration is proportional to that of full-time employees performing comparable work.

Redundancy pay is calculated proportionally on the basis of the number of years worked.

Netherlands

There is no legal definition of part-time work. Nor is it defined in collective agreements. Generally speaking, a part-time workers is anyone who works less than normal collectively agreed working time. According to this description, the percentage of part-time workers is very high (30% in total), (60% of women). Legislation contains binding requirements regarding equal treatment for full-time and part-time workers.

Portugal

There are no general regulations on part-time employment. However, the law on working time states that collective agreements should, if possible, include provisions on the subject and



establish priorities for access to part-time work for women with family responsibilities, disabled workers and workers who are also students.

In general, working time is equivalent to half of normal working time, subject to a written application submitted by the worker being accepted by the employer.

The law also states that remuneration may not be less than the amount payable for full-time work for the same period.

The provisions on part-time employment are flexible. No special or official provisions are necessary for part-time contracts.

Spain

An employment contract is considered to be part-time if it sets a daily, weekly, monthly or annual length of working time less than the normal length for the sector of activity in question. A worker is also regarded as part-time where he or she, being within 3 years of retirement, reduced daily working time by 50%, the rest of the job being done by another worker (job-sharing). A part-time contract must describe the nature of the contract, its duration, and the number of hours or days to be worked, and must be registered with the public employment service.

Remuneration is proportional to that of a full-time worker, and part-time workers enjoy the same rights and benefits laid down by the law or collective agreements as full-time workers. Social security contributions are calculated on the basis of working time, and social protection rights are reduced where working time is less than 12 hours per week or 48 hours per month.

Sweden

There is no specific definition of a part-time contract, which is covered by the same legislation on minimum periods of notice, redundancy pay and social insurance as a full-time contract (except that a part-time worker must work at least 17 hours a week to qualify for a partial pension) and an average of 17 hours a week to be entitled to labour market aid.

United Kingdom

Part-time contracts are left, wherever possible, to be determined by the employee and the employer. New regulations which entered into force in February 1995 give part-time workers the same rights as full-time workers.

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Annex 2

Analysis of the structure of the European labour market

◆ Overall structure :

➔ Distribution by economic sector (NACE code)¹ in Europe :

A-B	<i>Agriculture, hunting, forestry, fishing</i> / Agriculture, chasse, sylviculture, pêche	5.4%
C-D	<i>Mining and quarrying - Manufacturing</i> / Activités extractives - Industrie manufacturière	22.6%
E	<i>Electricity, gas and water supply</i> / Production et distribution d'électricité, de gaz et d'eau	1.1%
F	<i>Construction</i> / Construction	7.9%
G	<i>Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods</i> / Commerce de gros et de détail; réparations automobiles et domestiques	14.8%
H	<i>Hotels and restaurants</i> / Hôtels et restaurants	3.4%
I	<i>Transportation and communication</i> / transports, entreposage et communication	6.2%
J	<i>Financial intermediation</i> / Intermédiation financière	4.6%
K	<i>Real estate, renting & business activities</i> / Immobilier, locations & activités de service aux entreprises	4.8%
L	<i>Public administration and defence; compulsory social security</i> / Administration publique et défense; securite sociale obligatoire	8.7%
M-N- O-P- Q	<i>Other services^(*) : education; health and social work; other community, social and personal service activities; private households with employed persons; extra-territorial organisations and bodies</i> / Autres services : éducation; santé et action sociale; autres activités de services collectifs, sociaux et personnels; Menages employant du personnel domestique; organismes extra-territoriaux	20.4%

(*) : As this grouping took place during processing of the results it was beyond our control.

¹ The NACE code classifies economic activities in Europe. It was first presented by EUROSTAT in 1970, under the title "General Industrial Classification of Economic Activities within the European Communities".

