



Exploring the interactions between job quality, industries and health

A report for the Commission for Healthier Working Lives

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About the Commission for Healthier Working Lives

The Learning and Work Institute (L&W), Institute for Employment Studies (IES) and Royal Society for Public Health (RSPH) have formed a new collaboration as research partners for the *Commission for Healthier Working Lives*, supported by the Health Foundation.

The *Commission for Healthier Working Lives* aims to build consensus on the actions needed to address the UK's work and health challenges. It seeks to improve understanding of health trends and inequalities and their impacts on individuals, employers and the economy. The Commission will make recommendations to improve working-age health and help people with health conditions to access, remain in or thrive in the workforce.

This report is one of a series of commissioned reports, available at: www.health.org.uk/commission-for-healthier-working-lives

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Table of Contents

Executive Summary	3
1. Introduction	7
Links between work, health and wellbeing.....	7
2. How does quality of work relate to health?	9
Four main dimensions of job quality that affect health	9
Differences in health outcomes between demographic groups.....	16
Summary	18
3. How widespread are work-related health issues and which groups are most affected?	21
The dominant issues in job quality	21
How do the dominant issues vary by industry and demographics?	27
Summary	33
4. Conclusion	34
References.....	35
Appendix – mapping NACE industries to SIC categories.....	39



Executive Summary

There is a range of evidence that good work is protective and supportive of our health and wellbeing, while poor-quality work can be harmful – in some cases, as bad as not being in work at all. In 2022/23, 1.7 million workers in Great Britain reported work-related ill health, underlining the need to address job quality issues that affect health.¹

Underneath this, however, it is often less clear the extent to which different aspects of job quality may affect our health, how prevalent these issues are, and how impacts vary for different industries and groups. This paper seeks to clarify the evidence on these areas to support the Commission for Healthier Working Lives. Its findings on job quality and health also offer timely insights which can inform the Government's Employment Rights Bill, helping to strengthen protections for vulnerable workers.

Four aspects of job quality appear particularly important for our health and wellbeing

There is a growing consensus around how we define job quality, typically focused on 'employment' aspects (often contractual) and 'work' factors (such as how work is organised and supported). Following a rapid review of the evidence on these different dimensions, we have identified four key, often interlinked, factors with the strongest evidence linking job quality and health:

- **Job security and precarity.** There is strong evidence that being in insecure work can be significantly harmful for health and wellbeing, particularly for our mental health, with higher risks of depression, anxiety, low life satisfaction and exhaustion. Persistent insecurity appears to be particularly damaging to health, while there is also evidence that health impacts can persist even after specific drivers of insecurity (like threat of redundancy) are removed.
- **Excessive and/or irregular hours.** Working very long hours, unpredictable hours and nights shifts are all strong predictors of a range of physical and mental health risks, likely because these can lead to disruptions to private time, and irregular diet and sleep. In addition, there is evidence that hours 'mismatches' – working more or fewer hours than desired – can also harm health, with some evidence that the impacts increase with the size of the mismatch.
- **Demands and control at work.** Positively, high levels of control at work (for example, over tasks and skills use) appears to have positive impacts on health, with potential causal evidence that improvements in control lead to improvements in mental wellbeing. Set against this, having low or no control at work, particularly where this is combined with excessive demands (known as 'job strain'), can be strongly predictive of poorer mental and physical health.
- **Relationships and support.** Strong relationships with colleagues and supportive management are protective of health and can moderate the impacts of other negative factors. At the same time, being subjected to adverse behaviour like

¹ HSE (undated) *Work-related ill health and occupational disease in Great Britain*. www.hse.gov.uk/statistics/causdis/index.htm. Health and Safety Executive.



bullying, harassment or discrimination is very damaging and one of the strongest predictors of poor health outcomes when other factors are controlled for.

Impacts of poor job quality vary for different groups, although the evidence base is limited

We can identify some differences between groups in their experiences of job quality and its impact on their health. However, it is important to note that there are significant limitations in the evidence base, particularly in determining causality (i.e. how far different elements of job quality actually *lead to* poorer health). In part, this reflects limitations in data, and where studies do explore these links, they tend to focus on differences by gender and age.

On **gender**, a number of studies explore how working hours affect men and women differently. Generally, they conclude that women experience greater impacts from excessive hours, irregular hours and hours mismatches. There is also some evidence that negative changes in working conditions have a more negative effect on women than men and even that positive changes are less likely to benefit women. These findings likely relate to the uneven sharing of care responsibilities within families, with women more often ‘time poor’ outside of work or less able to accommodate changes.

There are signs of differential impacts by **age**, with evidence that changes in working time, changes in working arrangements and risks of job loss can more negatively affect the health of older people. Older and younger people also seem to benefit from different aspects of job control – with younger people benefiting most from ‘task variety’ and older people benefiting from ‘skill variety’ (i.e. being able to use different skills).

Given the limitations beyond these dimensions, and in particular the absence of robust evidence on health impacts for other groups disadvantaged in the labour market (including disabled people and those with long-term health conditions), improving the evidence base should be a priority for researchers and government in the future.

A growing minority are in jobs that put their health at risk

On most of the job quality dimensions set out above, the majority of people likely find that work is broadly supportive of their health rather than harmful to it. In particular:

- Around one in ten UK workers are in insecure work (whether measured subjectively on people’s perceptions or objectively on their employment status), but there isn’t clear evidence that rates of job insecurity are increasing significantly.
- The number and share of people working very long hours is falling (currently 15% of the workforce), as are rates of ‘overemployment’ (people who want to work fewer hours for less pay, currently 8%) and ‘underemployment’ (those who want and are available to work longer hours, currently 7%).
- Around four-fifths of those in work in the UK report being well supported by their



colleagues, and three-quarters by their managers – both above the averages for the rest of Europe.

Nonetheless, this still means that a significant minority of the workforce face risks to their health from being in insecure work, regularly working long hours (one in six workers), night shifts (one in nine) or irregular hours (one in six). Around one in six workers also report being subjected to bullying, harassment or discrimination over the last year.

In addition, the UK fares far less well in areas such as job demands, control and job strain. Data from the 2021 European Working Conditions Survey indicate that:

- Three-fifths of UK workers report having to work to tight deadlines, and two-fifths at high speed – both of which are among the highest rates in Europe.
- Half of all workers report having to work more hours than expected – the highest rate in Europe.
- Just one-third of workers say they have control over how they work – the lowest rate in Europe.
- Certain occupations, such as teaching and nursing, are especially likely to see high levels of job strain.

Moreover, there is clear evidence that work intensity and job strain have increased significantly over the last 25 years, to a point where around half of the UK workforce report being regularly exhausted from work. This increase has been accompanied by declines in levels of work autonomy, a key factor that helps people manage work pressures.

The incidence of poor job quality is higher for groups already disadvantaged at work

These issues are compounded by the fact that indicators of poor job quality tend to cluster. That is to say, groups who already disadvantaged in the labour market are overrepresented in types of work that pose health risks. In particular, we find that:

- Workers with chronic health conditions and young people are more likely to be in insecure work and to experience discrimination, harassment or bullying (with rates twice as high for those with chronic health conditions).
- Younger people (aged 16-24) report having less autonomy at work and more tiring job roles.
- Older workers (aged 56 or older) are more likely to report not receiving support from their managers.
- Women are significantly more likely than men to experience burnout.

There are also important differences in exposure to health risks by industry

It is important to understand how job quality varies across industries. In broad terms, people working in white-collar service industries, which account for nearly two-fifths of employment, are less likely to report job quality factors that could be a risk to their health and are more likely to report factors that should be supportive. By contrast, people working in transport and storage, construction, commerce and hospitality – around a quarter of the workforce – report poorer quality outcomes across a range of indicators.

Looking more specifically at mental health, people working in health services and education face the highest risks of burnout – affecting more than two-fifths of the workforce in 2021. This is echoed in the wider literature too, which points to significant increases in work intensity, reductions in control at work and therefore higher job strain, exhaustion and burnout since the early 1990s.² This is a major challenge, with depression and anxiety now the leading cause of sickness absence, accounting for 55% of working days lost due to work-related ill health.³ Rates of work-related stress, depression or anxiety are also notably higher in public sector industries.

Public policy has a key role to play

Taken together, these findings show that good relationships and support and control at work are key factors in making work protective of our health, while insecurity, hours pressures, excessive demands, low control and negative relationships can be profoundly harmful. They also highlight the diversity of experiences of job quality across the economy and for different groups.

Much of the responsibility for improving job quality lies with local actors – in particular, employers, workers themselves and their representatives. But public policy also has an important role to play.

Policy interventions to address poor-quality work need to be targeted at those industries, employers and groups where risks are greatest, with tailored measures to address specific challenges. These points, along with insights that we can draw from overseas, will be developed in upcoming reports for the Commission for Healthier Working Lives. This work should also be informative for the new UK government, which has clear ambitions to improve job quality through its new Employment Rights Bill.

² Green, F, Felstead, A, Gallie, D and Henseke, G (2018) *Work Intensity in Britain – First Findings from the Skills and Employment Survey 2017*, London: Centre for Learning and Life Chances in Knowledge Economies and Societies, UCL Institute of Education.

³ HSE (2023) Work-related stress, depression or anxiety statistics in Great Britain, 2023. Health and Safety Executive. www.hse.gov.uk/statistics/assets/docs/stress.pdf

1. Introduction

Links between work, health and wellbeing

There is a range of evidence that good work is good for our health and wellbeing, and in particular our mental health.⁴ People who are satisfied in their jobs are less likely to leave work due to poor health,⁵ while successful returns to work following a period of ill health can lead to better health and wellbeing in the longer term.⁶ Nonetheless, we also know that poor-quality work can be harmful to our health, and in some cases being in poor-quality work may be as bad for our health as not being in work at all.⁷

Beneath these headlines however, it is often less clear the extent to which specific aspects of job quality may affect our health (for better and worse). It is also uncertain how prevalent these issues are and how their impacts vary across different industries and groups. This paper seeks to clarify the evidence on these three areas, aiming to:

- identify where the evidence is strongest for links between different dimensions of job quality and health;
- explore the prevalence of these issues; and
- understand how impacts may vary across the economy.

The report is part of a series of research projects being delivered by the Learning and Work Institute, Institute for Employment Studies and Royal Society for Public Health to inform the work of the Health Foundation's Commission for Healthier Working Lives.

Structure of this report

In the next section, we set out findings from a rapid review of the evidence around how different aspects of job quality interact with health, and how these interactions may vary for people with different characteristics. This draws on existing syntheses of research and supplements it with online searches of academic and non-academic literature (using Consensus, Elicit and Google Scholar⁸).

The third section explores the prevalence of various work-related risk factors across different industries and demographic groups. It draws on data from the Skills and Employment Survey and European Working Conditions Survey, with a closer look at the most recent edition, the European Working Conditions Telephone Survey 2021.

The final section sets out a framework for considering how government policy can

⁴ Waddell, G. and Burton, K. (2006). *Is work good for your health and well-being?* Department for Work and Pensions, 1 January 2006

⁵ D'Angelo, S., Syddall, H., Ntani, G., et al (2021) How does job dissatisfaction interact with self-rated health in determining the risk of health-related job loss? Prospective findings from the Health and Employment After Fifty (HEAF) study *Occupational and Environmental Medicine* 2021;78:36-42.

⁶ Figueredo, J., García-Ael, C., Gragnano, A., & Topa, G. (2020) Well-Being at Work after Return to Work (RTW): A Systematic Review. *International Journal of Environmental Research and Public Health*.

⁷ Price, S., Shaw, H., Morgan, F., Rodríguez-López, R., Little, K., & Humphreys, C. (2021) *Is any job better than no job? A systematic review*.

⁸ Consensus and Elicit are new tools that incorporate generative AI. We used them mainly to identify relevant studies; to reduce the potential for bias, any generative AI descriptions of studies or summaries of findings were cross-checked against the original material.

influence job quality and makes some initial observations on the UK's approach to employment, health and workplace policy.

Defining the dimensions of job quality

There are a number of different approaches to defining job quality, although often with common features. The OECD job quality framework, for example, defines quality in terms of labour market security, the working environment and earnings;⁹ while the European Working Conditions Survey from Eurofound¹⁰ uses a framework for job quality with four indices: the level and fairness of earnings, job security and career progression prospects, intrinsic job quality (including the working environment and work intensity) and the quality of working time.

