



Construction sector

Fact sheet

Background

Eurofound's European Working Conditions Surveys (EWCS) have been carried out every five years since 1991. Each wave of the survey provides an overview of the state of working conditions throughout Europe and indicates the nature and extent of changes affecting the workforce and the quality of work. The fieldwork for Eurofound's most recent edition of the EWCS was carried out in 2005 in 31 countries, including the 27 EU Member States, plus candidate countries Croatia and Turkey, as well as EFTA countries Norway and Switzerland. In 2005, the sample size was set at 1000 per country (600 for Cyprus, Estonia, Luxemburg, Malta and Slovenia).

Following the 2005 survey, Eurofound asked TNO Work & Employment to perform a secondary statistical analysis of the data from the fourth EWCS 2005 on sector profiles with regard to working conditions in the 27 Member States. For the analysis, NACE Revision 1.1¹ was applied. The findings are set out in 26 fact sheets, each covering one of the 26 sectors in the NACE classification. Each fact sheet presents:

- a profile of the sector's socio-demographic characteristics based on data at NACE at 1 and 2 digit level;
- a profile of working conditions in the sector based on data at NACE at 1 and 2 digit level.

This fact sheet presents a snapshot of working conditions in the construction sector (Nace Rev. 1.1 F).

¹ This is a revision of the 'General Industrial Classification of Economic Activities within the European Communities', known by the acronym NACE and originally published by Eurostat in 1970. The NACE code was subsequently revised (REV. 1.1) in the 1990s.

Sector profile

The construction sector is a male-dominated sector, women comprising only 10.6% of all workers. Self-employment is quite prevalent in the sector: 24.7% of workers in construction are self-employed compared with the cross-sector average of 16.7%.

The sector is also characterised by a lower than average proportion of workers working in large enterprises (250 or more employees) – only 5.5% compared to the average of 15% across all sectors.

With regard to educational level, a high proportion of workers in this sector have completed lower secondary-level education (23.5% compared with the average of 16.5%), while tertiary level education is less prevalent (14.2% compared with the average of 23.5%).

Income levels are relatively high: just 11.6% of workers in construction fall into the lowest income category compared with the cross-sector average of 25.1%.

Differences by other socio-demographic characteristics between this sector and the average for all sectors are not statistically significant and therefore do not merit further analysis here.

Gender		
	Men	Women
Construction	89.4%▲▲▲	10.6%▼▼▼
All sectors	55.5%	44.5%

Age					
	Average age	Age group			
		≤ 24 years	25-39 years	40-54 years	≥ 55 years
Construction	39.3	13.3%	36.1%	39.8%	10.8%
All sectors	40.0	11.8%	36.8%	38.6%	12.7%

Years in company or organisation				
	≥ 2 years	3-5 years	6-15 years	≤16 years
Construction	28.0%	23.7%	29.4%	18.9%
All sectors	27.1%	20.9%	29.6%	22.4%

Type of employment		
	Self-employed	Employee
Construction	24.7%▲▲▲	75.3%▼▼▼
All sectors	16.7%	83.3%

Employment contract		
	Permanent contract	Non-permanent contract
Construction	72.9%	27.1%
All sectors	76.6%	23.4%

Company size					
	One-person company	Micro enterprise (2-9 employees)	Small enterprise (10-49 employees)	Medium enterprise (50-249 employees)	Large enterprise (250+ employees)
Construction	11.5%	34.9%	34.2%	14.0%	5.5%▼▼▼
All sectors	10.4%	27.5%	27.7%	19.4%	15.0%

Education level							
	No education	Primary education (ISCED 1)	Lower secondary education (ISCED 2)	Upper secondary education (ISCED 3)	Post-secondary including pre-vocational or vocational education	Tertiary education - first level (ISCED 5)	Tertiary education - advanced level (ISCED 6)
Construction	1.5%	8.7%	23.5%▲▲▲	45.7%	5.8%	14.2%▼▼▼	0.5%
All sectors	0.9%	5.3%	16.5%	44.5%	7.3%	23.5%	2.0%

Income level				
	Income bands			
	Lowest	Low	High	Highest
Construction	11.6%▼▼▼	23.4%	33.4%	31.6%
All sectors	25.1%	23.9%	26.7%	24.3%