➔ **Distribution by occupation (ISCO code)² in Europe**

1	<i>Legislators, senior officials and managers</i> / Membres de l'exécutif et des corps législatifs, cadres supérieurs de l'Administration publique, dirigeants et cadres supérieurs d'entreprise	7.1%
2	<i>Professionals</i> / Professions intellectuelles et scientifiques	11.4%
3	<i>Technicians and associate professionals</i> / Professions intermédiaires	13.7%
4	<i>Clerks</i> / Employés de type administratif	14.2%
5	<i>Service workers and shop and market sales workers</i> / Personnel des services et vendeurs de magasin et de marche	13.2%
6	<i>Skilled agricultural and fishery workers</i> / Agriculteurs et ouvriers qualifiés de l'agriculture et de la pêche	4.1%
7	<i>Craft and related trades workers</i> / Artisans et ouvriers des métiers de type artisanal	17.3%
8	<i>Plant and machine operators and assemblers</i> / Conducteurs d'installations et de machines et ouvriers de l'assemblage (ouvriers qualifiés)	8.9%
9	<i>Elementary occupations</i> / Manoeuvres et agents non qualifiés de l'entreprise, de la surveillance et de la manutention (ouvriers non qualifiés)	9.5%
10	<i>Armed forces</i> ^(*) / Forces armées	0.7%

^(*): Excluded from the analysis.

² The ISCO code was adopted in 1987. It was drawn up by the International Labour Office and stands for "International Standard Classification of Occupations".

Annex 3

Structural distribution of foreign workers in the EU

◆ Other nationalities:

➔ Distribution of foreign workers in the EU by economic sector

A-B	<i>Agriculture, hunting, forestry, fishing</i> / Agriculture, chasse, sylviculture, pêche	6.6%
C-D	<i>Mining and quarrying - Manufacturing</i> / Activités extractives - Industrie manufacturière	23.8%
E	<i>Electricity, gas and water supply</i> / Production et distribution d'électricité, de gaz et d'eau	0.1%
F	<i>Construction</i> / Construction	14.1%
G	<i>Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods</i> / Commerce de gros et de détail; réparations automobiles et domestiques	13.3%
H	<i>Hotels and restaurants</i> / Hôtels et restaurants	13.8%
I	<i>Transportation and communication</i> / transports, entreposage et communication	5.1%
J	<i>Financial intermediation</i> / Intermédiation financière	0.6%
K	<i>Real estate, renting & business activities</i> / Immobilier, locations & activités de service aux entreprises	4.3%
L	<i>Public administration and defence; compulsory social security</i> / Administration publique et défense; securite sociale obligatoire	0.2%
M-N- O-P- Q	<i>Other services - education; health and social work; other community, social and personal service activities; private households with employed persons; extra-territorial organisations and bodies</i> / Autres services : éducation; santé et action sociale; autres activités de services collectifs, sociaux et personnels; Ménages employant du personnel domestique; organismes extra-territoriaux	18.1%

➔ **Distribution of foreign workers in the EU by occupation**

1	<i>Legislators, senior officials and managers</i> / Membres de l'exécutif et des corps législatifs, cadres supérieurs de l'Administration publique, dirigeants et cadres supérieurs d'entreprise	2.8%
2	<i>Professionals</i> / Professions intellectuelles et scientifiques	7.5%
3	<i>Technicians and associate professionals</i> / Professions intermédiaires	10.9%
4	<i>Clerks</i> / Employés de type administratif	6.7%
5	<i>Service workers and shop and market sales workers</i> / Personnel des services et vendeurs de magasin et de marche	9.9%
6	<i>Skilled agricultural and fishery workers</i> / Agriculteurs et ouvriers qualifiés de l'agriculture et de la pêche	6%
7	<i>Craft and related trades workers</i> / Artisans et ouvriers des métiers de type artisanal	24%
8	<i>Plant and machine operators and assemblers</i> / Conducteurs d'installations et de machines et ouvriers de l'assemblage	12.7%
9	<i>Elementary occupations</i> / Manoeuvres et agents non qualifiés de l'entreprise, de la surveillance et de la manutention	19.5%
10	<i>Armed forces</i> / Forces armées	0%