Within the UK, the 'Measuring Job Quality Working Group' brought together researchers, industry bodies and social partners to develop a common and evidence-based framework for job quality, which built on work by the Chartered Institute for Personnel and Development and the Institute for Employment Research at the University of Warwick.¹¹ This identified seven key domains:

1. **Terms and conditions:** security, hours, fit with desired working patterns.
2. **Pay and benefits:** level of pay/benefits and satisfaction with these.
3. **Health, safety and psychosocial wellbeing:** mental wellbeing at work, risks of injury/ill health.
4. **Job design and nature of work:** control at work, opportunities, sense of purpose, skills utilisation.
5. **Social support and cohesion:** relationships with peers and line manager.
6. **Voice and representation:** access to union, employee engagement, information/consultation.
7. **Work-life balance:** hours worked, access to overtime, flexibility of hours/working patterns.

In our desk-based research, we have sought to summarise the evidence on links between these different aspects of job quality and health, drawing on the Measuring Job Quality Working Group dimensions above.

Across all approaches, there are clear recurring themes around the interaction between the quality of *employment* (including its contractual basis, job security and earnings) and the quality of our *work* (including working conditions, work organisation and how we are managed and supported).¹²

⁹ Cazes, S., A. Hijzen and A. Saint-Martin (2015), Measuring and Assessing Job Quality: The OECD Job Quality Framework, *OECD Social, Employment and Migration Working Papers*, No. 174

¹⁰ The European Foundation for the Improvement of Living and Working Conditions

¹¹ Irvine, G., White, D. and Diffley, M. (2018) *Measuring Good Work: The final report of the Measuring Job Quality Working Group*, Carnegie UK and the RSA

¹² This distinction is explored in Steffgen, G., Sischka, P., Fernandez de Henestrosa, M. (2020) The Quality of Work Index and the Quality of Employment Index: A Multidimensional Approach of Job Quality and Its Links to Well-Being at Work. *Int. J. Environ. Res. Public Health* 2020



2. How does quality of work relate to health?

The underlying factors that impact workplace health and wellbeing have been extensively researched over recent decades. In this section, we highlight where the evidence appears strongest for positive and negative impacts from specific aspects of job quality on health outcomes (drawing on the dimensions set out in the previous section). We also explore where these impacts may vary across population groups, particularly by gender, age and health or disability status.

The evidence review was conducted in two stages. First, through a rapid review using keyword searches and online tools (Consensus, Elicit and Google Scholar), focusing on existing syntheses of research from both academic and non-academic sources. This was followed by a more targeted search to explore key themes in more detail. Overall, 31 papers were screened in for review during the first stage, supplemented by a further 17 papers in the second stage.

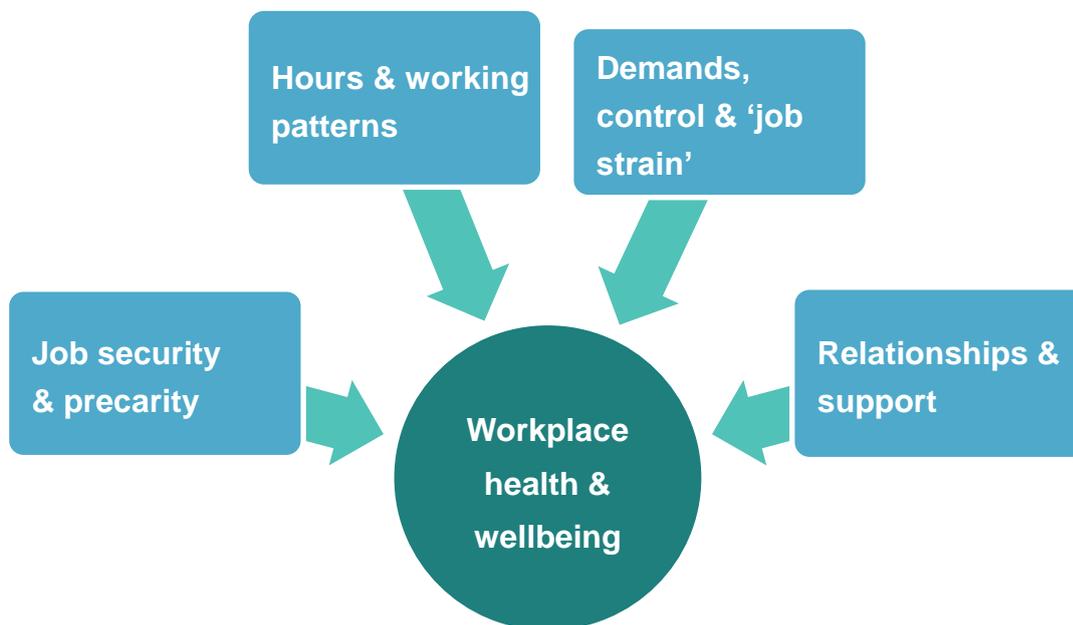
We set out the main findings below, grouped around four main job quality domains. It should be noted, however, that across much of the evidence base it remains challenging to establish causality (i.e. the extent to which different aspects of job quality lead to changes in health, rather than, for example, people with better or worse health being more likely to be in good or poor-quality jobs). In many cases, different aspects of job quality are interlinked and are also affected by wider contextual drivers (like the economy, social and cultural factors, or individuals' needs or characteristics).

In short, the analysis below helps identify where poor job quality poses the greatest risks to health. This can inform decisions to prioritise efforts of policy makers, employers and other actors. However, it does not assess solutions in depth; this will be addressed in forthcoming research for the Commission for Healthier Working Lives.

Four main dimensions of job quality that affect health

Our desk-based research identified four key aspects of job quality where the evidence base was strongest for a relationship with health and wellbeing at work: job security and precarity; working hours and patterns; the balance between demands and control at work; and the quality of relationships at work (Figure 1). These are reviewed in turn below.

Figure 1: Main aspects of job/work quality that affect health and wellbeing



Job security and precarity

The evidence review identified many studies that were exploring the links between the precariousness of employment and health and wellbeing at work. These studies consistently found evidence that:

- Insecure and precarious work is associated with poorer health outcomes and particularly worse mental health.
- Impacts were greater for those people experiencing persistent insecurity.

However, the evidence is limited in scope, with few studies that looked beyond one or two dimensions of job insecurity. Causal links also remain difficult to establish. For example, while precarious employment may contribute to poorer mental health, people with poor mental health are also more likely to be in precarious jobs.

Studies have often explored the links between *subjective* job insecurity and individual health and wellbeing, with subjective insecurity measured by responses indicating how much individuals feel at risk of losing their jobs or experiencing substantive changes to their roles (as opposed to objective measures like contractual terms of employment, economic conditions or the likelihood of job loss). A 2018 meta-analysis looking at how subjective job insecurity affects mental ill-health identified 33 European studies and found significant associations between job insecurity and mental health conditions, such as depression and anxiety, as well as indicators of reduced wellbeing, including low life satisfaction and exhaustion.¹³ While these impacts were often substantial, the

¹³ Llosa, J. A., Menéndez-Espina, S., Agulló-Tomás, E., Rodríguez-Suárez, Julio (2018). Job insecurity and mental health: A meta-analytical review of the consequences of precarious work in clinical disorders, *Anales de Psicología*, 2018, Vol 34, Issue 2, p211



review also highlighted gaps: few studies looked at the impacts of insecurity for different population groups, or the specific impacts on different mental health conditions. The narrow focus on subjective insecurity also made it harder to understand the links between insecurity, mental health and wider psychosocial factors (such as business culture, relationships and management).

Similarly, a 2019 systematic review exploring the links between precarious employment and mental health found 16 studies that met their inclusion criteria. The review concluded that there is moderately strong evidence associating job insecurity with poorer mental health, but weaker evidence for negative impacts from temporary employment or unpredictable hours.¹⁴ Studies that looked at multiple measures of precarity found stronger adverse impacts on mental health, and the review noted that more work is needed to develop a harmonised approach to defining precarious work across different dimensions.

There is evidence that the *persistence* of precarious work can be harmful for health and wellbeing, although the evidence base here is relatively limited. A recent systematic review which looked across studies using both subjective and objective measures of insecurity concluded that being in persistent precarious employment increases the likelihood of reporting poor health by 26% and the likelihood of having symptoms of poor mental health by 42%.¹⁵ However, the authors also noted that, despite these increases, the overall strength of the associations between persistent insecure work and poor health remain modest. Causality is also hard to establish and further research is needed to better understand the nature of these links.

Despite these limitations, there are a number of country-level studies that do suggest significant and direct links between job insecurity and ill-health, with research from the UK and Denmark standing out. In the UK, findings from the Whitehall II study, which was a long-term, longitudinal study following British civil servants from the mid-1980s onwards, found that workers who were exposed to chronic job insecurity had the highest self-reported morbidity. Furthermore, these effects were long-standing, continuing to some extent even after job security had been given.¹⁶ Meanwhile a large-scale, longitudinal study of Danish employees similarly found that perceived job insecurity, including perceived threats of internal job mobility, was associated with poorer wellbeing and mental health.¹⁷

Overall, there is clear evidence of associations between job insecurity and poor health, although the precise scale, nature and direction of these links are not always as clear, nor the extent of any differential impacts on specific population groups. These associations are also borne out in wider surveys of working conditions, with analysis of the most recent European Working Conditions Survey finding that perceived job insecurity was an important predictor of poorer health and wellbeing: after controlling

¹⁴ Rönblad, T., Grönholm, E., Jonsson, J., Koranyi, I., Orellana, C., Kreshpaj, B., Chen, L., Stockfelt, L. and Bodin, T. (2019). Precarious employment and mental health: a systematic review and meta-analysis of longitudinal studies. *Scandinavian Journal of Work, Environment & Health*, 45(5), pp.429–443.

¹⁵ Pulford, A., Thapa, A., Thomson, R.M., Guilding, A., Green, M.J., Leyland, A., Popham, F. and Katikireddi, S.V. (2022). Does persistent precarious employment affect health outcomes among working age adults? A systematic review and meta-analysis. *Journal of Epidemiology and Community Health*, 76(11), pp.909–917.

¹⁶ Ferrie, J.E., Shipley, M.J., Marmot, M.G., Martikainen, P., Stansfeld, S.A. and Smith, G.D. (2001). Job insecurity in white-collar workers: Toward an explanation of association with health. *Journal of Occupational Health Psychology*, 6(1), pp.26–42.

¹⁷ Cottini, E. and Ghinetti, P. (2018) Employment insecurity and employees' health in Denmark. *Health Economics*. 2018 Feb;27(2):426-439.

for gender, age, country, occupation and sector, people who felt their job was at risk were twice as likely to experience anxiety or exhaustion as other workers.¹⁸

Hours and working patterns

We also found evidence that working long hours, working night shifts and not being able to work your desired hours were all associated with both poorer physical health and mental health. Taking these three areas in turn, a systematic review exploring the links between long working hours and health identified that long hours (which the authors defined as working more than 40 hours per week) increased the risks of depression, anxiety, sleep disruption and coronary heart diseases.¹⁹ The authors concluded that workers with long working hours have less time to recover from work and have a shorter duration of private time which leads to irregular lifestyles and irregular sleep and diets. Similarly, recent analysis of the UK longitudinal survey Understanding Society has demonstrated that, after controlling for other factors, working at weekends increases the risks of depressive symptoms. Working extra-long hours (55 hours or more per week) was also associated with higher levels of depression among women, although not for men.²⁰

Our review found evidence that working night shifts can be harmful to mental health. A recent meta-analysis found that shift work is associated with higher risks of poor mental health, particularly depressive symptoms, and suggested that the impacts were greater for women than for men.²¹ However, some individual studies draw out contrasting findings. For example, one analysis of the British Household Panel Survey concluded that working night shifts for an extended period was associated with much poorer mental health for men, but not for women, when other factors were controlled for. In contrast, working irregular hours was associated with worse mental health for women, but not for men (this is returned to in section three below).²²

Finally, a number of studies have explored the impact of ‘mismatches’ between desired working hours and actual hours, concluding that both working more and working fewer hours than desired can be harmful to health – although the strength of evidence varies across studies. For example, one study of longitudinal survey data for the UK and Germany found clear evidence of an association between hours mismatches and self-perceived health, with the most significant impacts from being over-employed (working more hours than desired).²³ A more recent study of Korean data found slightly larger impacts on the likelihood of depressive symptoms from being under-employed than over-employed. Perhaps more importantly, it found that the larger the discrepancy

¹⁸ Eurofound (2023), *Psychosocial risks to workers' well-being: Lessons from the COVID-19 pandemic*, European Working Conditions Telephone Survey 2021 series, Publications Office of the European Union, Luxembourg.