How to read the table

The comparison is between the subgroup/sector and the average for all sectors based on the 2005 European Working Conditions Survey sample for the EU27. ▲ (p<0.05), ▲▲ (p<0.01), and ▲▲▲ (p<0.001) indicate differences between the sector profiled and the sample average at different levels of statistical significance. Each mean is tested with parametric tests of difference (t-test) to determine whether such differences are statistically significant. The more triangles, the higher the statistical significance of the figure (i.e. it is more likely to reflect a real difference in the population). Where estimates are not accompanied by triangles, this indicates that observed differences are not statistically significant.

Working conditions and outcomes

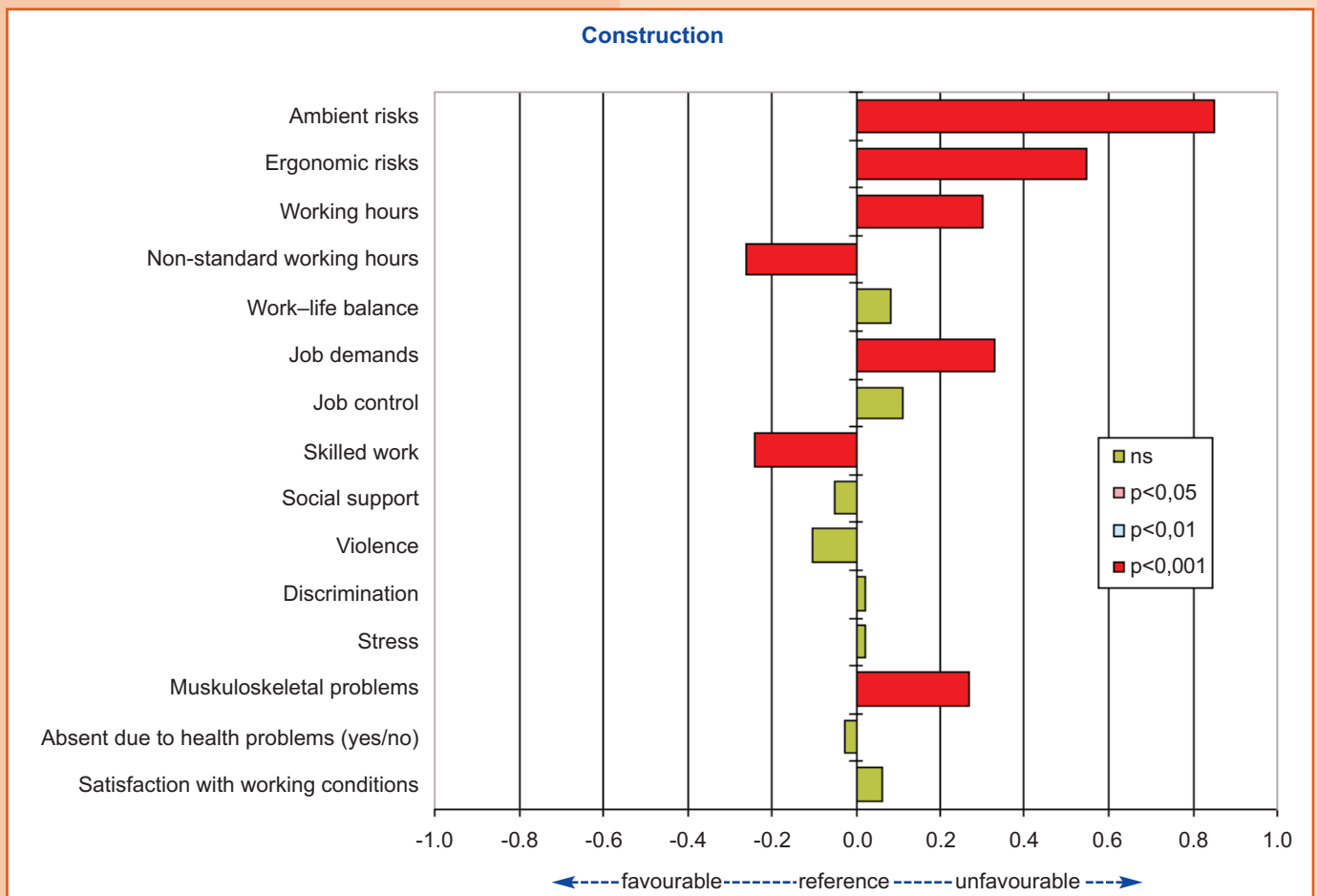
The figure below shows specific dimensions of working conditions with favourable and unfavourable scores in construction, taking as a point of reference mean exposure (0.0 score in the chart below).