Annex 4

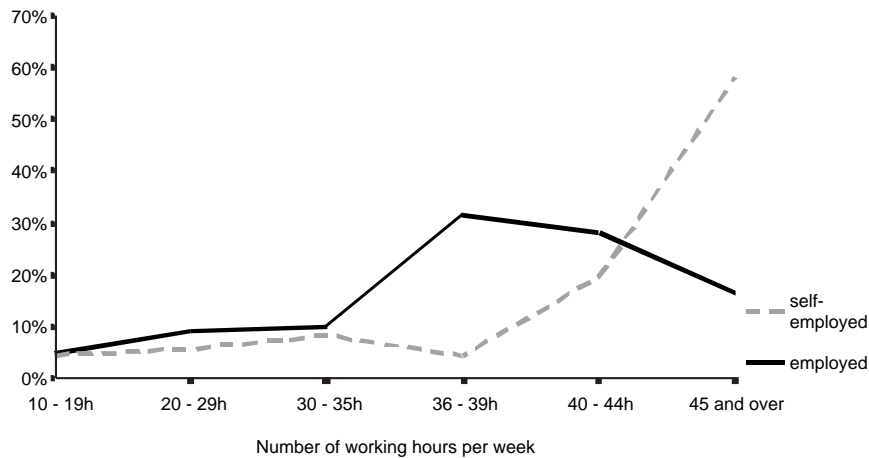
Working hours in Europe

The average working week in Europe is **39.3 hours**, all workers taken together. This breaks down as follows:

→ *employees* : 37.73 hours per week on average

→ *self-employed workers* : 47.06 hours per week on average

Working time in Europe (average = 39.38 hours/week)



The **Member States of the EU in which employees work the longest hours** are Greece and Portugal (26.6% of employees in both these countries work over 44 hours per week, in comparison with the European average of 16%), followed by Spain (24%) and the United Kingdom (22.6%).

The **Member States in which employees work the shortest hours** are the United Kingdom (24% of employees work less than 30 hours per week - 12% of whom work less than 20 hours - in comparison with a European average of 14%), followed by the Netherlands (19% work less than 30 hours).

The **Member States in which self-employed workers work the longest hours** are Belgium (76.4% work 45 or more hours in comparison with a European average of 58%), the former East Germany (73%), Ireland (72%), France and Austria (both 71%).

The **Member States in which self-employed workers work the shortest hours** are the Netherlands (19% work less than 30 hours per week, in comparison with an EU average of 10%), the former West Germany (18%), Finland and the United Kingdom (both 14%).

The following tables therefore show some distinctive features within the EU :

- The United Kingdom stands out because of the atypical working hours of the employee population at both extremes: very long working hours and very short working hours in comparison with the European averages;
- The Netherlands is the European country in which all workers (self-employed or employed) work the shortest hours;
- Employees in southern Europe have the longest working weeks (leaving aside the specific case of the United Kingdom).
- The countries in which self-employed workers have the longest working weeks are more in the centre of the EU.

WORKING HOURS OF EMPLOYEES BY COUNTRY

row %

	Number of working hours per week					
	10-19	20-29	30-35	36-39	40-45	45+
UK	11.7%	12.0%	10.4%	28.0%	15.4%	22.6%
DK	3.9%	8.5%	10.1%	57.4%	7.3%	12.8%
FIN	1.1%	3.3%	9.1%	33.0%	42.4%	10.9%
IRL	2.1%	7.1%	11.1%	27.8%	33.3%	18.6%
S	1.7%	10.1%	11.6%	10.7%	54.1%	11.8%
I	3.4%	9.9%	6.2%	25.4%	36.5%	18.6%
NL	8.0%	11.2%	10.4%	26.0%	33.6%	10.8%
B	3.7%	10.9%	6.6%	40.4%	24.0%	14.4%
P	2.4%	4.7%	12.2%	8.4%	45.7%	26.6%
FR	3.1%	9.4%	10.7%	48.2%	14.8%	13.9%
L	1.2%	8.0%	2.6%	2.1%	68.8%	17.5%
WD	3.6%	9.5%	11.7%	41.0%	23.3%	10.9%
OD	0.7%	4.5%	11.0%	18.7%	51.9%	13.2%
E	2.4%	4.8%	9.3%	10.4%	49.4%	23.7%
AU	1.3%	7.9%	5.1%	28.5%	38.2%	19.0%
GR	2.5%	6.5%	8.9%	6.5%	49.0%	26.6%
EU	4.6%	9.2%	10.1%	31.7%	28.2%	16.2%