¹⁹ Bannai, A. and Tamakoshi, A. (2014). The association between long working hours and health: A systematic review of epidemiological evidence. *Scandinavian Journal of Work, Environment & Health*, 40(1), pp.5–18.

²⁰ Weston, G., Zilanawala, A., Webb, E., Carvalho, L.A. and McMunn, A. (2019). Long work hours, weekend working and depressive symptoms in men and women: findings from a UK population-based study. *Journal of Epidemiology and Community Health*, 73(5), pp.465–474.

²¹ Torquati, L., Mielke, G., Brown, W., Burton, N., & Kolbe-Alexander, T. (2019). Shift Work and Poor Mental Health: A Meta-Analysis of Longitudinal Studies.. *American journal of public health*, e1-e8

²² Bara, A., & Arber, S. (2009). Working shifts and mental health--findings from the British Household Panel Survey (1995-2005).. *Scandinavian journal of work, environment & health*, 35 5, 361-7.

²³ Bell, D., Otterbach, S. and Sousa-Poza, A. (2012). Work Hours Constraints and Health. *Annals of Economics and Statistics*, (105/106), p.35.

between actual and desired hours, the greater the impacts on health.²⁴

Demands, control and ‘job strain’ at work

The third key theme identified in the literature was around the impacts on health and wellbeing of levels of control at work, demands at work, and a mismatch between the two (known as ‘job strain’). The evidence on control at work suggests that having low levels of control is associated with poorer mental health, but also that improvements in job control can be protective of health. For example, a longitudinal study of Australian data found a graded relationship between job control and health, with mental health improving with each quintile increase in reported job control.²⁵ Impacts on health were positive both for control measures around decision-making at work and using skills at work, and suggested a causal relationship.

Other data also highlights the positive or protective impact of having good control at work. For example, analysis of the latest European Working Conditions Survey found that, after controlling for other factors, those who could use their skills at work, were recognised for their work or had good work-life balance were more than twice as likely to report good wellbeing. Individuals who felt they did a good job were nearly four times more likely to report good wellbeing.²⁶ Meanwhile, a systematic review on the effectiveness of measures aimed at increasing workplace control through workplace reorganisation found positive effects on employee health from some organisational-level interventions, suggesting that measures that try to encourage greater employee participation in problem-solving could lead to improvements in health and wellbeing.²⁷

Set against this, evidence around the impacts of demands at work is generally less positive – with high levels of psychological or physical demands associated with poorer health outcomes. One systematic review looking specifically at the impacts of chronic stress at work (or ‘burnout’) found that this was a significant predictor of a range of health issues including diabetes, heart disease, musculoskeletal pain and mental ill health.²⁸ Another study focused specifically on physically demanding work, drawing on UK survey data, and concluded that high physical demands were an important predictor of health-related job loss among older workers.²⁹

Highly demanding work is considered most harmful when combined with low control at work. There is clear evidence that this combination, known as ‘job strain’, is associated with poorer health outcomes, although evidence on causality is limited due to data

²⁴ Kim, S., Jeong, W., Jang, S., Park, E., & Park, S. (2020). Is Work Hour Mismatch Associated with Depression?. *Safety and Health at Work*, 12, 96 - 101. <https://doi.org/10.1016/j.shaw.2020.09.009>.

²⁵ Bentley, R.J., Kavanagh, A., Krnjacki, L. and LaMontagne, A.D. (2015). A Longitudinal Analysis of Changes in Job Control and Mental Health. *American Journal of Epidemiology*, 182(4), pp.328–334.

²⁶ Eurofound (2023), *Psychosocial risks to workers’ well-being: Lessons from the COVID-19 pandemic*, European Working Conditions Telephone Survey 2021 series, Publications Office of the European Union, Luxembourg.

²⁷ Egan, M., Bamba, C., Thomas, S., Petticrew, M., Whitehead, M. and Thomson, H. (2007). The psychosocial and health effects of workplace reorganisation. 1. A systematic review of organisational-level interventions that aim to increase employee control. *Journal of Epidemiology & Community Health*, 61(11), pp.945–954.

²⁸ Salvagioni, D., Melanda, F., Mesas, A., González, A., Gabani, F., & Andrade, S. (2017). Physical, psychological and occupational consequences of job burnout: A systematic review of prospective studies. *PLoS ONE*, 12.

²⁹ Sewdas, R., van der Beek, A.J., Boot, C.R.L., D’Angelo, S., Syddall, H.E., Palmer, K.T. and Walker-Bone, K. (2019). Poor health, physical workload and occupational social class as determinants of health-related job loss: results from a prospective cohort study in the UK. *BMJ Open*, 9(7), p.e026423.



quality.³⁰ For example, one meta-analysis found that combinations of high demands at work and low control over decision-making are strongly predictive of common mental health problems.³¹ Another study found that people with high levels of job strain were more likely to have unhealthy lifestyles, though it did not confirm that job strain directly led to these lifestyle changes.³²

Finally, a study analysing cohort surveys from four countries (Finland, France, Sweden and the UK) concluded that high levels of job strain were consistently linked to shorter healthy life expectancy. On average, this reduced healthy life expectancy by 1.7 years, with a more pronounced impact on men (2.0 years) than women (1.5 years), and for people in lower occupational groups (2.5 years) compared to those in higher groups (1.7 years).³³

Overall, while causality remains hard to establish, there appears to be strong evidence that sustained high demands at work can be harmful, increasing control at work can be protective of health, and mismatches between demands and control – or ‘job strain’ – are consistently associated with worse health outcomes. This also points to one further important finding from the literature around demands and control at work: that having more control or resources appears to reduce the risks of burnout for those exposed to demanding work. This is set out in one large-scale analysis of over 200 studies which concluded that, while the nature of demands can vary across industries, the most effective resources for supporting good health are often consistent and relate to having a supportive environment at work.³⁴

Relationships and support at work

This leads on to the fourth dimension of job quality that was identified in our research: that having good quality relationships and support at work contributes to good health, while poor relationships can be harmful.

Once again, the evidence base on the links between workplace relationships and health is not clear-cut. For example, a recent literature review identified challenges around conceptualising and measuring ‘social support’, as well as mixed findings on the extent to which social relationships can moderate the impact of other factors.³⁵

³⁰ Kain, J. and Jex, S. (2010), Karasek's (1979) job demands-control model: A summary of current issues and recommendations for future research, in Perrewé, P.L. and Ganster, D.C. (Ed.) *New Developments in Theoretical and Conceptual Approaches to Job Stress (Research in Occupational Stress and Well Being, Vol. 8)*, Emerald Group Publishing Limited, Leeds, pp. 237-268.

³¹ Stansfeld, S., & Candy, B. (2006). Psychosocial work environment and mental health--a meta-analytic review.. *Scandinavian journal of work, environment & health*, 32 6, 443-62.

³² Heikkilä, K., Fransson, E., Nyberg, S., Zins, M., Westerlund, H., Westerholm, P., Virtanen, M., Vahtera, J., Suominen, S., Steptoe, A., Salo, P., Pentti, J., Oksanen, T., Nordin, M., Marmot, M., Lunau, T., Ladwig, K., Koskenvuo, M., Knutsson, A., Kittel, F., Jöckel, K., Goldberg, M., Erbel, R., Dragano, N., Debacquer, D., Clays, E., Casini, A., Alfredsson, L., Ferrie, J., Singh-Manoux, A., Batty, G., & Kivimäki, M. (2013). Job strain and health-related lifestyle: findings from an individual-participant meta-analysis of 118,000 working adults.. *American journal of public health*, 103 11, 2090-7.

³³ Hanson, L., Westerlund, H., Chungkham, H., Vahtera, J., Rod, N., Alexanderson, K., Goldberg, M., Kivimäki, M., Stenholm, S., Platts, L., Zins, M., & Head, J. (2018). Job strain and loss of healthy life years between ages 50 and 75 by sex and occupational position: analyses of 64 934 individuals from four prospective cohort studies. *Occupational and Environmental Medicine*, 75, 486 - 493.

³⁴ Nahrgang, J., Morgeson, F., & Hofmann, D. (2011). Safety at work: a meta-analytic investigation of the link between job demands, job resources, burnout, engagement, and safety outcomes.. *The Journal of applied psychology*, 96 1, 71-94.

³⁵ Jolly, P. M., Kong, D. T., & Kim, K. Y. (2021). Social support at work: An integrative review. *Journal of Organizational Behavior*, 42(2), 229-251.



There are a number of papers that point to the positive, protective effects of having good relationships at work. One study, for example, explored the links between health and relationships at work by surveying around 1,200 employees in UK local government and education. This found a strong positive association between self-reported quality of relationships and self-reported mental health as well as overall self-rated health.³⁶ This persisted after controlling for demographic characteristics as well as for measures of demand, control, and support within the workplace. In another study of workplace relationships among public sector employees in the US, high quality relationships – defined as having a good rapport with peers and managers – were found to help mediate the impacts of job stress and exhaustion.³⁷ The authors argued that this was because these relationships provided employees with the tangible and intangible support needed at work.

Alongside these positive impacts from good relationships, there is also clear evidence of negative impacts from damaging relationships. In particular, workplace bullying has profoundly negative impacts on mental health, with one meta-analysis of evidence from the Netherlands finding that workplace bullying is a significant predictor of worsening of mental health such as depression, anxiety, and other stress-related psychological issues.³⁸ Related to this, Eurofound's analysis of the latest European Working Conditions Survey found that being the victim of workplace discrimination was one of the strongest predictors of ill health, even after controlling for other factors. Workers who experience discrimination are four times more likely to report exhaustion, anxiety or health concerns than people who were not the victims of bullying at work.

We also sought evidence on the effectiveness of measures to support better health at work to inform action on improving outcomes for people with health conditions. However, we found the evidence base here to be particularly limited, with relatively few high-quality studies available. For example, one literature review of mental health and wellbeing support suggested a generally positive overall impact, but the evidence was not strong enough to recommend specific interventions.³⁹

In our own work at IES, we have also found some examples of positive impacts from workplace counselling. However, again, the quality of evidence is weak, and effectiveness may rely on how well these interventions are implemented and communicated to staff.⁴⁰ Within this literature, there is some evidence that online support can be beneficial, with one systematic review and meta-analysis finding that digital delivery of occupational mental health support can have modest but positive impacts on psychological wellbeing and work effectiveness.⁴¹

Unfortunately, the evidence base for the effectiveness of wider health and wellbeing initiatives in workplaces – like mindfulness and wellbeing apps, stress management

³⁶ Rydstedt, L.W., Stansfeld, S.A., Head, J. and Woodley-Jones, D. (2012). Quality of Workplace Social Relationships and Perceived Health. *Psychological Reports*, 110(3), pp.781–790.

³⁷ Caillier, J.G. (2017). The impact of high-quality workplace relationships in public organizations. *Public Administration*, 95(3), pp.638–653.

³⁸ Verkuil, B., Atasayi, S. and Molendijk, M.L. (2015). Workplace Bullying and Mental Health: A Meta-Analysis on Cross-Sectional and Longitudinal Data. *PLOS ONE*, 10(8), p.e0135225.

³⁹ Hesketh, R., Strang, L., Pollitt, A. and Wilkinson, B. (2020) *What do we know about the effectiveness of workplace mental health interventions?* Kings College London Policy Institute, April 2020

⁴⁰ Bajorek, Z., and Bevan, S. *Demonstrating the effectiveness of workplace counselling. Reviewing the evidence for wellbeing and cost effectiveness outcomes.* Institute for Employment Studies Report 553

⁴¹ Carolan, S., Harris, P.R. and Cavanagh, K. (2017). Improving Employee Well-Being and Effectiveness: Systematic Review and Meta-Analysis of Web-Based Psychological Interventions Delivered in the Workplace. *Journal of Medical Internet Research* 19(7), p.e271.



programmes, support with workload or time management, promotion of healthier lifestyles and so on – remains limited.