Looking at the statistically significant differences only, workers in the construction sector have unfavourable scores on exposure to ambient conditions (exposure to vibrations, noise, high/low temperatures, breathing in smoke, fumes, powder or dust, breathing in vapours, handling chemical products or substances) and ergonomic conditions (tiring or painful positions, carrying or moving heavy loads, standing or walking and repetitive hand or arm movements). The high exposure to ergonomic risks

may explain the higher prevalence of reported musculoskeletal problems in this sector.

On the working time dimension, workers in construction have a significantly higher than average exposure to long working hours (more than 48 working hours per week). By contrast, non-standard working hours (night and evening work, Saturday/ Sunday work and more than 10 working hours a day) are less prevalent in this sector.

This sector is also characterised by a higher than average level of job demands/work intensity (working at high speed and to tight deadlines) and a relatively high level of skilled work (use of quality standards in the work process, solving unforeseen problems, job complexity and learning new things).



How to read the figure

For the profiling of the sector, eleven aspects of working conditions (mainly composite indexes based on several variables) and four outcomes (stress, musculoskeletal disorders, absence due to health problems and job satisfaction) were taken into account.

In the chart above, $p < 0.001$ represents the highest level of statistical significance, while $p < 0.01$ and $p < 0.05$ indicate comparatively lower levels of statistical significance; 'ns' stands for no statistically significant difference. Statistical differences from the average can be either favourable (scores on the left side of the chart) or unfavourable (scores on the right side of the chart) on a specific set of working conditions.

Score values greater than ± 0.2 indicate a small deviation from mean exposure (0.0) while score values ranging from ± 0.2 to ± 0.5 and greater than ± 0.5 indicate respectively substantial and very substantial deviation from mean exposure.

For example, the figure above shows that values indicating exposure to ambient risks are highly statistically significant ($p < 0.001$) and are greater than $+0.5$, meaning that workers in the construction sector tend to report a higher level of exposure than the average.

Key findings

- In terms of socio-demographic characteristics, construction is a male-dominated sector with a higher than average proportion of self-employed persons. In contrast, working in large enterprises is relatively uncommon in this sector.
- Workers in this sector are more likely than average to have completed lower secondary education but are less likely to be situated in the lowest income category.
- Workers in the construction sector have higher than average exposure to ambient and ergonomic risks. They also report more often work-related musculoskeletal problems, long working hours, and a high level of job demands/work intensity. On a positive note, workers in this sector score favourably in terms of non-standard working hours and have a higher level of skilled work.

Methodology

The European Working Conditions Survey (EWCS) is carried out every five years by the European Foundation for the Improvement of Living and Working Conditions (Eurofound), a tripartite European agency based in Dublin. The questionnaire is developed by the Eurofound team in close cooperation with an expert questionnaire development group. This group comprises representatives of the European social partners, other EU bodies (European Commission, Eurostat, European Agency for Safety and Health at work), international organisations (OECD, ILO), national statistical institutes, as well as leading European experts in the field. The sample of the EWCS is representative of persons in employment (according to the Eurostat definition this comprises both employees and the self-employed aged 15 years and over) resident in the countries covered for the respective periods. In each country, the EWCS sample followed a multi-stage, stratified and clustered design with a random walk procedure for the selection of the respondents at the last stage. All interviews were conducted face-to-face in the respondent's own household.

Further Eurofound research on the sector

Liability in subcontracting processes in the European construction sector

<http://www.eurofound.europa.eu/publications/htmlfiles/ef0894.htm>

Further information

The Fourth *European Working Conditions Survey* report and secondary analysis of survey data are available on the *European Working Conditions Observatory* website:
<http://www.eurofound.europa.eu/ewco/surveys/ewcs2005/>

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