WORKING HOURS OF SELF-EMPLOYED WORKERS BY COUNTRY

row %

	Number of working hours per week					
	10-19	20-29	30-35	36-39	40-45	45+
UK	5.0%	9.3%	14.2%	0.5%	26.6%	44.3%
DK		8.5%	9.5%	20.2%	5.2%	56.6%
FIN	3.7%	11.0%	11.2%	2.2%	18.3%	53.6%
IRL	1.9%	2.5%	8.0%	2.6%	13.2%	71.8%
S		8.5%	15.8%	2.2%	35.5%	38.0%
I	3.0%	3.0%	5.2%	3.8%	25.2%	59.8%
NL	8.3%	11.2%	10.8%	1.3%	15.0%	53.4%
B	3.0%	3.0%	7.2%		10.3%	76.4%
P	2.1%	5.2%	5.6%	1.2%	21.5%	64.3%
FR	3.9%	1.7%	6.6%	4.4%	12.1%	71.3%
L	4.0%	5.6%		2.9%	26.4%	61.1%
WD	9.3%	8.4%	8.7%	12.3%	13.6%	47.8%
OD	1.2%	1.5%	3.3%	0.6%	20.3%	73.1%
E	2.1%	5.9%	9.2%	0.8%	23.0%	59.0%
AU	0.8%	5.1%	3.9%	7.1%	11.8%	71.2%
GR	2.7%	6.6%	10.2%	0.1%	14.6%	65.8%
EU	4.3%	5.6%	8.2%	4.2%	19.5%	58.1%

1/ GLOBAL POPULATION:

Value Label	Mean	Std Dev	Cases
For Entire Population	39,3061	12,1236	*****
1,00 UK	37,6360	14,0823	24468562
2,00 DK	36,7251	10,3076	2452623
3,00 F	40,1927	10,8858	2345349
4,00 IRL	42,5002	13,4455	1084346
5,00 S	38,0603	8,8191	4988833
6,00 I	41,3270	12,2457	20237479
7,00 NL	35,5105	12,6192	6266088
8,00 B	40,3445	12,7850	3805837
9, 00 P	44,7414	15,9464	4347713
10,00 FR	39,6841	11,4628	22620022
11,00 L	40,6258	10,4529	161727
12,00 WD	37,2425	9,5812	35825978
13,00 OD	40,4069	8,3218	6224134
14,00 E	41,8450	12,6816	11719728
15,00 AU	40,9600	10,4598	4128819
16,00 GR	45,8511	17,0079	3804608

2/ EMPLOYEE POPULATION :

Value Label	Mean	Std Dev	Cases
For Entire Population	37,7330	10,0692	*****
1,00 UK	36,7357	13,3143	21074489
2,00 DK	36,2620	9,0527	2212662
3,00 F	38,9220	7,6600	1958522
4,00 IRL	39,3338	9,4304	833978
5,00 S	37,7268	8,2302	4546230
6,00 I	38,0140	8,6797	13259919
7,00 NL	35,0450	11,3042	5542732
8,00 B	36,9426	9,4128	2878491
9,00 P	41,3808	10,9451	2880262
10,00 FR	37,9769	9,1778	18917948
11,00 L	39,5316	8,2407	128728
12,00 WD	36,8203	8,3958	30202615
13,00 OD	39,2684	7,2836	5516345
14,00 E	40,5951	10,9211	8550895
15,00 AU	39,4943	8,3723	3583063
78 16,00 GR	41,2573	12,3892	1997815