A study published this year on the Britain's Healthiest Workplace survey found that, on multiple subjective wellbeing indicators, people who accessed wellbeing support appeared to be no better off than those who did not.⁴² But underneath this overall finding, covering a broad range of interventions and workplaces, there will likely be both positive and negative impacts from individual initiatives. How interventions are embedded in organisational contexts is key. A key conclusion that the author draws is that employers should focus more effort on organisational-level changes to improve working conditions rather than simply offering access to individual-level support.

Differences in health outcomes between demographic groups

As noted in section 2, there is relatively limited robust evidence on the extent to which the health impacts of different dimensions of job quality vary for different groups within the population. Studies that do explore this tend to look at differences by gender and, sometimes, by age. Findings related to these dimensions are set out below. In addition, we have carried out searches on the evidence for differences for people with underlying health conditions or work-limiting impairments, a crucial area in supporting higher employment (in good-quality work) for disabled people and those with health conditions.

Differences by gender

As set out above, we found most evidence on differential impacts between women and men in studies looking at the impacts of working longer or irregular hours. As we noted there, in one study drawing on the UK Understanding Society survey, women working excessively long hours were more likely than men to have symptoms of depression,⁴³ while a meta-analysis of the impacts of shift work on mental health also found more significant impacts for women than men.⁴⁴

In addition to these studies, the analysis of hours mismatches using survey data from the UK and Germany referenced in section two also found interesting gender differences among those who were working more hours than they wanted but nonetheless still working fewer than 35 hours per week: with men seeing no negative impacts on their mental health but women significantly negatively affected.⁴⁵ The authors attribute these differences to women being more likely to be 'time poor' outside of work, given their greater likelihood to have caring responsibilities.

We also noted above that the British Household Panel Survey found that prolonged

⁴² Fleming, W.J. (2004). Employee well-being outcomes from individual-level mental health interventions: Cross-sectional evidence from the United Kingdom. *Industrial Relations Journal*, 55, 162-182.

⁴³ Weston, G., Zilanawala, A., Webb, E., Carvalho, L.A. and McMunn, A. (2019). Long work hours, weekend working and depressive symptoms in men and women: findings from a UK population-based study. *Journal of Epidemiology and Community Health*, 73(5), pp.465–474.

⁴⁴ Torquati, L., Mielke, G., Brown, W., Burton, N., & Kolbe-Alexander, T. (2019). Shift Work and Poor Mental Health: A Meta-Analysis of Longitudinal Studies.. *American journal of public health*, e1-e8

⁴⁵ Bell, D., Otterbach, S. and Sousa-Poza, A. (2012). Work Hours Constraints and Health. *Annals of Economics and Statistics*, (105/106), p.35.



night-shift working was associated with poorer mental health for men but not for women, but working irregular hours was associated with worse mental health for women but not men.⁴⁶ The authors speculate that they may have found a weaker association between night work and ill health for women because they controlled for occupations – as, for example, women working night shifts are more likely to be in high-stress roles like nursing and care – and also controlled for prior mental health. The findings on irregular hours however would be consistent with arguments around ‘time poverty’ and the uneven sharing of caring responsibilities – with women perhaps more likely to see negative impacts on their own health where they cannot mitigate the impact of changes in shift patterns.

Another area where different impacts by gender were identified was around working conditions. One recent study by Belloni et al (2022) and drawing on the European Working Conditions Survey and UK Understanding Society Survey found that negative changes in working conditions tended to have a more substantial impact on women's mental health compared to men, which the authors suggest may again be due to women being more likely than men to have to manage conflicts between working time and family care.⁴⁷ Similarly, the systematic review exploring the potential positive impacts of workplace reorganisations referenced above also found some evidence of differential impacts for men and women, in this case that in some studies women appeared to be less likely than men to see improvements in their health.⁴⁸

Differences for older and younger people

There is some evidence of different impacts of job quality dimensions by age, although the inter-relationships with other characteristics – like health status, qualifications, occupations and industries, and so on – mean that effects can be hard to isolate.

The study by Belloni et al (2022) referenced above sought to explore differences by age and gender and did find age-specific impacts on mental health from job quality dimensions.⁴⁹ It concluded that changes in the physical work environment and working time arrangements (like atypical work schedules) significantly impacted older workers more than younger workers, with greater impacts for women than men – perhaps as a result of older people having other limitations or constraints on their time. The authors also found some evidence that having ‘task variety’ was supportive of good health for young people (for example being able to choose the order of tasks and work methods) while ‘skill variety’ was more important for older people (being able to choose tasks and have some variety between more and less cognitive work).

There is also some evidence that the impacts of job insecurity and job loss can vary by age, with one recent study on the impacts of job transitions in Germany finding that job loss led to greater impacts on physical health and mental health for people aged 45-60

⁴⁶ Bara, A., & Arber, S. (2009). Working shifts and mental health--findings from the British Household Panel Survey (1995-2005).. *Scandinavian journal of work, environment & health*, 35 5, 361-7.

⁴⁷ Belloni, M., Carrino, L. and Meschi, E. (2022). The impact of working conditions on mental health: novel evidence from the UK. *Labour Economics*, 76, p.102176.

⁴⁸ Egan, M., Bambra, C., Thomas, S., Petticrew, M., Whitehead, M. and Thomson, H. (2007). The psychosocial and health effects of workplace reorganisation. 1. A systematic review of organisational-level interventions that aim to increase employee control. *Journal of Epidemiology & Community Health*, 61(11), pp.945–954.

⁴⁹ Belloni, M., Carrino, L. and Meschi, E. (2022). The impact of working conditions on mental health: novel evidence from the UK. *Labour Economics*, 76, p.102176.

than other age groups; with older men most severely affected.⁵⁰

The impacts of these differences can also be compounded by the fact that older people are more likely to be exposed to work-related health risks than younger people, when other factors are controlled for. One study, again drawing on the European Working Conditions Survey, estimated that people aged 55-65 are 5-11% more likely to be exposed to health risks than those aged 35-55, and 8-14% more likely than those aged 15-35.⁵¹ These issues are particularly important because there is a range of evidence that good work and longer working lives is protective of physical, mental and general health for older people.⁵²

Disability and health

Finally, we found very limited evidence on differences in the impacts of job quality dimensions for disabled people and those with health conditions. Nonetheless, there is a range of evidence that people with disabilities are more likely to be in poor-quality work, with evidence from the USA showing that disabled workers are more likely to be in precarious work and more likely to have worse outcomes than non-disabled people in all employment types⁵³. Even among college graduates, people with disabilities face significant wage penalties and report lower job quality than their non-disabled peers, after controlling for a range of job-related and demographic characteristics.⁵⁴

Summary

Drawing these findings together, the evidence suggests that there are a range of factors related both to working conditions and employment conditions that can drive positive and negative impacts on health.

Being in precarious work is associated with poorer health and particularly mental ill health, with the *persistence* of precariousness appearing to magnify impacts. There is also evidence that job insecurity has negative impacts on mental wellbeing and that these impacts can persist even after the threat of job loss has been removed.

Long hours, night shifts and weekend working all appear to increase risks of poor mental health but also poorer physical health and unhealthy lifestyles. Mismatches between desired hours and actual hours – both being ‘overemployed’ and ‘underemployed’ – are also associated with a higher incidence of ill health. Highly demanding and stressful work brings with it a range of health risks, and there is evidence that mismatches between job demands and resources (i.e. job strain) is associated with unhealthier lifestyles and poorer health outcomes. Poor relationships at work, and especially workplace bullying and discrimination, clearly harm mental health.

Set against these negative impacts, there are also important characteristics of work

⁵⁰ Unger, S., Tisch, A., & Tophoven, S. (2018). Age and gender differences in the impact of labour-market transitions on subjective health in Germany. *Scandinavian Journal of Public Health*, 46, 49 - 64.

⁵¹ Jones, M., Latreille, P., Sloane, P., & Staneva, A. (2013). Work-related health risks in Europe: are older workers more vulnerable?. *Social science & medicine*, 88, 18-29.

⁵² See for example Henseke, G. (2017). Good jobs, good pay, better health? The effects of job quality on health among older European workers. *The European Journal of Health Economics*, 19, 59 - 73.

⁵³ Schur, L., & Kruse, D. (2021). Disability and Precarious Work. *The Oxford Handbook of the Sociology of Disability*.

⁵⁴ Henly, M., & Brucker, D. (2020). More than just lower wages: intrinsic job quality for college graduates with disabilities. *Journal of Education and Work*, 33, 410 - 424.

Table 1: Summary of research evidence on the health outcomes of job quality

Aspects of job quality	Health impacts	Moderators
Employment: Job insecurity or precarious work	Mental health	Persistent insecurity is especially damaging Subjective measures are especially important
Working hours: Long hours Night shifts Not working desired hours	Mental and physical health Mental and physical health Mental and physical health	Under-employment is more damaging than over-employment
The nature of work: High psychological or physical job demands Underutilised skills Lack of recognition Poor work-life balance	Mental and physical health Wellbeing Wellbeing Wellbeing	Job control/autonomy reduces the impact of demands
Relationships at work: Poor quality relationships and lack of support Bullying Wellbeing interventions (e.g. counselling, online services, mindfulness)	Mental and general health Mental and general health Mental and general health (potentially positive impact)	Interventions need to be integrated into organisational processes and ways of working

that the evidence suggests can be supportive or protective of good health. Most notably, having higher levels of control at work is associated with better mental and physical health, with studies identifying various different drivers of this including task autonomy, skills use, involvement in decision-making and effective work organisation. Good quality relationships at work also appear to be protective of health and wellbeing and can moderate the impacts of demanding or stressful work. We found little evidence that health and wellbeing initiatives at work led to improvements in health, emphasising that organisational rather than individual factors are likely to be more important

determinants of good health at work.

We found some evidence that dimensions of job quality can affect different groups in the population in different ways (see Table 2), although relatively few studies included sub-group analysis and those that did tended to focus on differences by age and gender. Nonetheless, these findings do point to greater risks of ill health among women from working irregular hours, mismatches between actual and desired hours, and being subject to adverse changes in working conditions – likely reflecting the uneven sharing of caring responsibilities between men and women. Older people also appear to be at greater risk of ill health from changes in their working conditions, as well as from job insecurity and job loss.

Across all of these themes, however, one important finding has been that the evidence base on the links between different aspects of job quality and health and wellbeing at work is often limited, and it remains very challenging to establish causality rather than correlations. Improving the evidence base should continue to be a priority.

Table 2: Summary of research evidence on the difference in work-related health between demographic groups

	Differences in job or work quality
Gender	<p>Women’s mental health is more likely than men’s to be negatively affected by:</p> <ul style="list-style-type: none"> • Long hours • Shift work • Decline in working conditions.
Age	<p>Older workers have greater exposure to work-related health risks.</p> <p>Older workers are more likely to be negatively affected by:</p> <ul style="list-style-type: none"> • Changes in the physical work environment • Atypical working time arrangements. <p>Task variety especially benefits younger workers’ wellbeing.</p> <p>Skill variety especially benefits older workers’ wellbeing.</p> <p>Job insecurity and job loss especially impact the physical and mental health of older workers, especially men.</p>
Disability	<p>Disabled workers more likely to be in poor quality jobs.</p> <p>Disabled workers tend to be paid less.</p>

3. How widespread are work-related health issues and which groups are most affected?

The previous section summarised the evidence on the links between various dimensions of job quality and health and wellbeing at work – identifying four key dimensions where evidence is strongest for both negative and positive impacts. Building on this, this section explores the prevalence of these factors among workers in the UK.

It starts by setting out, at a relatively high level, what we know about the prevalence of different dimensions of poor-quality work from survey data and published literature – focusing on the four themes from the previous section around job insecurity, hours and working patterns, demands and control at work, and relationships.

Following this, we then take a closer look at measures of job quality from the UK sample in the latest European Working Conditions Telephone Survey (2021), first broken down by industry and then by demographic groups.⁵⁵

The dominant issues in job quality

Insecurity

We set out in the previous section that insecurity can be measured in objective terms – contractual and legal protections, the likelihood of losing a job and so on – and subjectively – whether people feel at risk of job loss or major job change.