**3/ SELF-EMPLOYED POPULATION :**

Value Label	Mean	Std Dev	Cases
For Entire Population	47,0690	16,4666	26717388
1,00 UK	44,4726	16,7530	3164712
2,00 DK	43,8200	17,5220	185677
3,00 F	47,5282	18,6652	349923
4,00 IRL	54,5749	17,5173	231419
5,00 S	42,6691	12,1819	399766
6,00 I	47,8275	14,5654	6404660
7,00 NL	40,7077	13,6733	611655
8,00 B	52,4854	15,6236	820120
9,00 P	52,3950	21,5601	1321122
10,00 FR	51,3812	17,1514	2875909
11,00 L	44,8904	15,2249	27429
12,00 WD	41,1416	13,7300	4873146
13,00 OD	49,4611	10,2319	676005
14,00 E	47,4075	15,2765	2570175
15,00 AU	52,2711	15,1940	480089
16,00 GR	51,5864	19,7459	1725581

Annex 5

Regression on the variable “employees” (permanent/non-permanent)

* * * * MULTIPLE REGRESSION * * * *

* * * VARIABLES USED * * *

DEPENDENT VARIABLE: EMPLOYEES (1: permanent; 2: non-permanent)

LIST OF INDEPENDENT VARIABLES (dichotomies: 1: yes, 2: no)

VARIABLES CONNECTED WITH STRUCTURE AND INDIVIDUALS

Group	ISCOPRIM	Agricultural and fishery workers
Occupation	ISCOBLUE	Craft workers, manual workers, skilled workers
	ISCOMED	Intermediate occupations, clerks, sales workers
	ISCOSUP	Senior officials and managers, professionals
Economic Sector	NACEPRIM	Primary sector
	NACE2ND	Secondary sector
	NACETERT	Service sector
Country	PAYSDK	Denmark
	PAYSLUX	Luxembourg
	PAYSIRL	Ireland
	PAYSBELG	Belgium
	PAYSLGR	Greece
	PAYSAUT	Austria
	PAYSPORT	Portugal
	PAYSFIN	Finland
	PAYSNL	Netherlands
PAYSALLE	former East Germany	

PAYSALLO	former West Germany
PAYSESP	Spain
PAYSITA	Italy
PAYSFR	France
PAYSUK	United Kingdom
PAYSUEDE	Sweden
TAILLDIC	Enterprise size: fewer than 10 employees / more than 10 employees
Q1	Sex (1: male, 2: female)
ANCIENNT	Length of service in the job (1: less than 1 year; 2: 1 year or more)
AGEDICHO	Under 25 / Over 25
ETUDICHO	Under 16 / Over 16 at end of education

VARIABLE CONNECTED WITH WORKING CONDITIONS:

	Q11C1	Fixed component in pay (1: no; 2: yes)
Hours	HOURS_20	Less than 20 h/week
	HOURS2044	From 20 to 44 h/week
	HOURSMAX	45 + hours/week
Atypical working time	Q18DICHO	Night work (1: no nights; 2: at least 1 night)
	Q18BNW1	Sunday work (1: no Sundays; 2: at least 1 Sunday)
	SHIFTDIC	Shift work and/or irregular hours (1: yes; 2: no)
	Q23E_DIC	Rotation of tasks between yourself and your colleagues
	Q15H_DIC	Working to very tight and very short deadlines
	Q21B_DIC	Pace of work depends on direct customer demand
	Q20B_DIC	Free to take a break when you want to
	Q22B_DIC	Free to adapt working methods
	Q15A_DIC	Painful or tiring positions
	Q15D_DIC	Repetitive hand/arm movements (1: always to 1/4 of time; 2: never or hardly ever)
	Q14B_DIC	Loud noise
	Q14D_DIC	Low temperatures
	Q14C_DIC	High temperatures
Q14E_DIC	Breathing vapour, smoke, dust or hazardous substances	
Q26C_DIC	Discussions with your boss	
Q26D_DIC	Discussions with colleagues	
Q26E_DIC	Discussions with personnel representatives	
Q23G_DIC	Complex tasks	
Q15F_DIC	Working with computers	
Q34C05	Back problems	

Q34C10	Stress
Q34C11	General fatigue
Q34C08	Muscular pain in the arms or legs
Q34C06	Headaches
Q34C03	Eye problems
Q34C02	Ear problems

*** MULTIPLE REGRESSION ***

Equation Number 1	Dependent Variable..	SALARIES
Multiple R	.44547	
R Square	.19845	
Adjusted R Square	.19845	
Standard Error	.32107	

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	54	2816527.71334	52157.92062
Residual	110355899	11376361./5176	.10309

F = 505955.62494 Signif F = .0000

---- Variables in the Equation ----

Variable	B	SE B	Beta	T	Sig T
ISCOSUP	-.019580	9.3073E-05	-.029487	-210.368	.0000
ISCOPRIM	.066526	3.1505E-04	.028794	211.160	.0000
ISCOBLUE	-9.09789E-04	9.0114E-05	-.001214	-10.096	.0000
NACE2NV	.027597	7.0686E-05	.038166	390.409	.0000
NACEPRIM	-.173923	2.5894E-04	-.092017	-671.660	.0000
AGEDICHO	-.095212	9.3884E-05	-.091186	-1014.144	.0000
Q1	.015376	7.0924E-05	.021280	216.80	.0000
ETUDICHO	.008402	8.3219E-05	.009580	100.962	.0000
PAYSALLE	-.045145	1.6165E-04	-.025744	-279.269	.0000
PAYSAUT	-.021035	1.9387E-04	-.009740	-108.502	.0000
PAYSBELG	-.039292	2.2365E-04	-.015684	-175.690	.0000
PAYSDK	-.027376	2.4357E-04	-.009985	-112.395	.0000
PAYSESP	-.257240	1.3826E-04	-.184182	-1860.597	.0000
PAYSFIN	-.084986	2.6857E-04	-.028025	-316.440	.0000
PAYS FR	-.097297	1.0740E-04	-.099387	-905.910	.0000
PAYSGR	-.053141	2.5234E-04	-.018847	-210.597	.0000
PAYS:RL	-.007069	3.8283E-04	-.001597	-18.466	.0000
PAYSITA	-.024776	1.2249E-04	-.021143	-202.279	.0000

PAYSLUX	-.002363	.001010	-1.999E-04	-2.340	.0193
PAYSNL	-.062503	1.6094E-04	-.036242	-388.351	.0000
PAYS PORT	-.030921	2.1580E-04	-.013033	-143.285	.0000
PAYSUEDE	-.028190	1.7298E-04	-.015087	-162.967	.0000
PAYSUK	.032811	1.0559E-04	.034928	310.734	.0000
TAILLDIC	-.023761	8.4887E-05	-.025736	-279.915	.0000
ANCIENNT	-.333687	1.0421E-04	-.286801	-3202.170	.0000
QIICI	-.068480	1.3564E-04	-.043867	-504.879	.0000
HOURS_20	-.060568	1.6707E-04	-.036583	-362.528	.0000
HouR2044	.010259	8.8547E-05	.011765	115.862	.0000
Q18DICHO	.021484	9~7843E-05	.023727	219.580	.0000
018BNW1	-.012257	8.7545E-05	-.014899	-140.003	.0000
SHIFTDIC	-.017522	7.8750E-05	-.022512	-222.501	.0000
Q23E_DIC	-.002961	6.6066E-05	-.004058	-44.813	.0000
Q15H_DIC	-.003464	7.1900E-05	-.004768	-48.172	.0000
Q21B_DIC	.026297	7.0114E-05	.034956	375.053	.0000
Q20B_DIC	.014649	6.8680E-05	.020152	213.291	.0000
Q22B_DIC	.010116	7.2692E-05	.013125	139.161	.0000
Q15A_DIC	-.039893	7.4118E-05	-.055019	-538.241	.0000
Q15D_DIC	-.006058	7.0228E-05	-.008380	-86.267	.0000
Q14B_DIC	.004526	8.1739E-05	.005705	55.371	.0000
Q14D_DIC	-.00S051	8.0990E-05	-.005980	-62.366	.0000
Q14C_DIC	.004333	8.6952E-05	.004832	49.831	.0000
Q14E_DIC	-.032284	8.7532E-05	-.038075	-368.826	.0000
Q26C_DIC	-.001584	7.8645E-05	-.002103	-20.142	.0000