In objective terms, relatively few workers in the UK are in temporary employment (around 5% of employees) while redundancy and contract termination are also rare (around 1% of the workforce leave jobs for these reasons each quarter). However, on a broader measure of job insecurity, which includes those on ‘zero hours’ contracts, in low-paid self-employment and in casual work, the TUC estimates that around one in eight workers – or 4.1 million people – are in insecure jobs.⁵⁶ Their analysis also suggests that the proportion of the workforce in insecure jobs has risen slightly since 2011, from 10.7% to 12.5%.

It is important to note that one reason temporary employment rates are so low is the comparatively low level of employment protections for those in permanent jobs in the UK by international standards. The UK has some of the weakest protections against unfair dismissal in the OECD, as well as low rates of unemployment benefit and limited income protection during sickness absence.⁵⁷ Analysis by the Resolution Foundation also highlights that employment insecurity is much more likely among those in low-paid

⁵⁵ This is the latest data for which we have comparable EU and UK data. The data are not strictly current, but give a good indication of where the UK sits in relation to other countries.

⁵⁶ Source: Trades Union Congress. Available at: <https://www.tuc.org.uk/news/number-people-insecure-work-reaches-record-41-million> [Accessed 1 October 2024]

⁵⁷ Cominetti, N. (2024) *Low Pay Britain 2024: Examining the Government's proposed employment reforms*, Resolution Foundation, September 2024

work, Black people, young people and disabled people.⁵⁸

Nonetheless, subjective measures of job insecurity tell a similar story to the objective data. The latest figures from the 2021 European Working Conditions Telephone Survey (EWCTS) show that 11.8% of UK workers reported feeling at risk of losing their jobs in the next six months, in line with European Union average.⁵⁹ This finding is notable given that the survey was conducted at a time when the Coronavirus Job Retention Scheme was still in place. It also reflects a longer-term decline in job insecurity, with the 2017 Skills and Employment Survey reporting that just under one in ten workers felt at risk of losing their job, half the rate reported five years earlier.⁶⁰

This survey also indicated similar levels of subjective insecurity between workers in lower-skilled and higher-skilled roles, as well as between those with lower and higher levels of qualifications. These findings are supported by recent analysis by the Centre for Economic Performance, which found no evidence of increases in subjective insecurity in the UK, US or Germany over recent decades (excluding the impact of the 2008/09 recession), even across different groups of the workforce.⁶¹

Hours and working patterns

Overall, a relatively small proportion of the UK workforce reports working very long hours, with 15% of workers reporting that they usually work 45 hours a week or more.⁶² Men are around twice as likely as women to work very long hours (20% compared with 9%), partly because women are more likely balance work with caring responsibilities and because men are more likely to work in industries where long hours are common (such as construction, transport and manufacturing – which, in turn, may reflect and contribute to these being male-dominated industries).

As shown in Chart 1 below, the proportion of the workforce working very long hours has fallen significantly over recent decades, from 21% in 2004 to 15% in 2024. This decline is explained by an increase in the share of women in work and a decrease in the share of men working very long hours. At the same time, the proportion of the workforce working part-time has remained broadly stable at around 26%, with recent decreases in part-time work among women and increases among men. Nonetheless, EWCTS data suggests that the share of the UK workforce working very long hours remains significantly higher than the European Union average and is higher than in any of our northern or western European neighbours.⁶³

⁵⁸ Cominetti, N., McCurdy, C., Thwaites, G. and Vieira-Marques, R. (2023) *Low Pay Britain 2023: Improving low-paid work through higher minimum standards*, The Resolution Foundation, April 2023

⁵⁹ Source: European Working Conditions Telephone Survey 2021.

⁶⁰ Felstead, A., Gallie, D., Green, F. and Henseke, G. (2018) *Insecurity at Work in Britain: First Findings from the Skills and Employment Survey 2017*, Centre for Learning and Life Chances in Knowledge Economies and Societies, UCL Institute of Education

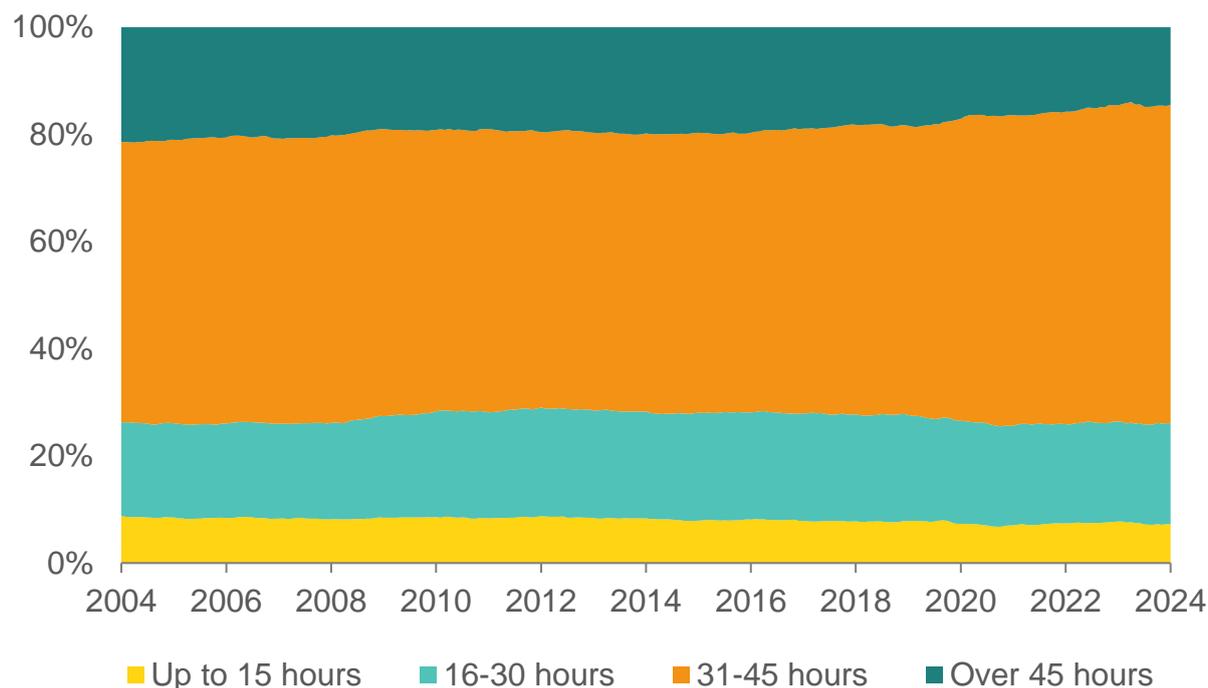
⁶¹ Manning, A. and Mazeine, G. (2020) *Subjective Job Insecurity and the Rise of the Precariat: Evidence from the UK, Germany and the United States*, CEP Discussion Paper No 1712, August 2020

⁶² Source: Labour Force Survey

⁶³ Source: European Working Conditions Telephone Survey 2021.

Chart 1: The share of people working very long hours has fallen

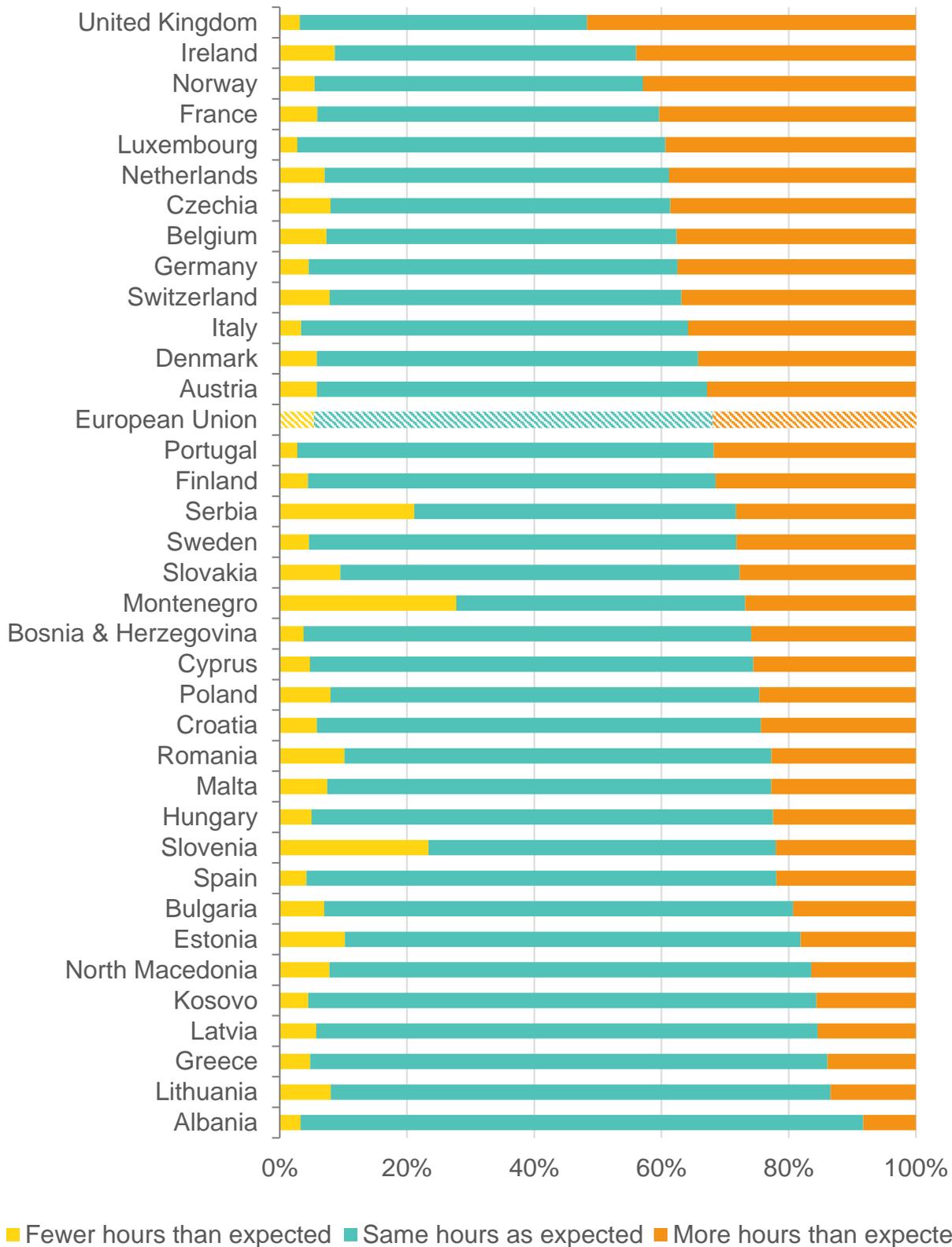
Usual weekly hours of work (all in employment), UK, 2004-2024



Source: Institute for Employment Studies analysis of Labour Force Survey

The latest EWCTS data also suggests that the UK is an outlier in Europe on hours 'mismatches' – with UK workers less likely than those in other countries to usually work the same hours as expected (45%). As shown in Chart 2 below, the UK has the highest share of people working longer than their contracted or expected hours – just over half (52%) of the workforce – and the lowest share of the workforce working fewer hours than expected (3%). However, the EWCTS data is slightly more positive around combining work and family commitments, with more than four-fifths (82%) of UK workers reporting that they are able to do this. This is slightly higher than the European average, although still somewhat lower than many northern European neighbours.