* * * * MULTIPLE REGRESSION * * * *

Equation Number 1 Dependent Variable.. SALARIES

- - - - Variables in the Equation - - - -

Variable	B	SE B	Beta	T	Sig T
Q26D_DIC	.010445	8.8051E-05	.012675	118.621	.0000
Q26E_DIC	.025258	7.6570E~05	.030448	329.871	.0000
Q23G_DIC	.031507	7.1226E-05	.043268	442.353	.0000
Q15F_DIC	.011927	7.7225E-05	.016402	154.447	.0000
Q34C05	-.017707	8.4385E-05	-.022291	-209.839	.0000
Q34C10	-.012057	7.9818E-05	-.014933	-151.054	.0000
Q34C11	.013760	9.0735E-05	.015020	151.652	.0000
Q34C08	.006115	1.0137E-04	.006147	60.324	.0000
Q34C06	-.011222	1.0237E-04	-.010563	-103.630	.0000
Q34C03	.002053	1.1106E-04	.001717	18.489	.0000
Q34C02	-.014964	1.3518E-04	-.010460	-110.702	.0000
84 (Constant)	3.769872	.003290		1145.971	.0000



---- Variables not in the Equation ----

Variable	Beta In	Partial	Min Toler	T	Sig T
ISCOMED	.	.	.000000	.	.
NACETERT	.	.	.000000	.	.
PAYSALLO	.	.	.000000	.	.
HOURSMAX	.	.	.000000	.	.

End Block Number 1 Tolerance = 1.00E-04 Limits reached.



Annex 6

Regression on the variable “health affected by your work” (yes/no)

(EMPLOYEE POPULATION ONLY)

DEPENDENT VARIABLE “is your work affecting you health” (1:yes; 2:no)

*** MULTIPLE REGRESSION ***

Equation Number 1 Dependent Variable.. Q34CO1 Q34C No. it does not affect

Multiple R	.73276
R Square	.53694
Adjusted R Square	.53694
Standard Error	.33818

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	41	14620726.02241	356603.07372
Residual	110251237	12608764.73696	.11436

F = 3118142.88041 Signif F = .0000

*** MULTIPLE REGRESSION ***

Equation Number 1 Dependent Variable.. Q34CO1 Q34C No. it does not affect

---- Variables in the Equation ----

Variable	B	SE B	Beta	T	Sig T
ISCOSUP	-.019580	9.3073E-05	-.029487	-210.368	.0000
ISCOSUP	.025425	9.6948E-05	.019205	262.2S3	.0000