Chart 2: UK workers are the most likely to work unexpected additional hours
 Difference between hours expected to work and actual hours worked by European country, 2021

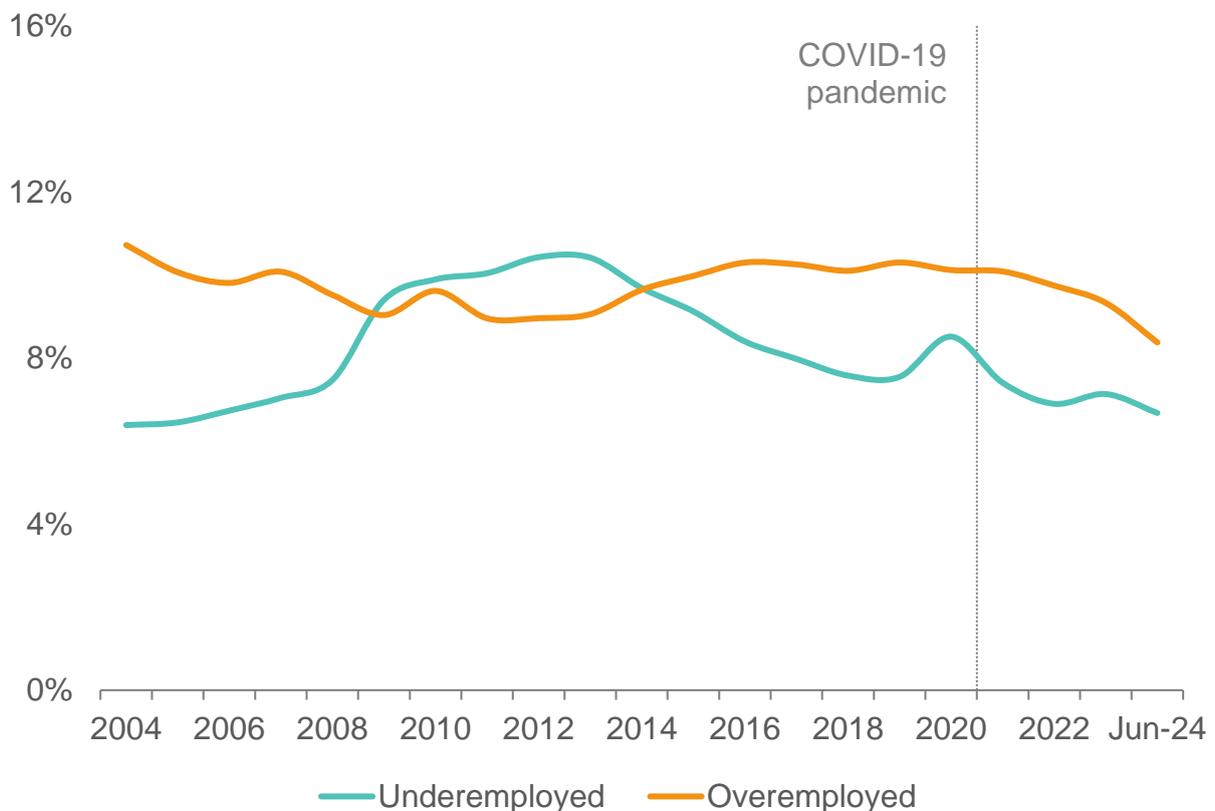


Source: European Working Conditions Survey, 2021

While this data points to a significant issue around people being expected or required to work excess hours, the share of people reporting being ‘overemployed’ – defined as wanting to work fewer hours for less pay – has been falling over recent years and is now at its lowest in a decade.⁶⁴ The number of underemployed people has also been falling as overall employment has been rising. This means that the number of people in work who are neither over- nor under-employed is now at its highest ever level (Chart 3). It should be noted, however, that while underemployment is relatively low on headline measures, there are important differences between groups. Analysis from the Resolution Foundation shows that young people, disabled people and those from ethnic minority backgrounds are more likely to want to work more hours.⁶⁵

Chart 3: Fewer UK workers are now overemployed or underemployed

Proportion of workers who are underemployed and overemployed, UK, 2004-2024



Source: Institute for Employment Studies analysis of Labour Force Survey

Looking at irregular and short-notice hours, the EWCTS data indicates that around one in nine (11%) UK workers report doing night shifts, while 15% are regularly required to come into work at short notice (at least several times a month). Both figures are in line with the European Union average.

Demands, control and job strain

The evidence above indicates that job insecurity and excessive or irregular working hours affect a relatively small minority of the UK workforce. Nonetheless, they are

⁶⁴ Source: Labour Force Survey.

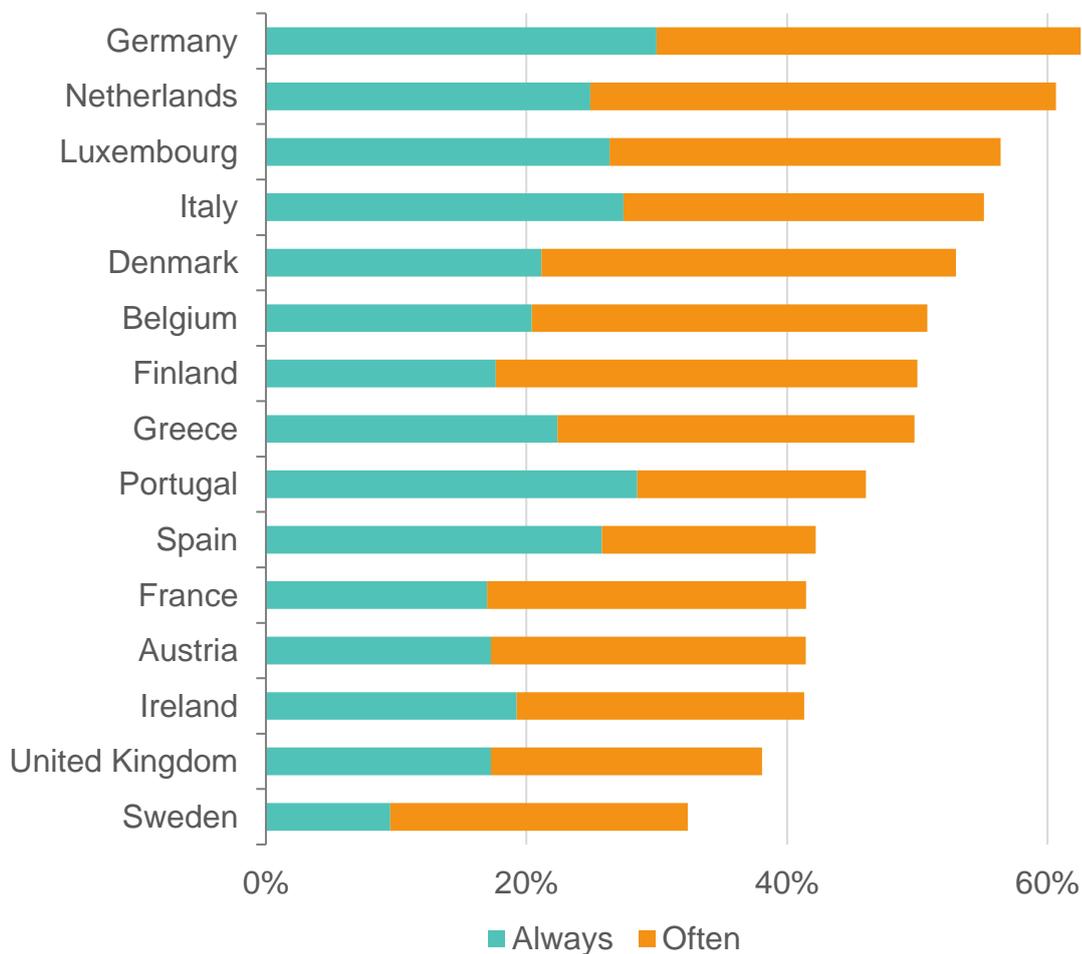
⁶⁵ Cominetti, N., McCurdy, C., Thwaites, G. and Vieira-Marques, R. (2023) *Low Pay Britain 2023: Improving low-paid work through higher minimum standards*, The Resolution Foundation, April 2023

important issues for those groups. A separate feature, work *intensity*, exacerbates these issues. High levels of work intensity also affects a much larger group of people. The EWCTS data suggests that a majority of UK workers regularly have to work to tight deadlines (58%) and that nearly half (43%) work at very high speeds.⁶⁶ The proportion working to tight deadlines is among the highest in Europe, while the figure for high-speed work is broadly in line with (and slightly lower than) the European average.

These pressures are compounded by relatively low levels of control at work, with just over a third of UK workers (37%) reporting that they have control to choose or change their methods of work, which is well below the European average (47%). UK workers are also far less likely than those in nearly any other European country to have control over the speed at which they work (28%; see Chart 4). Low autonomy is associated with other aspects of poor job quality, including insecure and low-paid work.⁶⁷

Chart 4: UK workers are relatively unlikely to experience work pace autonomy

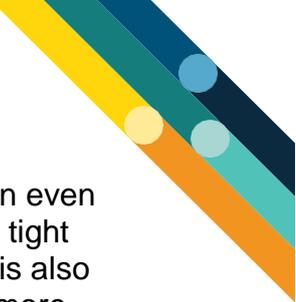
How often workers can choose or change speed or rate of their work by selected country (EU-15 only), 2021



Note: showing UK and EU-15 countries. Source: European Working Conditions Survey, 2021.

⁶⁶ Source: European Working Conditions Telephone Survey 2021.

⁶⁷ Cominetti, N., McCurdy, C., Thwaites, G. and Vieira-Marques, R. (2023) *Low Pay Britain 2023: Improving low-paid work through higher minimum standards*, The Resolution Foundation, April 2023



A more detailed analysis from the 2017 Skills and Employment Survey paints an even starker picture, finding that nearly half of workers reported working very hard or tight deadlines, while around half reported being exhausted from work.⁶⁸ The analysis also highlighted differences across occupations: managers and professionals were more likely to report very hard work, tight deadlines and high effort (defined as having to work beyond what is required for their job), while those in the lowest-skilled jobs were more likely to report working at very high speeds, and those in personal service jobs were more likely to report high effort. Teachers and nurses reported high levels of work intensity across all dimensions.

Importantly, the Skills and Employment Survey also show rising work intensity over recent decades. The share of people reporting that they had to work very hard rose from 31% in the early 1990s to 42% in 2017. This has also been accompanied by deteriorations in levels of control at work, which combined has led to the share of people facing high levels of 'job strain' more than trebling over 25 years – from 5% in 1992 to 17% in 2017. Levels of job strain were particularly high for teachers (39%) and nurses (29%) in 2017.

Relationships at work

Finally on relationships at work, the EWCTS data shows that UK workers generally feel well supported – with 82% reporting that they are often or always supported by their colleagues and 74% reporting being supported by their managers. Both are slightly above the averages for the European Union (79% and 68%, respectively). Set against this, however, around one in six (16%) UK workers report having been subject to some form of adverse behaviour at work (i.e. bullying, harassment and/or discrimination).

How do the dominant issues vary by industry and demographics?

This section takes a closer look at the prevalence of different aspects of job quality across broad industries and population groups, using UK data from the 2021 EWCTS. This analysis focuses on ten indicators, grouped under the four themes identified in the previous section. It is important to note that this analysis is only intended to illustrate the general prevalence of different indicators of good and poor job quality. It does not control for respondent characteristics or job roles, so it does not show the likelihood of poor-quality work once other factors are controlled for.

Job quality by industry

Table 3 below summarises the findings on job quality by broad industry. The EWCTS uses a high level, ten-category structure for industries: the Appendix at the end of this report maps these ten industry groups to UK Standard Industrial Classification codes. For each industry, we have also noted its workforce share based on Labour Force Survey data (shown in brackets in the top row). Within the table, colour coding from red to green denotes industries with the highest to lowest incidence of job quality factors. The final column provides summary values for each job quality indicator across all

⁶⁸ Green, F., Felstead, A., Gallie, D. and Henseke, G. (2018) *Work Intensity in Britain – First Findings from the Skills and Employment Survey 2017*, Centre for Learning and Life Chances in Knowledge Economies and Societies, UCL Institute of Education



industries, offering an overview of job quality across the workforce as a whole.

The table illustrates that people who work in ‘white collar’ services – represented by the three columns on the left-hand side of the table – are generally less likely to report negative responses on these job quality indicators compared to those in other sectors. In contrast, job quality scores are far poorer for those working in transport and storage, construction and commerce and hospitality.

Looking at job quality domains, **job insecurity** is particularly prevalent in transport and storage and construction, but also high in the commerce and hospitality sector and for workers in the ‘other services’ category (which includes administrative and support roles, information and communication, and arts and entertainment). Note that this measure of ‘job insecurity’ is a composite, based on responses to three questions: perceived risk of job loss within six months, likelihood of an undesirable change in working situation, and being self-employed with only one client or customer. This leads to an overall figure of 28% of UK workers in insecure employment – a higher estimate than in section two above, largely driven by the inclusion of dependent self-employed workers.

Regarding **working hours**, very long hours are more common in agriculture (although this sector accounts for only 1% of the workforce, so results here should be treated with caution) and are also significantly above average for workers in transport and storage and construction. Workers in transport and storage also report a high incidence of poor work-life balance, although scores are broadly in line with the average for other industries (and below average in white-collar services).