ISCOPRIM	-.020324	3.3149E-04	-.006351	-61.309	.0000
ISCOBLUE	2.94475E-04	9.4906E-05	2.836E-04	3.103	.0019
NACEPRIM	-.054736	2.7280E-04	-.020907	-200.645	.0000
NACE2ND	.005364	7.4524E-05	.005352	71.971	.0000
AGEDICHO	.027717	9.8952E-05	.019163	280.1d3	.0000
QI	.317406	7.4272E-05	.017380	234.348	.0000
ETUDICHO	.030209	8.5628E-05	.024864	352.797	.0000
TAILLDIC	-.016335	8.8878E-05	-.012772	-183.795	.0000
ANCIENNT	-.031875	1.1367E-04	-.019778	-280.412	.0000
SALARIES	.034688	9.8076E-05	.025041	353.680	.0000
QIICI	.037591	1.4267E-04	.017385	263.480	.0000
HOURS 20	.014981	1.7460E-04	.006530	85.802	.0000
HOURS2044	.017737	9.3013E-05	.014681	190.691	.0000
QI8DICHO	-.011497	1.0288E-04	-.009165	-111.747	.0000
Q18BNWI	.010637	9.8552E-05	.009334	107.933	.0000
Q18CNWI	-.009397	7.8274E-05	-.009451	-120.052	.0000
SHIFTDIC	.020735	8.3525E-05	.019229	248.246	.0000
Q23E_ISY	-.001431	6.8931E-05	-.001416	-20.757	.0000
Q15H_ISY	-.005766	7.2690E-05	-.005729	-79.324	.0000
Q21B_ISY	.005352	7.3306E-05	.005135	73.005	.0000
Q20B_ISY	-.017578	7.0577E-05	-.017453	-249.067	.0000
Q22B_ISY	-.021895	7.6231E-05	-.020506	-287.223	.0000
Q15A_ISY	.019943	7.7592E-05	.019845	257.024	.0000
Q15D_ISY	-.019094	7.2975E-05	-.019060	-261.654	.0000
Q14B_ISY	.027205	8.5852E-05	.024752	316.884	.0000
Q14D_ISY	.023386	8.4639E-05	.019957	276.299	.0000
Q14C_ISY	.023914	9.1404E-05	.019219	261.635	.0000
Q14E_ISY	.051685	9.2081E-05	.093998	561.299	.0000
Q26C_ISY	.013670	8.2181E-05	.013097	166.34S	.0000
Q26D_ISY	.001562	9.1340E-05	.001369	17.105	.0000
Q26E_ISY	-.020663	7.9959E-05	-.017980	-258.417	.0000
Q23G_ISY	.005097	7.4664E-05	.005052	68.267	.0000
Q15F_ISY	.009751	8.0619E-05	.009674	120.948	.0000
Q34C05	-.353264	8.8332E-05	-.320694	-3999.260	.0000
Q34C11	-.163216	9.4628E-05	-.128373	-1724.817	.0000
Q34C08	-.103076	1.0636E-04	-.074800	-969.095	.0000
Q34C06	-.068390	1.0770E-09	-.046335	-635.004	.0000
Q34C03	-.185914	1.1666E-04	-.111750	-1593.620	.0000
Q34C02	-.063920	1.4205E-04	-.032255	-449.970	.0000
Q34C10	-.378398	8.3582E-05	-.337948	-4527.243	.0000
88 (Constant)	.454697	9.3351E-04	487.081		.0000



*** MULTIPLE REGRESSION ***

Equation Number 1 Dependent Variable.. Q34CO1 Q34C No. it does not affect

--- Variables not in the Equation ---

Variable	Beta In	Partial	Min Toler	T	Sig T
ISCOMED	.	.	.000000	.	.
NACETERT	.	.	.000000	.	.
HOURSMAX	.	.	.000000	.	.

End Block Number 1 Tolerance = 1.00E-04 Limits reached.




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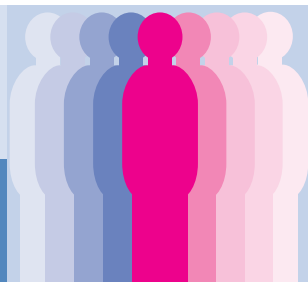
Precarious Employment and Working Conditions in Europe

Luxembourg: Office for Official Publications of the European Communities

1998 – 106pp. – 21 x 29.7 cm

ISBN 92-828-3044-6

Price (excluding VAT) in Luxembourg: ECU 30



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