There is significant variation across indicators related to **demands and control**. Consistent with earlier findings, risks of burnout are very high in education and in health, while people working in agriculture, construction, health and commerce and hospitality are more likely to report that their work is tiring. Measures of autonomy at work are notably lower for workers in transport and storage, and below average in health, commerce and construction.

Finally, in terms of workplace **relationships**, construction workers are much more likely to report poor support from managers, while those in commerce and hospitality and industry report higher incidences of discrimination (with slightly above average incidences of discrimination among workers in health and construction too).

Table 3: Job quality dimensions by industry, UK, 2021

Job Quality areas and indicators		Industry (proportion of total workforce)										
		Financial Services (5%)	Other Services (25%)	Public Admin (8%)	Education (10%)	Health & care (14%)	Commerce & hosp. (15%)	Industry (10%)	Construct-ion (6%)	Transport & storage (5%)	Agricult. (1%)	All industries (100%)
Job security	Insecurity	24%	31%	19%	25%	27%	30%	24%	36%	39%	9%	28%
Working hours	Long hours (48 or more/week)	13%	20%	14%	21%	17%	17%	23%	32%	37%	61%	20%
	Poor work-life balance	12%	15%	13%	18%	18%	21%	18%	20%	32%	13%	18%
Demands and control	Work in tiring positions	11%	33%	17%	36%	51%	45%	41%	56%	34%	61%	38%
	Physical/emotional burnout	16%	29%	34%	45%	43%	40%	35%	35%	35%	37%	36%
	Little work autonomy	8%	11%	7%	18%	23%	25%	13%	21%	40%	0%	17%
	Few chances to use skills or knowledge	7%	10%	8%	10%	11%	13%	12%	13%	20%	1%	11%
	No employee representation	59%	64%	18%	26%	31%	66%	63%	65%	37%	75%	50%
Relationships	Little managerial support	4%	10%	5%	8%	8%	10%	13%	19%	12%	2%	9%
	Experienced discrimination in last 12 months	8%	12%	11%	10%	14%	16%	15%	14%	9%	3%	12%

Note: Green highlights above average figures and red below average. Source: IES analysis of European Working Conditions Telephone Survey 2021, UK data.

Job quality dimensions for different demographic groups

In this section, we explore the extent to which people from different demographic groups report being in poor-quality work, using the same dimensions set out above and again drawing on EWCTS data. Tables 4 and 5 below present findings by age, gender, health status and education level.⁶⁹ As with the previous analysis, these tables show the prevalence of different indicators within each group, rather than controlling for factors which may (or may not) explain these differences.

The data shows that people with chronic conditions are more likely to experience **job insecurity**, with younger people, those aged 35-44 years, and men also slightly more likely than average to experience job insecurity. This is consistent with earlier evidence on job insecurity and reflects higher self-employment rates among men and disabled workers.

In terms of **working hours**, men are much more likely than women to report working very long hours (again consistent with wider evidence) and are also somewhat more likely to report poor work-life balance. People with chronic conditions and young workers fare better on measures of working hours, while there are relatively minor difference across other demographic groups.

The data on **job demands and controls** suggests that workers with health conditions, younger people and those with lower qualifications are more likely to report tiring work, while women and those with higher qualifications are more likely to experience burnout. These differences likely reflect differences in the physical demands of some roles and the cognitive demands of others, although in the case of burnout this may also relate to the fact that women and graduates are more likely to work in health and education, where burnout risks appear to be highest. Measures of autonomy show fewer differences between groups, although younger people generally report lower autonomy and fewer opportunities compared to workers in older age groups.

There is more variation in **relationships** at work. Lower qualified people, older workers and men are more likely to report receiving little or no managerial support, whereas higher qualified, younger and female workers are less likely to report such issues. Perhaps most worryingly, people with chronic health conditions are twice as likely as those without health conditions to report having experienced discrimination at work/ Youngers workers are also nearly twice as likely to report discrimination compared to those aged 25-44 years.

⁶⁹ Note that analysis by ethnicity is not included due to limitations in the dataset.

Table 4: Job quality dimensions by age group, UK, 2021

Job Quality Indicators		Age groups					
		16-24	25-34	35-44	45-55	56+	Total
Job security	Job insecurity	31%	28%	31%	24%	28%	28%
Working hours	Long hours (48 or more/week)	9%	21%	22%	22%	23%	20%
	Poor work-life balance	14%	22%	18%	16%	16%	18%
Demands and control	Work in tiring positions	47%	35%	32%	39%	41%	38%
	Physical/emotional burnout	34%	33%	39%	37%	35%	36%
	Little work autonomy	23%	21%	14%	13%	18%	17%
	Few chances to use skills or knowledge	20%	12%	8%	11%	9%	11%
	No employee representation	36%	51%	52%	55%	47%	50%
Relationships	Little managerial support	6%	6%	9%	12%	13%	9%
	Experienced discrimination in last 12 months	18%	11%	11%	12%	13%	12%

Note: Green highlights above average figures and red below average. Source: IES analysis of European Working Conditions Telephone Survey 2021, UK data.

Table 5: Job quality dimensions by other demographic groups, UK, 2021

Job Quality Indicators		Male	Female	Chronic illness	No chronic illness	Secondary Education	Tertiary Education	Total
Job security	Job insecurity	30%	26%	34%	26%	29%	26%	28%
Working hours	Long hours (48 or more/week)	28%	12%	14%	22%	18%	22%	20%
	Poor work-life balance	21%	15%	16%	18%	16%	18%	18%
Demands and control	Work in tiring positions	39%	37%	50%	34%	45%	28%	38%
	Physical/emotional burnout	32%	40%			34%	37%	36%
	Little work autonomy	17%	17%	17%	17%	24%	12%	17%
	Few chances to use skills or knowledge	11%	11%	11%	11%	12%	11%	11%
	No employee representation	50%	51%			43%	56%	50%
Relationships	Little managerial support	11%	7%	9%	9%	12%	7%	9%
	Experienced discrimination in last 12 months	11%	14%	19%	10%	14%	10%	12%

Note: Green highlights above average figures and red below average. Source: IES analysis of European Working Conditions Telephone Survey 2021, UK data.



Summary

The positives and negatives of UK job quality

This section finds that job quality in the UK meets certain standards: most workers are not in jobs that are likely to be harmful to their health. Relatively few people work in insecure jobs, work very long hours or cannot work the hours that they want. The majority of workers report that they can balance work and family commitments and do feel supported by their colleagues and managers. Headline rates of job insecurity have not noticeably increased in the UK over recent decades, while the proportions of people working very long hours or not working the hours they want to have fallen.

However, set against these positive headline findings, there are significant minorities of the workforce who are in insecure work, working long or irregular hours or subjected to harmful relationships at work. At least one in ten workers are in insecure jobs; more people have long working hours in the UK than in other western and northern European nations; nearly half of the workforce regularly work beyond their contracted hours (even if relatively few say they are ‘overemployed’); and one in six workers report experiencing bullying, harassment or discrimination in the last year.

Particular UK problems

In addition, on nearly every measure the UK ranks among the worst in Europe for workplace demands, control at work and job strain. Around half of the workforce work to tight deadlines or at high speed, only around a third have control over how they work, and around half of the workforce report being exhausted from work. All of these indicators have risen significantly over the last 25 years, reflecting an increase in work intensity.

Differences across industries and demographic groups

Our analysis also finds significant variations by industry and demographic groups. Workers in transport and storage, construction, commerce and hospitality report poorer outcomes across a range of indicators of job quality (with these industries accounting for around quarter of the workforce); while nearly half of those working in health services and education experience burnout. Workers in ‘white collar’ service industries, which account for just over a third of the workforce, generally fare better.

There are similar variations in experiences of job quality for different demographic groups, partly reflecting the industries that people work in. For example, women are much more likely than men to be at risk of burnout, while older and lower qualified people are more likely to work in tiring positions. People with chronic health conditions are more likely to be in insecure work, tiring work and – perhaps of most concern – to have suffered discrimination, harassment or bullying. Younger people also report higher risks of poor-quality work across a range of indicators.

The need for a targeted approach

Taken together, this analysis highlights the importance of a targeted approach to addressing poor-quality work and its impact on worker health. Efforts should focus on industries, employers, and groups where risks are highest, with tailored interventions to address the specific drivers of poor-quality work across different sectors.

4. Conclusion

There is extensive evidence that good work can be protective and supportive of our health and wellbeing, but that poor-quality work can be harmful to our health.

We identify four broad areas where the relationship between job quality and health appears strongest: job security and precarity; hours and working patterns: demands and control at work: and workplace relationships and support. Evidence suggests that these factors can affect different groups in different ways, often influenced by wider life factors – like caring responsibilities, underlying health, or labour market experiences.

Poor-quality work is often concentrated among certain groups

For most UK workers most of the time, work is more protective of health than harmful. We are often in secure jobs, working broadly the hours we want, and reporting good relationships with colleagues. However, even where dimensions of poor job quality only affect a minority of people (e.g. insecure employment, excessive hours or experiencing adverse behaviour at work), they are often concentrated among groups already disadvantaged in the labour market. Additionally, issues like excessive demands, low control and high job strain affect far more people across a range of industries.

Particular challenges facing the UK

Compared to similar EU countries, many aspects of job quality in the UK appear to fall short: workers have relatively weak employment protection, long overtime, high pressure and limited autonomy. Considering the UK's lower labour productivity compared to peers such as France and Germany,⁷⁰ these conditions do not seem justifiable on performance grounds. Although this report has focused on the links with health rather than productivity, enhancing job quality to create healthier workplaces may also contribute to improving UK productivity – a potential area for future analysis.

Finding solutions for healthier workplaces

Many solutions for improving job quality and working conditions lie within organisations. Employers and employee representatives play a key role and should focus their efforts on organisational-level changes, rather than simply providing individual-level support.

Public policy also has an important role. We would argue that the varied impacts identified here call for targeted, well-designed efforts to address specific challenges faced by different groups. Government can do this in four main ways: setting clear standards, including through regulation and enforcement; creating incentives (financial or otherwise) for employers to act; ensuring employers have access to the information, advice and support they need to make good decisions; and delivering effective public services, particularly around health, rehabilitation, employment and upskilling.

While the UK is starting from a relatively low base in these areas, the new government has significant ambitions for improvement in many (though not all) of them. Perhaps the main challenge then will be making progress across these areas in a joined-up and co-ordinated way, so that expectations for employers are clear, the right incentives are in place, and support mechanisms effectively reach and engage them. Future papers in this research programme will explore some of these points in more detail.

⁷⁰ Office for National Statistics (ONS), released 11 January 2023, ONS website, statistical bulletin, [International comparisons of UK productivity \(ICP\), final estimates: 2021](#)

References

- Bajorek, Z., and Bevan, S. *Demonstrating the effectiveness of workplace counselling. Reviewing the evidence for wellbeing and cost effectiveness outcomes.* Institute for Employment Studies Report 553
- Bannai, A. and Tamakoshi, A. (2014). The association between long working hours and health: A systematic review of epidemiological evidence. *Scandinavian Journal of Work, Environment & Health*, 40(1), pp.5–18.
- Bara, A., & Arber, S. (2009). Working shifts and mental health--findings from the British Household Panel Survey (1995-2005). *Scandinavian journal of work, environment & health*, 35 5, 361-7.
- Bell, D., Otterbach, S. and Sousa-Poza, A. (2012). Work Hours Constraints and Health. *Annals of Economics and Statistics*, (105/106), p.35.
- Belloni, M., Carrino, L. and Meschi, E. (2022). The impact of working conditions on mental health: novel evidence from the UK. *Labour Economics*, 76, p.102176.
- Bentley, R.J., Kavanagh, A., Krnjacki, L. and LaMontagne, A.D. (2015). A Longitudinal Analysis of Changes in Job Control and Mental Health. *American Journal of Epidemiology*, 182(4), pp.328–334.
- Burge, P., Lu, H., Smith, P. and Koch, N. (2023) *Incentivising SME uptake of health and wellbeing support schemes*, DWP Research Report 1024
- Caillier, J.G. (2017). The impact of high-quality workplace relationships in public organizations. *Public Administration*, 95(3), pp.638–653.
- Carolan, S., Harris, P.R. and Cavanagh, K. (2017). Improving Employee Well-Being and Effectiveness: Systematic Review and Meta-Analysis of Web-Based Psychological Interventions Delivered in the Workplace. *Journal of Medical Internet Research* 19(7), p.e271.
- Cazes, S., Hizen, A. and Saint-Martin, A. (2015). Measuring and Assessing Job Quality. *OECD Social, Employment and Migration Working Papers*, 174.
- CIPD (2020) *Revamping labour market enforcement in the UK*, Chartered Institute of Personnel and Development
- Cominetti, N. (2024) *Low Pay Britain 2024: Examining the Government's proposed employment reforms*, Resolution Foundation, September 2024
- Cominetti, N., McCurdy, C., Thwaites, G. and Vieira-Marques, R. (2023) *Low Pay Britain 2023: Improving low-paid work through higher minimum standards*, The Resolution Foundation, April 2023
- Cottini, E. and Ghinetti, P. (2017) Employment insecurity and employees' health in Denmark. *Health Economics*. 2018 Feb;27(2):426-439.
- D'Angelo, S., Syddall, H., Ntani, G., et al (2021) How does job dissatisfaction interact with self-rated health in determining the risk of health-related job loss? Prospective findings from the Health and Employment After Fifty (HEAF) study *Occupational and Environmental Medicine* 2021;78:36-42.
- Dickinson, P. (2022) *Review of Employment Charters in the English Mayoral Combined Authorities*, ReWAGE Evidence Paper

DWP and DHSC (2023) *Occupational Health: Working Better Summary of Responses to the Consultation and the UK Government Response*, HM Government Command Paper 961

Egan, M., Bambra, C., Thomas, S., Petticrew, M., Whitehead, M. and Thomson, H. (2007). The psychosocial and health effects of workplace reorganisation. 1. A systematic review of organisational-level interventions that aim to increase employee control. *Journal of Epidemiology & Community Health*, 61(11), pp.945–954.

Eurofound (2023), *Psychosocial risks to workers' well-being: Lessons from the COVID-19 pandemic*, European Working Conditions Telephone Survey 2021 series, Publications Office of the European Union, Luxembourg.

Felstead, A., Gallie, D., Green, F. and Henseke, G. (2018) *Insecurity at Work in Britain: First Findings from the Skills and Employment Survey 2017*, Centre for Learning and Life Chances in Knowledge Economies and Societies, UCL Institute of Education

Ferrie, J.E., Shipley, M.J., Marmot, M.G., Martikainen, P., Stansfeld, S.A. and Smith, G.D. (2001). Job insecurity in white-collar workers: Toward an explanation of association with health. *Journal of Occupational Health Psychology*, 6(1), pp.26–42.

Figueredo, J., García-Ael, C., Gragnano, A., and Topa, G. (2020) Well-Being at Work after Return to Work (RTW): A Systematic Review. *International Journal of Environmental Research and Public Health*, 17.

Fleming, W.J. (2024) Employee well-being outcomes from individual-level mental health interventions: Cross-sectional evidence from the United Kingdom. *Industrial Relations Journal*, 55, 162-182.

Green, F., Felstead, A., Gallie, D. and Henseke, G. (2018) *Work Intensity in Britain – First Findings from the Skills and Employment Survey 2017*, Centre for Learning and Life Chances in Knowledge Economies and Societies, UCL Institute of Education

Hanson, L., Westerlund, H., Chungkham, H., Vahtera, J., Rod, N., Alexanderson, K., Goldberg, M., Kivimäki, M., Stenholm, S., Platts, L., Zins, M., & Head, J. (2018). Job strain and loss of healthy life years between ages 50 and 75 by sex and occupational position: analyses of 64 934 individuals from four prospective cohort studies. *Occupational and Environmental Medicine*, 75, 486 - 493.

Heikkilä, K., Fransson, E., Nyberg, S., Zins, M., Westerlund, H., Westerholm, P., Virtanen, M., Vahtera, J., Suominen, S., Steptoe, A., Salo, P., Pentti, J., Oksanen, T., Nordin, M., Marmot, M., Lunau, T., Ladwig, K., Koskenvuo, M., Knutsson, A., Kittel, F., Jöckel, K., Goldberg, M., Erbel, R., Dragano, N., Debaquer, D., Clays, E., Casini, A., Alfredsson, L., Ferrie, J., Singh-Manoux, A., Batty, G., & Kivimäki, M. (2013). Job strain and health-related lifestyle: findings from an individual-participant meta-analysis of 118,000 working adults. *American journal of public health*, 103 11, 2090-7.

Henly, M., & Brucker, D. (2020). More than just lower wages: intrinsic job quality for college graduates with disabilities. *Journal of Education and Work*, 33, 410 - 424.

Henseke, G. (2017). Good jobs, good pay, better health? The effects of job quality on health among older European workers. *The European Journal of Health Economics*, 19, 59 - 73.

Hesketh, R., Strang, L., Pollitt, A. and Wilkinson, B. (2020) *What do we know about the effectiveness of workplace mental health interventions?* Kings College London

Policy Institute, April 2020

HSE (2023) *Work-related stress, depression or anxiety statistics in Great Britain, 2023*. Health and Safety Executive. www.hse.gov.uk/statistics/assets/docs/stress.pdf

Irvine, G., White, D. and Diffley, M. (2018) *Measuring Good Work: The final report of the Measuring Job Quality Working Group*, Carnegie UK and the RSA

Jolly, P. M., Kong, D. T., & Kim, K. Y. (2021). Social support at work: An integrative review. *Journal of Organizational Behavior*, 42(2), 229-251

Jones, M., Latreille, P., Sloane, P., & Staneva, A. (2013). Work-related health risks in Europe: are older workers more vulnerable?. *Social science & medicine*, 88, 18-29.

Kain, J. and Jex, S. (2010), Karasek's (1979) job demands-control model: A summary of current issues and recommendations for future research, in Perrewé, P.L. and Ganster, D.C. (Ed.) *New Developments in Theoretical and Conceptual Approaches to Job Stress (Research in Occupational Stress and Well Being, Vol. 8)*, Emerald Group Publishing Limited, Leeds, pp. 237-268.

Kankaanpää, E. (2010). Economic incentives as a policy tool to promote safety and health at work. *Scandinavian journal of work, environment & health*, 36 4, 319-24.

Kim, S., Jeong, W., Jang, S., Park, E., & Park, S. (2020). Is Work Hour Mismatch Associated with Depression? *Safety and Health at Work*, 12, 96 - 101.

Llosa, J. A., Menéndez-Espina, S., Agulló-Tomás, E., Rodríguez-Suárez, Julio (2018). Job insecurity and mental health: A meta-analytical review of the consequences of precarious work in clinical disorders, *Anales de Psicología*, 2018, Vol 34, Issue 2, p211

Manning, A. and Mazeine, G. (2020) *Subjective Job Insecurity and the Rise of the Precariat: Evidence from the UK, Germany and the United States*, CEP Discussion Paper No 1712, August 2020

Nahrgang, J., Morgeson, F., & Hofmann, D. (2011). Safety at work: a meta-analytic investigation of the link between job demands, job resources, burnout, engagement, and safety outcomes. *The Journal of applied psychology*, 96 1, 71-94.

OECD (2022) *Promoting Health and Well-being at Work: Policy and Practices*, OECD Health Policy Studies, OECD Publishing, Paris

Price, S., Shaw, H., Morgan, F., Lopez, R.R., Little, K. and Humphreys, C. (2021). *Is any job better than no job?: A systematic review*.

Pulford, A., Thapa, A., Thomson, R.M., Guilding, A., Green, M.J., Leyland, A., Popham, F. and Katikireddi, S.V. (2022). Does persistent precarious employment affect health outcomes among working age adults? A systematic review and meta-analysis. *Journal of Epidemiology and Community Health*, 76(11), pp.909–917.

Rönblad, T., Grönholm, E., Jonsson, J., Koranyi, I., Orellana, C., Kreshpaj, B., Chen, L., Stockfelt, L. and Bodin, T. (2019). Precarious employment and mental health: a systematic review and meta-analysis of longitudinal studies. *Scandinavian Journal of Work, Environment & Health*, 45(5), pp.429–443.

Rydstedt, L.W., Stansfeld, S.A., Head, J. and Woodley-Jones, D. (2012). Quality of Workplace Social Relationships and Perceived Health. *Psychological Reports*, 110(3), pp.781–790.

- Salvagioni, D., Melanda, F., Mesas, A., González, A., Gabani, F., & Andrade, S. (2017). Physical, psychological and occupational consequences of job burnout: A systematic review of prospective studies. *PLoS ONE*, 12.
- Schur, L., & Kruse, D. (2021). Disability and Precarious Work. *The Oxford Handbook of the Sociology of Disability*.
- Sewdas, R., van der Beek, A.J., Boot, C.R.L., D'Angelo, S., Syddall, H.E., Palmer, K.T. and Walker-Bone, K. (2019). Poor health, physical workload and occupational social class as determinants of health-related job loss: results from a prospective cohort study in the UK. *BMJ Open*, 9(7), p.e026423.
- Ståhl, C., Toomingas, A., Åborg, C., Ekberg, K., & Kjellberg, K. (2013). Promoting occupational health interventions in early return to work by implementing financial subsidies: a Swedish case study. *BMC Public Health*, 13, 310 - 310.
- Stansfeld, S., & Candy, B. (2006). Psychosocial work environment and mental health- a meta-analytic review.. *Scandinavian journal of work, environment & health*, 32 6, 443-62.
- Steffgen, G., Sischa, P., Fernandez de Henestrosa, M. (2020) The Quality of Work Index and the Quality of Employment Index: A Multidimensional Approach of Job Quality and Its Links to Well-Being at Work. *Int. J. Environ. Res. Public Health* 2020
- van der Noordt, M., IJzelenberg, H., Droomers, M. and Proper, K.I. (2014). Health effects of employment: a systematic review of prospective studies. *Occupational and Environmental Medicine*, 71(10), pp.730–736.
- Taylor, M., Marsh, G., Nicol, D., and Broadbent, P. (2017) *Good Work: The Taylor Review of Modern Working Practices*, July 2017
- Torquati, L., Mielke, G., Brown, W., Burton, N., & Kolbe-Alexander, T. (2019). Shift Work and Poor Mental Health: A Meta-Analysis of Longitudinal Studies.. *American journal of public health*, e1-e8
- Unger, S., Tisch, A., & Tophoven, S. (2018). Age and gender differences in the impact of labour-market transitions on subjective health in Germany. *Scandinavian Journal of Public Health*, 46, 49 - 64.
- Verkuil, B., Atasayi, S. and Molendijk, M.L. (2015). Workplace Bullying and Mental Health: A Meta-Analysis on Cross-Sectional and Longitudinal Data. *PLOS ONE*, 10(8), p.e0135225.
- Waddell, G. and Burton, K. (2006). *Is work good for your health and well-being?* Department for Work and Pensions, 1 January 2006
- Weston, G., Zilanawala, A., Webb, E., Carvalho, L.A. and McMunn, A. (2019). Long work hours, weekend working and depressive symptoms in men and women: findings from a UK population-based study. *Journal of Epidemiology and Community Health*, 73(5), pp.465–474.

Appendix – mapping NACE industries to SIC categories

The table below shows how the industrial categories (NACE codes) used in the European Working Conditions Telephone Survey map on to the categories in the UK Standard Industrial Classification (SIC). The final column indicates the proportion of the UK workforce employed in each category, based on Labour Force Survey data.

NACE – 10 categories	NACE/SIC – 21 categories	Proportion of UK employment (LFS)
Agriculture	A - Agriculture forestry and fishing	1%
Commerce and Hospitality	G - Wholesale and retail trade; repair of motor vehicles and motorcycles I - Accommodation and food service activities	15%
Construction	F - Construction	6%
Education	P - Education	10%
Financial Services	K - Financial and insurance activities	5%
Health	Q - Human health and social work activities	14%
Industry	B - Mining and quarrying C - Manufacturing D - Electricity gas steam and air conditioning supply E - Water supply; sewerage waste management and remediation activities	10%
Other Services	J - Information and communication L - Real estate activities M - Professional scientific and technical activities N - Administrative and support service activities R - Arts entertainment and recreation S - Other service activities T - Activities of households as employers; undifferentiated goods- and services.. U - Activities of extraterritorial organisations and bodies	25%
Public Administration	O - Public administration and defence; compulsory social security	8%
Transportation and Storage	H - Transportation and storage	5%



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